

### UNIVERSIDADE DE LISBOA INSTITUTO SUPERIOR TÉCNICO

### How to balance Modern and Traditional: Comparative studies of architectural discourse in Istanbul and Lisbon in the 20th century

#### Arsalan Nezhadfard

Supervisor: Doctor Ana Cristina dos Santos Tostões

Co-Supervisor: Doctor Francisco Manuel Caldeira Pinto Teixeira Bastos

Thesis approved in public session to obtain the PhD Degree in **Architecture** 

Jury final classification: Pass with Distinction



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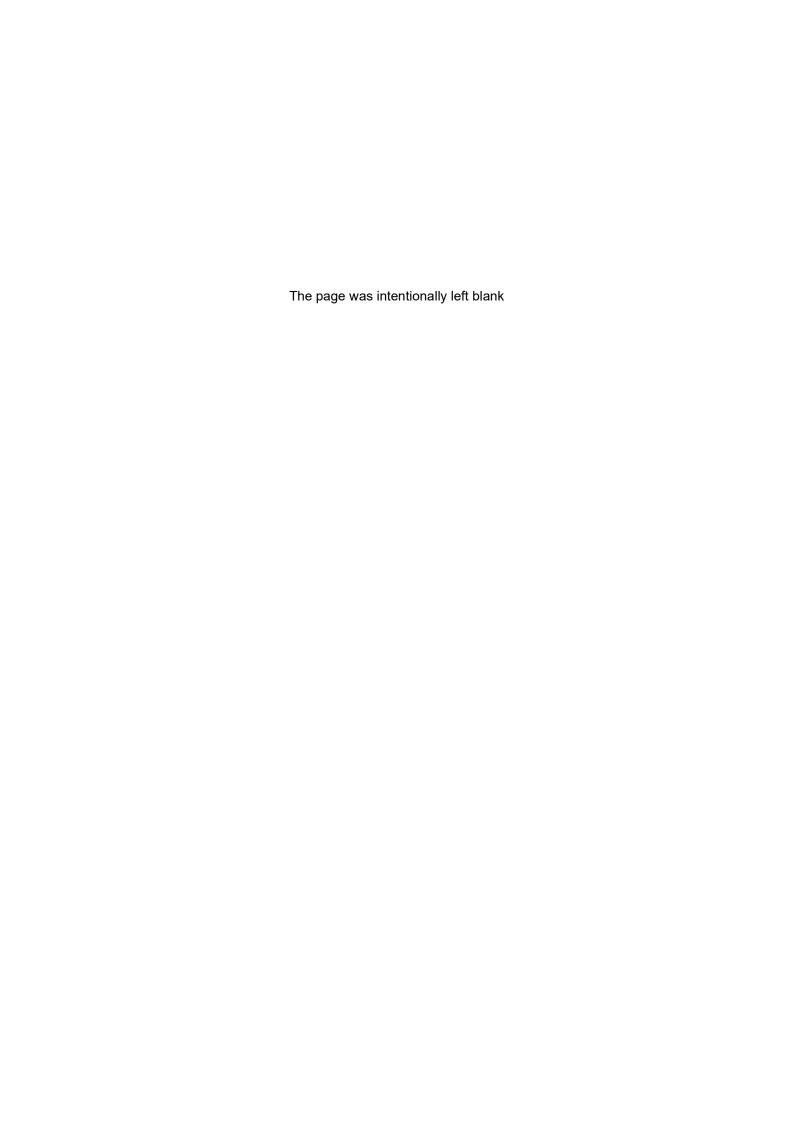
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#### **ABSTRACT:**

The thesis explores the approaches of balancing modernism and traditionalism in the 20th-century cities transmitted socio-political issues to the current chaotic age based on the clash of societies' traditional and modern cores. In this regard, the architectural and urban space ought to be the central theme of the research, with a triangle consisting of time, human and place as its realms. The possibilities for geographical sources of traditionalism and modernity led to the identification of the two case studies: Istanbul is the intersection of Asia and Europe, whereas Lisbon is the intersection of Europe, Africa, and America. The hybrid approach between the secondary research and the grounded theory is the methodology of the thesis. The analysis of case studies in the matter of time exhibited the cyclic and linear manner of time respective to traditionalism and modernism. In contrast, the matter of humans illuminated the dominant, oppositional, mediator and transitional factors of generations, which approves and even amplifies the findings in a matter of time. Given the consideration on the matter of the Place, it is possible to conclude that districts are either the dominant representative of modernism and traditionalism or the transitional character which in synthesis and deterministically generates a model like a spectrum. It is widely accepted that traditionalism and modernism reached diverse points of compromise over time. However, these short-term moments had to be converted to a continuous understanding of the city as a living organism, and for this reason, mutualism in architectural and urban discourse could be the roadmap for future cities by Adaptive reuse of the buildings and in a broader image, the urban fabrics.

Keywords: Modernism, Traditionalism, Balance, Istanbul, Lisbon

#### **RESUMO:**

A tese explora as abordagens destinadas a equilibrar o modernismo e o tradicionalismo nas cidades do século XX transmitindo questões sociopolíticas atuais baseadas no choque dos núcleos tradicionais e modernos das sociedades. A este respeito, o espaco arquitetónico e urbano deve ser o tema central da investigação, com um triângulo constituído pelo tempo, os humanos e o lugar como seus variáveis. As possibilidades de fontes geográficas de tradicionalismo e modernidade levaram à identificação dos dois estudos de caso: Istambul é a intersecção da Ásia e da Europa, Lisboa é a intersecção entre a Europa, África e América. A abordagem híbrida entre a investigação secundária e a teoria fundamentada é a metodologia da tese. A análise de estudos de caso em problemática do tempo exibiu a forma cíclica e linear do tempo, no que diz respeito,tanto ao tradicionalismo como ao modernismo. Em contrapartida, a questão dos humanos iluminou os fatores dominantes, opositores, mediadores e transitórios de gerações, que aprovam e até amplificam as descobertas numa questão de tempo. Dada a consideração sobre a problematica do Lugar, é possível concluir que os bairros são ou o representante dominante do modernismo e do tradicionalismo ou o carácter transitório que na síntese e deterministicamente gera um modelo semlhante ao modelo de "espectro electromagnetico" . É amplamente aceite que o tradicionalismo e o modernismo atingiram diversos pontos de compromisso ao longo do tempo. No entanto, estes momentos de curto prazo tiveram de ser convertidos para uma compreensão contínua da cidade como um organismo vivo, e por isso, o mutualismo no discurso arquitetónico e urbano poderia ser o roteiro para as futuras cidades através da reutilização adaptativa dos edifícios e, numa imagem mais ampla, dos tecidos urbanos.

Palavras-chave: Modernismo, Tradicionalismo, Equilíbrio, Istambul, Lisboa

### **Acknowledgements**

Writing acknowledgements could be the most challenging part as it reminds you of the different stages of the thesis with all the specific moments it might have.

In the first place, major thanks to my supervisor, professor Ana Tostões for her support in clarifying the issues I might face during the thesis process. I also have to confess that the more I read her published works on Lisbon and its development in the 20th century, the more interested I became in concentrating on Portuguese architecture. Her motivation to include Lisbon as one of the thesis case studies is not neglectable at all.

I want to thank professor Francisco Teixeira Bastos for his assistance in systemizing my mindset on how the thesis has to move forward from A to Z. I had a lot of conductive discussions with him, reinforcing the ideas shaped throughout the realisation of this dissertation.

Big thanks to my mother and father for trying to influence me either through their motivations or criticisms and their sponsorship.

Special thanks to my cousin, Rana Najjari, for helping me clarify the research methodology. Her personal experience in her PhD thesis in architecture illuminated many pathways to resolve the problems during the research process.

Finally, I would like to thank Instituto Superior Técnicofor providing a platform to embark on doctoral studies with Portuguese officials, municipalities, and libraries. It is impossible not to mention the influence of my Turkish friends in Istanbul and all the members of the SALT research centre, municipal delegates and local librarians.

## **INDEX**

${f A}$	Casa Portuguesa .29, 149, 155, 212, 221, 230, 231, 342, 388
Abstract Space 41, 42, 45, 48, 57, 79, 83, 87, 89, 98, 108, 112, 113, 117, 121, 123, 129, 133, 166, 180, 235, 386, 387, 392, 395, 397  Adães Bermudes	Cassiano Branco 139, 150, 151, 154, 215, 218, 305, 318, 383  Castelo 141, 302, 310, 311, 313, 314, 388  Cengiz Bektaş
Alvaro Augusto Machado	Cottinelli Telmo 139, 150, 152, 156, 215, 216, 217, 218, 219, 305, 383  Courtyard
Avenida da Liberdade29, 149 Avenidas Novas 29, 147, 148, 149, 150, 152, 211, 214, 243, 317, 319	<b>D</b> D'Aronco 176, 259, 267, 268, 349, 354, 368, 385
<b>B</b> Baixa Pombalina 140, 149, 302, 303, 304, 307,	Dead end
309, 316 Balance	E Emin Onat 136, 187, 188, 272, 273, 274, 283, 296, 385 Estado Novo 138, 139, 144, 154, 156, 158, 160, 161, 207, 218, 219, 222, 229, 237, 312, 313, 317, 319, 321, 328, 339, 341, 342, 375, 383, 384
Boundaries 15 75 76 117 398	F
C Carlos Ramos 150, 151, 152, 215, 216, 218, 223, 229, 231, 232, 235, 254, 306, 307, 383,	F Faria da Costa 139, 159, 163, 225, 231, 236, 306, 329 Fatih 137, 199, 347, 366, 377, 389, 394 Fernando Silva 139, 226, 227, 329, 331, 383

Francisco Keil Do Amaral 139, 222, 228, 231,	59, 60, 61, 62, 63, 71, 86, 94, 95, 107, 108,
383	109, 110, 111, 113, 121, 125, 127, 130, 131,
Francisco Silva Dias 166, 168, 233, 242, 339	132, 134, 135, 136, 138, 146, 150, 151, 154,
Free Façade16, 108, 397	155, 156, 157, 158, 160, 161, 162, 163, 166, 172, 173, 177, 180, 195, 197, 199, 205, 211,
G	213, 216, 217, 218, 219, 221, 223, 225, 226,
	227, 228, 229, 230, 231, 233, 234, 235, 236,
Galata 137, 174, 258, 296, 297, 346, 352, 353, 354, 355, 359, 363, 365, 366, 370	238, 240, 242, 243, 246, 248, 256, 257, 260,
Gonçalo Byrne	261, 265, 267, 273, 278, 279, 281, 285, 294,
Graça. 141, 169, 172, 235, 302, 310, 311, 312,	295, 296, 297, 300, 306, 307, 309, 319, 325,
313, 314, 388	326, 332, 334, 342, 360, 374, 378, 384, 386, 387, 389, 390, 391, 392, 394, 395
	Mongeri 136, 178, 180, 182, 259, 260, 261,
Н	262, 263, 264, 268, 270, 275, 278, 280, 349,
Hestnes Fereira163	354, 385
Hestnes Ferreira254, 256, 257	Mouraria27, 140, 149, 225, 302, 310, 311,
hierarchy 32, 57, 68, 71, 72, 73, 77, 82, 92,	312, 313, 314, 316, 319, 388, 394
133, 227, 309, 398	mutualism55, 56, 162, 214, 223, 381, 386, 390, 393
High-rise building16, 109 Historical Peninsula137, 347, 350	030, 030
Horizontal	N
human 37, 40, 41, 43, 47, 55, 75, 80, 88, 89,	narrow 61, 69, 71, 73, 82, 193, 307, 313, 368,
113, 116, 134, 135, 138, 164, 205, 239, 287,	370, 388, 395
293, 300, 302, 306, 313, 314, 319, 360, 377,	Non- monotonous (alternating) repetition 16, 83
378, 383, 390, 391, 392, 393, 394, 395	Nuno Portas139, 162, 163, 166, 168, 216, 242,
Human 134, 135, 138, 205, 206, 258, 300, 322, 374, 383, 384, 399	243, 244, 245, 246, 249, 251, 253, 255, 326,
07 1, 000, 00 1, 000	336, 338, 339, 384, 387
I	Nuno Teotónio Perreira139, 162
Identical Blocks16, 111, 397	0
Industrial buildings and districts16, 112	Olivais Norte 30, 141, 162, 165, 167, 234, 243,
Intendente 141, 207, 302, 315, 316, 317, 318,	250, 251, 302, 334, 335, 338, 341, 342, 375,
319, 388	388, 394
international style 36, 51, 106, 115, 218, 231, 252, 262, 273, 274, 275, 360, 364	Olivais Sul 141, 165, 243, 254, 257, 334, 335,
232, 202, 273, 274, 273, 300, 304	337, 338, 341, 375, 388
J	Organic
Jasmund 136, 176, 177, 264, 265, 267, 349,	overhang
385	evenuang
Jorge Segurado . 152, 154, 215, 216, 305, 330, 383	P
Jose Luís Monteiro 209, 210, 211, 220, 383	Pedestrian
	Pedro Cid 139, 164, 234, 330, 336, 384 <i>Pilotis</i> 16, 117, 118, 192, 193, 278, 329, 330,
M	397
Manuel Tainha 172, 231, 257, 338, 384	place.21, 22, 26, 27, 29, 32, 35, 36, 37, 38, 40,
Manuel Vicente 139, 167, 168, 169, 172, 238,	41, 42, 43, 45, 47, 52, 53, 54, 55, 57, 58, 59,
247, 254, 256, 339, 384	60, 63, 69, 70, 71, 75, 76, 78, 79, 89, 91, 92,
Memory	95, 96, 98, 100, 104, 106, 108, 113, 118, 120, 122, 129, 132, 133, 134, 135, 136, 137,
Mimar Kemalettin	
Mixed land-use 16 80	
Mixed land-use16, 80 , 168, 169, 176, 182, 184, 185, 187, 191, 192,	138, 139, 144, 145, 146, 149, 150, 151, 154, 155, 157, 158, 159, 160, 162, 164, 166, 168,
, 168, 169, 176, 182, 184, 185, 187, 191, 192, 198, 202, 203, 213, 215, 216, 219, 220, 221,	138, 139, 144, 145, 146, 149, 150, 151, 154, 155, 157, 158, 159, 160, 162, 164, 166, 168, 172, 173, 175, 179, 180, 182, 186, 201, 202,
, 168, 169, 176, 182, 184, 185, 187, 191, 192, 198, 202, 203, 213, 215, 216, 219, 220, 221, 222, 223, 226, 229, 231, 234, 236, 239,245,	138, 139, 144, 145, 146, 149, 150, 151, 154, 155, 157, 158, 159, 160, 162, 164, 166, 168, 172, 173, 175, 179, 180, 182, 186, 201, 202, 207, 208, 212, 214, 215, 222, 223, 224, 229,
, 168, 169, 176, 182, 184, 185, 187, 191, 192, 198, 202, 203, 213, 215, 216, 219, 220, 221, 222, 223, 226, 229, 231, 234, 236, 239,245, Modernism . 15, 16, 56, 94, 95, 96, 97, 99, 100,	138, 139, 144, 145, 146, 149, 150, 151, 154, 155, 157, 158, 159, 160, 162, 164, 166, 168, 172, 173, 175, 179, 180, 182, 186, 201, 202, 207, 208, 212, 214, 215, 222, 223, 224, 229, 231, 238, 239, 240, 242, 245, 246, 247, 248,
, 168, 169, 176, 182, 184, 185, 187, 191, 192, 198, 202, 203, 213, 215, 216, 219, 220, 221, 222, 223, 226, 229, 231, 234, 236, 239,245, Modernism . 15, 16, 56, 94, 95, 96, 97, 99, 100, 101, 102, 124, 160, 166, 222, 238, 248, 283,	138, 139, 144, 145, 146, 149, 150, 151, 154, 155, 157, 158, 159, 160, 162, 164, 166, 168, 172, 173, 175, 179, 180, 182, 186, 201, 202, 207, 208, 212, 214, 215, 222, 223, 224, 229, 231, 238, 239, 240, 242, 245, 246, 247, 248, 252, 256, 257, 258, 264, 273, 279, 281, 287,
, 168, 169, 176, 182, 184, 185, 187, 191, 192, 198, 202, 203, 213, 215, 216, 219, 220, 221, 222, 223, 226, 229, 231, 234, 236, 239,245, Modernism . 15, 16, 56, 94, 95, 96, 97, 99, 100, 101, 102, 124, 160, 166, 222, 238, 248, 283, 285, 384, 390, 397, 399	138, 139, 144, 145, 146, 149, 150, 151, 154, 155, 157, 158, 159, 160, 162, 164, 166, 168, 172, 173, 175, 179, 180, 182, 186, 201, 202, 207, 208, 212, 214, 215, 222, 223, 224, 229, 231, 238, 239, 240, 242, 245, 246, 247, 248,
, 168, 169, 176, 182, 184, 185, 187, 191, 192, 198, 202, 203, 213, 215, 216, 219, 220, 221, 222, 223, 226, 229, 231, 234, 236, 239,245, Modernism . 15, 16, 56, 94, 95, 96, 97, 99, 100, 101, 102, 124, 160, 166, 222, 238, 248, 283,	138, 139, 144, 145, 146, 149, 150, 151, 154, 155, 157, 158, 159, 160, 162, 164, 166, 168, 172, 173, 175, 179, 180, 182, 186, 201, 202, 207, 208, 212, 214, 215, 222, 223, 224, 229, 231, 238, 239, 240, 242, 245, 246, 247, 248, 252, 256, 257, 258, 264, 273, 279, 281, 287, 288, 289, 291, 293, 295, 300, 302, 306, 311,

384, 387, 388, 389, 390, 392, 393, 394, 395, 398, 400  Porfilio Pardal Monteiro	Terraced Roof
365, 368, 370, 378	Transparency 17, 131, 397
R	U
Raul Hestnes Ferreira	Üsküdar
S	212, 213, 214, 215, 220, 304, 305, 307, 383 Visual Contradiction
SAAL 168, 237, 239, 243, 247, 252, 254, 255, 342, 375, 384  Sedad Hakki Eldem 136, 137, 185, 190, 192, 196, 199, 263, 274, 281, 285, 289, 293, 296, 354, 378, 385  Seyfi Arkan . 185, 186, 279, 280, 359, 368, 385  Simplification	W Wide and straight streets
352, 354, 355, 356, 359, 360, 370, 377, 389, 399 Taut 50, 98, 128, 132, 136, 182, 185, 187, 189, 271, 273, 274, 281, 289, 293, 378, 385, 386	

#### **Abbreviations**

AKM Atatürk Kültür Merkezi (Atatürk Cultural Center)

AP(JP) Adalet Partisi (Justice Party)
CCB Centro Cultural de Belém

CHP(RPP) Cumhuriyet Halk Partisi (Republican People's Party)
CIAM Congrès Internationaux d'Architecture Moderne

**CML** Câmara Municipal de Lisboa

**DGEMN** Direção-Geral dos Edifícios e Monumentos Nacionais

DGPC Direção-Geral do Património Cultural DP Demokrat Parti (Democrat Party)

**EBAL** Belas Artes de Lisboa (Lisbon school of fine arts)

EUROPEAN European Economic Community
EMK Emlak Kredi Bankasi- Emlak credit bank

GTH Gabinete Técnico de Habitação- Gabinete Técnico de Habitação

IARP Inquerito à Arquitectura Regional Portuguesa

ICATIniciativas Culturais Arte e TécnicaIMCIstanbul Textile Marchants' BazaarINCInstituto Nacional de Estatística

ISEG Instituto Superior de Economia e Gestão

IST Instituto Superior Técnico

iTF (CUP) İttihad ve Terakki Fırkası ( Committee of Union and Progress)

IUPInstitut d'Urbanisme of the University of ParisLNECLaboratório Nacional de Engenharia CivilMRARMovimento de Renovação da Arte Religiosa

MRPO

ODAM

Organização dos Arquitectos Modernos

PDCL

Plano Director da Cidade de Lisboa

PGM

Plano Geral de Melhoramentos

RP(WP)

Refah Partisi (Welfare Parti)

SAPSociedade dos Arquitetos PortuguesesSNISecretariado Nacional de InformaçãoSPNSecretariado de Propaganda Nacional

TUBITAK Türkiye Bilimsel ve Teknolojik Araştırma Kurumu(Building Research institute)

YEM Yapi Endustri Merkezi (Building industry center)
TMO Toprak Mahsüller Ofisi (Soil Product Office)

### **Table of Contents**

INTRODUCTION	2
1. THEORETICAL FRAMEWORK	19
1.1. LITERATURE REVIEW AND THE THESIS	19
1.1.1. GLOBAL SCALE	19
1.1.2. THE SHIFT FROM TIME TO CONTEXT?	20
1.2. THE GAIN THIS OF THE THESIS AND SPATIALITY AS A CONTAINER	22
1.2.1. FROM THE NATURE OF SPACE TO THE GENERAL VIEW	23
1.2.2. Space in Architectural Discourse	23
1.2.3. PRESSURE AND BUILT ENVIRONMENT	25
1.2.4. SOCIAL SPACE: ACTUAL OR VISUAL?	26
1.2.5. URBAN SPACE	27
1.2.6. CULTURAL SPACE	27
1.2.7. INTERSECTION AND SPACE (SPATIALITY)	28
1.2.8. THE INTERSECTION IN BUILT-SPACE	28
1.2.9. THE THEORY OF INTERSECTIONALITY	28
1.3. FROM SPACE TO SPATIALITY	30
1.3.1. THE NEW TRIAD FOR THE RESEARCH	30
1.3.2. CONCRETENESS AND ABSTRACTION IN SPACE: THE REVERSE PERSPECTIVES	31
1.3.3. ABSTRACTION AND CONCRETENESS VERSUS TRADITIONAL AND MODERNISM	32
1.3.4. TRADITIONALISM VERSUS MODERNITY AND CONCRETE ABSTRACTION IN SPACE	33
1.4. BALANCE AND EQUILIBRIUM IN SPACE	34
1.4.1. THE PROBLEMATIC OF SPACE AND URBANISM	34
1.4.2. BALANCE: THE TERMINOLOGY	36
1.4.3. ARCHITECTURAL PRINCIPLES	36
1.4.4. AN INTEGRATED PERSPECTIVE IN ARCHITECTURE AND URBANISM	36
1.4.5. PARADIGMS OF BALANCE IN SOCIETIES	37
1.4.6. SYMBIOSIS IN ARCHITECTURE: A RECOGNISED WAY OF BALANCE	38
1.4.7. DEFINING TRADITIONALISM AND MODERNISM	39
1.5. TRADITION, TRADITIONAL AND TRADITIONALISM: CONVERGENCE AND DIVERGENCE	39
1.5.1. TRADITION	40
1.5.2. TRADITIONAL	41
1.5.3. TRADITIONALISM	42
1.5.4. TRADITIONALISM IN ARCHITECTURAL AND URBAN SPACE	43
1.5.5. TRADITIONALISTS AND THEIR FAILURES	44
1.5.6. KEYWORDS OF TRADITIONAL ELEMENTS IN ARCHITECTURAL AND URBAN SPACE	46
1.6. MODERNISM- THE BRIEF REVIEW OF THE TASK	72
1.6.1. WHAT DOES IT LOOK LIKE TO BE MODERN? 1.6.2. MODERNITY AND MODERNISM	73 73
1.6.3. MODERNISM AS A EUROCENTRIC PARADIGM	73
1.6.4. MODERNISM IN ARCHITECTURE AND BUILT ENVIRONMENT	74 75
1.6.5. MODERNISM: TOWARD THE KEYWORDS	82
1.7. TRADITIONALISM AND MODERNITY: THE FRAMEWORK FOR THE NEXT CHAPTERS	112
1.8. LITERATURE REVIEW AND THE DERIVED ROADMAP	113
1.8.1. CASE STUDIES	114
1.0.1. OAGE GTODIEG	114
2. TIME	121
2.1. HALTING (FREEZING) "TIME"	121
2.2. TIME-LISBON	122
2.2.1. LISBON BEFORE ESTADO NOVO	122
2.2.2. 1925-1930- SOCIO-POLITICAL UNCERTAINTY LEADING TOWARD THE PRELIMINARY WAVE O	F MODERNISM
	128

2.2.3. THE 1930s- OUTLINING THE STATE POLICY TOWARD ARCHITECTURE AND URBANISM	132
2.2.4. THE 1940s: Socio-Political Versus Architectural Moult	135
2.2.5. THE 1950s: THE DECADE OF RUPTURE	138
2.2.6. THE 1960s- TOWARD A NEW RUPTURE	142
2.2.7. THE POST-REVOLUTIONARY PERIOD	145
2.3. TIME-ISTANBUL	151
2.3.1. THE 1900S- THE NEW ERA FOR THE CITY: THE SYNTHESIS BETWEEN THE STATE AND TIME	151
2.3.2. THE 1910S- END OF AN ERA	156
2.3.3. THE 1920S- ISTANBUL AFTER OTTOMAN EMPIRE: TOTAL IGNORANCE	158
2.3.4. THE 1930s- A REJUVENATED ISTANBUL	160
2.3.5. 1940s- Re-Politicised City	163
2.3.6.The 1950s- The Liberalised, Globalised and Americanised Istanbul	166
2.3.7.1960-1980- ISTANBUL AND THE START OF SOCIO-POLITICAL CRISIS	171
2.3.8. THE LAST DECADES OF THE CENTURY	174
2.0.0. THE EAST BEOADES OF THE SENTON	., -
3. HUMAN	180
3.1. HALTING (FREEZING) HUMAN	180
3.2 HUMAN- LISBON	181
3.2.1. Before Estado Novo	181
3.2.2. ESTADO NOVO1926-1974	187
3.2.2. GENERATION WORKING IN ESTADO NOVO AND POST-REVOLUTION (THE FOURTH GENERATION)	200
3.3. Human- Istanbul	208
3.3.1.The First Generation	208
3.3.2. THE SECOND GENERATION	213
3.3.3.The Third generation	219
3.3.4.The Fourth Generation	222
4 DIACE	220
4. PLACE	230
4.1. HALTING "PLACE": THE ROLE OF "HUMAN" THROUGH "TIME."	230
4.1.1. THE CRITERIA FOR SELECTING THE NEIGHBOURHOODS	231
4.2. PLACE: LISBON	231
4.2.1. Zone 1: Baixa Pombalina	232
4.2.2. ZONE 2: ALFAMA, MOURARIA, CASTELO AND GRAÇA	239
4.2.3.ZONE 3: INTENDENTE, ANJOS AND ALAMEDA D.AFONSO HENRIQUES	244
4.2.4. Zone 4: Areeiro	249
4.2.5.ZONE 5: ALVALADE	256
4.2.6. ZONE 6 : OLIVAIS NORTE, OLIVAIS SUL AND CHELAS	262
4.3. PLACE- ISTANBUL	271
4.3.1. Zone 1: Historical Peninsula -Fatih	271
4.3.2. ZONE 2 : BEYOĞLU-GALATA-TAKSIM	277
4.3.3.ZONE 3: ŞIŞLI	283
4.3.4. Zone 4: Beşiktaş	287
4.3.5. ZONE 5: ÜSKÜDAR	291
4.4. GENERAL SYNTHESIS	296
5.1. THE RECAP: FROM METHODOLOGY TO SYNTHESIS	299
5.2. SYNTHESIS ON TIME	303
5.2.1. FINDINGS ON TIME: LISBON	303
5.2.2. FINDINGS ON TIME: EIGEON  5.2.2. FINDINGS ON TIME: ISTANBUL	306
5.2.3.COMPARATIVE ANALYSIS AND MODEL	309
5.3. SYNTHESIS ON HUMAN	311
5.3.1. FINDINGS ON HUMAN: LISBON	312
5.3.2. FINDINGS ON HUMAN: ISTANBUL	313
5.3.3. COMPARATIVE ANALYSIS AND MODEL	315
5.4. SYNTHESIS IN PLACE	316
5.4.1. FINDINGS ON PLACE: LISBON	317
5.4.2. FINDINGS ON PLACE, LISBON 5.4.2. FINDINGS ON PLACE (ISTANBUL)	318

CONCLUSION	321
THE RESEARCH QUESTIONS AND RESPONSES	321
FINAL SYNTHESIS – FROM THE TRIANGLE TO THE SPECTRUM-ORIENTED CITIES	326
THE FUTURE OF RUPTURES IN THE MODEL	328
RESEARCH CONSTRAINTS	329
EPILOGUE	330
References	

#### <u>Appendices</u>

### **TABLE OF FIGURES**

### \*The figures without references belong to the author

Figure 1-3 - Vavassore's plan for Istanbul in 1520 - (Source: Çelik, 1986:25)	Figure I-1-The Hierarchies of the Objectives	5
Figure I-4- Istanbul in 1871- (Source: Çelik, 1986:41).  Figure I-5- Henry Prost's proposal for Istanbul in 1937- (Source: Akpinar, 2014:82).  Figure I-6- Lisbon masterplan in 1650 (Source: CML).  Figure I-7- Baixa Pombalina Plan 1758- (Source: CML).  Figure I-8- Masterplan of Lisbon in 1871 (Source: CML).  Figure I-9- Coding in the Grounded Theory.  Figure I-9- Coding in the Grounded Theory.  Figure I-10- Categorisation of coding stages for the grounded theory.  Figure I-11- Coding in the Ground Theory specified for the thesis.  11- Figure I-1- The attempts as mediators in the 20th century.  22- Figure I-2- The terms Regarding the subject  Figure I-3- The T-H-P triad and their architectural reference.  33- Figure I-3- The Triad regarding Traditionalism and modernity in space.  34- Figure I-5- The Triad regarding Traditionalism and modernity in space.  35- Figure I-7- Traditionalism- modernity versus abstraction-concreteness.  36- Figure I-8- Hegel Dialectics.  57- Figure I-10- architectural paradigms of Balance.  37- Figure I-10- architectural paradigms of Balance.  37- Figure I-11- Dynamism and static-ness in space.  37- Figure I-12- Balance and biologic concepts in architectural reference.  38- Figure I-11- Tradition and Traditionalis in space.  39- Figure I-15- Tradition and Traditionalism in space.  30- Figure I-16- Tradition and Traditionalism in space.  31- Figure I-17- Ollective memory and traditionalism in space.  32- Figure I-18- Pradition and Traditionalism in space.  33- Figure I-19- Tradition and Static-ness in space.  59- Figure I-19- Tradition and Static-ness in space.  59	Figure I-2- Questions and objective	6
Figure I-5- Henry Prost's proposal for İstanbul in 1937- (Source: Akpinar, 2014:82).  Figure I-6- Lisbon masterplan in 1650 (Source: CML).  Figure I-7- Baixa Pombalina Plan 1758- (Source: CML).  Figure I-8- Masterplan of Lisbon in 1871 (Source: CML).  Figure I-9- Coding in the Grounded Theory.  15- Figure I-10- Categorisation of coding stages for the grounded theory.  16- Figure I-11- Coding in the Ground Theory specified for the thesis.  17- Figure I-11- Coding in the Ground Theory specified for the thesis.  18- Figure I-11- Coding in the Ground Theory specified for the thesis.  19- Figure I-1- The attempts as mediators in the 20 <sup>th</sup> century.  20- Figure I-2- The terms Regarding the subject.  30- Figure I-3- The T-H-P triad and their architectural reference.  31- Figure I-4- The relationship between Lefebvre's spatial triad and the research realm.  31- Figure I-5- The Triad regarding Traditionalism and modernity in space.  32- Figure I-6- The triad and overlapping of two vertex.  33- Figure I-7- Traditionalism- modernity versus abstraction-concreteness.  34- Figure I-8- Hegel Dialectics.  35- Figure I-9- Two possible imaginations for space and urbanism.  36- Figure I-10- architectural paradigms of Balance.  37- Figure I-11- Dynamism and static-ness in space.  38- Figure I-12- Balance and biologic concepts in architectural reference.  38- Figure I-13- Three types of symbiosis.  39- Figure I-14- Mutualism and synthesis as two paradigms of balance.  30- Figure I-15- Tradition and Traditional: Definition and Characteristics.  41- Figure I-16- Tradition and Traditional: Definition and Characteristics.  42- Figure I-17- Collective memory and traditionalism in space.  43- Figure I-19- The Symbol and semiotics- (Source: Author based on Barthes's work, 2008).  56- Figure I-20- non-monotonous repetition between path and landmarks based on Alexander's work.  57- Figure I-23- Forms of Growth in organic and mechanic cities- (Source: Mortada: 2004).  58- Figure I-24- Cordoba in 1811- Organically shaped city – (Source: Morta	Figure I-3- Vavassore's plan for Istanbul in 1520- (Source: Çelik, 1986:25)	8
Figure I-6- Lisbon masterplan in 1650 (Source: CML)		
Figure I-7- Baixa Pombalina Plan 1758. (Source: CML).  Figure I-8- Masterplan of Lisbon in 1871 (Source: CML).  Figure I-9- Coding in the Grounded Theory.  15 Figure I-10- Categorisation of coding stages for the grounded theory.  15 Figure I-11- Coding in the Ground Theory specified for the thesis.  17 Figure I-11- The attempts as mediators in the 20th century.  22 Figure I-2- The terms Regarding the subject.  30 Figure 1-3- The T-H-P triad and their architectural reference.  31 Figure 1-3- The T-H-P triad and their architectural reference.  32 Figure 1-5- The Triad regarding Traditionalism and modernity in space.  33 Figure 1-5- The Triad regarding Traditionalism and modernity in space.  34 Figure 1-6- The triad and overlapping of two vertex.  35 Figure 1-7- Traditionalism- modernity versus abstraction-concreteness.  36 Figure 1-8- Hegel Dialectics.  37 Figure 1-9- Two possible imaginations for space and urbanism.  38 Figure 1-10- architectural paradigms of Balance.  39 Figure 1-11- Dynamism and static-ness in space.  30 Figure 1-12- Balance and biologic concepts in architectural reference.  31 Figure 1-13- Three types of symbiosis-  32 Figure 1-15- Tradition and Traditional: Definition and Characteristics.  41 Figure 1-16- Tradition and Traditional: Definition and Characteristics.  42 Figure 1-17- Collective memory and traditionalism in space.  43 Figure 1-18- Piazza Del Campo in Sienna- (Source: Ritinar website).  54 Figure 1-19- The Symbol and semiotics- (Source: Author based on Barthes's work, 2008).  55 Figure 1-20- non-monotonous repetition between path and landmarks based on Alexander's work.  56 Figure 1-22- Mixed use development of a mosque, bazaar and centre of Fez – (Source: Dobbin, 1994).  57 Figure 1-24- Cordoba in 1811- Organically shaped city – (Source: Rhompson-Fawcett, 1998).  58 Figure 1-24- Cordoba in 1811- Organically shaped city – (Source: Rhompson-Fawcett, 1998).  57 Figure 1-25- The visual interruption example as a convex man in City Gorce: Pobbin, 1994).  58 Figure 1-29- A typical Manda	Figure I-5- Henry Prost's proposal for Istanbul in 1937- (Source: Akpinar, 2014:82)	9
Figure I-8- Masterplan of Lisbon in 1871 (Source: CML).  Figure I-9- Coding in the Grounded Theory.  15- Figure I-10- Categorisation of coding stages for the grounded theory.  15- Figure I-11- Coding in the Ground Theory specified for the thesis.  17- Figure I-11- The attempts as mediators in the 20th century.  22- Figure 1-2- The terms Regarding the subject.  33- Figure 1-3- The T-H-P triad and their architectural reference.  33- Figure 1-3- The T-H-P triad and their architectural reference.  31- Figure 1-5- The Triad regarding Traditionalism and modernity in space.  32- Figure 1-6- The triad and overlapping of two vertex.  33- Figure 1-7- Traditionalism- modernity versus abstraction-concreteness.  34- Figure 1-8- Hegel Dialectics.  35- Figure 1-9- Two possible imaginations for space and urbanism.  36- Figure 1-10- architectural paradigms of Balance.  37- Figure 1-11- Dynamism and static-ness in space.  37- Figure 1-12- Balance and biologic concepts in architectural reference.  36- Figure 1-13- Three types of symbiosis- Figure 1-14- Mutualism and synthesis as two paradigms of balance.  37- Figure 1-15- Traditionalism in general and in Architecture and Urbanism: Definition and Characteristics.  41- Figure 1-16- Traditionalism in Sienna- (Source: Author based on Barthes's work, 2008).  56- Figure 1-19- The Symbol and semiotics- (Source: Author based on Barthes's work, 2008).  57- Figure 1-20- non-monotonous repetition between path and landmarks based on Alexander's work.  57- Figure 1-21- The Forum of Pompeii as an example for local symmetry. (Source: Dobbin, 1994).  57- Figure 1-25- Fre visual interruption example as a convex map in City G France- (Source: Hiller et al. 1987).  58- Figure 1-26- Swetches of Courtyard houses on a hill on the right side in Latin America (Source: Rapoport. 1969).  58- Figure 1-28- Atypical Mandala- (Source: Rapoport, 1969).  58- Figure 1-29- A typical Mandala- (Source: Rapoport, 1969).		
Figure I-9- Coding in the Grounded Theory.  Figure I-10- Categorisation of coding stages for the grounded theory.  15 Figure I-11- Coding in the Ground Theory specified for the thesis.  17 Figure 1-1 - The attempts as mediators in the 20th century.  27 Figure 1-2- The terms Regarding the subject.  38 Figure 1-3- The T-H-P triad and their architectural reference.  39 Figure 1-4- The relationship between Lefebvre's spatial triad and the research realm.  31 Figure 1-5- The Triad regarding Traditionalism and modernity in space.  32 Figure 1-6- The triad and overlapping of two vertex.  33 Figure 1-7- Traditionalism- modernity versus abstraction-concreteness.  34 Figure 1-8- Hegel Dialectics.  35 Figure 1-9- Two possible imaginations for space and urbanism.  36 Figure 1-10- architectural paradigms of Balance.  37 Figure 1-11- Dynamism and static-ness in space.  37 Figure 1-12- Balance and biologic concepts in architectural reference.  38 Figure 1-13- Three types of symbiosis  39 Figure 1-14- Mutualism and synthesis as two paradigms of balance.  39 Figure 1-15- Tradition and Traditional: Definition and Characteristics.  41 Figure 1-16- Traditionalism in general and in Architecture and Urbanism: Definition and Characteristics.  44 Figure 1-17- Collective memory and traditionalism in space.  45 Figure 1-19- The Symbol and semiotics- (Source: Author based on Barthes's work, 2008).  50 Figure 1-20- non-monotonous repetition between path and landmarks based on Alexander's work.  52 Figure 1-21- The Forum of Pompeii as an example for local symmetry- (Source: Dobbin, 1994).  53 Figure 1-22- The Forms of Growth in organic and mechanic cities- (Source: Thompson-Fawcett, 1998).  54 Figure 1-24- Cordoba in 1811- Organically shaped city – (Source: Mortada, 2004).  55 Figure 1-25- The visual interruption example as a convex map in City G France- (Source: Rapoport: 1969).  56 Figure 1-26- sketches of Courtyard houses on a hill on the right side in Latin America (Source: Rapoport: 1969).  57 Figure 1-29- A typical Mandala- (Source	Figure I-7- Baixa Pombalina Plan 1758- (Source: CML)	. 12
Figure I-10- Categorisation of coding stages for the grounded theory.  Figure I-11- Coding in the Ground Theory specified for the thesis.  77 Figure I-1 - The attempts as mediators in the 20th century.  27 Figure I-2 - The terms Regarding the subject	Figure I-8- Masterplan of Lisbon in 1871 (Source: CML)	. 12
Figure I-11- Coding in the Ground Theory specified for the thesis	Figure I-9- Coding in the Grounded Theory	. 15
Figure 1-1 - The attempts as mediators in the 20 <sup>th</sup> century	Figure I-10- Categorisation of coding stages for the grounded theory	. 15
Figure 1-2- The terms Regarding the subject Figure 1-3 -The T-H-P triad and their architectural reference	Figure I-11- Coding in the Ground Theory specified for the thesis	. 17
Figure 1-3 -The T-H-P triad and their architectural reference	Figure 1-1 -The attempts as mediators in the 20 <sup>th</sup> century	. 22
Figure 1-3 -The T-H-P triad and their architectural reference	Figure 1-2- The terms Regarding the subject	. 30
Figure 1-5- The Triad regarding Traditionalism and modernity in space  Figure 1-6- The triad and overlapping of two vertex  Sigure 1-7- Traditionalism- modernity versus abstraction-concreteness  Figure 1-8- Hegel Dialectics  Figure 1-9- Two possible imaginations for space and urbanism  Figure 1-10- architectural paradigms of Balance  Figure 1-11- Dynamism and static-ness in space  Figure 1-12- Balance and biologic concepts in architectural reference  Figure 1-13- Three types of symbiosis-  Figure 1-14- Mutualism and synthesis as two paradigms of balance  Figure 1-15- Tradition and Traditional: Definition and Characteristics  Figure 1-16- Traditionalism in general and in Architecture and Urbanism: Definition and Characteristics  44  Figure 1-18- Piazza Del Campo in Sienna- (Source: Itinar website)  Figure 1-19- The Symbol and semiotics- (Source: Author based on Barthes's work, 2008)  Figure 1-20- non-monotonous repetition between path and landmarks based on Alexander's work  Figure 1-23- Forms of Growth in organic and mechanic cities- (Source: Dobbin, 1994)  Figure 1-24- Cordoba in 1811- Organically shaped city – (Source: Mortada, 2004)  Figure 1-25- The visual interruption example as a convex map in City G France- (Source: Rapoport: 1969)  Figure 1-26- Sketches of Courtyard houses on a hill on the right side in Latin America (Source: Rapoport: 1969)  Figure 1-28- Practical example for the symbolic role of circle- (Source: Pourahmadi, 2014)  Figure 1-29- A typical Mandala- (Source: Toda Materia)	Figure 1-3 -The T-H-P triad and their architectural reference	. 31
Figure 1-5- The Triad regarding Traditionalism and modernity in space  Figure 1-6- The triad and overlapping of two vertex  Sigure 1-7- Traditionalism- modernity versus abstraction-concreteness  Figure 1-8- Hegel Dialectics  Figure 1-9- Two possible imaginations for space and urbanism  Figure 1-10- architectural paradigms of Balance  Figure 1-11- Dynamism and static-ness in space  Figure 1-12- Balance and biologic concepts in architectural reference  Figure 1-13- Three types of symbiosis-  Figure 1-14- Mutualism and synthesis as two paradigms of balance  Figure 1-15- Tradition and Traditional: Definition and Characteristics  Figure 1-16- Traditionalism in general and in Architecture and Urbanism: Definition and Characteristics  44  Figure 1-18- Piazza Del Campo in Sienna- (Source: Itinar website)  Figure 1-19- The Symbol and semiotics- (Source: Author based on Barthes's work, 2008)  Figure 1-20- non-monotonous repetition between path and landmarks based on Alexander's work  Figure 1-23- Forms of Growth in organic and mechanic cities- (Source: Dobbin, 1994)  Figure 1-24- Cordoba in 1811- Organically shaped city – (Source: Mortada, 2004)  Figure 1-25- The visual interruption example as a convex map in City G France- (Source: Rapoport: 1969)  Figure 1-26- Sketches of Courtyard houses on a hill on the right side in Latin America (Source: Rapoport: 1969)  Figure 1-28- Practical example for the symbolic role of circle- (Source: Pourahmadi, 2014)  Figure 1-29- A typical Mandala- (Source: Toda Materia)	Figure 1-4- The relationship between Lefebvre's spatial triad and the research realm	. 31
Figure 1-7- Traditionalism- modernity versus abstraction-concreteness	Figure 1-5- The Triad regarding Traditionalism and modernity in space	. 32
Figure 1-8- Hegel Dialectics		
Figure 1-9- Two possible imaginations for space and urbanism		
Figure 1-10- architectural paradigms of Balance		
Figure 1-11- Dynamism and static-ness in space	Figure 1-9- Two possible imaginations for space and urbanism	. 35
Figure 1-12- Balance and biologic concepts in architectural reference		
Figure 1-13- Three types of symbiosis- Figure 1-14- Mutualism and synthesis as two paradigms of balance Figure 1-15- Tradition and Traditional: Definition and Characteristics Figure 1-16-Traditionalism in general and in Architecture and Urbanism: Definition and Characteristics Figure 1-17- Collective memory and traditionalism in space Figure 1-18- Piazza Del Campo in Sienna- (Source: Itinar website) Figure 1-19- The Symbol and semiotics- (Source: Author based on Barthes's work, 2008) Figure 1-20- non-monotonous repetition between path and landmarks based on Alexander's work Figure 1-21- The Forum of Pompeii as an example for local symmetry- (Source: Dobbin, 1994) Figure 1-22-Mixed use development of a mosque, bazaar and centre of Fez – (Source: Mortada: 2004) Figure 1-23- Forms of Growth in organic and mechanic cities- (Source: Thompson-Fawcett, 1998) Figure 1-24- Cordoba in 1811- Organically shaped city – (Source: Mortada, 2004) Figure 1-25- The visual interruption example as a convex map in City G France- (Source: Hillier et al. 1987) Figure 1-26- sketches of Courtyard houses on a hill on the right side in Latin America (Source: Rapoport: 1969) Figure 1-28-Practical example for the symbolic role of circle- (Source: Pourahmadi, 2014)  50-51-52-53-53-53-53-53-53-53-53-53-53-53-53-53-		
Figure 1-14- Mutualism and synthesis as two paradigms of balance	Figure 1-12- Balance and biologic concepts in architectural reference	. 38
Figure 1-15- Tradition and Traditional: Definition and Characteristics	Figure 1-13- Three types of symbiosis-	. 38
Figure 1-16-Traditionalism in general and in Architecture and Urbanism: Definition and Characteristics	Figure 1-14- Mutualism and synthesis as two paradigms of balance	. 39
Figure 1-17- Collective memory and traditionalism in space	Figure 1-15- Tradition and Traditional: Definition and Characteristics	. 41
Figure 1-18- Piazza Del Campo in Sienna- (Source: Itinar website)	Figure 1-16-Traditionalism in general and in Architecture and Urbanism: Definition and Characteristics	. 44
Figure 1-19- The Symbol and semiotics- (Source: Author based on Barthes's work, 2008)	Figure 1-17- Collective memory and traditionalism in space	. 48
Figure 1-19- The Symbol and semiotics- (Source: Author based on Barthes's work, 2008)	Figure 1-18- Piazza Del Campo in Sienna- (Source:Itinar website)	. 49
Figure 1-21- The Forum of Pompeii as an example for local symmetry- (Source: Dobbin, 1994)	Figure 1-19- The Symbol and semiotics- (Source: Author based on Barthes's work, 2008)	. 50
Figure 1-22-Mixed use development of a mosque, bazaar and centre of Fez – (Source: Mortada: 2004)		
Figure 1-23- Forms of Growth in organic and mechanic cities- (Source: Thompson-Fawcett, 1998)		
Figure 1-24- Cordoba in 1811- Organically shaped city — (Source: Mortada, 2004)	Figure 1-22-Mixed use development of a mosque, bazaar and centre of Fez - (Source: Mortada: 2004)	. 54
Figure 1-25- The visual interruption example as a convex map in City G France- (Source: Hillier et al. 1987) 57 Figure 1-26- sketches of Courtyard houses on a hill on the right side in Latin America (Source: Rapoport:1969) 58 Figure 1-27-The Samoan Dwellings- (Source: Rapoport,1969)		
Figure 1-26- sketches of Courtyard houses on a hill on the right side in Latin America (Source: Rapoport:1969) 58 Figure 1-27-The Samoan Dwellings- (Source: Rapoport,1969) 58 Figure 1-28-Practical example for the symbolic role of circle- (Source: Pourahmadi,2014) 59 Figure 1-29-A typical Mandala- (Source: Toda Materia) 59		
Figure 1-27-The Samoan Dwellings- (Source: Rapoport,1969)		
Figure 1-28-Practical example for the symbolic role of circle- (Source: Pourahmadi,2014)		
Figure 1-29-A typical Mandala- (Source: Toda Materia)	Figure 1-27-The Samoan Dwellings- (Source: Rapoport,1969)	. 58
Figure 1-29-A typical Mandala- (Source: Toda Materia)	Figure 1-28-Practical example for the symbolic role of circle- (Source: Pourahmadi,2014)	. 59
Figure 1-30- A typical cul-De-Sac in Medina- (Source: Mortada: 2004)	Figure 1-29-A typical Mandala- (Source: Toda Materia)	. 59
	Figure 1-30- A typical cul-De-Sac in Medina- (Source: Mortada: 2004)	. 60

Figure 1-31- Cul-De-Sacs in a typical Traditional Anatolian city – Source: (Bala and Nafa,2008)	61
Figure 1-32- The practice for stages of hierarchy in a contemporary project in Shanghai- (Source : Yanke des website, 2020)	
Figure 1-33- Mecca Plan- Hiarchial streets and alleys organised traditionally-Source: (Ekconcept Website,201	19)
Figure 1-34- A typical boundary in Venice- (Source: weurbansit.com,2020)	64
Figure 1-35-Narrow and winding street example in Alfama Lisbon	65
Figure 1-36- Pedestrian friendly zone in Istanbul- Constantine Hippodrome – (Source: Nomadic Nico.com) Figure 1-37- San Marco Square in Venice as a strong center- (Source: MHS Collections)	65 67
Figure 1-38-Courtyard houses and central patios in Cordoba, Spain (Source: Archeyes,2020)	
Figure 1-39- Courtyard house in Riyadh and the role in micro and macro system- Source :( Mortada, 2004:31)	
Figure 1-40- Horizontal walls linking the houses	69
Figure 1-41- Local Material in Mardin Turkey – (Source: Torus, 2011)	
Figure 1-42-The ornaments in traditional space	71
Figure 1-43- Sirkeci Post office in Istanbul built in 1909	12 75
Figure 1-45- The Global discourses on Architecture and Urbanism	
Figure 1-46– free façade among the five points of architecture in a 3d modelling of Villa Savoye – (Source:	
bim.acca.it)	83
Figure 1-47- Seskin District in Vilnius a typical example for identical blocks- (Source: Dreamstime.com)	
Figure 1-48- The modern buildings with less ornaments in Istanbul	85
Figure 1-49- A typical example of monotonous repetition and the pattern for that- (Source: Alexander, 2002) Figure 1-50- Prefabrication in America- (Source: - Prefabmuseum. uk)uk)	80 87
Figure 1-51- A building with maximum simplification	
Figure 1-52- Transparency in a shopping mall in Şişli Istanbul	
Figure 1-53- A bank with a single colored composition	92
Figure 1-54-AEG Turbine Factory by Peter Behrens – (Source: Jaeggi, 2000)	93
Figure 1-55- Industrial city by Tony Garnier in 1917- (Source: Garnier, 1917)	
Figure 1-56- Farnsworth House by Mies Van Der Rohe- (Source: archdaily)	
Figure 1-57- James Stirling Design for Siemens Computer center in Munich- (Source: Curtis, 1983)	
Figure 1-59-Mondrian's Composition with Red, Yellow and Blue 1921: The typical example of asymmetry-	91
(Source: Mondrian, Rothschild Collection-New York)	98
Figure 1-60- Taşlık kir Kahvesi as an Overhanging flat roof example- (Source: Erarslan, 2020)	100
Figure 1-61- Roof terrace and social gathering in unite d'habitation derived from von Moos, 2021:261)	101
Figure 1-62- Pilotis in Villa Savoye bu Le Corbusier – (Source : archdaily)	102
Figure 1-63- A building with a thin external wall	103
Foundationlecorbusier.fr)Foundation by Le Corbusier, a typical example for the reinforced concrete (Source:	105
Figure 1-65- Ribbon Windows in Bauhaus in Dessau built in 1925 – (Soruce : https://www.bauhaus-dessau.de	:)
	106
Figure 1-66- repetitious horizontal and vertical lines in Calouste Gulbenkian Museum- (Source:FCG archive)	
Figure 1-67-High-rise metropolis introduced by Hilberseimer-(Source: Hilberseimer, 1927:13)	
Figure 1-68-A separation between the pedestrian and vehicles in NYC- (Source: NYC Street design info,2022) Figure 1-69- Areal view by the Radburn plan by Clarence Perry in 1927 – (Source: by Southworth and Ben-Joseph, 2003)	
Figure 1-70- The intended traditionalism and modernism for each chapter	113
Figure 1-71- selected generations working in Istanbul for Human Section	
Figure 1-72- Istanbul and the selected case studies	
Figure 1-73-Timeline for Lisboa	
Figure 1-74- categorised generations of architects and planners working in Lisbon	
Figure 1-75- Selected neighborhoods in Lisbon	
Figure 2-1- Freezing time diagram  Figure 2-2- The visual image for status quo regarding spatial triangle	
Figure 2-3- Culturalist and Progressivist Queuing in architects	
Figure 2-4- The Intersection between Berna and Republic Avenue- (Source: CML, 1909)	126
Figure 2-5- The model for Cinema Capitolo based on its initial design- Source (Rodolfo, 2002)	129
Figure 2-6-Forestier's project for Lisbon in 1928 based on his sketches-( Source: Morais and Rosetta,2005:31)	<b>.</b>
Figure 2.7 Initial detailed cohomo for Darrus Educado VIII / Cauras - Mantez 1035)	
Figure 2-7-Initial detailed scheme for Parque Eduardo VII-( Source : Montez,1935)Figure 2-8- Casa de Moeda by Jorge Segurado in 1941 – (Source : CML)	
Figure 2-9- The Front page for one of the first issues of the magazine "Arquitectura Portuguesa"- (Source: FAI	
archive)	
Figure 2-10- Portuguese world Exhibition in 1940 – (Source: CML)	136
Figure 2-11- Lisbon Master plan in 1948- (Source: CML)	138
Figure 2-12-Infanto Santo Avenue- (Source: CML,1957)	
Figure 2-13- A residential complex in Bairro das Estacas – (Source :Aefaup.com,2021)	141
XV	

Figure 2-14- Calouste Gulbenkian Museum and Foundation – (Source: FCG archive)	
Figure 2-15- Chelas comprehensive plan – (source: Heitor,2016 &CML, 1964)	
Figure 2-16- The Amoreiras shopping center by Tomas Taveira.	
Figure 2-17-Centro Cultural de Belem	
Figure 2-19- Ministry of Defense Gatehouse in Islamic Eclecticism and Moorish Revivalism-(Source: Gül,2017	143 '\
rigure 2-13- Williastry of Deterise Gateriouse in Islamic Edecitiosin and Woorlsh Newtwalisti-Codifice. Gui,2017	,
Figure 2-20- Sirkeci Train Station by August Jasmund (Source:Fikriyat website)	
Figure 2-21- Haydarpasa railway station as a gift by Kaiser Wilhelm II to Sultan Abdul Hamit II – (Source:	
Gül,2017)	155
Figure 2-22- Istanbul Sirkeci Post Office - (Source: PTT museum archive)	156
Figure 2-23- 4 <sup>th</sup> Vakif Hans as the crucial buildings began to be built in 1910s	158
Figure 2-24- Harikzadegan Apartments in Laleli by Kemalettin Bey in 1920s- (Source: Gul,2017)	
Figure 2-25- Atatürk Sea Pavilion in Florya was designed in 1937- (Source: Aras Neftci's collected Archive)	
Figure 2-26- Faculty of Science and Letters by Sedad Eldem and Emin Onat	
Figure 2-27- Prost analytic plan for Istanbul (Source: Istanbul Metropolitan Municipality)	
Figure 2-28- Taşlik Coffee House By Sedad Eldem in 1948 – (Source :archnet.org)	
Figure 2-29- Social Security complex In Zeyrek by Sedad Eldem- (Source: Agha Khan Archive)	
Figure 3-1- Freezing "Human"	
Figure 3-2- Rossio Train station designed by Jose Luís Monteiro- (Source: Arquivo de Sipa-Fonte De Sacave	m)
Tigure of 2 Treaties Train etailer designed by 6555 Edia menteria (6551-55) Tigure de cipa Ferra de Sacra	181
Figure 3-3- Froebel Kindergarten by Jose Luís Monteiro- (Source: CML)	
Figure 3-4- Hotel Avenida Palace by Jose Luís Monteiro- (Source: Arquivo de Sipa-Fonte De Sacavem)	
Figure 3-5- Rafael Bordalo Pinheiro Museum by Álvaro Machado	
Figure 3-6- Tivoli Theatre centre designed by Raul Lino	185
Figure 3-7- Palacete Mendonca-Premio Valmor de 1909 by Ventura Terra –(Source: CML)	
Figure 3-8- The principles of the architects in the generation based on the traditional-modern spectrum	
Figure 3-9- Cais Do Sodre Train Station by Porfirio Pardal Monetiro- (Source: Serodio-CML,1963)	
Figure 3-10- Nossa Senhora de Fátima Church by Porfirio Pardal Monteiro	
Figure 3-11- Instituto Superior Técnico by Porfirio Pardal Monteiro – (Source: DGPC)	
Figure 3-13- The principles of the architects in the generation based on the traditional-modern spectrum	
Figure 3-14- Monsanto Tennis Club by Francisco Keil do Amaral- (Source: FCG archive)	
Figure 3-15- Alvalade urbanisation plan – (Source: CML 1948)	
Figure 3-16- Sheraton hotel and Imaviz- (Source: FCG archive	
Figure 3-17- The principles of the architects in the generation based on the traditional-modern spectrum	
Figure 3-18- Portuguese Pavilion at Expo 58-(Source: Biblioteca de Artes de Fundação Calouste Gulbenkian)	
Figure 3-19- Ruy Jervis d'Athouguia and Sebastião Formosinho Sanches Estacas neighbourhood Bird Eye vie	
(Source: CML)	197
Figure 3-20- Ruy Jervis d'Athouguia and Sebastião Formosinho Sanches, Estacas Neighbourhood-(Source: Cource)	,
Figure 2.24 Frantishes (Source)DCDC)	
Figure 3-21- Franjinhas- (Source:DGPC)	100
Figure 3-23- The principles of the architects in the generation based on the traditional-modern spectrum	
Figure 3-24- Chiado Fire before reconstruction by Siza- (Source: Revista Municipal,2007)	
Figure 3-25- Portuguese Pavilion in Expo 98	
Figure 3-26- Bonjour Tristesse Sketches by Siza-(Source: Jodido,2013:97)	
Figure 3-27 -A cidade como arquitectura [The architecture of city] written by Nuno Portas- (Source: Portas, 19	
Figure 3-28- Pantera-Cor-de-Rosa(Pink Panther) social housing	
Figure 3-29- Casa Dos Bicos	
Figure 3-30- The principles of the architects in the generation based on the traditional-modern spectrum	
Figure 3-31- The overall principles of the four generations in Portuguese architecture considering traditional ar	nd
modern architecture	
Figure 3-32- Pera Palace – (Source-Ariiktar,2013)	
Figure 3-34-Sheikh Zafir Tomb built in 1905 by D'Aronco	
Figure 3-35Saint Antony Church in Pera by Mongeri	
Figure 3-36- Istanbul 4 <sup>th</sup> Vakif Han- (Source: Salt Research centre)	211
Figure 3-37- Defteri Hakani building by Vedat Tek- (Archive: Salt Research archive)	
Figure 3-38-The first generation of Turkish architects during the Ottoman empire and the Turkish republic and	
their principles toward traditional and modern architecture	213
Figure 3-39- The perspective of Istanbul Palace of Justice built in 1948 - (Source: Bozdoğan,2002)	
Figure 3-40- Florya Atatürk Sea Mansion- (Source: Salt research)	
Figure 3-41- Ceylan Apartments- (Source: Salt Research) archives)	
Figure 3-42- Yalova Thermal Hotel- (Source: Salt Research archives)	<b>Z1</b> 0

Figure 3-43 Taşlik Coffee House- (Source: archnet.org)	217
Figure 3-44- Zeyrek Social Security Complex- (Source: Agha Khan)	
Figure 3-45- Şişli Mosque: The first religious building in republican era – (Source: SALT research archive)	
Figure 3-46-The second generation's overall orientation toward traditional and modern architecture	
Figure 3-47- Understanding Istanbul by Turgut Cansever- (Source: Cansever,2015)	
Figure 3-48-The generation's orientation toward traditionalism and modernity	
Figure 3-49- Intercontinental Hotel- (Source:Salt Research)	
Figure 3-50- The Levent Project in 50s- (Source:Salt Research)	
Figure 3-51- Istanbul Textile Traders Market –(Archent and salt research)	
Figure 3-52- Metro City By Doğan Tekeli-(Source: Salt Research)	
Figure 3-53- Bakirköy Industrial International Bank in 1985- (Source: Salt Research,2022)	225
Figure 3-54- Etimesgut Mosque in 1965 By Cengiz Bektaş- (Source: Salt Research center,2022)	226
Figure 3-55—The Generation's overall principle toward traditional and modern architecture	
Figure 3-56- The Turkish architects' modus operandi toward traditionalism and modernity	
Figure 4-1- Halting place	
Figure 4-2- The interaction of "Humans" through time considering traditionalism and modernity	
Figure 4-3-Selected neighborhoods for Lisbon	
Figure 4-4- Status Quo of Baixa Pombalina – (Source: ©Google Earth)	
Figure 4-5- Lojas das Meias by Raul Lino – (Source: Manta Perreira,2020)	
Figure 4-6- Santander Bank, previously known as Banco Totta e Açores  designed by Miguel Ventura Terra :	234
Figure 4-7- Santander Bank, previously known as Banco Totta e Açores' designed by Miguer Ventura Terra Figure 4-7- Buildings in the Praça de municipo, Praca D.Pedro Iv, Praca de S.Paulo and Rua João Perreira da	
Rosa—(Source : França,2012: 17-39) Figure 4-8- Building Typologies frequently used in the façades of Baxia Pombalina –(Source: França,2012)	
Figure 4-9- reconstruction plan for Baixa Pombalina by Eugenio Dos Santos and Carlos Mardel  - (Source:	231
Arquivo Municpal CML)	227
Figure 4-10-Evaluating the zone 1 based on the modern factors	
Figure 4-11- Evaluating the zone 2 based on the traditional factors	
Figure 4-12- Overall classification based on imposing factors	
Figure 4-13- Rua Benformoso and Rua Terreirinho	
Figure 4-14- narrow and winding passages in Graça, Castelo, Mouraria and Alfama	
Figure 4-15- Evaluation of the zone based on the modern factors	
Figure 4-16- Evaluation of the zone based on the factors of traditionalism	244
Figure 4-17- Overall points based on the imposing factors	
Figure 4-18- The Valmor prize winner building in Intendente by Adães Bermudes in 1908- (Source : Arquivo Cl	
rigure 4-10- The valinor prize wither building in interfacile by Addes Bernades in 1900- (Godise : Alquivo of	
Figure 4-19 Ermida Dos Resgate in 2022	_
Figure 4-20- Evaluation of the zone based on the modern factors	
Figure 4-21- Evaluation of the zone based on the traditional factors	
Figure 4-22- Overall classification based on the imposing factors	
Figure 4-23-Isometric plan of Areeiro square (FGC-Blblioteca de Arte e Arquivios)	
Figure 4-24- Praça De Areeiro in 1950s - (Source: FCG-Biblioteca de Arte e Arquivos)	
Figure 4-25- South Facades of the monumental design –(Source: FCG Biblioteca de Arte e Arquivios)	
Figure 4-26- Critical networks of the zone: Praca De Pasteur (Top -left) , Avenida João XXI (Top-right), Avenid	
da Paris (Down-Left) and Rua President Wilson (down -right)	
Figure 4-27- Identification of the zone based on the modern factors	
Figure 4-28- Evaluating the zone based on the traditional factors	
Figure 4-29-Evaluating the zone based on the imposing factor	
Figure 4-30- The aerial View of Alvalade- (Source: CML)	
Figure 4-31-Urbanisation plan for the Southern zones of Alferes Malheiro- (Source: AML)	258
Figure 4-32- Bairro das Estacas-( Source :CML).	
Figure 4-33-Alvalade and its main networks	
Figure 4-34- Evaluating the zone based on the factors indicating modernism	
Figure 4-35- Evaluating the zone based on the factors indicating traditionalism	
Figure 4-36- Overall classification based on imposing factors	
Figure 4-37- The zone 6 -Oliavis Norte, Olivais Sul and Chelas (Soruce : CML-GTH)	
Figure 4-38-Olivais Norte Master plan- (Source: GEO – Gabinete de Estudos Olissiponenses, DP 1272 CMLE	
— Olivais Norte)	
Figure 4-39- Olivais Norte Areal view in 70s- (Source: GTH-CML)	
Figure 4-40- Olivais Norte	
Figure 4-41- Olivais Sul Master plan-( Source: GEO – Gabinete de Estudos Olissiponenses, DP 1272 CMLEO	
Oliavis Sul,1961)	
Figure 4-42- Chelas and the dispersed residential complex	
Figure 4-43- Evaluating the zones based on the factors indicating modernism	
Figure 4-44- Evaluating the zone based on the factors indicating traditionalism	
Figure 4-45- overall classification based on imposing factors	270
Figure 4.40. Only start a simple ordered in lateral and	
Figure 4-46- Selected neighborhoods in Istanbul	271

Figure 4-48-Fatih district in a nutshell	275
Figure 4-49- Evaluation of the zone based on the factors indicating modernism	
Figure 4-50- Evaluating the zone based on the keywords indicating traditionalism	
Figure 4-51- Overall classification based on imposing factors	
Figure 4-52-The location of zone 2 in the map	
Figure 4-53- Grand Plan For Galata- (Source: Çelik, 1986:65)	278
Figure 4-54- Buildings located in the zone varying from Stylistic revivalism to Art Nouveau and Modernism	280
Figure 4-55- Evaluating the zone based on the factors indicating modernism	
Figure 4-56- Evaluating the zone based on the factors indicating traditionalism	
Figure 4-57- Overall classification based on imposing factors	
Figure 4-58- The location of the zone in the map	283
, Rebi Gorbon(1909-1993), Zeki Sayar(1905-2000), Ruknettin Güney(1904-1970) and Emin Necip Uzman (19	11-
1997) participated in the projects urbanising Şişli (Altan Ergut et al.,2015). The apartments started from small-	-
scale buildings in the 20s and 30s. The building process developed toward high-rise buildings in the second h	alf
of the 20 <sup>th</sup> century. Figure 4-59-Şişli and its tendency to modernity	
Figure 4-60- Evaluation of the zone based on the factors indicating modernism	
Figure 4-61- Evaluating the zone based on the factors indicating modernism	
Figure 4-62- Overall classification based on imposing factors	
Figure 4-63- The zone 4 location in the map	
Figure 4-64- Evaluating the zone based on the factors indicating modernism	
Figure 4-65- Besiktas: From traditional settlements to the modern development in late 20th and 21 centuries	
Figure 4-66- Evaluating the zone based on the factors indicating traditionalism	
Figure 4-67- Overall Classification based on the imposing factors	
Figure 4-68-The zone location in the map	
Figure 4-69-The Recap for Üsküdar	
Figure 4-70- Evaluation of the zone based on the factors indicating modernism	
Figure 4-71- Evaluation of the zone based on the factors indicating traditionalism	
Figure 4-72- Overall Classification based on the imposing factors	
Figure C-1- Revised understanding of adaptive reuse regarding the thesis	
Figure C-2- Research findings- coding based on Identification of modernism and traditionalism	
Figure C-3- A Dynamic city based on the Gradient Layers of a Spectrum	
Figure C-4- A Section from a Spectrum Understanding a City	
Figure C-5- The Future of Ruptures in the Spectrum model of the city	. 329



# Introduction



This chapter aims at introducing the research problems briefly, theme of the research, Questions, Objectives methodology and case studies

#### Introduction

#### The Research Statement

The societies in the 20th century experienced two major opposing themes, in the cities, that concluded in severe unresolved challenges. The radical shifts in space and built environment during various periods can result in radical disruption in the communities (Piquard and Swenarton, 2011:2).

Like mathematical and computer science essential elements, modernism and traditionalism have been playing as seemingly binomial concept of architecture and urbanism in the last century. Like the edges of a rope, these two radical attitudes imposed their leadership through diverse societies to represent themselves as the ultimate solution for an incoming dark path. The battle for these interdisciplinary binaries affected and restructured the space in its distinct scopes from social to urban for everyday experience. Therefore, this vision paves the way to seek out the socio-political cause-and-effect outcomes in the built environment and urban fabrics.

It still seems indispensable to analyse the architectural and urban behaviours of the societies in the different geographic borders both on global and local scales. This perspective generates specific particularity to monitor the invisible deterministic dynamics or anti-deterministic ruptures throughout the century. Accordingly, the selection of case studies from the east and the west end of Europe functions as the hotspots of architectural and urban dialogues in the 20th century. This perspective could provide a framework for a study trying to search for a pattern of Balance between the modern and traditional tendencies. In the age of pluralism, such mentality appears as the potential to offer global peace inside a sustainable structure.

During the last decades, Europe has been experiencing mass migration from the countries outside the continent, like the Middle East, inheriting the harsh dichotomies of western Eurocentric modernity as a colonial paradigm and traditional eastern ideologies (Fukuyama,2006:11). Also, the critique of the modern discourse of the 20th century is still the priority of several countries as the different theories could not drive the architecture and built environment in a persistent practical way. The new formation among the immigrated populations and the native residents will create a repetitious situation of conflict and challenges.

This continuous theme could be a severe social risk in the long term, even for societies coping with other priorities like global warming and sustainability.

The socio-spatial segregation as the most evident aftermath appears as the limiting factor in different groups' participation influencing the adaptation process (T. Taşan-Kok and D. Stead, 2013). Nevertheless, it is impossible to put the architectural discourse and their political reading and reflection in urban design aside due to their requisite role in structuring the space. Moreover, the conceived spaces consumed in various districts cannot provide the required mutual interaction and self-organisation between the communities.

The cultural and political crisis in various societies, especially in the Middle East, originates from architectural and urban discourses without responding to the residents' sense of belonging to the space they live. The possible consequence could form radical groups start to appear to begin dominancy and rivalry, causing a crisis caused by western planning and zoning (Al Sabouni, 2016). The experiences of

Syria and other regions in the Middle East warn decision-makers to generate innovative and dynamic approaches to balance the socio-political dichotomies in cities through architectural perspectives.

The intersections and borders on a global scale contribute to the deep understanding of clashes between ideologies and cultures, shaped in a balanced position throughout history. Their transition into an intense and radical phase contaminated the sense of place and spatiality, concluding in social anxieties.

Given the importance of the cultural exchange of East and West in the borders of Europe, Istanbul and Lisbon could be identified as the most critical case studies for a comparative study. The chosen cities shape the critical cores of the thesis to analyse the global and local interactions of urbanity, architecture, and spatiality.

Istanbul, known as the Intersection of Europe and Asia and the centres of" Rationalism" and "Orientalism", was the subject of discussions for western and anti-western interactions. The most crucial layout of the city still inherits the legacy of the Ottoman Empire for centuries and the collapse of one of the greatest Islamic dynasties in Anatolia. The infare of Eurocentric modernism from the countries like France and Germany to Ankara, the new capital of the Republic, Influenced the former Ottoman capital as well (Soltanzadeh and Hasanpour, 2015). The socio-political turbulences from First World War to the military coups were tightly linked with the clashes of secular and anti-secular mentalities. Inside such a chaotic environment, the traditional and modern perceptions were the subject of space (re-)production influencing Istanbul. Also, a sign of neo-Ottoman traditionalism could be sensed as returning point to a political spectrum (Taşpınar, 2008). One can claim that this situation is amplifying the radical possible opposing modern movement.

On the other side of Europe, Lisbon is the capital of Portugal, located in Southwestern Europe; the flow of migration from the Middle East and African countries is clear to grasp. The spatial transformations after the carnation revolution in 1974 resulted both in suburban sprawl and urban shrinkage, which caused the leaving out of some groups from the most critical parts (Alves et al,2016). Also, the increase in prices of houses, mainly in the last decade, hugely boosted this urban discontinuity. The new waves of nationalism, anti-immigrant policies and population mixture due to globalisation may lead to the typical clash of East and West in a radical way, even in Lisbon.

### Importance and rationale

Looking back at architectural and urban development and space as their production in history's scope is necessary. Also, observing and characterizing history and space without socio-political perception is impossible. If the architects and urbanists neglect to learn the historical consequences of what happened in the countries like Syria and Bosnia- Herzegovina, they will not even reach a consensus over the sustainability and global warming crises. This possibility stems from the extent of participation in such societies.

The history of discourses in the 20th century, theoretically, is not yet over and will evolve in several ways in a problematic cycle. Consequently, balancing the traditional and modern poles in a dynamic approach frames a kind of historical sustainability. Subsequently, such a vision paves the way for the other stages of sustainability as well.

#### Questions

#### **Main Questions**

- What are the most significant socio-political implications and definitions of radical modernity and traditionalism in architecture theory and urbanism?
- It is justified to percieve city as a specturm with most traditional layer in one side and the most modern layer on the other? If so, how does the "Spectrum theory and model" physically balance and contribute to peaceful societies?

#### **Secondary Questions**

- Is it justified to address the term "traditionalism" and "modernity" geographically in architectural discourse? If so, does this polarity illuminate West vs East ( or Occidental vs Oriental ) dichotomy?
- Which styles and ideas in the case studies and in general neighbourhoods in case studies do represent modernism and traditionalism with the highest possible extent?
- How can a correlation between the architectural styles, ideologies, and social groups in societies take place considering traditionalism and modernism

#### **Objectives**

The first objective is to designate a theoretical spectrum model based on theoretical frameworks. It is the synthetic consequence of the studies on diverse realms of the thesis. The next objective is centralised in the case studies to identify the neighbourhoods indicating modern and traditional factors in the city and locate the layers following the spectrum model between them as transitional spaces.

Based on the theoretical discourse, the thesis intends to define the critical factors as decoded keywords for balancing traditionalism and modernism in cities.

The last target will be the possible identification of the approaches contributing to a city balanced by traditionalism and modernity toward a more peaceful society respective to the theoretical discussions conducted in the thesis.

The objectives of the thesis follow a top-down approach. The subject of the thesis generates the first objective as the primary and the general one. The case studies give rise to a comparative analysis. This comparative analysis finds a pattern helpful enough to designate a theoretical model.

Case studies are the most crucial parts of understanding such patterns. Nonetheless, they are the objects for a larger-scale perception. Hence, each city's modern and traditional layers are the second priority. The comparative analysis contributes to finding the critical factors as decoded keywords playing a part in balancing traditionalism and modernity. The last target is a lesson learned from the historical narratives and phenomenological observations derived from the previous objectives. It is possible through this step to discuss approaches to balance traditionalism and modernism in the cities.

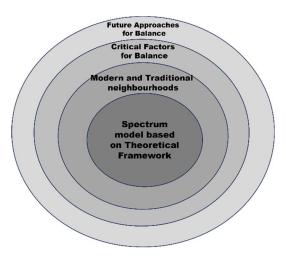


Figure I-1-The Hierarchies of the Objectives

#### Questions and Objectives: The Theoretical State of the thesis

The thesis intends to clarify the term traditionalism and modernity stemming from the etymological to the philosophical and the focused approach in architecture and urbanism in the first place. In a parallel effort to generate the realms of the thesis, it is widely believed that a historical review of urban development through time illuminates the socio-political reading of the problem. Answering this question paves the way for meeting the first and second objectives. Therefore, answering this question facilitates reaching the objectives, such as finding the functional factors decoded as keywords for balancing traditionalism and modernity and identifying the neighbourhood's character based on modern and traditional elements of cities. A theoretical framework is a reasonable approach to rationalising perceiving the city as a spectrum of traditionalism and modernity with the neighbourhoods in a more modern or traditional instance than others. This is the second main question for the thesis. It can also function as a catalyst to identify the character of the neighbourhood based on modern and traditional elements of cities as a proper mindset to create a spectrum model to perceive the dynamism of the city, answering diverse social needs of the residents possible through policies as a road map for future generations of urban development. Geographical sources of the dichotomy between traditionalism and modernity have been debated between historians and theorists of interdisciplinary fields, sometimes as a deceiving factor for possible biases. The dialogue between the Orient and the West or North-South classification of discourses had been the central lens for considerable investigation. Though it is not classified as a first-level priority question, a literature review of traditionalism and modernity might also answer it.

Furthermore, the possibility of generalising such classification on a microscopic scale (case studies in this case) could be answered. Moreover, the chronological vision of case studies investigates the role of influential ideas, styles and neighbourhoods with dominant modern and traditional features. This complementary question reinforces the capacity to meet the goals like decoding the functional factors of balancing cities and identifying the characteristics of the selected neighbourhoods in the case studies. At last, the correlation between architectural styles, social groups, and ideologies respective to

traditionalism and modernity has to be observed. This final secondary question supplements all the attempts to clarify possible roadmaps to balance the cities based on perceiving the city as a spectrum.

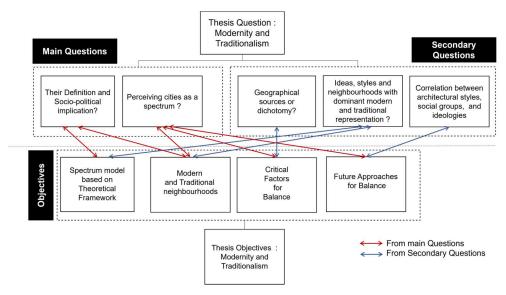


Figure I-2- Questions and objective

#### Case Studies

The development of architectural design throughout history with its specific diversities, necessitated the presence of architectural evolution with all the thesis, anti-thesis and synthesis formed through the recent centuries. The theoretical and practical advancements of architecture in Europe with its transmissible power to all continents has to be observed in the borders, regardless of visual and physical. The reason behind this approach might be creation of geographical anti-thesis toward a time-specific imposing power of architecture which might be considered as alienating force. The traces of such image are locatable in the geographical intersections reinforcing the battle between traditionalism and modernity. For this reason, selecting the case studies seems to a crucial step for clarifying the research statement of the thesis.

Istanbul and Lisbon are European architecture's Eastern and Western ends dealing with modernity and traditionalism. Moreover, understanding the behaviours of what is known geographically as the "inbetweens" seems necessary as it provides the attitude to process the possibility of following a deterministic model.

#### Istanbul through the centuries: A focused introduction

Istanbul, one of the most crucial cities in the Middle East and Turkey, witnessed numerous historical turning points. Formerly known as *Constantinople*, the city was the capital of the Byzantine and Ottoman empires during the centuries. Istanbul represented all diverse cultures and regimes, such as the Hellenic, Roman, Ottoman and Turkish Republics. The historical development established various religious hegemony from Christianity to Islam through the migration and inhabitation of different ethnic groups.

Yet, the enthusiasm shown by the ethnic groups to reside in the city is the question to be answered. The most straightforward answer is hidden inside the geographic attributes and attractions that Istanbul has presented. The city is between the Black Sea in the North and the Marmara Sea with the Bosporus strait in between, indicating the city's division into East-West and Asian-Europe half. The Golden horn is the other critical geographic feature, indicating another division between Istanbul's Classic and contemporary areas. Apart from the watercourse and horn, the topological aspect is another implication for *Constantinople*, as it was known to be the city of "Seven Hills", on which the mega historical monuments are built.

#### Istanbul before the 20th century: A brief story

Excavation projects in the classic part of the city in the second half of the 20th century prove that the city dates back to the second Millennium BC (Janin, 1964). The primary settlements belonged to the Greek communities organizing the city as *a Greco-Roman* structure. These settlements consisted of spaces such as Temples, an Acropolis, theatres, baths, gymnasiums and stadiums (Çelik, 1986:11).

#### Istanbul as a Roman city

There was a shift in the city from the Greek regime to a new Roman system, as *Septimius Severus* destroyed all the previous fortifications. The new system manufactured new urban structures like the forum and hippodrome. However, the city became a new Roman centre a century after Constantine decided to instigate Byzantium as a capital (Krautheimer, 1983).

There was significant duplication of Rome regarding the urban administration by dividing the city into fourteen regions (Çelik, 1986:15). Constantinople became a new centre for Christianity. During the centuries, the population balance in Constantinople changed rapidly (Janin, 1964). The foreign population consisted of Italian colonies such as Genoan and Pisan, German and Spanish tradesmen with Arabs and Jews as minorities (Çelik, 1986: 21). The Roman dynasty continued until the fifteenth century as the Roman capital collapsed by the Ottoman Turkish rulers.

#### Ottoman capital: A new identity

Osman Gazi's successors' most exceptional turning point occurred as *Mehmet* II conquered one of the major centres of Christianity in 1453. It was a new era for the architectural and urban Image when mosques substituted the churches without demolition and destruction.

In the first years of the newly called Istanbul under the Ottoman regime, the religious formation of the population was not a significant concern for the government. However, the policy of creating an Islamic identity was executed later. Notwithstanding, around 58 per cent of the population were Muslims according to the census in the 15th and 16th (Inalcik,1978). The population formation stayed the same until the latest years of the 19th century ( $\varphi$ elik,1986:26).

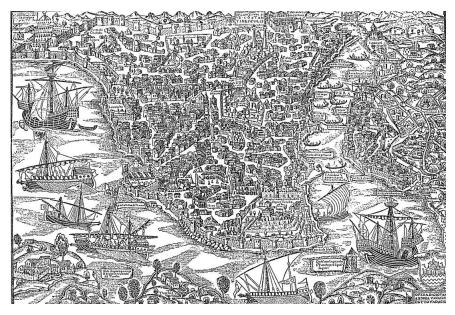


Figure I-3- Vavassore's plan for Istanbul in 1520- (Source: Çelik, 1986:25)

The architectural and urban Image of the city transformed with monumentality. The monuments, mostly the *Kulliyes*, were designed with the mastery of *Mimar* (the architect) *Sinan*<sup>2</sup>. The economic support of Ottoman *Vakifs* generated verticality in the city and influenced the urban form on a grand scale. It was the age of mosques on the hills to reinforce the Islamic identity that the Ottoman kings intended to fabricate.

The population of Istanbul approached almost one million by the 18th century. It was the era of fascination with European architecture (Cezar, 2002:58). Mehmet Çelebi, a representative of the Ottoman Empire, visited France to grasp how the country industrialised (Özgen, 2016: 222). Afterwards, the French architectural culture synthesised with Ottoman architecture, resulting in the so-called "Baroque Ottoman" style (Kuban, 1954) with its famous curved facades, eaves and surface decorations inside a picturesque image that the streets of that Time generated (Çelik, 1986: 29).

The political dominance of the empire started to decline in the 18th century. A weakened empire faced several challenges that led to the urban system's transformation—a significant period in this century generated a fundamental step for a more modernised city. This reformation era, known as the "*Tanzimat*<sup>4</sup>", started in 1838 through the *Anglo-Turkish* commercial treaty and reached to peak in 1908 with the Young Turk Revolution (Lewis, 1961: 28). The constitutional revolution at the beginning of the 20th century paved the way for the ultimate collapse of the empire since it lost some territories in Europe in the last century.

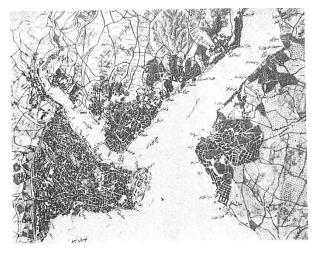


Figure 0-4- Istanbul in 1871- (Source: Çelik, 1986:41)

#### Istanbul in the 20th century- The core part of the discussion

The second decade was a new wave of failure for the Ottoman Empire as they joined the First World War. Besides the war, which concluded in a loss for the allied powers, the revolts in Arabic territories amplified the previous reformist anxieties caused by the Young Turks. The empire first lost the Middle Eastern Territories, resulting in occupation by France and the United Kingdom.

Anatolia was the last remaining region for the Ottomans. However, the civil wars between the weakened empire and countries (or groups) such as Greece, Armenia, French, Italy, and the United Kingdom created severe anxieties in the region. Finally, the treaties of Kars in 1921 and Lausanne in 1923<sup>5</sup> were the cornerstones to establishing a new country known as "Turkey", with the leadership of Mustafa Kemal Atatürk and the exile of the last *Caliph* of the Ottomans (Britannica).

Based on the brief historical introduction, the research's central task overlaps the socio-political turning points of Istanbul in the latest years of the Ottoman Empire and the current Turkish republic period. Moreover, architectural developments throughout the 20<sup>th</sup> century will be discussed in depth in the following chapters.



Figure 0-5- Henry Prost's proposal for Istanbul in 1937-(Source: Akpinar,2014:82)

#### Lisbon (Lisboa) through the centuries

The Portuguese capital had been the scenery for various images of vivid architectural heritage throughout history. Like its Turkish counterpart, Istanbul, the city is known as *Cidade das Sete Colinas* meaning "the city of seven hills", being built over the hills such as *São Jorge, São Vicente, São Roque, Santo André, Santa Catarina and Sant'Ana* marginalised by the *Tejo (Tagus)* river emptying into the Atlantic Ocean.

The city was the settlement for several cultures and tribes, such as Celts, Romans, Carthaginians, Visigoths, and Moors. Lisbon is also known as the Intersection of continents like America, Europe and Africa Geographically and for the country's critical political role during the world wars. The capital experienced diverse socio-political moments throughout history. This specific circumstance provided various distinct characteristics for Lisbon. Through a historical lens, a serial move from a Roman realm through an Islamic Moorish culture and later a powerful colonial centre gave rise to various contexts of centrality. Hence, besides the multiple cultural transitions over the centuries, it is probable to articulate a way of looking inside a traditional-modern polarity.

#### **Lisbon Before 1755 (pre-Pombaline era)**

It has been an entirely reasonable approach for most scholars, especially modern architecture investigators, to divide the city's architectural history based on after and before the earthquake in November 1755. The collapse on a significant scale affected the general urban fabric, leading to the revitalisation of the city, being evident until now.

There are not enough sources for elaborating on the dominant forces, accurately shaping Lisbon in pre-Pombaline times. Nevertheless, the scripts written by numerous travellers indicated a few essential points in the way the city developed. The Portuguese identity started reorganizing in the 12th century, known explicitly as the "*Reconquista6*", when king *Afonso Henriques* (1106-1185) ended the dominancy of Moravids and became the kingdom of Portugal. Besides the diverse spectrum of monumentality, the short Moravid period Left its mark on urban fabric since *Alfama* and *Mouraria* are known as reminiscent of Islamic planning (Anderson,2000)

The most noticeable period for Lisbon afterwards, dealing with urban regulation and architectural reforms, dated back to the time King *Manuel I* (1469-1521) held the dynasty for 26 years (1495-1521) when Lisbon experienced significant growth in population. The age of discovery influenced the need for Portuguese culture was already felt (Barreiros, 2008: 207). The city was also the host for foreigners and merchants because of its specific critical port-side role.

Later, it was Time for the Iberian union to perceive the Importance of Lisbon, with the most population in the peninsula. The primary core of the city sprawled from *Rossio* to *Terreiro do Paço* in a North-west direction, surrounded by *São Jorge* hills on the east side and Bairro Alto on the West. The planning and construction of *Bairro Alto* as a crucial nucleus is utterly connected to the Lisbon Tsunami in 1531 Based on *Joaquim Jose Moreira de Mendonça*'s (1758) argument. As an aftermath of this devastating moment, streets of *Bairro Alto* were built just outside the *Portas de Santa Catarina* and *Postigo de S.Roque*.

Under the monarchy of *King Philip II* (1527-1598), it was essential to transform the fabric a little bit aligned with the Renaissance. Henceforth, the residential two-storey buildings in *Bairro Alto* were the central physical elements to be revised according to the geometrical patterns planned for the city. Nonetheless, the efforts of the Manueline and Philippine times did not connect to the urban landscape. The slow approach to rational regulation of the town moved on until 1640 and the restoration of war between Portuguese and Spanish armies. Later on, urban growth linearly extended toward the West. Once again, Lisbon was monumentalised in the period of *King João V* (1689-1750) with the supervision of *Manuel Da Maia* (1677-1768) (Mullin, 1992:7).

The *Aqueduto das Águas* Livres (free water aqueduct) was the exemplary work of that time before the earthquake, which demolished the whole urban system except for a few monumental works, such as the aqueduct itself. Apart from widening the streets and rejuvenating the older quarters, this approach continued until 1755 as a critical point for Lisbon's indispensable taxonomy of architecture and urbanism.



Figure 0-6- Lisbon masterplan in 1650 (Source: CML)

The Aqueduto das Águas Livres (free water aqueduct) was the exemplary work of that time before the earthquake, which demolished the whole urban system except for a few monumental works such as the aqueduct itself. Apart from widening the streets and rejuvenating the older quarters, this approach continued until 1755 as a critical point for Lisbon's indispensable taxonomy of architecture and urbanism.

#### Pombaline era- the revitalised Lisbon

The fabric understood mainly as a modernised city in the contemporary era dates to 1755. The earthquake resulted in significant destruction at a considerable scale and left the city in total misery. Reconstructing the Portuguese capital and reorganizing the hygienic system were the essential priorities and nearly 66-70% of the city was severely damaged (Rossa,2004). The most critical personality of that period, *Marquês de Pombal* (1669-1782), secretary of state for foreign affairs in king *Jose's* (1714-1777) leadership and one of the most influential politicians, took responsibility for regenerating Lisbon. He supervised the plan designed by *Eugenio dos Santos* (1711-1760), *Carlos Mardel* (1695-1763), and *Elias Sebastião Poppe* (Camaranihas, 2011: 13).

It is possible to find symptoms of the enlightenment period in the rationalised drawings of these engineers since the grid planning of *Baixa* surrounded two rectangular squares known as *Rossio* and *Praça do Comércio*. The green spaces were considered essential elements to integrate with the physical fabric. Consequently, the *Passeio Público* in 1764 was added to the urban system, although it was restricted and fenced (Tostões, 2005:23). At last and in the beginning years of 1820s,the city hall decided to make the park accessible to the public. The extent and scale of urban development in Lisbon were even more rapid than in the pre-Pombaline period. It was even faster when the city entered the 19th century when a new phase of planning was under the leadership of the French urban school. *Passeio Público* lost its character, and the Haussmannian inspiration took place with a new boulevard, known as "*Avenida da Liberdade*", the most pragmatic example of *Avenidas Novas*, built in 1879. *Avenida da Liberdade* was the city council's contribution to extending the city toward the north, linking *Restauradores* square to *Marquês de Pombal*.

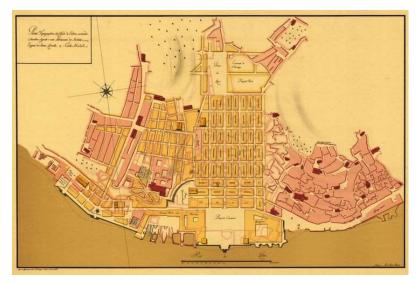


Figure I-7- Baixa Pombalina Plan 1758- (Source: CML)



Figure I-8- Masterplan of Lisbon in 1871 (Source: CML)

This boulevard was the manifest of several serial monumentalised buildings beside the monumental squares. The political context of the city formulated and articulated Lisbon as a more modern European capital, ready for motorised streets and a new way of life. Frederico Ressano Garcia (1847-1911) made this perspective accurate in a century of anxieties raised by plural eclecticism and the battle of styles. Finding more authentic architecture representing national identities was also a real challenge for Portuguese society. Notwithstanding, the approach toward modernity was more evident and concrete. At the same time, the challenge of defining Portuguese art and architecture traversed a more illusory and shadowed path, even though the efforts to visualise The Portuguese identity based on ethnographic studies started in the last decades of the century (Santos,2012). The more confident the planners and engineers seemed to be, the more uncertain the society began to act.

#### 20th century: a focused discussion

The architectural and urban discourses of the 20th century in Lisbon are the focused lenses for this research. The current thesis investigates the urban fabric and how it was developed regarding modernity and traditionalism based on the specified structures discussed in the next chapter. In the political context, the city was the centre of three critical incidents: the regicide and republic formation of 1908-1910, the *Estado Novo* period (1933-1974) and the post-carnation revolution (1974-2000).

If it is possible to identify an almost clear polarity (in a little bit dialectic way) between modern and traditional ambitions, *Ventura Terra* (1866-1919) and *Raul Lino* (1879-1974) were the representatives of progressivism and culturalism (Tostões, 2003: 100).

The 20th century witnessed diverse planning concepts, and architectural generations contributed to urban development by extending the city toward the north by creating Avenues, such as *Republic* and the extension of *Almirante Reis*, as a flat way toward the airport. The modernisation process moved on with specific focuses, no matter monumentalizing along the boulevards or systematic district design such as *Alvalade* and later on the masterplan for Northeastern Lisbon such as *Chelas*, *Olivais Norte* and *Sul*.

### Methodology

#### **Theoretical Methods**

The whole core of the research relies on a comparative study of two cities, as mentioned before. Literature and field research are the primary tools to obtain the necessary data and contextual insight. The essential keywords as the central attributes of each concept will be output for further investigations, comparison, synthesis, and suggestions regarding the balancing approaches of future societies. The in-field research in this thesis involves the presence in the case studies, taking photographs of the selected neighbourhoods, local libraries and archives. Also, the phenomenological view of thesis is related to first-person vision of the site observation echoed with the conversation with local residents of the neighbourhoods to receive the information. That is why the field work deals with this oral conversation with local and even urban historians. Such experiences were implemented in Istanbul as a second case study of the thesis.

#### The Grounded Theory

Since the intrinsic nature of the study generates words as signifiers in a multidisciplinary approach, the systematic structure is vital for the cohesive articulation of the research. The Grounded theory is a possible solution for generating, organizing, and connecting the terms. Grounded theory is flexible regarding integrating quantitative methods inside its qualitative reality (Walker and Myric, 2006: 548). The theory grew during the second half of the 20th century first time by Barney Glasser and Anselm L.Strauss (1967) and evolved into various types. The most recent type was introduced in the 2000s. Classification and "Coding" is the central step in this method and all three types. Notwithstanding, each type differs based on the perspectives, coding process and choices (Melia,1996 & Walker and Myric, 2006: 550). The constructivist grounded theory conducted by Kathy Charmaz(2006) is a "middle ground between positivism and postmodernism" (ibid,2000). Also, it has found its way into several disciplines, specially built environment, architecture and urbanism (Allen and Davey,2018: 225), although the method tries to neglect objectivity (ibid,2000). The constructivist grounded theory is a tool to connect qualitative and even quantitative data. Therefore, it could manage the double sides of the study dealing with objectivity and subjectivity in some areas.

All types of Grounded theory follow the same process, from data Gathering and theoretical conclusion. Concentration in detail, the theory follows three critical objectives: Open coding, Selective coding and theoretical coding. In the first stage, the researcher must clarify the main and sub categories. Then, in selective coding, the task is to find a linear relationship between the keywords. The final stage is to reanalyze the categories and saturation for theoretical sampling (Jones and Alony, 2011). Literature review and interviews are the central approaches for gathering data in this research. Open interviews could be efficient for avoiding personal considerations. Besides, the method contributes to decision-making and prediction. Interviews can also be conducted in the other stages of grounded theory to check the procedure's validity in time.

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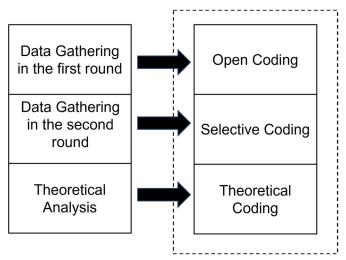


Figure 0-9- Coding in the Grounded Theory

For the coding, the most preferred option is to combine and overlap the outcomes of secondary research with the experts' ideas by conducting interviews with open questions. The logical approach categorises the open questions into two parts: The first is known as "general questions". Then the second type must be specifically related to the case study". The selection of interviewees has to be based on their expertise in the case study, impacting the first part of the survey.

Each question in the interview needs a short description to understand the scope better if the interview itself does not take place directly in person. The experts in architecture, architecture history and theory and philosophy are the suggested groups for the interview in this research. The questions follow a hierarchy, meaning every question brings the next one. However, this system of the design for the open interview might create general and broad order of questions. Nevertheless, the hierarchy can make the interview as condensed as possible since every question might be answered in the previous one.

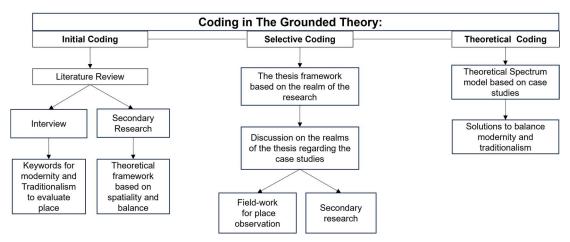


Figure I-10- Categorisation of coding stages for the grounded theory

#### Designation of Interview as a verification tool for the Grounded theory

The most preferred option is to combine and overlap the outcomes of secondary research with the experts' ideas by conducting interviews with both evaluation and open questions. The core of the

research in the first place is to understand the terms traditionalism, modernism and their manifestations in architecture and urbanism. For this reason, a questionnaire was designed as the first step to verify the keywords defining them. Also, inside the questionnaire, an open question was implemented to know their idea about further possible defining keywords.

Another round of interview was to establish an interview with open questions dealing with the thesis primary and secondary questions. Six experts were selected to conduct interviews as a result of snowball sampling. Four out of them are specialised in architecture or architecture history and theory. The rest of them are experts in urban design and urban sociology.

The primary preference was to select people from case studies to seek the continuous round of interview on the case studies. However, the effort did not end in a fruitful way although this approach could prevent the research bias. Geographical proximity of the experts was a substitute approach to cover the problem. Four experts are from Asia and Middle East while the rest are academic members or researchers of the Europeans universities. (See Appendix 3.A)

Therefore, the first chapter as a theoretical framework is the syntactic approach between secondary research and interviews. The secondary research includes secondary research on the bibliographic grounds of the interdisciplinary fields, starting from architectural history to architectural theory for formulating the realm of the thesis. Then, the theme continues by identifying the keywords for traditional and modern elements in architecture and urbanism. After conceptualizing the realm of the thesis, the secondary research method continues to be a significant step for decoding the development of each realm, considering traditionalism and modernity.

In conclusion, it is essential to generate a new synthesis based on the literature review's decoded elements and the open general questions in the second round of the interview. The new synthesis, as a combination of theoretical content analysis and the participation of experts in the interview, is the outcome of the new theoretical model of the thesis.

#### From Objectives to Methodology: A Synthesis

The objectives, ranging from comparative analysis to theoretical models and final considerations and instructions, must prioritise a qualitative approach. Nevertheless, a very crucial point is still necessary to follow:

- The thesis at a global level might increase its broadness. Hence, it is better to select case studies.
- For a more precise investigation, the theme of the thesis needs to search for a state-of-art in the first place. If there are rare previous studies in this regard, it is obligatory to study the context from a linguistic and semantic lens and then extend to architectural discourses. Nevertheless, the thesis still needs to look for other possible grounds for identifying the realms of the thesis. That is why secondary resources are vital in this regard.
- The thesis should have a cyclic comprehensive method to provide and facilitate the framework to be checked and balanced by going back to gathered information for a more precise synthesis.
- The main structure of the thesis is based on theoretical discourses through secondary resources. Nevertheless, the expert's opinion must verify some parts of the observed

- information for a more solid argument. It should be noted that the thesis fundamental bases are still built upon secondary resources.
- The thesis could encounter the appeal to authority fallacy. Additionally, it can be problematic due to the inadequate participation of the experts. For overlapping such a problem, it is widely advised that the thesis would benefit from a fieldwork and phenomenological approach, specifically on case studies. This approach can also contribute to different understandings of people's modernism and traditionalism.

Considering all these points, the grounded theory is the most flexible approach to implement in a thesis with a theoretical fundamental. The coding stages in the methodology are the most crucial element for codifying the theoretical discourse and comparative analysis.

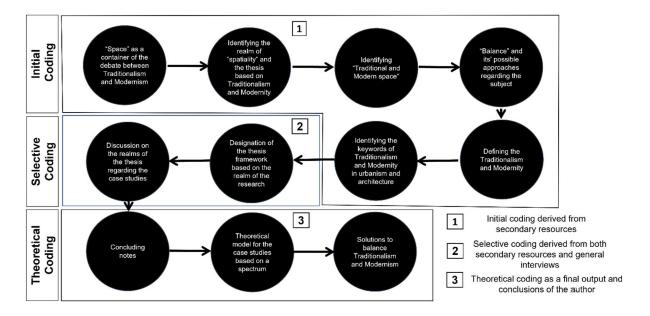


Figure I-11- Coding in the Ground Theory specified for the thesis

# Chapter I Theoretical Framework

The Chapter is identifying the theoretical framework inside the matter of space and spatiality to generate the realm of research which is the T-H-P triangle. Then, modernism and traditionalism are identified with their respective keywords and then rationale for the selection of case studies are explained based on realms of the research

#### 1. Theoretical Framework

### 1.1. Literature review and the thesis

Every research consists of the keywords as the broken-down elements, which are critical in identifying questions, problems and solutions. These core subjects and their subcategories organise the thesis structure. Nevertheless, it is vital to understand the topic and the probable historical literature with a top-down approach. From a more linguistic perspective, the whole topic is the primary concept that needs to be investigated globally.

Balancing modernity and traditionalism has not been a prevalent task in architecture and urbanism as it was not a significant societal concern. Understanding these two terms in a broader view and their alignment with what was understood in the 20th-century built environment literature were challenging to combine. Notwithstanding, their specific attributes originate from the social movements since the industrial revolution and the sequence of events. Each term was inside the spectacles of critics independently.

#### 1.1.1. Global Scale

The roles of architecture and urban fabrics on civil anxieties and even wars were often invisible to grasp and prove scientifically. The previous century was when architecture and urbanism were almost in the context supported by the Eurocentric architectural system. Some critics of the modernity of the 20th century were harsh enough to condemn the vanguards of this ideology in architecture for ignoring the contextuality and a kind of unintentional radicalism. Inside such vision, this approach brought about nothing but resulting in social turbulence, even in more extreme tones than the ones published in the post-war literature.

One of the scholars in architecture theory who tried to talk about the problem and the roles of architecture and planning in creating the situation was Marwa Sabouni (2016). She believed that the dominant modernity misguided peaceful living through the different religious groups in Syria. The result was the replacement of the balanced zones of communities as a clash of modernism and traditionalism, concluding the country's recent civil war through times. These words are the signs of the mentioned poles in architecture and planning reflected in space and society. Henceforth, there are at least two possible polemics on both sides of the polemic known:

- The polemic inside the styles
- The socio-political reflection.

First, it looks reasonable enough to search globally for the historical polemics of the two mentioned poles in architecture and urban planning.

#### Art Deco: the first inter-disciplinary attempt at reconciliation

Reviewing the ideas and concepts trying to reconcile radical modern and traditionalists and introducing Art Deco in the interwar period, David Gebhard (1983:35) presented two central tendencies: High Arts modernists and traditionalists. Also, It is possible to seek and perceive these tendencies in Henry Russel

Hitchcock Jr's ideas (1932). In an almost similar approach, he tried to imagine the modern-traditional sides inside the matter of time. This approach categorised them in the past-future tense and the way in between (Striner, 1990:24). Moreover, Hitchcock Jr defined radical modernity as "new pioneers seeking purity through avoidance of ornaments". However, for Hitchcock, the in-between manner was the new paradigm of returning to traditionalism, as he called them "The New Traditionalists", feeling free to borrow and combine the past and present.

According to Richard Striner (1990:22), the historical catastrophe affected both radical modernists and traditionalists in the 20th century. The modern radicals tried to make the distance from the turbulent past with the educational system in *Bauhaus*, while the traditionalists continued the classical orders. Art Deco tried to integrate history and futuristic ideas. Nonetheless, it lost the expected influence since it was accused of not being clear enough for the international style.

Art Deco concentrated on designing buildings rather than planning and space. It seems that the mediation between the modern and traditional needed to be more identifiable for the whole society. Furthermore, this mediatory attempt was tightly linked with the concept of space and its production. However, Art Deco, as an architecture or a discourse, did not mitigate the polarised situation.

Modern architecture, no matter in what specific attitude, was the dominant and accepted voice, and the effort for an equilibrium was not a visible target to architects and designers. However, the problem was still not solved correctly. Both sides of this formerly popular topic did not conceptualise the terms in architecture or broader terms. It mainly was the battle between the new and the old or technology versus principles of the past.

Is the created rivalry solely dependent and produced by the time factor? For some scholars, the roots of production were vital too.

#### 1.1.2. The Shift from Time to context?

Among those critics of modernity and traditionalism, some scholars started to appear. This attitude was more accessible to the Middle Eastern scholars. West-East or Oriental-Occidental and even the North-South dichotomies are the most discussed themes in contemporary architectural theory and history regarding modernism and traditionalism.

East and the West were the representatives of diverse cultural, religious, or political definitions. The same dualities of the traditional-Eastern and the modern-Western were the most over-repeated discourse during recent and past centuries. The religious architecture was the strongest pillar of the Eastern spirit linked with identity, especially in countries with Islamic societies and even Europe.

For instance, according to Albert Hourani (1979), there was a footstep of Islam in European history. The similar condemnation of traditional ideas was also the core of discussions on orientalism.

Edward Said (1978) emphasised that orientalism exchanged human experience with a textual perspective, although he questioned the West-East division. The entrance of orientalism into an architectural culture in Europe would not be possible if the discoveries of Middle Eastern architecture did not happen. Sibel Bozdoğan (1986) defined two critical western views of the Orient. The first was the shift from enlightenment to romanticism, and the second was the intervention in colonial culture.

On the other side of the scope, other scholars did not believe in the mentioned dualities and tried to break the illusion of tension. Fernand Braudel (1983:183) argued the concept of rivalry between individualism and uniformed modernity and told:

"We would have to be blind not to feel this massive transformation of the world, but it is not a transformation which is taking place everywhere, and where it is taking place, it is in the forms and with a human dimension and resonance which are rarely ever the same. The triumph of civilisation in the singular does not spell disaster for civilisations in the plural."

Universality and pluralism were among the views to resolve the West and East tension for those who questioned the Modern-Traditional encounter. Based on such a mindset, traditionalism was not received well to rise in contemporary societies, whether as a necessity or in its radical way. Therefore, discussing briefly how the architects, urbanists and theorists directed the poles in the last century is necessary. The socio-political developments in society were inevitable. It was even more indispensable for the architects and planners to move within the social consequences that took place post-war. Besides the narratives published on the contemporary architectural history of the 20th century, other approaches started to create a link between the source and trend, old and new, identity and technology.

#### **Critical Regionalism**

When geographical science (specifically human geography) and philosophy influenced the concept of space and spatiality, a shift in architectural discourse had already occurred. Regional concerns and the simultaneity with the modern criticism in architecture and urban design centralised the matter of place. Nevertheless, it was not possible to ignore the time factor. That was the show time for an idea known as "Critical Regionalism", first introduced by Alexander Tzonis and Liane Lefaivre (1981), contributing as a mediator between rapid modernisation and also superficial post-modernity (Foster,1983).

Kenneth Frampton was another theorist advocating Critical Regionalism functions as a mediator, although there was a little difference with what Tzonis and Lefaivre discussed regarding the term. His central idea was to answer Paul Ricoeur's vital question (how to remain modern and return to sources? and besides the matter of self). Ricoeur (1965) rejects repeating the nostalgic past. However, if the public demand's identity in line with nostalgia, it will create a paradox in speaking about Critical Regionalism and designing for people. This paradox was also the topic of universal civilisation and "popular culture".

Critical regionalism also engages in the monumental binary oppositions: East/West, traditional/modern, natural/cultural, core/periphery, self/other, and space/place (Eggener, 2002: 234). That is a confirmation of Kenneth Frampton's idea (1983:149) claiming that:

"It is necessary to distinguish at the outset between critical regionalism and the simplistic evocation of a sentimental or ironic vernacular. It is referred, of course, to that nostalgia for the vernacular, which is currently being conceived as an overdue return to the ethos of popular culture; unless such a distinction is made, one will end by confusing the resistant capacity of regionalism with the demagogic

tendencies of populism."

Even Frampton's idea, furthermore, had an interrelation with European revivalism like New Brutalism, Neo-Palladianism, and the Picturesque, according to Dirk Van den Heuvel (2008).

Van den Heuvel also believes that the idea of context had the most robust links with environment, ecology and habitat, and the concept of history was an addendum to contextuality, leading to grasping Rogers idea of defining architecture as a conversation between surroundings, the physical environment and historical continuity (Forty,2000). Not only the term "context" was a helpful solution for Frampton to shift from centrality to periphery, continuing the critical path of Postmodernism, but it also reduced populism and artificial imitations.

Styles	Scholars	Year	Publication	ldea
	Henry Russel Hitchcock	1928	Modern architecture	Radical modernism and new traditioanlist were two opposing ideas
Art Deco	David Gebhard	1983	About style not ideology	Art deco as a mediator between high art modernism and traditionalism
	Richard Striener	1990	Art Deco: Polemics and Synthesis'	Art Deco as a synthesis
	Paul Riceour	1965	Universal Civilisation and national culture	To be modern and returning to sources in the same time
Critical Regionalism	Alexander Tzonis and Liane Lefaivre	1981	The Grid and the pathway	Mediator between rapid modernising and sueprficial postmodernism
	Kenneth Frampton	1983	Critical regionalism	Critical Regionalism as a solution for Paul Riceour's concern

Figure 1-1 -The attempts as mediators in the 20th century

Looking toward modernity and traditionalism as mere production inside the time frame was not capable enough to analyse without understanding the primary consciousness of these terms. Thus, the broader scopes brought about significant attention to context and contextuality. However, the comprehensive version is still necessary. Besides identification of the efforts in history regarding the subject, it is also indispensable to magnify more on the definition and the linguistic views.

# 1.2. The realms of the Thesis and Spatiality as a Container

The perspectives on modernity and traditionalism shifted from various features. For Bruno Zevi (1948), the precise narrative of history in architecture is only possible by concentrating on the concept of "space"

as reality, even for describing architecture. Understanding space is another task in the literature review to know what modernity and traditionalism could be inside the space context. In this regard, the terms interrelated to the topic, such as pressure, urban space, social space, cultural-domestic space, and Intersection, are the possible secondary concepts of "space" and "spatiality".

# 1.2.1. From the Nature of Space to the General view

The concept of space, regardless of being studied as a terminological scope or a general interdisciplinary view for understanding the universe, has been one of the most challenging tasks for scientists and philosophers to identify during the contemporary era.

The known etymology to link with the familiar investigation toward space since the Renaissance was the Latin source *Spatium*. In general, it means "outer space", which deals with the invisible realm of exterior-interior categorisation outside the planet earth (T.Lewis and Short, 1879). However, this was not the complementary identification for space as it seemed possible for further verification in mathematics, physics and philosophy afterwards. Thus, this is the time to clarify space's nature rather than its implications.

The pioneers were mathematicians and philosophers who reached the most critical meeting points. Immanuel Kant's (1724-1804) ideas regarding the nature of space as a "Synthetic Priori7" sought out the term inside the geometrical knowledge to clarify space as a property of mind or "form of intuition" rather than the pure reality (Kant, 1998: 68).

The first arguments on space diversified its realms from mathematical to social, and afterwards, the directions of debate and arguments on space shifted to the social and economic phase as the mathematical principles were universal. The industrial revolution was the invisible force directing societies into a more material world. Space was perceived through production and its producers (Labour and value specifically).

A representational feature of space resulted in a particular investigation track inside the socio-economic and even socio-political spectrum. This feature covered comprehensively diverse theories, from the "conflict theory "and "historical materialism" to the "production of space" by Henri Lefebvre(1991) in the 20th century. It is clear to grasp the point that the knowledge of space, in general, was a broad set of interdisciplinary terms in the materialistic sphere. As time passed, the paradigm shift was into even more challenging societal tasks, not feasible enough to comprehend, mainly when investigated through artistic, architectural and urban lenses.

The most general term to identify space was the outcome of synthetic and empirical forces in the universe surrounding humanistic perception. "Forces", as disciplines or physical rules, paved the way to the pluralistic ambitions regarding space.

# 1.2.2. Space in Architectural Discourse

Space Indeed was not a precisely defined word for architects until the end decade of the 19th. Forty (2000) confirms that space in architecture was the production of modern science and philosophy. For

scholars like Forty, there was initial confusion with words like "void" and "volume". Moreover, interpreting the original term "*Raum*" in German philosophy amplified such a situation (Forty, 2000: 256).

One of the pioneers in conceptualizing space was Gottfried Semper (1803-1879), without any doubt. Space as an "enclosure" was the most common discourse of proto-modern architecture as its fundamental property. This approach derived from German philosophy was also the roadmap for architects such as Behrens, Berlage, and Loos to be later vanguards of modern architecture. Besides, this framework facilitated receiving the representative and empirical typology. The effort was to" limit the probably unlimited knowledge" (Forty, 2004:254).

The most critical question arises when perceiving space as an "enclosure" challenges its source as a dynamic or static paradigm since buildings are the most typical productions in architectural and urban spaces. On top of that, this perception provides a perspective to understand space as a form as it was a limited perceived term. Moreover, studying space either as the mental realm and reality or as a limited enclosure was a gifted opportunity for psychologists and philosophers to investigate the matter as an aestheticist.

The "Empathy" theory was the critical agenda for the philosophers to analyse the identity of space generated by bodily sensation and movement (Verducci, 2000). The theory approves the possibility of space as a form perceived by a human being and space as a continuum. The body-sensation binary derived from this theory was influential in the works of scholars like *Robert Vischer* (1847-1933), *Friedrich Nietzsche* (1844-1900), *Theodor Lipps* (1851-1914) and *Adolf Von Hildebrand* (1847-1921), although their ideas were not directly following architectural principles.

Notwithstanding, shifting the vision to architectural discourses generates an abstract harmony between inside, outside, and inside started to shape. Inside such mentality, Camillo Sitte (1843-1903) stated that not only space included inside but also what is known as "outside" as it could be extendible to even larger scales such as urban design, which was "an art of space" (*Raumkunst*) according to what he defined in the first place.

It was evident by the beginning of the 20<sup>th</sup> century that the concept of space dealt with several disciplines like philosophy, art and architecture, indicating its features like form and movement. Assuming the matter of "movement" for space, even inside the empathy theory and the humanistic notion or sensation, did not wholly justify the validity of the historical account of space. Time as an addendum was a complimentary feature in the categorisation of space in Forty's view until 1930:

- · Space as an enclosure
- Space as a continuum-influenced Bauhaus and De Stijl.
- Space as an extension of the body

Investigating time as an intertwined aspect close to the concept of space created two views: First, it was the historical aspect meaning that time creates history and makes human life continuous. Furthermore, the historical scope was fundamental regarding the architectural history and the space in architecture. The second viewpoint is modernity. Identifying contemporaneity and newness, in general, is almost impossible without the notion of space and time. Also, modernity owes its presence to the matter of

space and spatiality. In another word, architecture and urban planning were, in reality, nothing but the production (or even reproduction) of space in its particular moment (a specific period known as "the modern").

Although space was a critical theme for modern architects, relativity and pluralism influenced its nature again. For instance, for scholars like Martin Heidegger (1889-1976), space was neither the property of the mind nor an independent reality in the world. He also believes that buildings do not shape pure space; therefore, space receives its being from locale, not from itself (Heidegger, 1971).

One of the other significant latest space theorists in the 20th century is Henri Lefebvre (1900-1991). His book" production of space" (1974) played a critical role in a new image of space. To Lefebvre, architectural space is a space of manipulation, condemning the architects to design in abstraction, as it is sensible by the sense of vision and made homogenous by drawing (Forty, 2000).

It is almost impossible to generate a general definition for a term covering all the disciplines. Nonetheless, space contains the accumulative forces located in a time-place framework. The most central identification of space is inside the social realm, whether borderless or limited.

"Space", as a social product dealing with the built environment, is the intended type for the current research.

#### 1.2.3. Pressure and Built Environment

What could be known as "pressure" is the broadest term used in multiple disciplines dealing with either abstract or concrete data. The primary and most straightforward concept is physics, which is force per unit area. Nevertheless, this practical term in physical sciences was perceivable metaphorically. Hence, it is possible to conceptualise two kinds of pressure. First, the pressure could be empirical and understandable by senses, especially supported by a vision in architectural and urban scope. Second, it can become a metaphorical and understandable term with the assistance of other terms and disciplines.

The initial and main question regarding cities, the built environment and the term "pressure" is associated with identifying the two possible types mentioned. What kind of pressure do societies experience in an urban context?

Considering the city as a physical system of fabrics challenges the growth and development in the first place as the most critical urban issue. Hence, geographical science is the respective discipline analysing the possibilities of urban growth regarding topography and natural threats like floods and earthquakes. Also, this view interconnects the word pressure mainly with another term known as "limits".

The physical and empirical aspects of pressure are on the agenda when they get inscribed, as a rule, orders and regulations by municipalities or other possible regional-national organisations. Hence, the policies for standardisation could be accounted as the most sensible features of pressure in the built environment.

Shifting from a system to a spatial perspective brings about the social review of urban and architectural space, which is qualitative. In this case, the pressure depends on other words, as the term is not functional in bibliographic reviews. The tendency toward a more common synonym like "conflict" is over-

evident in sociologists, philosophers and even urbanists' studies. That is why the term is interdependent on other synonyms like anxieties, duality, disorder, and contradictions.

The conflict in (social) space, according to Lefebvre, takes place when differences are tested and recognised (Stanek, 2008:74). Nonetheless, the differences are enough for pressurising the social space as its most necessary element is a dominant force (power). Considering power and differences together brings about multiple dualities. Each side of chaos represents a class or group. One of the most well-known aspects is the conflict between social and abstract space in modern society (Fox Gotham et al.,2001:314), in which the abstract space is instrumental rationality, fragmentation, homogenisation, and commodification (Lefebvre,1991).

There is a force, whether empirical or visual, whenever there is pressure. The virtual force is mostly political as it manages the production of society and class. Hence, the pressure in (social) space derives its identity from political discourse. David Harvey (1982&2013) and Edward Soja (1980) continued what Lefebvre mentioned, although the central socio-economical theme amplifies Marxism and labour-capital relations.

The respective pressures in space are investigable in the produced and lived social space. It is indispensable to accept that studying the pressure beyond the regulations (or physical and geographical limits) intersects the socio-spatial and socio-political discourses.

# 1.2.4. Social Space: Actual or Visual?

Identifying the primary source of the term "social space" has been a significant challenge. Since similar meanings were vaguely related to this specific word in all disciplines regarding social science, this kind of space started to appear at the end of the 19th century by Emile Durkheim (1858-1917), continued by Paul-Henry Chombart de Lauwe (1913-1998) and enriched by Henri Lefebvre (Claval, 1984: 105). According to Durkheim (1961), social space is a space inhabited by a group. However, putting aside the most straightforward definition by Durkheim, what are the elements and features of social spaces? The most fundamental idea regarding social space is that there is a social space whenever there is a society. Therefore, groups and classes are the necessary cores of social spaces. However, the nature of social space is still vague for many sociologists and philosophers. For them, space is a social product. Based on this perspective, it is possible to understand social space as the total or "natural" space (Soja,1980 & Harvey, 1982). Moving forward in time enlightens the tense relations of social space with the area and locale. Therefore, the sense of place has been critical in identifying social space since the second half of the 20th century.

Assuming space as the "unlimited" or "extendible" reality creates another vital question. Do social spaces as "social products" consist of boundaries? Humanistic perceived spaces are the symptoms of everyday life, following the system of hierarchies. Therefore, it is a natural symptom of human behaviour to classify and categorise (Ozaki and Rees Lewis, 2006: 92). This point is the most critical distinction between what was perceived as social space by Marxists and the most contemporary definition of social space by

geographers. Furthermore, the boundaries in the social space could identify it as a system of values and relations.

Social space is a perceived, conceived and lived space where human produces everything dependent on classes as the fundamental forces of society. Every social space depends on humans, place (Urban or rural) and time to be shaped, reshaped, and transformed.

# 1.2.5. Urban Space

The most common duality regarding space was its exterior-interior classification. Synthesising both space views created a systematic version of the investigation for defining the "urban space". The term began to be noticed by sociologists as "urbanism" played a significant role in contemporary discourses. Subsequently, urban space began to be perceived as external (Krier, 1979:15).

Physical understanding of urban space simplifies it into the square and the street. Inside this framework, a city consists of multi-central networks regulating human life from the public zone to the private one. The range of systemised urban systems concerns the scale and size of networks (of roads). The roads started to diminish in size, creating a more and more privatised area. Therefore, the general perception of urban space often follows geometrical patterns (Ibid,1979:17).

The plural conception of urban space derives from centrality. Centralities, indeed, are not only the geometrical product of public spaces and social interactions but also the organisations, municipalities or hegemonical sites. Therefore, various elements of urban space as a whole system are not homogenous. Furthermore, the current approach to understanding cannot function as ideal as it consists of disadvantages like pollution, crimes and revolts, each of them as a different layer.

Urban space intertwines spatial and social perception (Madanipour,1996). However, the most critical feature of analysing urban space is time. According to Rodger Trancik (1986:21), urban space is either traditional or modern as traditional buildings are the critical core, and the modern consists of a freestanding pavilion giving the roads and highways an essential role in cities.

The only agreement for any scholar regarding the urban space is that it is a "multi-central" produced space. This multi-central aspect includes a double-sided material and social relationship system embodied inside the private-public hierarchies.

# 1.2.6. Cultural Space

Cultural space is the spaces or organisations representing a common culture. The cultural space is physical or metaphysical (Martin and Nakayama, 2013). The physical reflections of these spaces are houses and dwellings. Also, the other physical paradigms are symbolic as they are primarily religious. Cultural spaces are mainly indicated inside rather than outside. Otherwise, their functions are like public-open or semi-open spaces.

The domestic space deals with the space related to a specific group bearing the same identity, whether viewed as a terminological or architectural scope. It is undoubtedly feasible to grasp that the most common example should be dwellings and residential complexes. However, it bears the unlimited realm like other types of spaces. Introduced first in the 1970s by British anthropologist Mary Douglas (1921-

2007) (Lawrence, 1982), the term entered modern architectural criticism and is known as an "enclosed living space" for the household (Cieraad, 2006).

Are domestic spaces private frequently? Well, it depends on the visional choice. If domestic spaces are the societies identifiers, they will sometimes introduce themselves as relative-public spaces. It depends on the selected limit for localness in the analysis. The Eurocentric philosophy identifies domesticity as one of the most common symptoms of traditional thinking, specifically in art and architecture.

Assuming the house as the most common symptom of domestic space, the conception of a dwelling as "a machine for living" by Le Corbusier creates a binary with domesticity (Walker, 2002:827). Domestic spaces are inside the two-sided relationship between time and locale. They represent the identity and culture the same as they exhibit privacy.

The bibliographic reviews regarding the definition of domestic space prove that boundaries for this kind of space are obligatory.

# 1.2.7. Intersection and Space (Spatiality)

"Intersection" is another challenging term to define nowadays as its function is not only in mathematics but in social science too. However, still, the concept derives its identity from mathematics, which is the common point of multiple lines or surfaces (Oxford, 2019).

It is pretty feasible that when the concept of Intersection is central, there are at least two sensible items. Therefore, there is a possible duality or binary in every Intersection.

Intersection, like pressure, possesses concrete and abstract themes. Visualising this term in social science is possible by symbolizing the themes. Understanding this concept always needs precise space in a more perceived and lived form. However, in a broader term, unlike mathematics, the intersection is not necessarily between two homogenous items. Notwithstanding, it is essential to objectify even the non-empirical terms to understand the identity of the Intersection. Hence, there are unlimited possibilities for meeting points, like the intersection between architecture and urbanism, social and political space.

# 1.2.8. The Intersection in Built-space

The first and initial terms respective to the Intersection refer to the issues that the societies deal with inside the everyday-life experienced space, mostly known as "urban intersection". As a physical reflection of the most straightforward meaning, It is either an Intersection of vehicle roads, neighbourhoods or nodes of public space. Hence, these typical examples follow geometrical patterns as a necessary global rule. Another symptom of intersection started to play a central role in discourses regarding postmodern criticism.

# 1.2.9. The Theory of Intersectionality

It was a period of radical racism, and gender discrimination became the central motive for Kimberlé Crenshaw (1989), creating a theory that confirmed pluralism and multiplicity.

Although gender and race were the two pillars of the theory known as "intersectionality", it paved the way for the other disciplines. Intersectionality often contains the space of discrimination in social science

when appropriation of space does not represent all the classes, races, or any other respective layers of society.

Intersection, whether as a geographical or physical-urban issue or ideas and identity in social science, is generally a meeting point and clashing point of homogenous and anti-homogenous layers of space. In this regard, the aim of the thesis is the intersection between the sense of place and identity reflected in architectural and urban discourse.

It is evident enough to understand why the attempts at definitions of architectural space were not a simple task. Furthermore, even in practical design concepts, space as a solution needed a united structure linked to other interdisciplinary issues. Therefore, the source point of space was still vague enough, and the question mark stays (Space as a reality or a property of mind?).

The literature review on the architectural history narratives exhibits how scholars shifted from understanding space to spatiality.

Terms	Scholars	Year	Publication	ldea
	Adrian Forty	2000	Words and buildings	Architectural Space and its definition during the history
	Henri Lefebvre	1975	Production of space	The Triad of space
	Bill Hillier	1974	Social logic of space	Human as a central point in spatial perception*see note number 8
Space	Martin Heidegger	1971	Building, Dwelling, Thinking'	Place (Locale) as a critical feature for space
·	August Schmarsow	1893	The Essence of Architectural Creation	Humanistic perception of space- Historical account for space
	Camillo Sitte	1889	planning according to artistic principles	Art of space and its influence on outside and inside
	Gotfried Semper	1861	Style in the Technical and Tectonic Arts	Space as an enclosure
	Immanuel Kant	1781	Critique of Pure reason	Space as synthetic priori
Pressure	Lukasz Stanek	2008	Space as concrete abstraction	Clarification of Lefebvre's logic on pressure in social space
(conflict)	Edward Soja	1980	The socio-spatial dialectic'	Pressure in social space and political discourse
	Ozaki and Rees Lewis	2006	Boundaries and the meaning of social space	Human behavior and the tendency to categorise social space
social	Paul Claval	1984	The Concept of Social Space	The continuous efforts for definition of social space in history
space -	David Harvey	1982	The limits to capital	Social space and its perception in every day life
	Emile Durkheim	1893	Division of labour in society	Social space inhabited by a group
Urban space	Ali Madanipour	1996	Urban design and dilemmas of space	Urban space intertwined between social and spatial realm
	Rodger Trancik,	1986	Finding lost space: theories of urban design	Urban space: either as traditional or modern
	Rob Krier	1979	Urban space	Urban space as external space

	Marin and Nakayama	2013	Intercultural communication in contexts	Cultural space representing a common culture
Cultural- Domestic	Lynne Walker	2002	Home making: An architectural perspective	Domesticity as a traditional thinking method
space -	Mary Douglas	1972	Symbolic Orders in the Use of Domestic Space	Domestic space as an enclosed living space
Intersection	Kimberlé Crenshaw	1989	Demarginalising the intersection of race and sex	Theory of intersectionality and discrimination in societies

Figure 1-2- The terms Regarding the subject

# 1.3. From Space to Spatiality

The architecture and urban theories during the 20th century experienced illuminations spun on dark sides. The consequences were the new terms as a viewpoint. However, it was impossible without the contributions made inside the majors such as geography, sociology, and philosophy. The most comprehensive theory on space and spatiality in the last century is by Henri Lefebvre and his famous work, known as "the production of space" (Lefebvre, 1991).

The well-known space triad of Lefebvre consists of three essential characteristics known as representations of space (Conceived), representational (lived) spaces and spatial practice (perceived space). The conceived or representations of space are known as space without humans (Grunlond, 1993), created by specialists and technocrats, primarily architects and planners trying to visualise what is called "second space" by Edward Soja (1996:6).

The lived or representational spaces are the ones which influence the users and inhabitants (Lefebvre, 1991:39). The perceived space known as a spatial practice is physical, including production and reproduction. For instance, routes, networks and even buildings are perceived by a human<sup>8</sup>.

#### 1.3.1. The New Triad for the Research

Accumulating and overlapping the issues on space and architectural history will lead to research into three central factors: time, human and place. The perspectives on space in philosophical terms and architectural narratives approve both the external and internal reality. Since conceived space initiates the topic of "place", the lived and perceived space concentrates on humans taking shape inside time. Besides, it is possible to find the footsteps of these features in architectural scholars too.

Architectural theorists like Zevi (1974:56), Le Corbusier's famous *Le Modulor* (1958), Schmarsow (1894) and Hillier and Hanson (1975) focus on the perception of space by a human. Secondly, the time factor is inevitable to neglect due to the most critical work of Sigfried Giedion (1941). Also, as the third vertex of the triad. the philosophers like Norberg Schultz (1979), Heidegger (1971) and Pierre Von Meiss (1990) notified the importance of place as well.

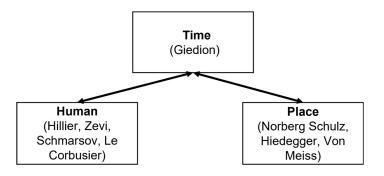


Figure 1-3 -The T-H-P triad and their architectural reference

Overlapping the notion of space from architectural, philosophical and sociological points of view organises three aspects of time, place and human as a new triad of spatiality regarding the research. Based on the T-H-P triad, traditionalism and modernity reasonably produce dynamic interaction on three elements, and radicalism is hypothetically the outcome of over-concentration on each factor.

However, what are traditionalism and modernity based on the respective literature review inside the spatial realm?

The answer is embedded inside how we look at space. As mentioned earlier, the polemic story inside the architectural vision re-insists the question of the nature of space, whether it is a reality or intuition. Is space inherently concrete or abstract? These two words are the following terms to grasp the more indepth literature review.

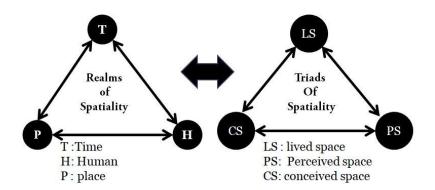


Figure 1-4- The relationship between Lefebvre's spatial triad and the research realm

# 1.3.2. Concreteness and Abstraction in Space: The Reverse Perspectives

The humanistic view of space depends on the words and the language system. Since the discourses on "space" confirm that sensible and non-sensible representative keywords exist, the concrete and abstract words became central.

The abstract word, in general, is theoretical, qualitative, and not empirical. For instance, words such as bravery and excitement depend on explanation, unlike concrete words like hot, yellow and table, which

are natural, evident and tangible by the five senses (Oxford). However, the paradox rises when there is an effort to connect and reconnect space and spatiality to universal concreteness and abstraction.

The distinction between the abstract and concrete perspective thinking regarding the murderer from Hegel's (1807) points of view paves the way for a better understanding of the situation (Stanek,2008: 63). The abstract thinkers investigate the event and the subject in the way it is. Therefore, the murderer is no one but a murderer. However, possible friends, relatives and psychologists consider the crime a process of reasons and social background. In his article, *Hegel, Marx, and modern urbanism in Henri Lefebvre*, Lukasz Stanek amplifies the mentioned example with another from Michael Inwood (1992), the redness and life.

Based on the central point of view from Hegel's era until Lefebvre, Stanek and even non-Marxists, concrete thinking is interconnected while abstraction, such as "redness", is more isolated, and the reverse linguistic scope of abstraction and concreteness. As mentioned before, there is a consensus that the (social) space is neither purely mental nor physical nor a concrete abstraction (Lefebvre, 1974). While there are both subjective manners of concreteness and objective sides of abstraction in social spaces, the challenges of defining modern versus traditional and balancing the architectural and urban perspectives are still on the agenda.

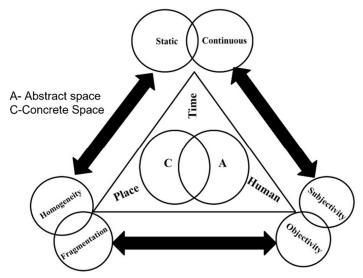


Figure 1-5- The Triad regarding Traditionalism and modernity in space

# 1.3.3. Abstraction and Concreteness Versus Traditional and Modernism

Is it possible to define traditionalism and modernity based on modern and traditional space based on abstraction and concreteness?

The most straightforward approach is identifying both words etymologically and depending on other fields.

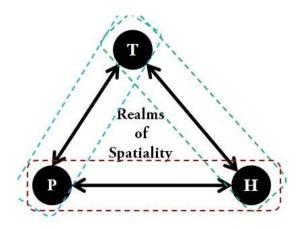


Figure 1-6- The triad and overlapping of two vertex

# 1.3.4. Traditionalism Versus Modernity and Concrete Abstraction in Space

Investigating the root of the term, in an etymological view, led to the words such as "*Tradere*"," *Tradicion*", and "*Traditio*" in English and French literature, mainly meaning "to hand over" (Meriam-Webster). Moving beyond the primary view in English and French 14th-century literature, the term was the product of the late mediaeval period, in which religious discourse was the dominant ruling idea inside the societies. The time factor brought about concentrations of tenses the most as time moved on. The age of enlightenment marginalised the "past" and shined on the "present" as a clear and natural consequence; some groups admired the nostalgia, opposing transformation.

What does traditionalism mean? The most obvious meaning is the act of attachment to tradition. Notwithstanding, identification of the origin of the term is critical. It was in the 19th century when the word started to represent itself as a more theological and philosophical discipline, being mentioned as a counterpoint for Cartesian rationalism after the French revolution.

On the other side, modern and modernism take root from the Latin word "*Modernus*." and "*Modo*." meaning "just now". In general, the simple meaning is the act of opposing to remote past (Oxford).

Comparing the terms reintroduces subjectivity and objectivity, the critical features of concreteness and abstraction in space.

There is a firm commitment between (theistic subjectivity) and traditionalism (Baldwin, 2017). Furthermore, identity, as an essential indicator of traditionalism, is a subjective manner built and enriched through time (Popescu, 2006: 191 & Kant, 1996: 26).

On the other side, for instance, the architectural space regarding modernity chose to step on the road of objectivity in the 20th century. New objectivity (*Neue Sachlichkeit*) was a reaction toward expressionists in eastern Europe, including the architects like Bruno Taut (1880-1938), Peter Behrens (1868-1940), Le Corbusier (1887-1965), Mies Van der Rohe (1886-1969) and Walter Gropius (1883-1969) (Frampton, 2007). These well-known architects emphasised the specific application of materiality by using concrete, glass and steel. It was not far enough from the expectations for Bauhaus, as a

dominant architectural school to create generations focusing on prefabrication and mass building. Hence, this apparent instance of objectivity led to another style known as "the international style".

The brief on terminology and their typical examples, the concreteness of space, brings about traditionalism in vision, and the abstraction in space most likely leads to modernity, despite the initial assumptions.

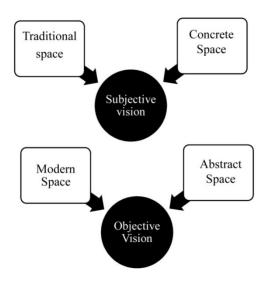


Figure 1-7- Traditionalism- modernity versus abstraction-concreteness

# 1.4. Balance and Equilibrium in Space

Is space an intrinsically balanced paradigm? In physical terms, the answer is positive as the perceived and conceived space outputs are balanced. However, considering them in interaction with the lived space could disrupt the intrinsic and imagined equilibrium in space. Nevertheless, the terminology is an essential approach. Before defining a new term, it is critical to clarify the urban imagination based on abstraction and concreteness of space with a flashback of the spatial triad.

# 1.4.1. The Problematic of Space and Urbanism

There is a consensus among scholars which implies that the social changes follow the model initiated firstly by Hegel, known as dialectics of Hegel, which consisted of "the thesis", "anti-thesis", and "synthesis" (Hegel, 1874).

Based on Hegelian dialecticism, it is possible to confirm that the various classes in society clash and reach a stable situation in a matter of time. Accordingly, the architectural and urban spaces are the final products and reflections.

However, a critical question arises. Assuming the city is a system, are all the segments and parts in a balanced and homogenised situation, or the clashing points are the only balanced parts?

Given the ideas on space and spatiality, the last discourses on space in the 20th century and the late 90s were more or less focused on Lefebvre's identification of space as a concrete abstraction magnifying once more the final path of dialectic, known as the "synthesis".

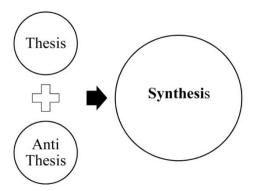


Figure 1-8- Hegel Dialectics

Abstraction tries to isolate and homogenise, while fragmentation is the product of concrete thinking, which is possible to see universal concepts like modern architecture. Homogeneity could result in fragmentation (Stanek,2008). Therefore, concrete abstraction creates two possibilities: two-folded dialecticism or synchronisation.

Concrete abstraction in the city synthesises fragmented pieces defining unity (Lefebvre, 1991: 97-98). Then, it is an obligation to break the city into segments and combine them. This approach justifies the combination of fragmentation and homogenisation in every city.

Nonetheless, still, an important question is not answered. Are the borders of this so-called fragmentation sensible immediately? Fragmentation is an essential term to define place; every place depends on a specific border to be perceived. On the other side, the place is in a strong correlation with the scale.

The place consists of a location, city, site, neighbourhood, house, etc. Hence, the border depends on visual humanistic perception to understand spatiality rather than physical and sensible ones. That is the moment the second probability takes place. The "synchronisation" phase is when homogenisation and fragmentation happen in parallel. The urban space is fragmented and homogenised at the same time. Hence, the moment for clarification of balance and its paradigm regarding space arrives. It is crucial to find out what balance could be in space and spatiality and how it also takes place in urban space. To what extent is it sensible? What are the significant symptoms of balance in architectural and urban science? These are the fundamental points that must be answered to simplify the research process.

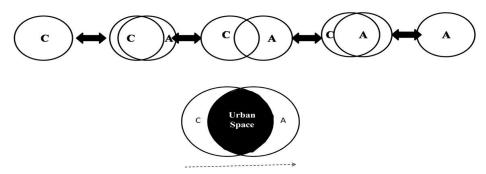


Figure 1-9- Two possible imaginations for space and urbanism

# 1.4.2. Balance: The Terminology

Looking up the encyclopaedias and dictionaries provides broad meanings for the term "balance". The most comprehensive ones are the followings which indicate harmony, equality, and proportion:

- A harmonious or satisfying arrangement or proportion of parts or elements (The American Heritage Dictionary of the English Language, 2019)
- Harmony of design and proportion (Oxford,2019)
- To counteract or equal the effect (Merriam-Webster,2019)

# 1.4.3. Architectural Principles

Balance is among the numerous critical design principles such as proportion, rhythm, emphasis, and unity (Dondis,1973). The two possible and evident types of balance are formal (symmetrical) and informal (asymmetrical). Symmetrical balance follows an axis as a mirror line or a central symmetry point (radial balance). Since (social) spatiality deals with lived, perceived and conceived space, the triad of time, humans and place will be the product of traditionalism and modernity in spatiality. Regarding the T-H-P triad, finding dynamism and stability in space is possible. Here is the vital question regarding elements of balance in architectural design. Is stability the only manner of a balanced space?

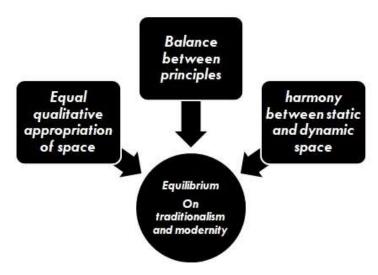


Figure 1-10- architectural paradigms of Balance

# 1.4.4. An integrated perspective in architecture and urbanism

Spatiality itself is dynamic. What architecture produces; is a static space signifier. Achieving this factor is possible by freezing a factor on a small scale. Therefore, what architectural design indicates about Balance; magnifies the place in the triad, and dynamism could be approved as a balanced phenomenon. Such a perspective might also be why architecture and urbanism should be in the realm of research. Some studies made these terms more feasible.

Notwithstanding, some geometrical shapes are influential in indicating dynamic and static spaces (Fredrick, 2007). Whenever space is dynamic, it represents a movement (El Husseiny, 2018), while the shape of a square with more emphasis on enclosure amplifies the feeling of static spaces (Fredrick, 2007). Attributing each space instance to traditionalism and modernity is almost impossible since both provided kinetic and static space examples. Nonetheless, to balance these spaces, it is necessary to consider both.

Equality in quantity and quality and harmony in weight are the three general and straightforward features to reach equilibrium, although there are not enough records for the words "dynamic" and "static" spaces.

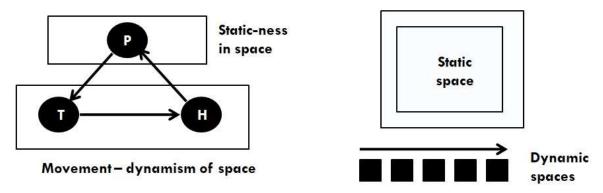


Figure 1-11- Dynamism and static-ness in space

# 1.4.5. Paradigms of Balance in societies

As a concrete abstraction, space creates two main possibilities: Dialectics and Synchronisation.

There are two challenges respective to the perspective of the cities:

- Understanding the city as an interaction of urbanism and architecture in a balanced way
- The city is understood as a whole and consists of living organisms. Hence, all layers of abstraction and concreteness are shifting, transforming into each other. Also, these layers are always in the blend as the time, human and place change.

Based on the diagrams in the previous chapters, it is possible to select the second approach as it covers the first one too. Is synthesis the only way to reach Balance? Doesn't a system combine two different symptoms (assuming Traditionalism and modernity) set back within the historical period? The bibliographic reviews confirm the second approach.

Several scholars and architects like Choay (1969), Cerda (1867), Collins (1965) and Wright (1953), conceptualised cities as living organisms.

scholar	Publication	Year	Idea
Francoise Choay	The modern city	1969	Georges-Eugène Haussmann transformed modern Paris and revolutionised its streets as a "general circulation system.
Peter Collins	Changing ideals in modern architecture, 1750-1950	1965	Modern architects and the relationship between evolution in architecture and nature
Frank Lloyd Wright	The Future of Architecture	1953	Biology shows how form follows function
lldefons Cerdà	General theory of urbanisation	1867	city as a body and a living organism

Figure 1-12- Balance and biologic concepts in architectural reference

# 1.4.6. Symbiosis in Architecture: A Recognised Way of Balance

The relationship between architecture and biological concepts leads the research into the concept of Symbiosis since the previous report concluded that fragmentation in space is inevitable as human perception shifts toward spatiality. Symbiosis is a relationship between two or more organisms in which one organism or symbiont lives within the tissues of another or on the surface of the body (Ahmadjian and Paracer, 2000). Symbiosis contains three situations consisting of: parasitism, commensalism and mutualism.

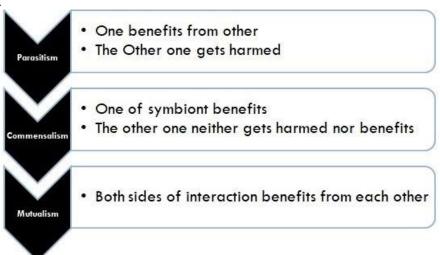


Figure 1-13- Three types of symbiosis-

Since mutualism increases the equilibrium densities of the interacting species (Holland,2012), conceptualizing the city as a living organism could bring about mutualism as another critical paradigm of Balance in societies.

The studies of mutualism in architecture are primarily focused on intervention. According to research by Milan Šijaković and Ana Perić (2016), architectural mutualism respects new and old architectural disciplines, including structure, interior-exterior material, form, and spatial organisation. All in all, mutualism should be another aspect of equilibrium in social space besides synthesis.

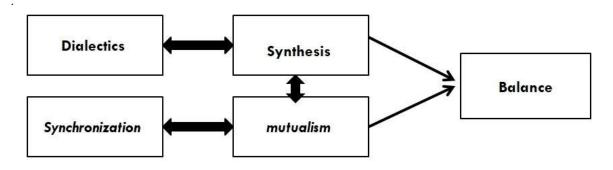


Figure 1-14- Mutualism and synthesis as two paradigms of balance

# 1.4.7. Defining Traditionalism and Modernism

As the critical pillars of this thesis, "traditionalism" and modernity were the core of precursory discussions on spatiality and its realm known as the triads of spatiality. Based on the earlier steps executed on state of the art, it is possible to often look at traditionalism inside the subjective and concrete sphere and the objective and abstract realm. Nevertheless, architecture seeks to identify the feasible and physical paradigms in urban reality regardless of modern and traditional attributes. Since the architect is responsible for creating space, physicality is inevitable. For this reason, the main target is to recognise the traditional features the architects pinpointed in both practical and theoretical fields.

# 1.5. Tradition, Traditional and Traditionalism: Convergence and Divergence

What are tradition, traditional and traditionalism? Were these words born in ancient times since the primary civilisations produced and sometimes re- and over-produced lifestyles? Are they the representative of old against new and young, considering the matter of time and humans? Is it archaic against innovative and progressive emblematic considering the aspect of place based on the ultimate productions in the status quo?

No matter how authentic the answers to these questions could be, traditionalism was always part of society's polemic in the 20<sup>th</sup> century. It appeared as a founding point in diverse broad dualities such as old versus new, East versus West, and progressive versus conservative (Brown and Maudlin, 2012).

It seems critical that these three concepts sometimes take different positions besides the similar etymology.

#### 1.5.1. Tradition

Tradition is the primordial notion for investigating what strictly opposes modernity. Is tradition the term in front of modernity? Is tradition a united and homogeneous entity, or can it be fragmented enough for selective approaches?

The perception of tradition substantially relies on time and then collectively by humans. This notion is process-oriented. According to Edward Shills, tradition is passed on from past to present (Shills,1981:12 & Moten, 2011) and from generation to generation. This definition does not certainly approve of the tradition's controllability by humans as it can usually be what Pallasma calls "non-conscious", generating and sustaining historicity, context coherence, hierarchy and meaning (Pallasma, 2012:20). Possibly and paradoxically, the magnified sense of historicity questions the flexibility of tradition, whether it is static or dynamic. The tight relationship between cultural values, social structure and time brings about Carl Popper's (1972) argument that traditions comply with transformation.

For some scholars, this transformation is continuous without rupture (Al-lahham,2014:68). Based on this argument, the scale of difference between modernity and tradition decreases. Consequently, any tradition can be modern (Asatekin and Balamir, 1990:62). Nevertheless, this perspective toward tradition concerns the near past substituting with the present and the near future. It seems tradition connects to a more significant past period, assuming a rupture less entity. Also, the past in tradition is not isolated, and the root is deep enough to influence. This mindset could be amplified by arguments raised by Hobsawn (1983) and Halpin (1997:5), believing that tradition and its deep roots can inculcate certain values and norms by denoting particular sets of practices. Hence, a tradition dictates the history and the necessity of shaping the present and future, chosen by humans purposefully (Williams,1977:15).

The approach toward tradition was mainly reintroduced in post-war discourses to illuminate the duality between modernity and tradition as a biased view caused by the supporters of each pole. A similar argument toward tradition appeared in Redfield's argument in a neutral ambience (Asatekin and Balamir, 1990:62). Notwithstanding, the story of architectural development throughout history presents modern as a positive departure from the past, contrary to the irrationality of any possible tradition (Crysler, 2003). Even in this Image, total rejection was impossible. The criticism of international modernism shifted the predominant negative Image of tradition toward its possible authentic and interactive reality. This transformation also presented a plural regeneration, specifically considering domestic space and sense of place, decades after the dominancy of the matter of time.

The bridge between modernity and tradition was impossible without representing rational features of tradition in architecture. Due to the semantic conceptual modelling, the tradition in architecture was a collective paradigm. It was shared between "the maker" and "the user" (Abu-Lughod,1992:2011) or what Hanafi (1980:151) calls "transmitter" and "user". Accordingly, in this framework, tradition might have numerous layers, and only one of them might be in line with modernity. Such perspective is caused by one Intersection called vernacular architecture, the only perceivable leftover of the past in the container of modernity. Indeed, this desired tradition is not traditional anymore.

#### 1.5.2. Traditional

"Tradition" and "traditional" might play a similar role in linguistics and etymology. However, in more extraordinary Images, they might take slightly different standing points. As mentioned, tradition can be reflected as modern. Nonetheless, anything traditional deterministically insists on the past. Furthermore, anything traditional derives from traditions. Therefore, a traditional entity is the amalgamation of traditions contributing to a united system. Conversely, tradition is selective, specifically when appropriated for a modern context. In this regard, in the first half of the 20th century, anything traditional was more in line with "rural" and "pre-industrial" (Abu-Lughod, 1992:8). Moreover, the acceptance of tradition over traditional and traditionalism contributed to a static and not flexible face for traditional buildings (Vellinga, 2006). Also, it links everyday life and forgotten cultural values (Oliver, 1969). According to Sutton (1963:71), the stratification system is based on the groups of some particular characteristics relying on specific laws and patterns that generate the traditional societies. Subsequently, traditional architecture must be the outcome of social rules rather than imaginary creative freedom (Eco, 1980 and Mann, 1985:14). The traditional buildings in Eurocentric discourses were inside vernacular architecture as the product of a particular place and non-expert people. However, these two terms maintain the distance from each other even as two opposite visions. The vernacularism of the 1950s and 1960s introduced the simplicity of traditional buildings confirming the functionalists' argument (Brown and Maudlin, 2012:340). Beyond traditional architecture's functional and formal readings, theorists such as Amos Rapoport (1969) and Paul Oliver (1969) concentrated on the impacts of cultural practices on traditional buildings, introducing them as rich values containing multiple meanings.

Term	Author	Year	Definition and Characteristics
	Abeer Al Lahham	2014	- Transformation in tradition is still continuous
	Juhani Pallasmaa	2012	- A non-conscious Process generating and sustaining "historicity, context coherence, hierarchy and meaning"
	Reynold Williams	1977	- A tradition dictates the history and the necessity of shaping the present and future, chosen by humans purposefully
	Asatekin and Balamir	1990	- Any Tradition can be modern
Tradition	Eric Hobsbawn	1983	- Tradition and its' deep roots can "inculcate certain values and norms" by "denoting particular sets of practices
	Edward Shills	1981	Tradition Relies on Time and Human Collectively     Process Oriented
	Hassan Hanafi	1980	- Shared Experience Between Transmitter and User
	Carl Popper	1972	Tradition complies with transformation (due to correlations between time, social structure and time)
	Marcel Vellinga	2006	- The acceptance of tradition over traditional and traditionalism contributed to a static and not flexible face for traditional buildings
Traditional	Janet Abu-Lughod	1992	- Unlike the Selective feature of a tradition, anything traditional is rural and pre- industrial (specifically 20 <sup>th</sup> century)
	Umberto Eco	1980	- Anything traditional such as architecture must be the outcome of social rules rather than imaginary creative freedom

Figure 1-15- Tradition and Traditional: Definition and Characteristics

## 1.5.3. Traditionalism

A consensus confirms the dichotomy between traditionalism and modernity since they are inherently the product of time. The first one roots in the glorified past, while the other gazes at the progressive ambitions toward the present and future. The argument can be questioned as traditionalism took place at the same time as modernity and in a more precise scope; traditionalism is a modern paradigm (Hojjat, 2015:6) or a modern European reaction (Legenhausen, 2002).

Traditionalism indeed is a movement initiated by traditional schools and theorists such as Rene Guenon (1886-1951), Frithojf Schuon (1907-1998), Titus Burckhardt (1908-1984), Seyed Hossein Nasr (1933-) and Gary Legenhausen (1953-) (Fardpoor, 2018:68).

Contrary to the modern principles, critique and shift toward locality, traditionalism might seek its pure reflection in global concepts (Hojjat, 2015:6). Henceforth, traditionalism is set to find truth and indefiniteness (Schuon,1982). In this scenario, this term is the whole package of religious principles in global terms overlapping the cultural values shared collectively. That is why the tradition of traditionalists, according to Hojjat (2015) and Nasr (1993), is primordial, influencing the other traditions through the horizontal relationship between time and the vertical spiritual revelation. Furthermore, the tradition of traditionalists is beyond culture and religion, meaning that it consists of religion. It is also beyond the more sacred levels not perceivable in the material world (Nasr and Jahanbegloo, 2010). The tradition of traditionalists is complex and cultivates all the disciplines influenced by constellations (Hojjat, 2015:8 & Perry, 1999).

When the central principle transforms from time to place, the geographical origin is on the agenda. Then the possibility of traditionalism as an oriental paradigm begins to shine. Traditionalism might be identified as an oriental paradigm since most religions appeared in the Middle East. Inside such readings framed in cultural terms, most civilisations systematised their identity in the areas such as Anatolia, Egypt, Greece, Mesopotamia and Persia. Also, the concept of traditionalism in all fields, like architecture, was filled with Islamic discourses on a considerable scale by scholars of Islamic countries. Therefore, this argument identifies itself as a serious question. Is traditionalism a reaction to reflect orientalism? Some theorists and authors do not reject it, while others reject it entirely, especially in sub-categorised dichotomies between old against new and east against west (Brown and Maudlin, 2012).

In his book "Orientalism", Edward Said (1979:203) elucidates this term as the influence over the western world. Based on his argument, the role of colonisation and consciousness of the east is not deniable. It could reflect the domination of the western world over the Middle East or vice versa. Regardless of addressing the dominance, orientalism<sup>9</sup> and traditionalism are reactions toward western-oriented modernity. Inside this contain-container scope, the container is western, modern discourses. However, the source of the reaction could be different. Janet Abu-Lughod (1992) also confirms the geographic address of this dichotomy along with Amos Rapoport (1969), believing that the "none" western society faces modernity as a threat. Nonetheless, orientalism was capable enough to find its way through eclectic architecture in the 19th century than traditionalism since orientalism and later on in the 20th

century; vernacular architecture was the western attempt to understand Traditionalism, a multi-layered mindset.

# 1.5.4. Traditionalism in Architectural and urban space

Knowing the precise view of traditionalists toward architectural and urban spaces and how they should be designed is critical. The central dilemma in understanding traditionalism is to identify whether as a critical tool of modern planning or an isolated perspective toward the past. In the first case scenario, since traditionalism is a modern paradigm with a reactionary nature, it inevitably enters the field of revivalism because it takes place in the opposite container. Consequently, traditionalism reduces to physical elements generating the images of memories (Al-Lahham, 2014:70). In contrast, for Christopher Alexander, traditionalism is a living language (unlike static images) sharing the group culture, dreams and memories and a specific way of life (Alexander,1979:336). It can be concluded that the revival of traditional architecture ought to change its function from static images to dynamic elements and essence. In this regard, the other scholars concentrated on a system of patterns replacing the elements of modernity. Hence, it could replace the criticised features of modern planning for what Talen and Ellis enumerated, such as hyper-individualism, decontextualisation, fragmentation and specialisation (Talen and Ellis, 2004:24).

Traditionalism was institutionalised in philosophy, yet traditionalism in architecture needed to take a bit critical from a reaction toward a tendency and desire. This tendency finally happened in the Netherlands after the First World War with the Delft School and the pioneers such as A.J.Kropholler (1883-1973), M.j.Granpre.Moliere (1883-1972) and C.H. de Bever(1897-1965) (Van Dijk, 1999:92). Also, this movement was a response to the functionalism of the Amsterdam school, criticizing them for being overobsessed with technology. The concentration was on the religious and rural architecture of the late Middle Ages, called the glorious times (Malich, 2018: 43). The importance of Dutch traditionalism started to fade out in architectural discourse. The reason is that the obsession with the technological advancement of modernism was a predominant image for architects and urban designers in the global context.

As mentioned in the upper paragraphs, traditionalism is restricted by any revival movements since it is a modern paradigm, and revivalism is the centre of denouncement as the outcome presents static images with superficial objectivity. Neo-traditionalism was an attempt to introduce elements of traditional space to regenerate it. Neo-traditionalism in architecture was entangled with urban discourses in the 1980s. The target was to recreate the spaces of pre-industrial societies (Al-Laham, 2014:71), trying to diminish the elements influential in low-life quality, such as the lack of mixed-use and prioritisation of motorised vehicles (Hasan et al., 2014:47).

The movement was introduced officially in Britain and the United States for the first time with pioneers such as Leon Krier (1946-), Quinlan Terry (1937-) and Robert Adams (1948-) in England and Robert A, M. Stern (1939-), James Kunstler (1948-), Doug Kelbaugh (1945-) and Andres Duany (1949-) in the United States (Maudlin,2009:52). Neo-Traditionalism developed into the urban design as "New Urbanism" in North American cities in the last decades of the last century. The ideology mainly focuses on traditional neighbourhoods. For this reason, the districts are the central elements for retrieving

traditional values with features such as higher densities and vernacular architecture, generating a sense of community and tradition, narrow streets and broader sidewalks<sup>10</sup> (Berman, 1996).

Neo-traditionalists appeared following postmodernism, critical regionalism, and historical revivalism (Al Lahham, 2014:69) since these approaches attempted to illuminate the neglected points. The capacity of their response to the current situation still needs to be observed in social terms by the public and elites. Nonetheless, the criticism is on the concepts like, tradition, traditional and traditionalism, both expectation and practice-wise.

Term	Author	Year	Definition and Characteristics	
	Issa Hojjat	2015	- Traditionalism took place at the same time as modernity - Traditionalism is a modern paradigm - The tradition of traditionalists is complex and cultivates all the disciplines influenced by constellations	
Traditionalism	Gary Legenhausen	2002	- Traditionalism is a modern Euro-centric reaction	
	Hossein Nasr	1993	Tradition of Traditionalists is primordial influencing the other traditions through the horizontal relationship between time and the vertical spiritual revelation     It is also beyond the more sacred levels not perceivable in the material world	
	Frithjof Schoun	1982	- Traditionalism is set to find "truth" and "indefiniteness "	
	Ksenia Malich	2018	The movement in Netherland was a response to the functionalism of the Amsterdam school, It criticized them for being over obsessed with technology. The concentration was on the religious and rural architecture of the late Middle ages, called the glorious times.	
	Abeer Al-Lahham	2014	- Traditionalism reduces to physical elements generating the images of memories	
Traditionalism In Architecture and Urbanism	Daniel Maudlin	2009	<ul> <li>The "Neo-Traditionalism" (Also "New-Urbanism") movement was introduced officially in Britai and the United States for the first time with pioneers such as Leon Krier (1946-), Quinlan Ter (1937-) and Robert Adams (1948-) in England and Robert A, M. Stern (1939-), James Kunstl (1948-), Doug Kelbaugh (1945-) and Andres Duany (1949-in the United States.</li> </ul>	
	Marshal Berman	1996	-The districts are the central elements for retrieving traditional values with features such as higher densities and vernacular architecture, generating a sense of community and tradition, narrow streets and broader sidewalks	
	Christopher Alexander	1979	- Traditionalism is a living language (unlike static images) sharing the group culture, dreams and memories and a specific way of life	
	Amos Rapoport	1969	- Vernacular architecture was the western attempt to understand Traditionalism, a multi-layered mindset.	

Figure 1-16-Traditionalism in general and in Architecture and Urbanism: Definition and Characteristics

#### 1.5.5. Traditionalists and their failures

Regardless of a mere reactionary movement or practical desire, traditionalism had been the target of criticism. Numerous critics surrounded traditionalism from a philosophical perspective. For instance, Muhammad (Gary) Legenhausen (2002:22) argues that the metaphysical approaches toward traditionalism and historical discourses are heterogeneous and historical studies cannot possibly have diverse claims on traditionalism and metaphors.

Isa Hojjat addresses another point for this failure. In his argument, the traditionalism of traditionalists is more descriptive than strategic. Also, he argues that their concepts are mere individual inferences than discursive reasoning. Based on these two points, traditionalists overuse sacred art and attribute it to physical reality (Hojjat, 2015:10). Even these metaphysical perceptions are the outcome of time,

gradually changing and shaping (Necipoğlu, 1995), while the tradition of traditionalists is primordial as mentioned before. Indeed, traditionalists

Traditionalism created another possibility: the tendency toward radicalism and fundamentalism. For Pallasma, tradition might not be a static paradigm as it is transmittable through generations. However, for Pallasma and the regionalists accompanying modern architects, traditionalism could represent a regressive manner (Pallasma, 2012:15).

The primordial and Perennialist aspect of traditionalism also questions its dynamicity; However, the multiple readings of universal truth and sacred arts generated pluralistically and subsequently, traditional space, in contrast to modern space, was conceived then perceived as a static entity (Alan Mann,1995:13).

Such an argument denies the possibility of criticism over something static since the static paradigm itself indicates the universal and ultimate truth as non-revisable. Later on, it might lead to fundamentalism. The other criticism toward traditionalists is linked to their simplified and broad notions. First, the multi-layered characteristics of traditionalism make it broad without an objective border and "all-inclusive" (Howard, 2011:110). Suppose traditionalism as a modern paradigm consists of various views and layers overlapped, happening in a predominant container of contemporaneity and modernity. In that case, modernity might have the same position (Ibid,2011:118), and the simplification of the dichotomy between modernity and traditionalism as a new and old or even in a more outstanding picture, the simplification of modern science, is a severe challenge (Kuban, 1978:6).

Neo traditionalism in architecture and "new urbanism" had been the target of criticism similar to the approach in the philosophical literature, and these challenges are accordingly rooted in the philosophical nature of traditionalism. Liane Lefaivre and Alexandre Tzonis (2003:19) argue that neo-Traditionalism's achievement is without authenticity and rationality. Moreover, neo-traditionalism present in contemporary society is nothing, but a superficial mask of historicity maintained by the regionalists such as Frampton (Maudlin and Brown, 2012). The failure of neo-traditionalists is also addressed with the titles such as "manipulation of motifs" (Pallasma, 2007:129) and "Counter-productive repetition" (Pavlides, 1991 & Brown, 2009:54).

What makes traditionalism so difficult to conceive? Why does traditionalism experience failures in meeting the ends? The most straightforward can lie in three principles. First, the problem refers to the relationship between value and time. Every valuable heritage does not contain the same value from the first beginning point. People should perceive and live it over a long period between generations to link them and create their memory.

On the contrary, the critics investigate the work for a short timeline without considering the influence on society and public reaction. Indeed, one of the most central concepts of traditionalism is participation and critics, as the elites of society have to deal with the influence of the public, and even, in this case, temporality is in the first place. Therefore, any primary perception of critics could be ephemeral without considering the long-time effect.

Second, the problem lies in controllability. Unlike the organic construction of the cities, contemporary planning and design look more controllable. The laws and regulations restrain traditional attempts such as neo-traditionalism, Postmodernism, and even critical regionalism, and in a broader term, the concept

of design. Traditionalism generates something superficial since the simulacrum of original, natural and organic is not the real expected. This argument causes the third challenge.

Third, the extent of considering the urban space or, on a broader scope, the urban reality is not evident enough. The urban space as metabolism is not supposed to function as an ideal entity, although the traditionalists aim to revive the golden past and ultimate primordial reality in philosophical terms. Any architectural building or generated fabric considered a mask is inevitable because the urban reality is neither the utopian machine nor the ultimate truth. Indeed, the urban space is the interaction between the created works in a matter of time. Moreover, traditionalism is the reaction toward modernity, and every reactionary approach is not necessarily located inside the rational context. Therefore, traditionalism is widely rejected by the elites in urban reality.

Combining the challenges of traditionalism in the 21<sup>st</sup> century magnifies why the possibility of pure tradition decreases and is almost a challenge to resolve the dichotomy between modernity and traditionalism.

# 1.5.6. Keywords of traditional elements in architectural and urban space

As mentioned before, traditional spaces are subjective and concrete spaces. Reviewing the literature represents the distinction between tradition, traditional and traditionalism. Modernity approved the matter of tradition in time with fractioned concepts such as regional and vernacular. The way it was given consent to by the post-modernists magnifies that the expectation from tradition does not meet the conceptual illustrated goals.

Umberto Eco's (1980:145) third approach to building between modernity and traditionalism, other than integration with governing social systems or casting out the tradition, could act as an influential principle. In this view, the architect attempts to find the fundamental codes and patterns of the society or the communities, and at the same time, this approach can reassure contemporary progressivism.

The transformation of the space's notion in traditional and modern perspectives, from Cartesian vision to those such as functionalism, structuralism, and phenomenology, was discussed previously. This evolutionary process confirms and combines with semiotics accrediting Eco's approach toward traditionalism and modernity to categorise the connotations and denotations as codes. Therefore, in this section, the main target is to codify these terms in a traditional context and then link this part to methodology and the Grounded theory. A similar approach will be implemented to identify modernism as well.

The primary objective was to seek out the terms intersecting traditional elements and the keywords approved by traditionalists to reduce the superficiality and make it perceivable since they were evident at global levels, and the tradition of traditionalists is universal. The discussed terms in this part are the outcomes of an overlapping approach between secondary research and experts' opinions inside the grounded method.

### **Conceptual and Building-Scale Elements**

#### **Culture-Specific Environment, Collective Memory and Connotative Symbol**

In traditional environments, several general terms are subjected to a particular place, humans and periods. Their meanings are wide and broad, causing difficulties in the semantic world to reach a consensus over the optimal. Therefore, there will be a shift in the research focus from the meaning to the mutual concepts with traditional architecture, apprehensible in the built environment.

Rooted with the Roman language "Cultura Animi" (Ciceron and Bouhier, 1812), the term in the Cambridge dictionary (2020) contains one of the most straightforward meanings ever, which is "the way of life". Nevertheless, this way or attitude toward life sometimes fabricates different beliefs, religions, foods, laws, and many specific words as separate themes.

The most critical point on culture is that it generates a group of people over time. This vis-à-vis connection causes growing culture and integration with continuity in tradition (Pallasma, 2007:11 & Mihaela, 2014:565). However, the main question always exists. What type of culture does this research aim to tackle, especially in this vast domain of disciplines concerned? According to Raymond Williams (1980), there are three distinguished types of culture: Residual, Emergent and Dominant. In this categorisation, the residual culture is reminiscent of the previously practised one in the society inherited by the past. The emergent culture is the newly initiated values and practices. The dominant culture could result from the interaction between residual and emergent cultures by integrating selective and incorporation traditions (Bryson, 2008:748).

Based on Williams' idea, the intersection of culture and traditionalism in architecture takes place on the residual and continuous dominant culture and is more complex than traditional notions of high culture (Warnsboroguh and Mageean, 2000: 182). Therefore, the culture-specific environments, regardless of their construction technique, can be regarded as the elements promoting traditionalism (Rapoport,1980:26). The architectural and urban discourses are subjected to pursue the possible "material" culture to revive traditional and vernacular values. Henceforth, the research intends to locate cultural examples in neighbourhoods or districts such as the known cultural heritages, museums, cultural centres, districts and local communities. Semiotically these instances impose the role of culture in the first place. Indeed they are the containers inside the perceived, conceived and lived sphere of cultural practices.

Memory is another broad term to identify traditional elements of architecture. It might experience metamorphosis or continue over time. However, it depends more on place than time, although a special bond exists between place and memory. Maria Lewicka (2008) clarifies this correlation with the terms such as "place attachment", "place identity", and "place memory". As Lewicka discussed, the "place attachment" is a specific connection between the people and the place and includes three types such as affective, cognitive and behavioural.

The "place identity" intensifies the memory invisibly with the notion of identity. Then the third stage for Lewicka is the "place memory", providing the mutual relationships between the words: "place", "attachment", "identity", and "memory".

Besides the role of place, humans ought to be the crucial elements in perceiving it and the time to facilitate the perception. The most crucial point is that these mutual bonds magnify the integration between that "past" without even a known starting point and "memory", laying the foundation for the traditionalists like Titus Burckhardt, Guenon and Nasr to claim it as the representatives of traditional architecture.

Can any memory contribute to the physical outcome of the built environment? Possibly, any inhabitants of an urban space passing by a particular street or square recall a memory shaped since childhood until a very near past. Based on this experience, there will be around the population number case scenarios to build the city, considering only each person's static image of a particular period. That is why the necessity to divide the individual memory. Moreover, the abstract space presumably generates the individual memory, and the concrete space produces and reproduces the collective memory. Therefore, the justification presents that the defenders of traditional architecture usually seek out collective memory to identify a group or community, locality or nationality and the place itself.

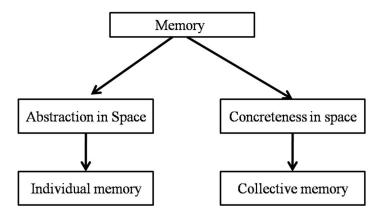


Figure 1-17- Collective memory and traditionalism in space

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The term collective memory introduces one of the first post-war discourses by Maurice Halbswach (1945), a French sociologist who investigated the role of history in memory. For Halbswach, the collective memory is the outcome of the memories shared by a specific group and community, passed through time and exists now. This vision influenced architectural theorists and urban historians such as Aldo Rossi (1982) and Christine Boyer (1996). The city was the "locus" of collective memory for Aldo Rossi (1982:31). In Boyer's vision, the physical artefacts are the entities taking the memory forward toward the present and future. The monuments or streets and the architectural forms are the footprints of this collective memory (Boyer,1996:31). The statements like these articulated the criticisms by the postmodern scholars to target the modern architects, claiming that the modern movement marginalised the memory resulting in its crisis by international styles (Hebbert, 2005:583).

Another important point concerns everyday life. Does the collective memory have to be part of a fixed, functional, productive system? For example, a discovered heritage located inside an excavated site lost the typical role it used to have in everyday life. On the other side, the collective memory has to be continuous. Hence, the question needs to be asked with a more precised approach. Does the collective memory take various roles in a matter of time? For instance, a building designed with a specific style and functioning as an office once upon a time might symbolise a memory for the next 40 years. As time passes, the building can lose its previous function. Therefore, the collective memory nowadays has transformed into a function itself, and people consume it in their everyday life because it is an urban reminder (Lewicka, 2008:214). The purity of memory increases over time since it might be monofunctional. That function is the collective memory representing every community in neighbourhoods.

The thesis intends to locate the collective memory examples in the case studies such as cultural heritage, plazas or public shared spaces, cemeteries and parks representing the communities. They are the most compromising points between a connotative and denotative image of memory in urban spaces practised through time by the public and through perception and living the sense of place.



Figure 1-18- Piazza Del Campo in Sienna- (Source: Itinar website)

Symbolism regained its position in the second half of the 20<sup>th</sup> century as a comprehensive term. It owes this return to the emergence of semiotics and phenomenology with the noticeable works of scholars like Eco, Barthes and Norberg- Schulz. The generality of the term also presents the possible connection with the keywords like "culture", "memory", and "ornaments" since finding the boundaries between the words have been a difficult task. The notion in the contemporary context deals with core discussions in postmodernism.

If architecture is a language system and communication is possible through recognizing signs, how does a symbol work in this system? The focus fluctuation between form and function is transmitted to the symbol itself. Whether inside a structuralism scope or postmodern, the linguistic approach illuminates that the symbol can possess a connotative or denotative role. Every sign significantly affects signified and signifier production (Saussure, 1966). In simple terms, a signifier is a word and how it creates the sound pattern. The signified is generally the mental concept (Ismayil and Zaharin, 2017: 89). Based on Barthes (1988) argument, the first stage of every sign is the definition, and for this reason, in the first stage, denotation takes place which signified. Then, the signifier (the mental image) creates the first level. Nevertheless, every sign ought to be perceived with the specific respective reaction. Thus, the second stage of connotation takes place, being dependent on the previous stage of denotation (signifier and signified in first order) and a new signified (a new mental concept) (Ismayil and Zaharin,2017:90). The distinction between modern symbols and traditional ones starts from linguistic systematizing. Modernity in architecture generally stops on the first level of the sign, which is denotative. The mental image manufactures abstraction by representing industrial and mechanical images (Mankus, 2014:276).

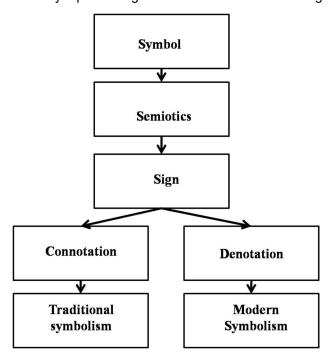


Figure 1-19- The Symbol and semiotics- (Source: Author based on Barthes's work, 2008)

The meeting point or synthesis contributing to unity between the signifier and the signified might result in cultural intervention (Gottdiener, 1995) as the requested symbol in traditionalism. In other words,

symbolic architecture combines function and aesthetics (Jencks,2004). One paradigm of these overlapped layers could be the ornaments and religious values or the public monuments derived from the socio-political processes.

That is why the thesis intends to find: symbolic representations and symbolism in architectural and urban discourse for each city's religious centres, such as mosques and churches. Furthermore, ornaments reflect specific meanings of cultural identities. Also, monuments as heritages could be considered a precise instance regardless of the cultural or political background.

#### Non- Monotonous (alternating) Repetition

Repeating in the physically built environment is inevitable. Almost all natural paradigms contain repetitive elements. Repetition permits identity and particular idiosyncrasy to specific groups of people and buildings. Like other elements, modern architecture and urbanism witnessed repeating characters in the built environment. Thus, it seems impossible to appropriate this term to modern and traditional city principles. Nevertheless, investigating further inside the context enlightens the context more. Christopher Alexander (2002:165) is the most critical figure identifying this pattern as compatible with traditional aspects, claiming that the repetition ought to be "alternating" or non-"monotonous" (Salingaros, 2011).

Every repetition has to present liveliness, according to Alexander. Henceforth, the argument on the difference between modern and traditional repetition starts. Based on the previous dichotomy between the abstraction-concreteness polarities derived from the literature review, repetition in modern architecture appears to be more abstract since minimalism or even international styles exhibit themselves as the most important examples of these types. Alexander (2002,66) also confirms that the repetition contributing to the liveliness is not a matter of motives of forms but the rhythmic and systemic interaction between the centres of the patterns, intensifying themselves.

In such categorisation, every concrete and subjective feature of repetition, such as the hierarchical rich articulation of ornaments, could be an example of traditional repetition. The identical modular buildings emphasizing horizontality or verticality can represent the modern type (Salingaros, 2011:3).

The element does not necessarily concern the buildings at all. Other instances include city-country fingers, parallel roads, paths and goals, and terraced slopes (Alexander, 1977). A city with landmarks is an attractive environment for walking and experiencing the atmosphere. In this case scenario, every path should lead to goals. The diverse pattern of the path and the landmarks exhibits alternating repetition, which is not necessarily exact and monotonous. Every path might have specific scenarios and goals as centres magnify themselves. It is a rhythm indicating unity and multiplicity at the same time.

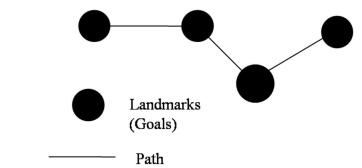


Figure 1-20- non-monotonous repetition between path and landmarks based on Alexander's work

It is possible to locate the non-monotonous repetition in the neighbourhoods selected to investigate in chapter 4 of the thesis, like any possible alternating repetitions of dwellings and traditional ornaments and repetition in them, magnifying repetition of a specific identity and double-sided relationship between paths and their goals.

## **Conceptual and Urban-Scale Elements**

#### (Local) Symmetry

The concept of symmetry has been a long-term one throughout architectural history. The standard and well-known symmetry is the global or overall type, generally created by Euclidean geometry. Nevertheless, the symmetry of traditional architecture and ancient cities is not perfect. In this regard, Christopher Alexander (2002) introduced another term known as "local symmetries", Considering liveability or wholeness as the core of his argument. Perfect or overall symmetry does not necessarily imply the desired model inherent in the traditional built environment. However, a system might contain symmetrical sub-systems. For example, the multiplicity of small or local symmetries presents the system as a living organism. On the other side, the overall and perfect symmetry tends to define "death" rather than "life" (Ibid,2002:186-187). Alexander also exemplifies local symmetry by observing the Alhambra, discussing how every sub-space involves local symmetries while the plan is asymmetrical. These examples are extended worldwide, from the Middle East to Latin America.

Local symmetry also applies to ornaments, building forms, and other examples that might follow hierarchy and centrality (Ibid,2002:188). It follows a pattern that generates centrality for each entity to contribute to the liveability of the system. In a broader picture, every part has its own identity, and now, the community-oriented societies accompanied by other spaces, perceived as vital centres, are examples of local symmetries for the urban space as an organism.

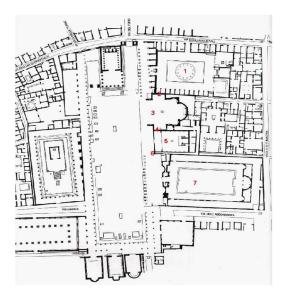


Figure 1-21- The Forum of Pompeii as an example for local symmetry- (Source: Dobbin, 1994)

Local symmetry is a concept that challenges those who criticise traditionalism for being static; while perfect and exaggerated symmetry tends to be more static, the shapes or motifs in the ornaments might follow a subjective pattern representing more motion.

The thesis targets finding the elements such as the buildings or complexes with a plan of local symmetry, urban districts plan indicating local symmetry, ornaments representing local symmetry, and observing row houses and houses on terrains.

## .Mixed Land-Use Developments:

Mixed-use development is among the most concrete and evident approaches for the critics denouncing modern urban planning as it is a traditional representative of architecture and urban design. Leon Krier (1998), as a figure embracing traditionalism in architecture, believed that:

"An urban village is a human-scale, compact, mixed land use, mixed tenure neighbourhood within a wider urban area, with diverse open spaces, minimal car dependency, and relative self-sufficiency regarding the resident's needs for employment, shopping, recreation and community activity".

Indeed, mixed-use development is an overlapping factor between the other possible elements of traditional cities. The examples of mixed-use development are not limited to specific areas of the world, and even the starting point in history is unknown. The anticipations on the sources vary from Egypt in the Mamluks' era (1250-1517) (Mortada, 2004:75) to the medieval European cities. Nevertheless, it is clear that this approach, horizontal or vertical, was dominant in the old town until the industrial revolution and later in the 20<sup>th</sup> century with the segregation zoning.

The mixed-zone approach reflects both rhetorical and evident facts about cities. This approach paves the way for walking friend passes with the control of cars (Hasan et al., 2014:50). Furthermore, the mixed-use development is the product of pluralism in societies since it includes the "cultural regeneration" paradigm (Warnsborough and Maagean, 2000:196) and "social integration" (Mortada, 2004:75).

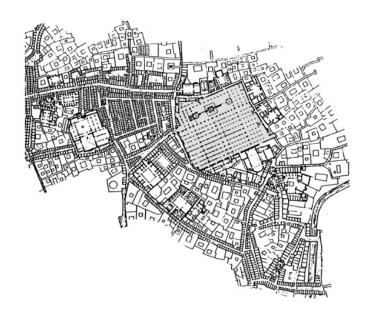


Figure 1-22-Mixed use development of a mosque, bazaar and centre of Fez – (Source: Mortada: 2004)

It is possible to perceive the presence of mixed land-use developments through the examples like mixed-use streets or districts and neighbourhoods reflecting the community. These examples contribute to the investigation in the chapter 4 of the thesis for each case studies and their corresponding selected districts.

## **Organic Organising**

There is the turn to discuss an entirely broad term in contemporary and throughout history. Is organically built or designed something necessarily traditional? Specifically, this question rises to the peak of the doubt when it looks like a dissociation between architectural and urban understanding of "organic" exists. From the architectural lens, this term started to appear gradually in the 19<sup>th</sup> century by Ruskin and later by Viollet Le Duc (Zevi, 1950:86). In that version, organic design possessed a special bond with Medieval and Gothic revivalism synthesised with understanding the principles of nature. However, the term in architecture officially is instigated by Louis Sullivan (1856-1924). The term "organic" was systematically connected with "organism"," structure", "function", "growth", "development", and "form" (Zbasnik-Senegafnik and Kitekkuzman, 2014:293). Subsequently, these two distinct visions combined influenced Sullivan's apprentice, Frank Lloyd Wright.

The principles of nature and the fascination with traditional Japanese art and others such as Gaudi and other architects, even inside the modern discourse, represent a severe probability of "organic organising" as a universal opposition to what traditionalists label mechanical and artificial planning extending from east to west.

The metaphorical aspects appear if this term moves beyond architecture and enters urbanism's scope. Organic organizing had been constantly on the edge of polarity with the "planned" or "artificial" on the other side (Batty and Longley, 1994:8). To define it in a more discernible way, Kostof's (1991) notion of the organic city seems to be more comprehensive since he identifies organic cites as chance-grown and generated instead of being imposed. For Kostof, there is no benefit for the designer, and the only master

plan for an organic city is the time itself. There are numerous differences between the elements of traditional organic cities and modern mechanical or planned types.

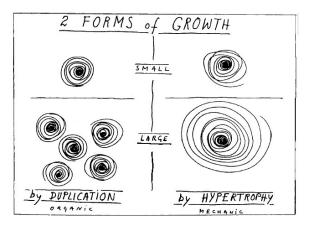


Figure 1-23- Forms of Growth in organic and mechanic cities- (Source: Thompson-Fawcett, 1998)

According to Batty and Longley (1994), organic cities grow slowly and gradually, while the development rate is rapid in mechanically planned cities. Also, the urban form can decline in organic cities, and another side, almost all modern cities grow. Furthermore, the other illuminating aspect of the various subjective elements is the dialectic relationship between organic cities and the centre. Leon Krier (1984) discusses this issue by creating a distinction and duality between organic and mechanical composition and city of communities versus (anti)cities of zones. Moreover, Krier distinguishes the organic systems with their duplicated centres against the hypertrophic centre of modern cities (Thompson-Fawcett, 1998:173). Based on these visualisations, the communities and centres play a vis-à-vis role. It is almost impossible to imagine a centre without a community and a community isolated from a centre. In general, the organic city is more contextual and subjected to surroundings than cities built industrially in the 20th century. That is why the organic city is the outcome of the deterministic compactness overlapped with cultural preconceptions. It is not the plan that represents the power of the built environment. The crucial element is the earth and the component, as a metaphoric reading of nature's growing plants and trees. The old towns in the majority started with an organic pattern (except Romans) and then continued either in an organic way or combined with a regular geometrical master plan. It is possible to find any organically organised forms in cities and urban districts besides the irregular patterns developed in cities reflected in alleys and streets. These instances will be the roadmaps for the further investigations in the chapter 4 of the thesis for each case study.

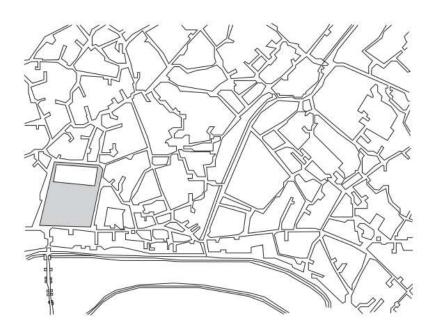


Figure 1-24- Cordoba in 1811- Organically shaped city – (Source: Mortada, 2004)

#### **Visual Contradiction**

This term is the outcome of criticism toward modern architecture by the appearance of postmodernism. Jane Jacobs (1961:380) introduced "visual contradiction" as an element being erased in North American cities. Jacobs identifies a visual interruption as a typical example of visual reinforcement, being also an essential feature of traditional cities and claims that the "interruption of vistas" along with "the cutting of the indefinite distant view" were visible to note in old towns, giving the streets their deserved identity (Talen and Ellis,2004:26).

Jacob's argument also presents some similar conclusions to other scholars' work. The organic cities contain some elements reflecting the visual contradiction. For instance, the curved and winding pathways cut off the view because of the environmental situation. Even cultural beliefs are also influential in creating hierarchies. Visual contradiction in the streets also encourages the passengers to walk and penetrate the unknown and unpredictable space. This perception makes the streets more recognizable and non-homogenous. Their name guarantees their required identity, contributing to the sense of place.

The visual contradiction was also the central point for the urban designers who desired to revive and revise the garden cities since the green spaces inside every district and neighbourhood function as centrality and the space of transition regarding hierarchy, interrupting a direct vision of an alley or street. This situation can happen in a combination of height differentiation and topography, amplifying complexity and unpredictability.

The thesis in the chapter related to the place, is going to find the elements indicating visual interruption, like Irregular curved networks, districts with winding alleys, a green space cutting the direct view of a street and a building cutting the direct view.

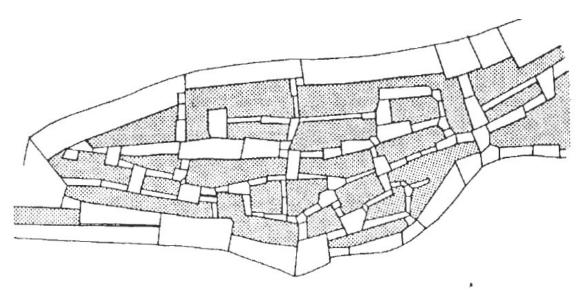


Figure 1-25- The visual interruption example as a convex map in City G France- (Source: Hillier et al. 1987)

## **Physical and Urban-Scale Elements**

## **Adaptation Toward Slopes**

Building on slopes was not a necessity for traditional cities. Countless cities are in a valley or a plain. Nevertheless, compact cities are the consequences of restrictions such as topography, defence and agriculture. All over the world, cities are known for the cities of seven hills, such as Athens, Brisbane, Istanbul, Lisbon, Mecca, Rome, and San Francisco, with different histories and reasons behind their specific environment.

The historical scope clarifies that the ancient cities were on hillsides, addressing diverse historical stages. For instance, most European cities on the hills date back to the medieval era, even those influenced by Islamic cultures. In contrast, the hillside settlements in Eastern Asia, the Middle East and Latin America belong to different periods with distinct purposes. The hilltop could contain a landmark such as a religious site or castle in all these cases.

The above examples provide credibility for claiming that the traditional buildings built upon the hillsides are more compatible than the modern ones. Adaptation toward the hills and slopes can bring about organic planning. Nonetheless, it is not necessarily part of an organic organisation in cities.

The factors like settlements built on slopes, shanty towns on slopes, landmarks on hilltops, and topographic contours shaping the districts and socio-cultural backgrounds of districts located on hillsides will be observed for each case study in the chapter 4.

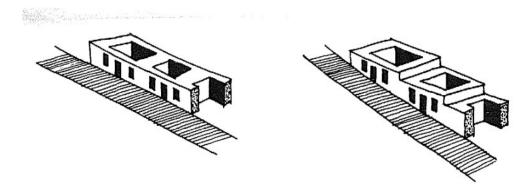


Figure 1-26- sketches of Courtyard houses on a hill on the right side in Latin America (Source: Rapoport: 1969)

## **Circle and Circularity**

Assigning the geometrical shapes to one specific side of the traditional-modern pole is almost impossible. Even so, there will not be any sufficient practical points to perceive since the outcome is inside the context of superficiality. Nevertheless, using geometrical motifs, examples, and patterns has been a continuous paradigm through the centuries, even from the primary civilisation.

The notion of "circle" and, in general, "circularity" played a critical role in a sensible physical world and also in narrative reflections of architecture. In primitive dwellings and huts of Eastern Asia and Latin America, the usage of the circle represented itself as the most basic form, being sensible for the first civilisations. It was not even a deniable matter for modern architects since numerous examples were designed and constructed by the architects such as Frank Lloyd Wright and Louis Kahn. Nonetheless, a considerable decline in circular form is utterly imaginable. Continuity of time introduces the circle and how it is used as a long tradition. However, this broad story never ends here since the traditionalists illuminated the circle's narrative and metaphorical importance. The philosophers like Rene Guenon, Titus Burckhardt and Seyyed Hossein Nasr gave symbolic and sacred meanings to this concept and transformed circularity into a traditional term.

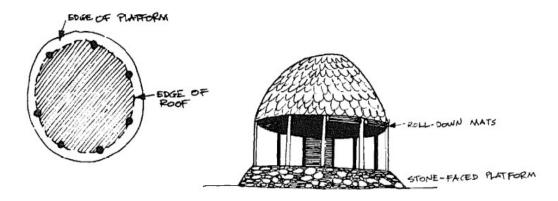


Figure 1-27-The Samoan Dwellings- (Source: Rapoport, 1969)

For Guenon (1970), it is the source and essence of the whole universe, and for Burckhart, the core of other geometrical shapes (Burkhart, 1967:19). The symbolic face of the "circle" was even more central when it was the symbol of the whole, sky and perfection, and on the other side, the "square" was the

symbol of the physical world. In religious architecture, specifically in Islamic cities, the concept of "multiplicity in unity" (Nasr,1985 & Ardalan and Bakhtiar,1973) and vice versa exhibits a sublime level of circularity. For instance, integrating the dome into the "square" and how it is converted (Hojjat,2015) was the central topic of discussion from both physical and spiritual perspectives. Also, in ancient India, the *Mandala* was the geometrical pattern between humans and the cosmos, influencing other beliefs such as Christianity and Hinduism.

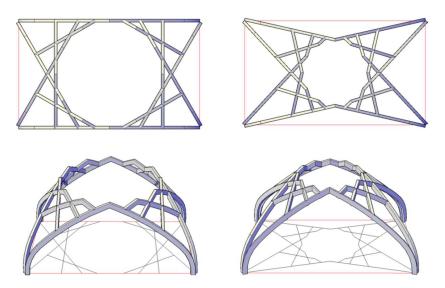


Figure 1-28-Practical example for the symbolic role of circle- (Source: Pourahmadi,2014)

The critical focus of the thesis is to observe the possibilities of the presence of circles and circularity in the selected case studies in the chapter specified for the matter of place. Traditional or vernacular motifs on the surface of the buildings using circular geometries in the urban fabric concerning the centrality of the selected districts and any relationship between geometrical usage will be the subject of analysis for the selected cities.



Figure 1-29-A typical Mandala- (Source: Toda Materia)

## Cul-De-Sac (The Dead-end passage)

The Dead-end passages, known as "cul-de-sac", are controversial since they made their mark in modern and traditional architecture. Does a contemporary example of the cul-de-sac refer to the past traces in traditional cities? Indeed, there are some differences. However, without a doubt, this term contains the most archaic instances in traditional cities. Cul-de-sac is a French term and, according to the Oxford English Dictionary (2020), means "a street, lane or passage closed at one end, a blind alley; a place having no outlet except by the entrance" (Southworth and Ben-Joseph,2004: 28).

The concept of Dead end passages has been the core of appraisal and criticism among urban designers and architects. The criticism weighed more than admiration since, for some scholars, these passages decreased the sufficient and required potential for the walkability of the cities. *Cul-de-sacs* were the essential elements of ancient civilisations. Given the lack of more evident sources to make more precise about the possible first generations, there were several physical footprints of these spaces in North European Middle Ages towns (Southworth and Ben-Joseph:2003). According to Cozens and Hillier (2008:54), the primary *cul-de-sacs* were narrow and short, without circular points, including pedestrian walkways. Unlike traditional prototypes, contemporary types have more width and length.

The contemporary designation of *cul-de-sacs* was because of controlling vehicular movements. Eventually, the extension of this approach toward the suburbs was not successful enough to create enthusiasm for living there, considering the problems with traffic in metropolitans nowadays.

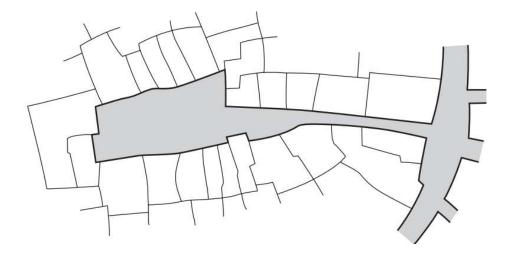


Figure 1-30- A typical cul-De-Sac in Medina- (Source: Mortada: 2004)

Unlike the modern ones, the traditional *cul-de-sacs* are the product of organic planning without the concern for the existence of any roundabouts. The dead-end passages follow a hierarchical pattern. Indeed, they play a "semi-private" role, linking the semi-public alleys to the private realm of the house or also even as a semi-public space with one-way access (Bala and Nafa, 2008:69). This perspective can justify why these spaces were less walkable since they are not supposed to function in that way. On the other side, neighbourhoods and districts with cul-de-sacs are more likely to interact with the people

in the neighbourhood (Appleyard, 1981), increasing the sense of safety among the locals. Sometimes they are the centres for local activities. For instance, the *cul-de-sacs* of Latin American cities such as Havana, Buenos Aires and lima are the places for some commercial spots or Café (Mortada, 2019:2).

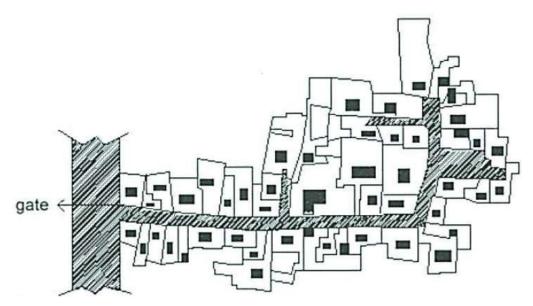


Figure 1-31- Cul-De-Sacs in a typical Traditional Anatolian city – Source: (Bala and Nafa,2008)

*Cul-de-Sacs* in the selected case studies will be the keyword for evaluating the traditional character of the districts in each case studies.

## **Hierarchical Organising**

"The traditional cities insisted on hierarchies." This sentence was the most direct criticism of modernity in architecture and urban planning claimed by postmodern critics. However, this denunciation cannot depict an image that modern architects did not value hierarchy. Nevertheless, modern urbanism generated a more acute transformation of space from public to private (Bala and Nafa,2008:70), while this transition is more gradual, especially in the Middle East, with religious values.

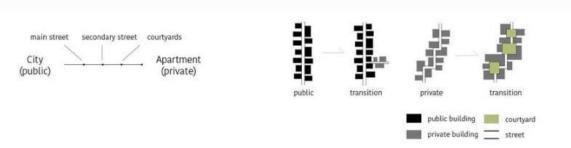


Figure 1-32- The practice for stages of hierarchy in a contemporary project in Shanghai- (Source: Yanke design website,2020)

There are a few terms in this research fitting inside the concept of hierarchy, and the central intention is not to narrow down a list of words but to clarify the term. The required hierarchy for traditional architecture is the more levels or stages of hierarchy from public to private. The identity of communities in specific districts experienced severe neglect of representation in the previous century. Thus, space replaces form in the built environment (Carrauters,1986:17). In some cities, the hierarchy level is seven for symbolic and religious reasons.

From what did hierarchy derive? Was that the matter of inevitable or bound to the matter of temporality? In universal discourses, the origins are different without any specific starting point. For Dennis Alan Mann (1985:12), it is the" ritual family life". It generates the spatial use hierarchy from the past. For the other traditionalists, the only reason for the hierarchy is a sacred theme (Evans, 1960: 412). Henceforth, the possibility of understanding the matter of hierarchy inside the context of traditionalism increases since both family life patterns and religious or symbolic attributes prioritise spatial transitions in the urban reality.

Based on this brief and concrete understanding of hierarchy, it is possible to find the most sensible items like the hierarchies in general for neighbourhoods, hierarchies for more than four stages in the cities, the physical elements creating hierarchy and the transition between public and private spaces. Moreover, the physical elements, such as narrow passages since these factors are the most perceptible instances of recognizing the hierarchy in traditional cities.



Figure 1-33- Mecca Plan- Hiarchial streets and alleys organised traditionally-Source: (Ekconcept Website,2019)

The hierarchical organisation from public to the private is the selected term for the chapter specified for the matter of place in the thesis. The realms of hierarchy is the important term to know the traditional extent of the selected case studies in chapter 4.

#### **Intensified Boundaries**

The revival of boundaries appeared in postmodern discourses. Nevertheless, this word has been a prolonged concept throughout history as a necessity. Its presence was essential since boundaries provide space for perception, identity, and transition regardless of functioning virtually or physically. Besides the pre-conceptualised spatial-temporal discourses, the boundaries magnify the sense of place or placeness (Rashid, 1998:23 & Heidegger, 1971) and the importance of certain epochs (Battey and Longley, 1994:164). In English, boundary means the thing which divides and separates, indicating borders and limits (Webster, Dictionary). The most crucial point is that the boundaries are multifunctional since they are subjected to the specific object that gives meaning. In this regard, the outcomes are blocks, districts, zones, and even architectural forms. Stating the necessity of boundaries causes the central question. What are traditional boundaries?

As mentioned in the upper paragraphs, Boundaries are perceived in a place as a container inside a period, but humans' role should not be forgotten. People tend to define and identify the space they are moving inside. Nikos Salingaros (2016) characterises this requisite need in the biophilia hypothesis; in this sense, the boundary must be notified or densified. That is why for Salingaros, the boundaries in traditional architecture are well-defined. In a broader view, this point is evident in Salingaros collaborator, Christopher Alexander (2002) and other theorists, such as Kevin Lynch (1960), despite minor differences. Boundary is among the 15 principles of good design in Alexander's book: "the nature of order " while Lynch used this word in a slightly different way, entitled the edges. For Lynch (1960:62), the edges are usually linear. Nonetheless, it is perceived and conceived spatially by humans.

One desired feature of boundaries compatible with traditional examples is the integration between unity and separation. Boundaries should separate and unite (Alexander, 2002:159) to magnify the centre and periphery. By this assumption, the boundaries are not necessarily impenetrable like walls and paths, trees, parks, streets, buildings, and squares. They possibly act as a local centre, dependent on other centres, probably located in other districts separated by the edges. Henceforth, the boundaries allow the adjacent communities to interact, so the boundaries are the intersections for the fragmented or homogenised parts of space. Boundaries are as critical as the buildings themselves, and subsequently, the traditional cities contain more densified and emphasised boundaries. In Eastern Asia and Medieval Europe, they were the space of everyday life or the transitional space between public and private spaces in Islamic cities. The modern urban space for the critics such as Jencks, Alexander and Salingaros is not bounded. The external space was left over on the other side, whereas the traditional cities used the maximum out of perceptible boundaries.

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Figure 1-34- A typical boundary in Venice- (Source: weurbansit.com,2020)

The thesis, in chapter 4 intends to clarify the boundaries in traditional spaces such as (derived from Alexander's work on boundaries and their patterns 1977) arcades along the pathways, building edges that attract to enter or sit around, building thoroughfares, coastal line or waterfront pathways, public outdoor rooms and partially enclosed public space, sub-cultures. Also, the detailed overlapping factors include neighbourhood boundaries, the old city walls, and temporal activity pockets.

## **Narrow and Winding Paths**

Although there is no history for the first precedents of narrow and winding paths, it is possible to label this element as traditional urban features since some signs indicate that the primary types appeared in Anatolian villages (Kostof, 1992). This prototype of the narrow alleys does not necessarily monopolise the element inside the Middle East, as the cities in China, the Iberian Peninsula and Medieval Europe contained narrow and winding paths. Nonetheless, the concept of winding paths seems to be interesting for some urban analysts and designers, along with the others like Garden city (Cozens and Hillier, 2008:54)

The element can overlap and guarantee the other keywords and signifiers of traditionalism in architecture, both physically and non-physical. Like Muslim cities, the narrow streets provide a hierarchy where privacy is critical. Even this factor is visible in Southern Spanish and a few Portuguese cities. Besides the cultural issues, the climatic considerations for shade and winds were central for the old towns (Rapoport, 1969:7). Furthermore, characteristics like being pedestrian-friendly (Thompson-Fawcett, 1998:82) and compactness could be implied through the narrow alleys.

The thesis intends to identify the narrow alleys and streets in districts and the winding passages for the chapter precisely investigating the place.



Figure 1-35-Narrow and winding street example in Alfama Lisbon

## **Pedestrian Oriented (Walking Friendly) Network**

The invention of the car and motorised vehicles inevitably paved the way to polarise into two possible divisions. The first type is the cities with wide roads for vehicles, and the second type is cities without any standardised car network. According to Mumford (1961), the ancient cities were organised according to the communication influenced by walking. In general, when the human-scale city is the central topic to focus on, the sidewalks' network is on the top list of priorities. Walkability was forgotten entirely in the modern urbanism discourse and regained popularity in post-war literature, mainly in the 1960s with the works of Jane Jacobs and, later on, Jan Gehl.



Figure 1-36- Pedestrian friendly zone in Istanbul- Constantine Hippodrome – (Source: Nomadic Nico.com)

The physical elements of walkability are the wide pavements, sidewalks, pedestrian zones, and even the plazas and public spaces originating from ancient Greek.

It can be concluded that the old towns were more comfortable to walk than the modern types in the 20<sup>th</sup> century. The neo-traditionalists, in general, seek a model approving walkability. Even greatly influenced by modern cities, the historical zones are likely to be more pedestrian-friendly and considering this; it will be more evident to recognise this term as a more traditional element.

The thesis tries to identify examples such as the alleys or streets with the priorities of pedestrians, the pedestrian zones, and the zones controlling the vehicles.

#### **Strong Centres**

Strong centres are the other critical principle introduced by Christopher Alexander (2002: 151), reflecting the feature of the traditional built environment. The tendency to look for central points and follow the patterns resulting from centrality has been a prolonged mentality. The geometrical and natural modules involve central points, and this principle was institutionalised in mathematics, physics, philosophy, and geography and then influenced architecture. It can be arguable that the centres are less related to time than the other factors. Centres tend to be time-independent factors, but their development can depend on time, meaning that the centres are also part of modern architecture and urbanism. Strong centres can be represented by a precisely defined entity or the visual precondition, or what Salingaros (2008) calls "defined and implied". That is granted to differentiate the centres in modern and traditional built environments.

The centres in modern cities appear to be more abstract entities, specifically when the geometry itself was the reason to indicate centrality. They functioned more isolated respective to the other critical elements of the city. Furthermore, modern centres tended to obtain regulative and dispersive roles with more appeal to be vehicle-friendly and motorised. The critical argument on modern centres is how they radiate the activities rather than integrate them.

Conversely, traditional centres are more potent since they perform beyond geometry. They are not supposed to be necessarily geometrical (Alexander, 2002:152). Their existence is bounded to other centres and the whole system's broader picture. Consequently, they interact and overlap with each other. Subsequently, this argument once again amplifies that centres go beyond the geometry since they are multi-layered: They can be the buildings themselves or the passageway with its specific motion axes (Shojae, 2016:40), generating local symmetries (Alexander, 2002).

Another critical point is how traditional centres interact with their borders, so every intense centre should have firm boundaries. This interaction could also be conceptualised as the interaction and synthesis of the centre and periphery. The centre transmits its importance to the boundary and makes it a new centre; the outcome will be an urban space or a city with echoing centres. Henceforth, the vital centres perform in diverse scales and produce or, to be precise, reproduce centres contributing to a coherent system (Ibid,2002:84).

The strong centres are compatible with the traditional built environments since they reflect plurality. They are more detailed with mixed-use activities involved with complicated forms. In symbolic and religious scopes, they reflect the sacredness and god as the ultimate centre of the world.

Centres such as (Some of the terms are derived from Alexander) prominent buildings in the selected districts and squares, local public spaces in the neighbourhoods, top hills, parks, plazas and other critical focal points will be observed in case studies.

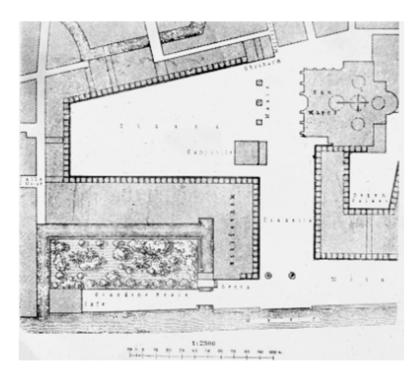


Figure 1-37- San Marco Square in Venice as a strong center-(Source: MHS Collections)

# Physical and Building-Scale Elements Courtyard Houses (Attached Houses with Courtyards)

It is almost impossible to talk about traditional architecture globally and not discuss how courtyard houses evolved. Courtyard houses inside the context of global items are traditional architectural elements influencing the urban fabric. The first generations of courtyard houses in *Chatal Huyuk* and Jericho (Rapoport, 1969:14) were the starting point to formulate the hypothesis on the reasons for their existence. The courtyard houses continued to evolve in Egyptian, Greek, Persian and Roman civilisations (Lamey,1984). The footsteps of courtyards are still evident worldwide, from China to Iberia and Latin America. Courtyards might have different forms due to diverse functions for the dwellings and the specific situations of the site (Abbas et al., 2016:2560), such as L, U, T, V, H and Y shapes (Edwards,2006).

The socio-cultural factors and environmental considerations were two central convergent issues regarding the existence of courtyards, creating different possibilities of various shapes for them. One crucial cultural role of courtyards concerns the matter of hierarchy as they increase one level toward privacy. This factor represents more in cities with religious values, such as Islamic cities with central courtyards. Considering climatic and environmental vision, houses with courtyards diminish the heat and function as sound barriers (Hanna and Simpson, 1996).



Figure 1-38-Courtyard houses and central patios in Cordoba, Spain (Source: Archeyes, 2020)

The use of the courtyard and courtyard houses is not exclusively inside the scope of traditional and vernacular architecture worldwide. It does not at all result in rejecting the "courtyard" concept from the modern movement doctrine. Indeed, modern architects such as Philip Johnson and Mies Van der Rohe have some traces of designing courtyard houses (Johnson, 1953). Also, Marcel Breuer conceptualised the central function of the courtyard to separate the zones between living and sleeping (Abbas et al., 2016 & Das,2006). Notwithstanding, most examples of houses are designed as single-family detached houses or what Rapoport calls "freestanding" (Rapoport, 2007:67). It is possible to seek out some newly revived ones' interests in the contemporary post-war discourse regarding the courtyard houses.



Figure 1-39- Courtyard house in Riyadh and the role in micro and macro system- Source :( Mortada, 2004:31)

The consensus among most scholars accredits the "courtyard" as the traditional element of architecture, confirming its central role. It also provides a denser urban fabric for a more compact city, although there might be a few differences according to regional specifics such as climate and culture.

As the representative of traditional architecture in neighbourhoods, the courtyard house will be the object of observation in this thesis.

## Horizontal walls linking houses

The presumption of "horizontality" inside traditional architecture always seems problematic. First, the topic is broad enough to investigate, leading to a more detailed term, such as "horizontal development", which creates the second problem or question. Does the vertical volumetric system hypothesise that every horizontal paradigm in this development concerns traditionalism?

There are long-listed examples of efforts made by the modern movement architects, such as the "need for horizontal well-lit surfaces" stated by Le Corbusier in 1929 (Bourdon, 2019:323 & Steinmann, 1979:62) including his concept of "ribbon window", Frank Lloyd Wright's horizontal elements and cantilevers (Schumacher, 2005: 17) and also the horizontal lines in the towers to balance the amplified influence of verticality.

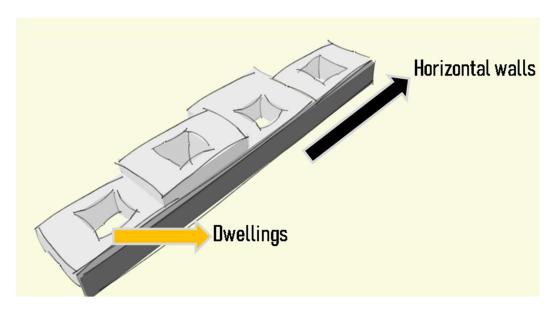


Figure 1-40- Horizontal walls linking the houses

As the third problem, these instances inevitably decline the exclusive position made for horizontal development inside traditional values. Furthermore, the negative impacts of horizontal developments can also result in the critics' massive disappointment. Does the polemic between horizontality and verticality generally pave the way for other superficial contexts, causing total ignorance of the whole essence that architecture is supposed to reintroduce?

The answer is embedded inside space and is integrated with cultural values. The traditional spaces often reflect the concrete pattern of social spaces, while the modern ones focus on abstraction. Therefore, the possibility between horizontality and integration and even communities appear.

For some scholars, such as Amos Rapoport (1969:77), the horizontal and non-enclosing flat walls reflect traditional architecture, especially in rural vernacular houses. This application can generate a possibility for boundaries in hierarchies, courtyard housing and integrative community. Moreover, it is influential in producing and reproducing identity and culture, whether residual, emergent or dominant. In contrast, any horizontal reflection in modern architecture ends in harmony with the whole building rather than the urban fabric.

The chapter 4 of the thesis aims at investigating the traditional alleys of the selected case studies containing horizontal walls linking the houses.

#### **Local Material**

The most sensible and universal factor in identifying traditional architecture is local material. The sense of place and climatic consideration require using materials derived from the local ground. The necessity and simplicity could result from using local materials (Mortada, 2004:121), contributing to synchronising cultural values and spatial continuity. This rule still exists for heritages such as churches, mosques, and museums.

The thesis aims at identifying the neighbourhoods with materials that indicate traditional architecture, the buildings with materials responsive to specific climatic issues of the city and the materials as representative of vernacular architecture.



Figure 1-41- Local Material in Mardin Turkey – (Source: Torus, 2011)

#### **Ornament and Decorations**

Where is the ornament standing in the irreconcilable debate between modernity and traditionalism? Indeed, this question is without any simple answer. The argument on ornament and architecture had been a typical debate, starting from decades before the 20<sup>th</sup> century when architectural theories were inside the vast domain of dilemmas such as style, revivalism and progressivism. Nonetheless, it was not a matter of time first, but the matter of whether being existed in architecture or not. Is ornamentation an essential element of architecture?

The criticism from each side was on the perspective that architecture is perceived since theorists such as Pugin, Ruskin, Owen Jones, and Robert Cockrell believed that shifting the focus from ornaments to any concept else is almost impossible. Given the linguistic scope of architecture, whether structure-oriented or metaphorical, the way of looking toward ornament was also critical (Bordeleau, 2009).

Gottfried Semper, an influential character in the 19<sup>th</sup> century, defended the existence of ornaments by considering them as a process of building and even the essence of construction (Semper, 1851& Saglam, 2014:129). Besides the communicative role, the semantic and metaphorical effect is noteworthy.

If architecture is assumed as a language, then what is the character of ornamentation? Are the ornaments inside a systematic realm, or are they expressive? Regardless of how mechanical and systematic value ornaments might have for Semper, the conceptualised duty is more representative as a primary element or unit by the others such as Dietterlin, Morris and Ruskin.

The wide acceptance of ornament in architecture gives it a traditional face in the age of historicism since, for some scholars like Jones (1856), Ornaments are as old as "humanity", relying on culture and style. The turning point in accrediting ornaments as a global element of architectural tradition or even traditionalism in architecture might be addressed in the famous polemics of Adolf Loos (1908) entitled "Ornament and Crime", resulting in a considerable decline in using the ornaments. However, his criticism of traditional ornaments and their superfluity (Long, 2009: 200) might cause functionalists to misread (Andrews, 2010:438), resulting in superficial perceptions.

In reality, it was not a matter of ignorance but a shift in how decoration should function in contemporary architecture. Therefore, the usage of ornamentation was still alive for contemporary architects such as Sullivan, claiming that ornaments increased individuality (Sullivan, 1918:58).

The precise point again is on the changing form of decorations, especially with the terms like "machinery aesthetics" and "abstract ornaments" by Henry Van De Velde even before Loos's essay (Saglam,2014:130) and the materiality of Loos himself for the authentic ornamentation (Andrews,2010).

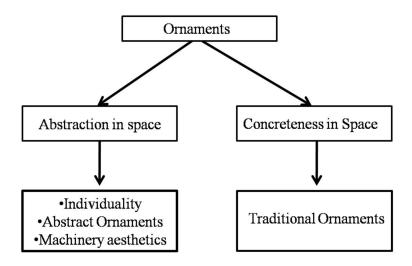


Figure 1-42-The ornaments in traditional space

If there is a strong link between ornaments and style, then time might be the enemy, and the style accompanying the ornament could present an outdated outcome.

Although this idea gave the upper hand to the modern movement architects to share their concern on using the ornament, the outdated decorated building is a new heritage, emblematic of culture and symbol. Regardless of identifying ornament as an anti-modern element from traditionalists' point of view or the role of change of representation, it is a continuous universal tradition from ancient civilisations. Building with decorations and monuments with specific decorations reflect the collective identity.

The thesis will observe the influence of the decorations and monuments in imposing the traditional character to the selected case studies.



Figure 1-43- Sirkeci Post office in Istanbul built in 1909

#### The other elements

The mentioned factors were the most repeated keywords from the literature review and the grounded theory. Other factors include compact cities, garden-oriented districts, meaning, gradient, contrast, non-leftover spaces, interlocks, inner calm and simplicity, non-separateness, echoes, roughness, environmental determinism, perceived homogenous, informality, and religious spaces can indicate traditionalism. Most of these factors are introduced and confirmed by traditionalists like Leon Krier(1946-), postmodernists such as Jane Jacobs(1916-2006), and regional-cultural experts such as Amos Rapoport (1929-), Hassan Fathy (1900-1989), and Christopher Alexander (1936-2022).

## 1.6. Modernism- The brief review of the task

The repetitious binary and rivalry between Modernity and traditionalism produce and even re-produces several terms over time, overlapped and juxtaposed, misleading experts and theorists to understanding the real problem. The typical tendency has been to categorise and specialise the terms with a top-down approach to generalise the intended term with the specific discipline. Modernity in the built environment is not a mere abstraction when the central intention is to define it. It crosses diverse terms and even diverse interdisciplinary Modernity, precisely as the central focus is on traditionalism. Modernity could not stay in the same depicted direction the public drew in words like modern as a broad adjective, modernism as a global tendency and movement, modernism in architecture and modernism in the matter of understanding space. Even so, branches, impulses, and styles are introduced in a way that

modernity dominated and influenced the modern movement in architecture, art, and the built environment. Hence, the interrelated terms increase the difficulty of separating the terms to reach an exact specified meaning. Accordingly, the terms such as "modern and modernity", "modernism"," the geographical source", and "modernism in architecture and built environment" will be discussed in this part.

## 1.6.1. What does it look like to be modern?

Being modern equals having a modern mindset, and since a mindset generates strategies and approaches .Then all the possible domains could be identified inside it. According to Jean Baudrillard (1987:63), modern domains like a modern state, modern music, and paintings can be a part of the "general category" or "cultural imperative".

Modern, in general, poses various meanings and definitions. Most of the definitions are time-dependent since they refer to contemporaneity, "current" -ness and "trend" -ness (Whyte:2004:43). Based on the temporal approach to the definition of everything modern, authenticity is another meaning comes as a secondary concept as it derives the presumably correct approaches from the time because the time itself imposes the correctness. Thus, authenticity does not imply the eternality or temporality of anything modern.

If everything modern is time-dependent, every domain might have a different starting point for its modern mindset.

In the article entitled "Moderne" written in the "Encyclopédie ou Dictionnaire Raisonné des Sciences, des Art et des Métiers", Dennis Diderot (1751) considered different starting points for each modern discipline. Diderot believed modern astronomy began with Copernicus, modern philosophy by Descartes, modern physics by Isaac Newton, and modern literature by Boethius in the fifth century. The term modern itself traces back to the term "Modo", meaning "now" and "present", and Modernism affirms its temporality (Kavalovski,2014).

# 1.6.2. Modernity and Modernism

There is no concrete evidence to imagine a case scenario for modernism to begin, evolve and end, although it might represent fluctuation. Nevertheless, some scholars indicate ending points for this movement. Modernism is apparent since the time factor exists and produces, and the people desire a place to be practiced. That is why Jean Baudrillard (1987:63) claims:

"Modernity is neither a sociological concept, nor a political concept, nor exactly a historical concept. It is a characteristic mode of civilisation, which opposes itself to tradition, that is to say, to all other anterior or traditional cultures: confronting the geographic and symbolic diversity of the latter, Modernity imposes itself throughout the world as a homogeneous unity".

According to Baudrillard, modernity is not analytic, and there is neither a theory nor a law to define in total precision. Modernity follows logic and is a regulatory factor in every society and civilisation. Moreover, Baudrillard regards the history of any modern entity in its adjective sense as older than

modernity. Correspondingly, the modern and the opposite, call it "ancient", could be substituted. He further continues even with the argument that a "universal modernity" never existed.

Modernism can be observed in Europe from the 16<sup>th</sup> century and obtained its whole meaning in the 19<sup>th</sup> century (Ibid,1987:64). Although he does not define modernity as a universal paradigm, it seems that modernity could culminate universality later in the 20<sup>th</sup> century. Historical references considering the humans' point of view on modernity might have diverse turning points. The discovery of America by Colombus, the Renaissance and humanism resulting in subsequent debates in the 17th and then the 1789 revolution in France are diverse historical points indicated for modernity. Regardless of the beginning points in the historical framework, one can claim that modernity as a mindset brought about modernism as a more official movement in art, architecture and urbanism.

Based on Baudrillard's argument, not only did the noblemen like Galileo and Martin Luther's views revolutionary to put the foundations for Modernity, but the influence, structure, and product were also vital as humanism and individualism could affect society. Consequently, the "signs" form new social habits (Ibid,1987:65).

Considering the time, he also sees the time's effect in two scopes, closely linked. Modern temporality is the property of "productivity" and "rhythms of work" and regulates leisure time. Even as a more important one, the other vision belongs to the linear dimension between the past-present-future. Also, in Baudrillard's view, modernity takes responsibility for the future, while tradition concentrates on the past. This notion of time causes a dialectic between the past and future (lbid,1987:67). From a cause-and-effect perspective, Iain Boyd Whyte (2004:51) defines modernism as a response to modernity being powerful, mainly in a dynamic irresolution and changing parameters. Despite the differences, this thesis will consider modernity and modernism equivalently, given the presumable correlation between these two terms.

# 1.6.3. Modernism as a Eurocentric Paradigm

The amalgamation of historical evidence, footsteps of the elites and geographical locations are the vital hypotheses to conclude that Modernism is a Eurocentric paradigm. Baudrillard (1987:63) confirms this image by asserting that Modernity irradiates itself from the occident as a unifying element. The possible addressing of modernity into occident might place the traditional rituals as an illuminating force from the orient in the other place. Scholars like David Apter (1965) link the probably political power of modernisation in colonialism to affirm this hypothesis and understand Modernity as a universalizing factor.

The perception of history and spiritual aspiration for modernism shares similarities with Christianity when the central concept is advancement. The only difference is that modernism's progress in creating a better universe is not religious. Overcoming the previously uncontrolled paradigms is possible to notice in the west scientifically (Lowith, 1949:203).

Modernism and the specific perspective, the modern movement in architecture and urbanism seeks out the rational perspectives to be the universe's saviour. Indeed, such a vision is a symbolical metaphor to illuminate a better world that needs nothing more than Eurocentric Western modernism. It could seem in the first place that investigating modernism as a eurocentric paradigm is an obvious fact because the initial physical representations took place in Western Europe. However, the vital point indicates the separation between modernity and modernism.

One can claim that everything modern is time-oriented without a specific period. At the same time, modernism balances the concentration between time. Moreover, modernism tends to be represented as a "mode of civilisation "mentioned by scholars like Baudrillard and opposes tradition. At last, modernism is more specific, as a movement and a reaction practised and introduced in Europe. Besides the similar word roots, the similarity between these terms addresses their tendency to seek contemporary values and the probability that they must be synthesised with all the domains.

Term	Author	Year	Definition and Characteristics
Modern	lain Boyd Whyte	2004	Most of the definitions are time-dependent since they refer to contemporaneity, "current" -ness and "trend" -ness
	Jean Baudrillard	1987	- Modern domains like a modern state, modern music, and paintings can be a part of the "general category" or "cultural imperative"
	Dennis Diderot	1751	Modern astronomy began with Copernicus, modern philosophy by Descartes, modern physics by Isaac Newton, and modern literature by Boethius in the fifth century
	Jashua Kavalovski	2014	- The term modern itself traces back to the term "Modo", meaning "now" and "present", and Modernism affirms its' temporality
Modernity	lain Boyd Whyte	2004	<ul> <li>modernism as a response to modernity being powerful, mainly in a dynamic irresolution and changing parameters</li> </ul>
Modernism	Jean Baudrillard	1987	- "Modernity is neither a sociological concept, nor a political concept, nor exactly a historical concept. It is a characteristic mode of civilization, which opposes itself to tradition - confronting the geographic and symbolic diversity of the latter, Modernity imposes itself throughout the world as a homogeneous unity - modernity is not analytic, and there is neither a theory nor a law to define in total precision - Modernity follows logic and is a regulatory factor in every society and civilization modernity takes responsibility for the future, while tradition concentrates on the past
	David Apter	1965	<ul> <li>Modernity is a universalizing factor as there is a link between the political power of modernization in colonialism to affirm this hypothesis.</li> </ul>

Figure 1-44-Modern, Modernity and Modernism: Definition and Characteristics

## 1.6.4. Modernism in Architecture and Built Environment

Several published works by architectural historians, theorists, and critics on how Modernism influenced architecture and urbanism. Furthermore, several visions were the central viewpoint in all the discussions. For this reason, the thesis's critical target is to briefly identify the critical points, such as modernism in architecture, modern architects, how it evolved in European countries and North America, and the impulses affecting modernism.

Whereas the dichotomy in architecture was between artistic representation and progressive ambitions, all the efforts were to find the in-between scopes or the synthesised approaches in the 19<sup>th</sup> century, specifically when stylistic revivalisms were the central image. The generally perceived "modern" was recognised as a saviour in a universe full of mustiness or a threat to identity, culture, and craftsmanship. Hence, varying practices were done in Art Nouveau and Art Deco contexts, along with more liberal impulses like Expressionism and Futurism (Curtis, 1983:87).

The narratives and books regarding architectural history saw modernism as a scenario in a movie with a beginning point, the first role of evolution and the ending moment. However, for a few, the process, the legacy, the reasons for its necessity, and its shortcomings roots seem to be more vital. Modernism in architecture was described inside the different turning points such as Joseph Paxton's Crystal Palace, Huassman's triumph for the radical changes in Paris, the Industrial Revolution or French revolution as a beginning point or the demolition of *Pruitt-Igoe* in 1971 as an ending point. Nevertheless, it is categorised into three periods of early, high and late Modernism, in a consensus by most historians and yet not as a finality (Kavalovsky, 2014, as cited in Benevolo, 1977).

As discussed before, everything considering its temporal stance, could be conceptually modern. Modernism tends to penetrate every possible domain and even create a new one. That is why modernism in architecture relies on new construction (and materials), new clients, new solutions, new forms, and even new "problems" (Curtis, 1983:14). The newness from this scope owes the credibility of such ideas to the industrial revolution. In due course, industrialisation transformed everyday life, causing the public to be fascinated with curiosity to experience it. Regardless of the atmosphere, to investigate the term better, one might seek architects and architecture's position toward three terms: history, theology, and politics, according to Whyte (2004:44).

The problem was whether to grasp history as a linear set of events or a framework consisting of laws and patterns. This framework results in the dichotomy between moralists defending the patterns or the progressivists desiring a new one (Ibid,2004:44) since the Hegelian notion of history grant them to find a new synthesis. This concept led the research to discover the elements that influence modern architecture. As discussed before, the theological vision was the target for modern architects to create a better world. The political features of contemporary society manufactured simultaneity between modernism and centre-oriented socialism (Ibid,2004:48).

As a European country with' noteworthy influences in shaping diverse scientific and artistic fields, France played a critical role in formulating what is known as modern architecture since there were numerous efforts to transform French cities by architects and engineers. The key figure as a superstar of modernism was Eugène-Emmanuel Viollet-le-Duc (1814-1879), without a doubt. Viollet-Le-Duc formalised rationalism in architectural and urban discourses, authoring the "Dictionary of French Architecture from the 11th to the 16th Century" (1869) and the "history of human habitation (1875)".

These two books introduced critical themes like organic architecture, influenced by Teyssot and Cuvier (Singley, 2019:285). Also, this influence was effective enough to elaborate the concepts such as primitive huts and masonry houses (Viollet-Le-Duc,1875). His structural rationalism and criticism of eclecticism and stylistic revivalism were common ideologies in the Beaux-Arts school. Through such ideology, it was possible to liberate architecture from the shackles of repetitious rituals and patterns. For Viollet-Le-Duc, the structural essence was viable through the continuity of practice through time. His inspiration for the Gothic buildings structures was an alive nostalgia at that time (Singley, 2019:287). Accordingly, it is arguable enough that the pluralistic notion of styles in the 19<sup>th</sup> century was transformed into the singular form of the "style" (Hvattum, 2019:6).

In the urban scope, Charles Baudelaire (1859), in his book "The painter of modern life", defined the metropolis as a site of Modernity with examples like Haussmann's Paris as a representative of modern art with the wide boulevards (Whyte, 2004:52). Hence, the ground was apt enough in architectural and urban context from the French metropolitan's physical developments. Furthermore, the scholars and experts, specifically Viollet-Le-Duc, amplified architectural science's structural and biological comparison (Collins, 1965). Thus, the concerns of the moralists like John Ruskin and William Morris opened the way for Art Nouveau to respect the rational and technological advancement, cultural identity and organicity in architecture in the years toward the end of the nineteenth century. In this short period, this design lexicon was reflected in the works of architects such as the Belgian Victor Horta (1861-1947) and Henry Van de Velde (1863-1957), the French Hector Guimard (1867-1942) and the American L.C Tiffany (1848-1933) (Curtis, 1983:26). Indeed, it was a transitional period for a movement planning itself to the contemporary society. Art Nouveau lasted for a short period before the First World War.

The dilemma between architecture and art was still on the agenda at the beginning of the 20<sup>th</sup> century. Also, the matter of space in architecture and art pushed the context toward abstract representations, supporting the convergence of artistic representations and scientific fantasy.

The German art historians and philosophers like Konrad Fiedler (1841-1895), Max Schasler (1874-1928), Heinrich Wolfflin (1864-1945), Robert Vischer's (1847-1933) empathy theory and Adolf Von Hildebrand's (1847-1921) theory of pure visibility established not only the creation of anti-plural creed toward style but also facilitated the departure of art from aesthetics and its classical vision (Benovolo,1980:259).

Just in Art-Nouveau's fading moment, the avant-garde movements such as Cubism and Expressionism were the new products of the theoretical articulation that started in advance. Cubism was influential in modern architecture between 1907 and 1912 in Pablo Picasso and Georges Braque's works as a turning point regarding the break from "the renaissance perspective" (Giedion,1959:432).

The term appeared formally in French art between 1912 and 1920. it reflected as the most vital element to set up and affect further critical movements like Russian constructivism and Purism, which later on led to the modern architecture and painting legacies and examples in Kasimir Malovich (1879-1935), Laszlo Moholy-Nagy (1895-1946), Charles-Edouard Jeanneret known as Le Corbusier (1887-1965), El Lissitzky and Amedee Ozenfant (Curtis,1983: 93-94).

In the same place, German philosophy formed a new atmosphere all over Europe, precisely the German and French societies with Expressionism. The term was conceived earlier in French society in 1901 by the society of artists under Henri Matisse's (1869-1954) leadership, trying to modify the approaches toward manifesting nature with a more subjective scope. However, Expressionism was inside the German context and then international scope until 1911 (Colquhoun,2002:87). In general, Expressionism played a unitary role in converging diverse artists from countries like The Netherlands and Germany between 1910-25 (Curtis, 1980:121). In Germany, three combined groups, such as the artist groups of *Die Brucke* in Dresden, *Der Blaue Reiter* in Munich and *Der Strum* as a magazine and art gallery in 1910 in Berlin, were the central parts of Expressionism in the art (Colquhoun,2002:88). Expressionism also affected the Dutch architects like Michel de Klerk (1884-1923) and Piet Kramer (1881-1961) besides the German architects like Hans Poelzig(1869-1936), Bruno Taut(1880-1938),

Erich Mendelsohn(1887-1953) and Walter Gropius (1883-1969) (Curtis, 1980:122).

While the trace of traditionalism was automatically diminished by the importance of the "time" matter, there were other movements to face it straightforwardly. Futurism started with the two manifestos in 1914 by Prampolini (1894-1956) and Boccioni (1882-1916), whose work was not published until 1960. Afterwards, Antonio Sant'Elia (1888-1916) wrote the critical manifesto. For Colquhoun, Futurism reflects the same way that Expressionism did and states:

"In trying to place Expressionism and Futurism in a historical perspective, a salient fact emerges both movements, whatever their other differences, rejected the Enlightenment tradition of reason and stressed the importance of myth and instinct in the social life of nations. They denounced a rationalistic civilisation which they believed had sown discord in a previously unified and organic society. They espoused a set of ideas—anti-materialist, anti-liberal-democratic and anti-Marxist—which became increasingly influential in the countries of western Europe in the years leading up to the First World War and which, in their extreme form, found political expression in the Fascism and National Socialism of the inter-war years" (Colquhoun, 2002:105).

Futurism observed the sound of modern desires as a collective force of society in architecture, urban spaces, and metropolitan areas. The influence of cubism seems critical as the futurists' painters grasped analytical cubism in 1911. Even the possibility of representing diverse viewpoints established a fluidity and dynamism for modern society. Subsequently, this possibility influenced the representation of futurists' paintings and sculptures (Curtis, 1983: 71-72). Hence, breaking from the traditional mindset turned to a slightly radical manner with the rejection of historical continuity and stylistic development. It can be interpreted that even the transformation of the notion of "styles" to "style" by Viollet-Le-Duc was rejected. This paradigm shift was evident enough to grasp the statement and manifestos published by Sant'Elia. Nothing more concrete than the *Citta Nuova*, *Casa a Graduate* and the power station drawn by him can reflect as a shred of evidence for this creed.

No matter how short Futurism's effect was sensed in the universal architectural billboard, society seemed to be on the track of Modernism through linear and overlapping movements. Modern architecture and the city were so intertwined that it was impossible to differentiate them into two separate concepts. The process regarding the abstraction in metropolises moved in parallel with architecture from the North American City Beautiful movement to British Garden cities coined by Ebenezer Howard (1859-1928) and then the industrial cities of Tony Garnier (1869-1914).

Besides formulating the super-abstraction in art and introducing avant-garde movements, the new town-planning systems entered this phase even a little earlier, just at the beginning of the 20th century Tony Garnier's *Cite Industrielle* (1901-04). For certain, two inspiring figures for Garnier were Auguste Perret (1874-1954) and François Hennebique (1842-1921). The character of the reinforced concrete was central in this display (Giedion, 1959). The industrial city was designed for 25000 habitats, prioritised by zoning policies to separate the functions and link them by transportation (Curtis, 1983:161). The publishing and conceiving of the idea lasted until the end of World War I. Over time, the context for a more severe phase in modern architecture became available.

Besides the countries' contributions to generating the expected theme, the Dutch legacy finalised it. Following the movements like Cubism, Expressionism and Futurism, Neo Plasticism or *De Stijl* was another pillar of Modernism's physical and visual entity. The Netherlands, a country with a rather traditional town planning system since 1901, hosted post-cubist artists and neo Plasticists such as Van Doesburg (1883-1931) and Mondrian (1872-1944) (Benevolo, 1980:457).

De Stijl's objective was to understand the real essence of art through materials and their denotations to be in harmony with everyday life. Furthermore, the target was that art and science do not question each other, being influenced by M.J.H Schoenmaker (1875-1944) (Colquhoun, 2002:111).

The two vital characters, Piet Mondrian and Theo Van Doesburg, were famous for using primary colours and rectilinear geometries around 1918-20 (Curtis, 1983:94). Besides the multidisciplinary and mysticism of Schoenmaeker, Kandinsky's book "about the spiritual in art" (1911) was convincing enough for Van Doesburg to utilise in architecture (Colquhoun, 2002:111). The influence of Neo-Plasticism in amplifying geometrical and mechanical abstraction was revolutionary in the work of Dudok (1884-1974). Jacobus Oud (1890-1963), Gropius, Mies and Le Corbusier were its successors. However, its non-objective manner of art was not affirmative to Le Corbusier and Ozenfant (Curtis, 1983:107).

The amalgamation of Avant-Garde movements developed architectural education in Amsterdam schools. Later, the German school dominated the modern movement heritage in the contemporary universe, and that place was nowhere but Bauhaus. However, besides the artistic representations, Germany's industrial ambition organised *Deutscher Werkbund* in 1907 as an essential association of architects like Peter Behrens, Walter Gropius and Mies Van Der Rohe.

The successful designs represented by its member, specifically Behrens at the beginning with the Fagus works, AEG, and the model factory manifested in the Cologne 1914 exhibition, denoted a humanistic and simple image from Werkbund (Giedion,1959:479-80). After the First World War, Gropius combined design and applied art school. The outcome of this decision was the formation of The Bauhaus school in 1919, not only with the cooperation of German experts but also with the presence of the Swiss Johannes Itten(1888-1967), The Russian Wassily Kandinsky (1866-1944) and the Hungarian László Moholy-Nagy(1895-1946) (Ibid,1959:483).

Regardless of both phases in Weimar and then in Dessau, the school's contribution was remarkable as it was successful in importing ideas all over the world and also the emergence of international Modernism, although it was the target of criticism from both left and right political wings in the late 1920s and 1930s in Germany. Nevertheless, even with the replacement of Gropius by Hannes Mayer in 1928, Bauhaus's charismatic role was not ignorable with the economical-functional approaches made by the new leadership at that time (Curtis, 1983:131).

Although Germany's dominant impact on the 1920s and 1930s architecture was traceable, Modernism is recognised by the Swiss architect Le Corbusier (1887-1965). Two direct critical figures seemed to be aspiring in his career; August Perret taught Jeanneret how to master ferro-concrete between 1908-10 in Paris and the Viennese Josef Hoffmann (Giedion, 1959:510). Also, it is not ignorable to address the influence of Viollet-Le-Duc and Otto Wagner (1841-1918) - in general, the Vienna School - that shaped the young Jeanneret's mindset vision. If a perspective has to be introduced globally, it needs a capable master at the International level. Without exception, that master was him since he travelled to Eastern

and Southern Europe, Italy, Greece, Turkey and So forth. Le Corbusier got acquainted with the Mediterranean white architecture and Turkish wooden houses (Curtis, 1983:106), which were inspiring enough to shape his design philosophy.

He should be observed and perceived in multiple scopes. As an urban designer, he impacted two projects, such as Ville *Contemporaine* in 1922 and Ville *Radieuse* in 1933, indicating the importance of nature, technology, and the Cartesian logic of separation (Colquhoun, 2002:150). Le Corbusier moved further to Europe and was involved in designing the urban systems in Rio de Janeiro, Algiers, and Chandigarh (Ibid,2002:210). As an architectural designer, his well-known major in general, he generated and even transformed the design concept at the theoretical level. The *Dom-ino* system performed as an architectural alphabet and industrialised society's product, providing the vast use of the reinforced concrete even further than what Perret taught him in his atelier in earlier years (Curtis, 1983:104). Most elements of Modernism in architectural and urban space discussed in the following parts are rooted in Le Corbusier's five points of the new architecture.

Modern architecture's theoretical frameworks were presented as more developed since he published numerous works, such as "L'Esprit Nouveau" as the magazine head and the book "Vers Une Architecture" (Towards a New Architecture). All these publications contributed to the formalisation of modern architecture.

As a painter also, he investigated the typology of forms (Ibid,1983:104). As a leader, he organised the league of nations competitions in 1927, allowing European architects to present their work as an unofficial norm for global interests (Giedion, 1959:520).

In the latest years of the 1920s, political discourses were combined with the movement. Modernity was aligned with socialism and Marxism in the European context even before the 20<sup>th</sup> century. Conversely, in the United States, specifically the Chicago Style, the organic impacts of Sullivan and Frank Lloyd Wright and the American town planning were adaptive enough to the capitalistic system. The First World War and then the Russian revolution of 1917 amplified Communism and Fascism as the other vertex of this triangle. Inside such an ambience, Le Corbusier became a member of the new-syndicalist group led by Hubert Lagardelle and Phillip Lamour as an anti-liberal and anti-Marxist and more in harmony with the Fascist movement in France and Italy (Colquhoun, 2002:152).

The question of nationalism and modern architecture exhibited the problem of traditionalism and modernity in Italy as an example. The Right-wing fascist party was against Modernism, while the left defended it, although they desired to return to its traditional roots (Colquhoun, 2002:183). Unlike European scholars' centrality of such discourses, the totalitarian nationalism in Eastern Europe and the Middle East was identified as the primary contributor to a modern country imposed by the state. Moreover, the traditional vision absorbed by the totalitarian states is selective, meaning they prefer the farthest tradition from the previous one. In this regard, the similarity between the imposed tradition and modernism is rationalism. As a result of this approach, two progressive architectural movements, the *Novecento* and *Gruppo* 7, rejected the futuristic ambition in Italian society. They preferred instead to synthesise functionalism and the classical sprint with the leadership of Intellectual figures like Edoardo Persico (1900-1936) and Giuseppe Pagano (1896-1945) (Ibid,2002:185).

Unlike Italy, the most influential architects in Bauhaus experienced severe problems with the Nazi political system in Germany, making architects such as Walter Gropius, Mies Van Der Rohe and Moholy Nagy leave for the United States, another critical hub to practise the modern built environment.

All the discussed points reflected a brief evolution of modern anatomy with European examples. Nevertheless, international modernism was nourished and developed on a global scale. Modernism in the United States marked a noticeable impact from the rise of crucial figures like William Le Baron Jenny (1832-1907), Louis Sullivan (1856-1924) and Dankmar Adler (1844-1900) to shape the initial phase of such perspective with the technological advancement of high-rise commercial buildings and detailed fireproof steel-frame construction. Such initial mentalities of modern representations were disseminated later to architects like, Ludwig Mies Vander Rohe (1866-1969), Frank Lloyd Wright (1867-1959) and Philip Johnson (1906-2005) with different subjectivity.

The central mindset of modernism in architecture was followed in different parts of the world like the United Kingdom and Japan in the UK, with diverse concepts ranging from the Crystal palace exhibition in 1851 to the role of the Glasgow school, Garden cities and, later, the new brutalism. In Japan, this widespread influence was structured with the influential roles of Junzo Sakakura(1901-1969), Kunio Maekawa(1905-1986) and Kenzo Tango (1913-2005) in their subjective approach to synthesizing modernism <sup>11</sup>.

This brief explanation was designated to show how modernity as a mindset and modernism as a more official instance of art, architecture and urbanism was presented in the last century. The latter parts will discuss the critical indicator of modernism in architecture and urbanism.

Global influence	The influence of styles such as Art-Nouveau, Art Deco, Expressionism and Cubism The role of global institutions and communities such as the League of Nations and CIAM
France	In France with the influential role of Viollet Le Duc , Le Corbusier, Tony Garnier, August Perret     projects, such as Ville Contemporaine in 1922 and Ville Radieuse in 1933, indicating the importance of nature, technology, and the Cartesian logic of separation .Also The publication of L'Espirit Nouveau and Vers Une Architecture paved the way to a clear understanding of modernism in architecture
The Netherlands	The influence of De Stji with the important role of the artists such as Van Doesburg (1883-1931) and Mondrian (1872-1944) The significant contributions of Berlage, Michel De Klark,Piet Kramer
Germany	In Germany with the presence of Max Schasler ,Heinrich Wolfflin Robert Vischer's empathy theory and Adolf Von Hildebrand's Theory of Visibility affected modernism     Hans Poelzig, Bruno Taut, Erich Mendelsohn and Walter Gropius
Italy	Futurism and its' role by the participation of scholars such as Prampolini, Boccioni and Antonio Sant'Elia
The rest of the world	<ul> <li>The role of Russian constructivism with the works of Tatlin, Malovich</li> <li>The footsteps of modernism in America was initiated by Chicago Style. The generation afterward like Philip Johnson, Frank Lloyd Wright and Louis Kahn as well as the migrated German architects developed the modern architecture in the next decades</li> <li>United Kingdom took its' part utterly firm in the history as for some Crystal Palace Exhibition was recognized the start of Modernism. The role of Garden cities is also indispensable. Later on, the role of British Modernism in 20<sup>th</sup> century up toward the years of Brutalism is significant</li> <li>Japanese architecture played a huge role in subjectifying the modern architecture by the works of the architects such as Junzo Sakakura, Kunio Maekawa and Kenzo Tango</li> </ul>

Figure 1-45- The Global discourses on Architecture and Urbanism

# 1.6.5. Modernism: Toward the keywords

What was discussed was not the historiography of modern architecture to discuss the rise and fall but to define the fundamentals and beginning points of modern, modernity and modernism and how to differentiate them. Furthermore, the Eurocentric possibility of modernism was also at the core of the discussion.

The intended objective was to know the roots, influential figures, ideas, and critical countries, mainly in Europe since Istanbul and Lisbon are the case studies selected for this thesis and are located in this continent, with possible similar political ambience practised in the countries mentioned as examples. Indeed, this thesis's brief discussion on Modernism does not aim to identify the weak and strong spots and, subsequently, the start and end. However, it seeks out the keywords that are primarily perceivable. Therefore, the central concentrations were on structuring modern.

Based on the open interviews with experts and literature review in the Grounded Theory method, the identified terms as the outputs of the grounded theory will be the subject of investigation in part dedicated to the place chapter.

## **Conceptual and Building-Scale Elements**

## Free Façade

One factor as an original element in modern architectural discourse is the "Free Façade". The superstar of modern architecture first introduced this term, Charles-Edouard Jeanneret, known as Le Corbusier, in his list of 5 points in architecture. Nowadays, the term "curtain wall" is more common as a synonym for the exclusively Corbusian-stated factor (Njoo,2010).

Free Façade or "*la façade libre*" makes itself independent from the interior structure paving the way to represent freely further renovations. The notion, in general, is the product of the desire for freedom in metaphorical and literal vision (Zevi,1978). It could be argued that a free plan could generate a free façade, which borders the outside and inside space. The matter of skin is inside a continuous dialectic amplified in the 19<sup>th</sup> century, which seems contradictory sometimes.

Skin and the way cladding should take place had played a critical role since the way it relates to the outcome is a dilemma, and possible approaches are either the acceptance of the external façade as a dressing or respecting the whole transparency process starting from Semper to the postmodernism. This argument will debate the role of ornaments and, in a broader concept, the extent of distances modernity takes from traditionalism. For instance, in the book entitled: "Learning from Las Vegas ", there is an example of a monument with a billboard on it, functioning as a "free façade" (Venturi and Scottbrown, 1972).

This perspective brings about a fluctuation in how the elevation was understood from traditional ornaments to the tectonic transparency and honesty of Auguste Perret (1874-1954), the surface plasticity of Le Corbusier and lately, the post-war consumerism with a pop vision toward the skin.

It is possible to deduce that the abstract way of the free façade which Le Corbusier introduced is the way that fits modernity since the façade freed itself from the possible limitation of structure, and the

windows can extend from one end to another (Benevolo,1980:445). Moreover, it does not serve to represent ornaments, and purity or simplicity is still exhibited. Using a free façade in selected districts of case studies in a more abstract way could be the best example.

The thesis aims at identifying the modern buildings implicating free facades in the selected case studies and their cities.

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Figure 1-46– free façade among the five points of architecture in a 3d modelling of Villa Savoye – (Source: bim.acca.it)

#### **Identical Blocks**

The Identical blocks were the entities identified as the feature of modern architecture. Residential blocks and monotonous office buildings were the primary representation of identical blocks in the 20th century. However, the reasons behind the generation of these blocks need to be investigated. The socio-political discourses inside the temporal context toward equality (Yegenoğlu, 2004: 6). what is generally known as "egalitarianism" theoretically justified these designs. The other factor for creating identical blocks is the standardisation and geometry, providing the base for building repetitive buildings regardless of height and function (Urban, 2013:143-4). Economic reasons motivated modernists to build identical blocks (Yegenoğlu,2004:9), primarily as grand ensembles in a cubic form.



Figure 1-47- Seskin District in Vilnius a typical example for identical blocks- (Source: Dreamstime.com)

These identical blocks in the post-war discourses faced numerous criticisms. In the 1950s, France and Germany were targeted by the terms such as "sleep cities with rows of dead houses", "without character", "creating dead spaces", "characterless", "carelessly designed", "lack of recognition", (Urban,2013), "Sterile and depressing" and depicting tragic scenes of the science-fiction movie. Regardless of standardisation or the quest for an egalitarian society, the identicality of blocks imposed almost the same lifestyle and habits for all inhabitants (Yegenoğlu, 2004:10). The uniformity of these blocks was among one of the critical factors of modernity, playing the central role in shaping the modern metropolitans and resulting in a monotonous repetition or spatial uniformity in a bigger picture which will be discussed in the incoming chapters. The Identical blocks of collective housing estates and commercial office buildings will be the subject of investigation in chapter 4.

## **Less Ornamentation**

The most straightforward reference to address ornamentation in modern architecture is Adolf Loos's statement entitled "ornament and crime" in 1908. However, the initial sparks shined before Louis Sullivan's "ornament in architecture" article in 1892. The acceptance or rejection of ornament has been the centre of discourses since the previous century. In a matter of time, the fixed point for ornaments began to experience a metamorphosis since the art Nouveau movement appeared prominent in the 19<sup>th</sup> century. Subsequently, the role of ornamentation was not as firm as it was traditionally.

The ornaments in the modern discourse should serve the architecture. Otherwise, it was an unnecessary addendum (Miller,2011:67). Also, they were visualised like clothing from the points of view of architects such as Eliel Saarinen and Louis Sullivan. The necessity of their existence in the visions of figures such as William Morris, and John Ruskin made progressive architects of the time prescribe the acceptable inevitably. The authentic kind of ornaments was influenced by nature, as a pure abstraction (Chudoba,2016:99).

In the 20<sup>th</sup> century, Adolf Loos institutionalised the perspective toward ornaments with the statements mentioned above in 1908 by appraising the honesty in architecture with the ambition to represent the materials and also concentration on function (Hardarson,2016:50). Although it seems that what Adolf Loos said was not the very radical voice that the critics grasped.

The later architects' central policy was to break from tradition; in this regard, ornamentation was considered a part of reviving it. Technological advancement and the impulses such as minimalism isolated the ornamentation in architecture, although some architectural designs consisted of ornaments, even not to a considerable extent. Nevertheless, it is undeniable that even this paradox of using ornaments did illuminate that the traditional position for its usage was not visible enough until the arrival of post-modernism.

The thesis aims at identifying buildings with fewer ornamentations and a minimalistic representation of architecture in the case studies.



Figure 1-48- The modern buildings with less ornaments in Istanbul

## **Monotonous Repetition**

Repetition in architecture is indispensable since patterns, elements, spaces, and sub-spaces convey specific signs for establishing the desired harmony in design. Even so, modern architecture is described as architecture with the consequence of monotonous repetition. This term is a broader image for the previous keyword, "identical blocks", discussed before. What makes the repetition in modern architecture more monotonous as a uniform entity?

The modern movement of the 20<sup>th</sup> century involved the concept of standardisation, which was parallel with the "international style" (Hofmann, 2017:2). The standardisation and the attributes, such as the functionality, resulted in physical spaces consisting of solid boxes without any different features such as ornaments or decorations to avoid a homogenous repetition(Parajawiasastra and Aranti, 2017).

The other impulse for this kind of repetition is symmetry. The fundamental symmetry imposes a systematic repetition without differences in facades and a broader vision of the buildings and blocks. Also, it is possible to address the homogenous repetition of mass production as it seems possible through standard repetition by prefabrication for the modern movement.

Le Corbusier (1987[1929]:220), in his book entitled "The city of tomorrow and its planning", emphasised repetition since he believed that "repetition dominates everything". A section in this book titled "On repetition and mass production" rationalises the similar use of both terms. For Le Corbusier, repetition conveys the same point as mass production (Smith,2001:32). Mass production manufactures a monotonous repetition based on this argument.

The term was the target of severe criticism with the words such as "fatigue generators", "boring" (Tracada and Caperna, 2012:8), "depressing", "inheriting inhuman scales", and chaotic (Urban, 2013).

The monotonous repetition began with tall buildings of the 1920s (SalingArûs, 2011:4) and extended to avant-garde residential buildings (Wojtkun, 2019:8). Sometimes, this repetition's uniformity is in the service of scales since the patterns and modules are repeating in more minor scales leading to greater scales by order.

Monotonous repetition is the outcome of objective spaces, as modern spaces generate homogeneous entities. They are part of the abstraction that the modern movement produced and reproduced in the

previous centuries, from windows and doors to residential complexes and office buildings amplified by prefabrication. This monotony was a new aesthetic in the modern movement (Guillen, 2006:32).



Figure 1-49- A typical example of monotonous repetition and the pattern for that- (Source: Alexander, 2002)

The thesis at chapter 4 aims at identifying these symptoms, such as the residential complex with identical buildings, the buildings with monotonous repetitions, and the monotonous repetition of grids.

## **Prefabrication**

Prefabrication became one of the fundamental ideals of the modern movement in the 20<sup>th</sup> century when the social context was surrounded by technological advancements resulting in the transformation of the cities, specifically the metropolitans. Indeed, Prefabrication is a broad term since it comprises different diverse terms. It makes every attempt at definition subjective and incomplete. Nevertheless, the simple definition of Prefabrication could be manufacturing the elements of a designed entity in a factory and connecting them to the projected location (Smith, 2010 &Silva et al., 2020:3).

Some definitions indicate that the Prefabrication process is rapid and fast, which is more explicit in the post-industrial vision (Lopes Correira, 2017:120). Terms such as "demountable", "modular", "portable" (Osayimwese, 2017), "mass production", "standardisation ", "specialisation", "industrialisation", "site assembly" and offsite fabrication (Lopes Correira, 2017:121-22) are the precise synonyms for this term. The concept of Prefabrication is not a contemporary issue at all. It dates back to ancient history in Egypt, Indians and Babylonian civilisation. Some prefabrication tracks with terms such as "transportable nuts" (Yarnal and Aman, 2009) indicate that the idea existed even though the traditional on-site building was dominant. Prefabrication gradually began to step inside construction in the 19th century with a few projects, such as the crystal palace by Joseph Paxton in the second half of the 19th century (Armstrong,2008). Still, this concept was not dominant enough to be a distinctive part of the architecture until the city's transitory image and architecture were introduced by Antonio Sant Elias's manifesto in 1914 (Silva et al.,2020).

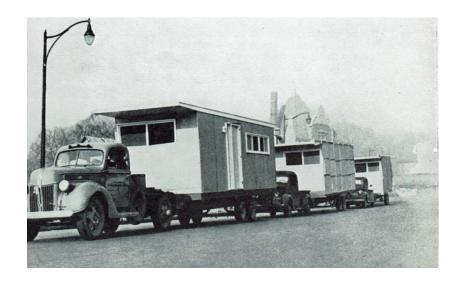


Figure 1-50- Prefabrication in America- (Source: - Prefabmuseum. uk)

The Futurists' manifesto, besides the other resonant voices, grounded the Prefabrication as the defining factor of the modern movement, according to the German philosopher Jurgen Habermas (1989). One of the acute symptoms of this desire belongs to Le Corbusier's *Dom-ino* house in 1914 as a prototype for Prefabrication (Orchowska, 2018) and as a diagram to affect the future of architecture, contributing to more advanced techniques in the 1920s.

Besides the technological development, the revolutionary role of Bauhaus and modern architecture's superstars are not deniable. Walter Gropius found an innovative solution by manufacturing the wall panels in a prefabricated way to be fixed to the dry structure. Also, he built around 316 affordable houses in *Dessay-Torten* up to 75 meters with the Bauhaus group between 1926 and 1928 (Orchowska, 2018:27). In the United States, Frank Lloyd Wright identified the term "assembled house" for the first time in 1932 as an intersection between housing and Prefabrication involving modular units of building blocks (Smith 2010). However, he designed a "ready-cut" system for an individual system in 1916, compatible with the American ordinary frame construction (Armstrong, 2008:75).

As a new practical trend, prefabricated buildings entered a new and more severe housing phase in the 1940s (Fezer et al., 2004:55). Gropius and Konrad Wachsmann ended in "Prepackaged house" consisting of a system of prefabricated wood panels (Berthier, 2015:91). Prefabrication entered a new level in the 1960s by Louis Kahn with precast columns and *Vierendeel* girders (Smith,2010). However, all the efforts in the 20th century by Sant Elia, Le Corbusier, Frank Lloyd Wright Gropius, Fuller, Mies Van Der Rohe and Ernst May were to provide cheap, better quality and famous houses. As a result of economic depression and war crisis, the fabrication industry experienced several problems, such as cultural degradation, low quality, and unappealing objects (Orchowska,2018:29). Nevertheless, this approach is still in consideration for the future of architecture as a catalyst for sustainability.

The thesis aims at the observing the modern character of the cities based on the prefabricated entities.

## Simplification

Simplification contains almost all the elements selected to discuss briefly before. Before modernity, simplicity defined the way of life in the 20<sup>th</sup> century. As a result, modern architects pursued the architecture of certainty and pragmatism. Nevertheless, it was challenging to define simplicity as, for Adrian Forty (2000), "simple" was the most exploited word in the architectural vocabulary. Simplicity should be observed in two diverse ways: Inherent and voluntary. The inherent idea of simplicity is rooted in the continuity of the dwelling during history. That is why the primitive huts influenced modern architecture such as Mies Van Der Rohe formulated in 18<sup>th</sup> and 19<sup>th</sup>-century discourses (Esenwein, 2016:4). The inherent simplicity as a product of time and represented in distinct periods, transformed into a voluntary force since the revivalism weakened slowly toward the 20<sup>th</sup> century. However, simplicity was not a severe desire for architects in modern society since Art Deco and Art Nouveau were the obstacles in the middle of the way. The neglect toward simplicity was noted by Cyril Alington's article in the English Preview in 1923. Alington criticised the modern culture claiming that it transformed into a culture of difficulty due to the complexity of contemporary life.

The demand for simple representations boosted and appeared in diverse fields, although it was activated and formalised seriously until World War II, which contrasted with the monumentality in some works of Behrens and Poelzig (Benevelo, 1971:386). The interwar and post-war periods introduced voluntary simplicity and "simplification".

When the central principle is to impose a feature in a design or any other entity, it is critical to identify it. Simplification appeared tightly linked with universalisation in subjects such as poetry and literature (Diepeveen, 2002:226) and other international styles such as minimalism, positivism, and functionalism. Notwithstanding, it was challenging to define simplicity independently without finding an intersection with these styles because of the broad terms. For Marcel Breuer, simplicity emphasises "structural laws in the aesthetic by repudiating the irrational forms" (Breuer, 1934:181).

This definition is similarly confirmed by the architects such as Erich Mendelsohn as a challenge (Guillen, 2006:29). It is possible to find out that the definition of simplicity and simplification depends on distinct impulses such as functionalism, structuralism, internationalism, and minimalism. When the simplification of space is a task to manage its enclosure, it results in structuralism and functionalism. It might end in universality and internationalism when comprehensible worldwide as an opposing force toward cultural complexity.

Whenever the main concentration is on purity and pure forms, it causes minimalism, although it might be influenced by traditions such as Japanese culture.

Simplification might implicate diverse keywords that were discussed before or will be discussed in the following order. Although modernism was questioned for the overuse of simplicity, it is still a positive value for contemporary architects like the previous generations, such as Ludwig Mies Van der Rohe (1886-1969), Kenzo Tange (1913-2005), Ludwig Karl Hilbersheimer (1885-1967), Tadao Ando(1941-), Luís Barragan(1902-1988) and Peter Zumthor(1943-).

The thesis tries to identify simplicity in terms such as simple geometric forms, monotonous colour economic considerations and materials in the selected case studies.



Figure 1-51- A building with maximum simplification

#### **Transparency**

Transparent architecture became a vital feature of 20<sup>th</sup>-century modern architecture. For Siegfried Giedion, transparency is the necessary quality of artistic production referred to as architectural and artistic origins. (Giedion, 1962). Adrian Forty also defines this term as one of the fundamental architectural words, insisting on its physical significance (Forty, 2000). The physicality of transparency could be reflected in the ideal sense, being possible to obtain in architectural design in the material sense (Brezicki, 2016:1).

Notwithstanding, the true nature of transparency is not embedded inside the objective vision. That is why the term transparency, even from a linguistic perspective, according to Rowe and Slutsky (1963). It could be beyond the static presumption and even dynamic depending on the view, the viewed and the viewer. In other words, transparency can result from material conditions, regardless of light, intellectual order and public demand for clarity and honesty raised as a democratic value (Beaujur, 1988:59 & Rowe and Slutsky, 1963:45).

Transparency as a concept and practice dates back to 120 years ago and even before the 19<sup>th</sup> century, with other factors like lightness in public buildings (Vidler, 2003). The Crystal Palace world exhibition and, later on, the Chicago school generated a more severe framework for transparency. At the beginning of the 20th century, specifically in the 1910s and 1920s, transparency became a signifier of modernity in technical, artistic, and ethical visions (Whitely,2003).

The use of glass has increased since the previous century. In the physical world, the materials with light permeability were significant; among them, the magnitude of glass is not ignorable. Le Corbusier credited the glass and its attribute with allowing light to penetrate inside the space. The reflection played a magnificent role as a proper material to represent the masses' composition with the lighting (Sadeghi et al., 2015:385). Among the vanguard of modern architecture historians, Siegfried Giedion confirmed

that glass in modern architecture marginalised the concept of central perspective as a renaissance spatiality product (Mac Quire, 2003).

This material was used with other materials to function statically as glass solely and technically is not load-bearing (Widrich,2015:45). Thus, it was integrated with steel and concrete as a curtain wall and other exterior forms. Beside this quality and other characteristics such as Weather resistance, durability and affordability (Brezicki, 2016:1), the visual quality of transparency is discussed even more by the scholars such as Vidler, Ockman and Van Moss, focusing on psychological, political and metaphorical factors (Widrich,2015:43).

The symbolic attribute started to shine in the 1940s and 1960s in the essay "transparency, literal and phenomenal" by Rowe and Slutzky. The literal transparency is identical to material perception. At the same time, the phenomenal was the new term they introduced as a metaphorical term dependent on the stratification of space (Brezicki, 2016:2). The notion of phenomenal transparency was not clear enough. Consequently, diverse readings were published to define the term. Although Rowe and Slutzky decided to publish an addendum in 1972, it did not contribute to a new definition (Bletter, 1978 & Brzezicki, 2016).

Their theoretical etude of phenomenal transparency was preferably in a two-dimensional mode influenced by cubism. The metaphorical aspect ended in the representation of political and moral liberation besides the physical ambitions of architects like Bruno Taut, Walter Gropius, Hans Scharoun and the non-deniable figure, Mies Van Der Rohe, who experimented with diverse styles of glass from lakeshore drive to Seagram building in New York (Balik, 2017:147).

The transparency in the buildings is continuous as a trend, although there is a shift from the ephemeral notions of modernity to the translucent and blurred concept of post-modernism (Brezicki,2016). The thesis intends to identify the transparent public buildings, shopping malls and restaurant. Also this concept in residential buildings of the 20<sup>th</sup> century in the selected case studies will the observed in the chapter 4



Figure 1-52- Transparency in a shopping mall in Şişli Istanbul

#### Single-Coloured Fabrics

Colour was one of the most controversial themes in the architectural discourses of the 20<sup>th</sup> century. The most critical challenge is the position that colour takes in architectural design. First, it seems necessary to characterise the subject into two segments: the necessity and the priority. Colour is for sure central to understanding and coding the surrounding particles. However, its necessity inside the architectural discourse is vague enough to produce diverse ideas even by modern architects. In the previous century, two possible movements started to look at colour in diverse ways; the first way was to characterise colour as white and "off-white", and the second one consisted of architects believing in the "polychromic" use of colour (Klinkhammer, 2004:429). For the first group, colour was vital in noticing space, but the artistic vision of colour was discredited. On the other side, this perspective was not that much radical. However, for both sides, the reductive characteristic toward ornamentation was affirmative (Parker, 2005:146).

The second group transformed the matter of colour from necessity to priority since it appeared to make the form recognizable. This group consisted of the De Stijl Group in the Netherlands, consisting of architects such as Van Doesburg, Van Eesteren and Rietveld. Besides Neoplasticism, using primary colours shaped Expressionism by Bruno Taut in Germany. Late, the usage of "neutral" colours was the theme of purism in France by Ozenfant and Le Corbusier (Serra et al.,2012:127).

The Bauhaus school initiated the effort to theorise colour in modernist architecture with key figures such as Wassily Kandinsky, Josef Albers and Johannes Itten, despite not ending fruitfully (Bayer et al.,1984:168). The critical step was to identify the colour. As a result, Itten describes colour "as radiant energies". Its aesthetics can be investigated in three ways: impression, expression and construction (Itten, 1970:12). This definition illuminates the unstable position of colour between the concreteness and abstraction in space or the struggle between the objective or subjective world. That is why the scholars like Kandinsky possibly represent the transition from visual to symbolic.

Regardless of the definition of the colour, monochromic and polychromic hues have always been compulsory. Le Corbusier, influenced by neoplasticism, created colour pallets for modern architecture to distinguish between the object and the perception of the material and the semantic world (Parker, 2005:146). The grounded works on the position of colour in the modern movement did not end up in an evident road map, although architects such as Piero Bottoni made a few reasonable attempts to exhibit the gradation of colours (Serra et al., 2012:129).

The concept of colour lost its depicted place in many architects' works when the initial concentration was on function and shape. Moreover, the association between ornaments and colour was never disjointed, even though the "flat colours" were the architects' trend or the materials' actual colour was the primary preference. Indeed, the dual quality of colour boosted the architects' confusion about whether to convey warmth, shadow and light or even immaterial or objective (Kane,2015:7).

That is why white "modernism" signifies most of the era's architecture and never seized to perform. Even the architects known as the "New York five architects" prioritised the material's natural colours and the white stucco. For Richard Meier, white was "the source of all colours in the rainbow, intensifying and reflecting the light and shadow" (Serra et al., 2012:127). Notwithstanding, modern architecture did not prescribe white as the primary colour that the architects should concentrate on. The streaks of colour

are visible in Le Corbusier's unit Habitation or *Rietvield's Schruder* house. However, it ended in white and grey tones. The role of abstract black-and-white presentations in the books is not deniable. For this reason, the research attempts to identify the single-coloured entities and buildings, mostly in white and grey in the selected case studies.



Figure 1-53- A bank with a single colored composition

## **Conceptual and Urban-Scale Elements**

#### **Industrial Buildings and Districts**

The industrial and modern spaces are somehow intertwined; individually studying them seems almost impossible. Industrial buildings have been the products of time since the industrial revolution, and afterwards, the machine age (Manvi, 2017:1) created the necessity for factories to influence the urban fabric. Indeed, industrialism affected the modern movement and vice versa, meaning that each facilitated its development. Also, it appears that the beginning of the 20<sup>th</sup> century was the appropriate synthesis between these two approaches since they were in the same direction, converging in abstraction and abstract space (Levine, 1986). Hence, it is possible to find the synthesis entitled "industrial modernism" by some scholars, such as Terry Smith (1994), concentrating on American society (Bradley, 1995).

The industrial revolution catalysed the building process with the development of technology and the materials such as steel and reinforced concrete (Schumacher, 2002:31). In this case, any building designed and built in the modern period is highly influenced by industrialism. Moreover, technological and industrial advancement starting and developing in the 19th century smoothed the way for approaches like pre-fabrication, mass production and specialisation in which the results and instructions of modern architects such as Gropius and Le Corbusier can be noticed (Agren and Wing, 2014).

The previously explained points refer to industrialisation's influence on the movement in a matter of time, providing a continuous framework with a minimum rupture. However, this influence was double-sided. Industrialism and indicating a turning point for it with the industrial revolution amplified the division known as the "working class".



Figure 1-54-AEG Turbine Factory by Peter Behrens – (Source: Jaeggi, 2000)

The need to design habitation for them and the position of residential areas respective to industrial factories started to be critical in the 20<sup>th</sup> century. This critical discourse became a central point for architects such as Albert Kahn, Mies Van der Rohe, Le Corbusier, Walter Gropius, and Peter Behrens. The aim was to design efficient industrial spaces as the essential reflections of their work are graspable in several buildings and generate a whole quarter appropriated for industrial functions (Manvi, 2017:2). The Industrial buildings became part of the culture that the modern movement interpolated into contemporary society (Solomon, 2003 and Alexander & Natrasony, 2007:11). In the meantime, some industrial buildings played a monumental landmark role, such as the AEG turbine factory by Peter Behrens 1909 or the Fagus factory by Walter Gropius and Adolf Meier (Jaeggi, 2000:42).

It was mentioned before that global industrialisation paved the way for modern movement to represent the desired movement at the maximum possible velocity. Subsequently, this mindset manifested the city as a machine and the potential to view systematically industrial buildings on a grander scale. The industrial quarters were transformed into industrial spaces as "urban hotspots" (Glorius and Manz, 2018:26). These quarters gave credit for the idea of *Cite Industrielle* or the industrial city, first conceived by Tony Garnier. However, this project was officially published in 1917. The first stage of work started at the beginning of the 20<sup>th</sup> century, followed by the second stage in 1904.

Even though all the activities and functions are considered in his entirely theoretical and utopian plan, it was among the first efforts to consider the industrial buildings as a whole playing a critical feature in the city. Afterwards, its link to other parts was visible to grasp. The residential areas are rectangular blocks extending from east to west in a linear form linked by vast green spaces to silk manufacturing factories in the north and metallurgic factories in the south (Wiebenson, 1960:16), which is the right mindset for zoning the activities. Garnier's vision for the city influenced Le Corbusier and other architects and contributed to forming modern cities.

The discussion focused on all three vertexes of place, human, and time representing that the industrial buildings, whether abstract objects or a larger spatial complex, represent modernity. The industrial revolution in Europe created an utterly strong justification to form industrial buildings and to influence all

the other functions with the advancement in materials. The working-class community was shaped, and as a result, architectural institutions such as Beaux-art. Later, Bauhaus realised that industrial buildings and zones were necessary for contemporary society.

In general, buildings with industrial functions affecting the districts in selected case studies, industrial zones and factories inside the city are the most feasible examples of this element. The thesis aims at identifying them based on such functions.



Figure 1-55- Industrial city by Tony Garnier in 1917- (Source: Garnier,1917)

#### **Rectilinear Geometry and Cylindrical Shapes**

The rectangular and cubic box and the cylindrical shape are inseparable elements of modern architecture, although the Greeks and Romans used them in residential and public spaces such as *Forum Romanum*. Notwithstanding, it was a dominant form in the modern architectural discourse of the 20th century.

What made the box one of the central themes of modern architecture? There are several reasons and impulses for an answer this question. One ought to be inside a 2d mindset regarding the appropriation of space. For instance, designing the buildings based on their plan as a space management tool necessitates using rectangular to achieve a faster problem-solving design solution. To Rem Koolhaas (1995), "The typical plan is an architecture of the rectangle; any other shape makes it atypical- even the square". As a result, designing takes place in a rectangle, and the possibility of the divide into small rectangles generates an understanding of a whole project in a grid, facilitating the adoption of the structure, beams and columns (Gangwar and Kaur,2012:2).

The cube could result from Cartesian space in a broader scope, imposing the Z-axis on architectural design. This abstract notion of space led to modern architecture's abstract feature since vertical development was a trend. Besides this mathematical modelling of space, the top list of artistic representations, such as cubism, paved the way for modernists to design rectangular forms freely. Cubism is a significant impulse in artistic style for some scholars and was the starting point for modernity. This style later on notions such as formalism, minimalism, and simplicity justified modern architecture's modularity and standardisation. Furthermore, cubism provided the framework of analysis for the artists

as it was qualified with words such as intellectual, structural, architectonic, geometric, classical and logical (Robbins, 1988).

The other motivation for modern architecture was the relationship between the design outcome and education. The grids and cubes were compelling enough for academic perspective and teaching activities. It was possible through grids to run the computer programs aiding architectural design and representations (De Graaf, 2017). The abstract representation enables the software to identify efficient plans based on the rectangular fundamentals (Van Leusen, 1996:146). Besides the freedom of planning and flexibility, the economic consideration confirmed the independent use of cubic shapes.



Figure 1-56- Farnsworth House by Mies Van Der Rohe- (Source: archdaily)

Cylindrical forms are the other archetypal platonic shapes that were commonly used by modern architect's various times. However, they were not to that extent compared to the cubic shapes. They serve the fluidity of the plan when synthesising with rectilinear forms in the spatial arrangement. The most common function for a cylinder was to house spiral stairs (Curtis, 1986:191) and industrial zones. Amid the architects of the 20th century, such as Kazimir Malevich, Bauhaus architects, such as Walter Gropius, Adolf Loos Raumplan and Le Corbusier's Plan Libre, the mark of cubic and rectilinear geometry is discernible. Mies Van Der Rohe even idealised it in 1948 with the Farnsworth house (De Graaf, 2017). Furthermore, cylindrical forms are repeatedly presented in the drawings of Sant'Elia. Le Corbusier also confessed that he was "possessed" by the forms such as cylinders and white cubes, spheres and so forth (Curtis, 1978).

In the second half of the 20<sup>th</sup> century, the gradual break from these platonic geometries became more severe than ever. However, the old trend continues in the 21st century. It is possible to conclude that these shapes were independent of humans and place. They were even independent of the time context as the meeting point of Cartesian space, abstraction and minimalism. Cubic structures of the buildings, the combination of rectilinear and cylindrical shapes in industrial and residential buildings and rectilinear planning of the districts are the common types to recognise the urban fabric.

The chapter 4 of the thesis observe the modern character of the case studies regarding the rectilinear geometry and cylindrical shapes.



Figure 1-57- James Stirling Design for Siemens Computer center in Munich- (Source: Curtis, 1983)

#### Single-Use Zoning

The way to perceive a place as a whole or categorise it has been one of the most severe issues in architecture and urbanism. Fragmentation of place might lead to a concept known as zoning in a broader term. This term entered the hall of fame in the modern architectural discourse. Zoning, in general, allows regulation of land control and, specifically, land use. Regardless of the history of zoning, land use was a continuous theme. The continuous tendency entered a new way to establish control, whether by traditional governance or contemporary controlling mechanisms, almost when the modern movement or the connected impulses appeared and generated a more differentiated perspective. This part aims to illuminate what more or less depicts the concept of zoning, specifically known and institutionalised by planners influenced by the modern movement and seeing the matter of city and zoning like a state" (Scott,1998).

Zoning in modern planning belongs to the notion of "single use" and "Euclidean" zoning<sup>12</sup>. Although there were some ephemeral colours of zoning in the 19<sup>th</sup> zoning in the United States (Talen, 2012:332 &Valverde, 2011:279), Euclidean zoning started to be inaugurated officially in the first decades of the 20<sup>th</sup> century. The New York zoning policy in 1916 organised a controlling policy on use, height and bulk based on standards for better safety and health (Blasingame-Custer, 2007:1).

Euclidean zoning tends to segregate uses and categorise them in a more functional perspective, an understanding city as a "machine" (Hall, 2007:918), such as single and multi-family, commercial and industrial. Also, it played a critical role in barring race and class since the coexistence of different groups was precarious (Valverde, 2011: 281).

The so-called single-use zoning was an opposing strategy to the utterly traditional concept of mixed-use zoning, which started at the beginning of civilisation regardless of the modern approach. Nonetheless, single-use or Euclidean zoning's dominancy was still evident in the 1950s and 1960s (Ohm and Sitkowski, 2003:784).

The concept of zoning in the broader image was flexible (Rodgers,1990:184). One of the critical problems of Euclidean zoning was neglecting the city's fundamental characteristics and ignoring the specific idiosyncrasy of districts. Furthermore, the criticism toward single-use zoning targeted it with

concepts such as urban sprawl, racial segregation, negative economic impact, and decreased quality of life (Hall, 2007:919).

Regardless of the criticism, the Euclidean zoning aimed to mobilise life to low-income families with a preferable life form according to light and air standards (Talen, 2012:333). Moreover, this kind of zoning was denounced by neo-traditionalists and new urbanism that values traditional concepts. Notwithstanding, the supporters of new urbanism who prioritised the traditional neighbourhoods as a central norm substituted the prior with mixed-use zoning. Based on their arguments, zoning and categorisation are inevitable despite the criticism toward it.

The target of the thesis is to clarify single-use zoning in the cities by locating and identifying the symptoms in selected districts, the new districts created in the modern era and the literature review of historical sources regarding the policies of Euclidean zoning in the selected districts.

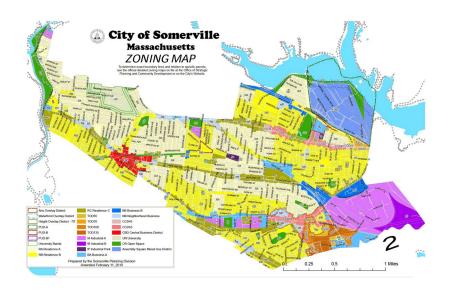


Figure 1-58-Single-use zoning example for Somerville Massachusetts- (Source: Witsky:2018)

# **Physical and Building-Scale Elements**

#### Asymmetry

The dilemmas of architects throughout history were to design a symmetrical whole or an authentic entity regardless of the necessity for following a symmetrical order. The severe asymmetric footsteps could be found in the late decades of the nineteenth century without addressing the proportion. It was the opposite of what is known as "bilateral" symmetry (Selzer, 2016:234) or "axial" symmetry. For Arnheim (1977:36), it is a divergence from the norm and standard of symmetry.

An authentic design process has somewhat liberated itself from the shackle of the dilemma between symmetry and asymmetry nowadays. Nevertheless, the influence of asymmetry in modern architecture is doubtless. One of the critical examples is Frank Lloyd Wright since the superimposed cubes in most of his works followed asymmetrical orders. There is a strong possibility for Micheal Leyton (2001:43) that memory is in the form of asymmetry. This argument could be problematic for traditionalist scholars memory, specifically in its collective form, a factor for traditionalism in a broader image.

Moreover, this apparent paradox also includes asymmetry. For scholars like Alexander and Salingaros, local symmetry could represent traditional architecture; even bilateral symmetry is a modern paradigm. Leyton's concept of memory seems not collective but links to individuality since the modern movement attempted to create a new memory. Henceforth, asymmetrical forms possibly contributed more to being memorable, not necessarily continuous.

Asymmetry served the technical and aesthetical requirements of modern architects since function and standards were on the primary lists of priorities. As a result, asymmetrical compositions were constructed (Hitchcock and Johnson, 1932).

It is possible to identify the traces of asymmetry in De Stijl artists, such as Mondrian's artworks and Geritt Rietvield's Schroder house in Utrecht, that the rectangular houses are placed asymmetrically. Furthermore, seeking out the asymmetrical plans inside the works designed by modern architects is possible. For instance, the plan in villa Savoye is asymmetrical. It could be argued that the asymmetrical plan or forms result from adding or removing some features (formal or spatial processing) (Shin, 2009:320). Indeed, asymmetry was the tool for modern architects to increase their distance from the historicism of the 19th century, facilitating the introduction of it as a dynamic feature (Nikolic et al.,2015). The shreds of evidence around the functionality of modern architecture illuminate the fact that asymmetry was able to enter inside the modern movement discourses, being an "invariable" of the modern language (Zevi, 1978). The most specific outcome for modern architecture and urbanism was to prove that balance and harmony are not necessarily achievable by symmetry and the asymmetrical harmony of Piet Mondrian.

In this thesis, the central approach will be to identify asymmetrical urban spaces influenced by modern discourses and buildings containing asymmetry was designed and built in the modern period.

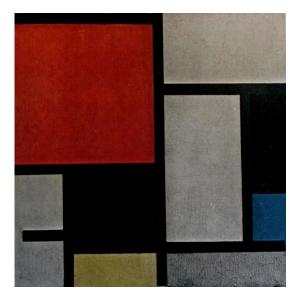


Figure 1-59-Mondrian's Composition with Red, Yellow and Blue 1921: The typical example of asymmetry-(Source: Mondrian, Rothschild Collection-New York)

#### Flat Roof Overhang (Flat Cantilevered Roof)

It is almost impossible not to talk about the regard and value the flat roof overhang has had since the dawn of modern architecture. Besides its presence as an alternative to gable or pitched roofs, the flat cantilevered roof encountered a particular delight, functionally and aesthetically. Indeed, the depicted image of the modern movement and international style (Campbell, 2005:464) was drawn with its other identifiers, which are easy to denote.

What was the impulse behind the flat roof overhang? In the first place, and without a doubt, the geometry self generates this possibility. The flat cube produces a flat surface, and then the flat cantilevered roof is an outcome for several reasons, such as formal integration. The other impulse might have historical traces, even though the usage of flat roofs was not limited to the 20<sup>th</sup> century. A few residential buildings in the 19<sup>th</sup> century contained flat roofs (Urbanik and Tomaszewicz,2014:2). Problems such as the melting snow in spring and sharp icicles could be hazardous.

For this reason, the Davos was an alternative suggested by Samuel Haussler in 1851 (Campbell,2005:464 & Poeschek,1928). The use of flat roofs also allowed the building of high-rise apartments to be lighter and, at the same time, suitable for lower costs (Urbanik and Tomaszewicz, 2014:2), especially with the technological advancement and shift in the usage of materials from wood and timber to steel and concrete.

The 20<sup>th</sup> century and, accurately, the interwar period transformed the solution toward desire without addressing geographical orientation .The low-pitched roofs are automatically left aside to be known as traditional. Nonetheless, it seems to be some influences of cultural exchanges between the east and the west. These influences are evident in the Mediterranean context in countries such as Greece and Turkey (Liernur,2010).

It was not a matter of labelling Prairie houses with the pioneers such as Frank Lloyd Wright and Louis Sullivan as a modern attitude or Bungalows as the domestic ones in the United States since there are significant influences of Le Corbusier's sketches on Turkish houses with overhanging eaves. Also, the Greek vernacular houses influenced him in designing Villa Savoye (1929-31) (Campbell,2005:471). Nevertheless, the whole concept is enriched with contemporary technology to function as an abstraction, and therefore, the contemporary way of flat and broad roof overhangs typically introduces itself as the element of modernism in architecture.

Besides the positive advantages such as facilitation of reparation and innovation, the possibility of placing mechanical equipment and space for parking below, it started to become problematic and still needs to be precisely and considerately designed in terms of drainage and roof garden. Notwithstanding, modernity in architecture indispensably characterises broad flat roofs overhanging. Therefore, the thesis aims to find symptoms such as flat overhanging eaves in houses, apartments with cantilevered eaves and flat roofs and a combination of broad flat roofs.

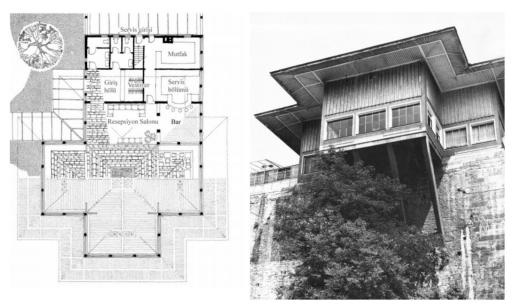


Figure 1-60- Taşlık kir Kahvesi as an Overhanging flat roof example- (Source: Erarslan, 2020)

#### **Terraced Roof**

When the taboo for pitched roof construction in the 19<sup>th</sup> century started to fade gradually, the consciousness of organizing space on the era's unorthodox flat roof appeared. Like previous keywords identifying modernity, roof terraces are the exclusive members of this movement. As mentioned before, Le Corbusier listed them among the "five points of a new architecture" (1926) in his progressive statement with the same title. He states that:

"For centuries, a traditionally sloping roof has borne winter with its mantle of snow, while the house was warned with stoves. From the moment central heating was installed, the traditional roof was no longer suitable. The roof should no longer be sloping but hollow in the centre; it must collect the water on the inside, no longer on the outside. An incontestable truth: cold climates demand the abandoning of the sloping roof and necessitate building hollow roof terraces to collect the water inside the house. Reinforced concrete is the means that which makes it possible to build all of one material. Reinforced concrete expands greatly; expansion causes the structure to crack when it suddenly contracts. Instead of rapidly disposing of the rainwater, one should try to maintain a constant level of humidity on the terrace's concrete and, therefore, a regular temperature on the reinforced concrete—special protective measure: Sand covered with thick slabs of concrete, with wide grass. Sands and roots prevent water from seeping in fast. Roof terraces become lush: flower, trees, bushes, and lawns. Technical, economic and functional and spiritual reasons advise us to adopt the roof terrace "(Le Corbusier, 1926, quoted by Benevelo, 1971:444)."

As mentioned before, the flat roof was an essential factor in providing the possibility of terraced roofs. There were examples of the flat roof before in German text in the 18<sup>th</sup> century by Paul Jakob Marperger, raising new arguments on flat roofs (Pommer,1983:158). However, the previous instances were rare in Europe, such as in Sweden in the 19<sup>th</sup> century, which was not a solution in a country with snow, rain and cold weather (Simonson,2001).

Another ambition for the roof terrace is reinforced concrete and bringing nature to the house, as evident at 24 Nungesser et Coli, Villa Savoye and Unite habitation (Como et al.,2015:4). The roof terrace, other than concrete, can be built as framed construction. The only difference is in detail regarding

waterproofing. Concrete roofs nowadays contain a slight slope for water drainage. On the other side, the central concentration of a framed roof for waterproofing and thermal insulation is through the membrane.

The terrace roofs allow the residents of the house and people to penetrate that space which was almost impossible in the loft apartments with pitched roofs. The idea reflected quite perfectly in Unite habitation (Antonic,2014) was approved by Bauhaus-based architects and CIAM members. Modern architects used it repetitiously, from Mies Van Der Rohe's *Wiessenhofsiedlung* flexible to numerous recreational activities (Moffet et al.,2003:15) to *Sven Markelius* parallel towers of the Hotorget district (Barnett,2016). Unlike the other factors, roof terraces and gardens are still on the designers agenda, and it was neither target of architectural critics nor post-modern critics.

Therefore, accepted as a modern architectural element, the thesis aims at identifying the buildings built in the modern period with roof terraces and gardens.



Figure 1-61- Roof terrace and social gathering in unite d'habitation derived from von Moos, 2021:261)

#### The Pilotis

One of the primary references in modern architecture is Villa Savoye, and its undeniable character is Le Corbusier. The clear mindset on his ideals of modern architecture was reflected in this work perfectly since he talked about the five major principles of new architecture in his book *Vers une architecture* in 1927 (Toward a new architecture) and the "*L'Esprit Nouveau*" (The new spirit). The *Pilotis*, or what can be called stilts in English literature, were among the essential list of 5 principles, along with the Roof garden, free Plan, horizontal ribbon windows and free façades forming the ideals he depicted for contemporary architecture.

*Pilotis*, in general, is the whole space consisting of concrete and steel column grids that contribute to elevating the building and liberating it from the ground. *In the first place, Pilotis* free the wall from its structural base. Then it facilitates the movement between pedestrians and vehicles (Cui et al.,2013) by giving access from what Le Corbusier calls *Rues intérieures* on the second level. Then buildings are

raised through *Pilotis* on a structural element called "*Sol-Artificiel*", meaning the artificial ground (Millais,2015:106).

Le Corbusier's leadership in the CIAM Congress and especially the Athens Charter paved the way to codify and legalise all the five points he previously introduced himself (Chase, 2015:6). For some scholars such as Jameson, the separation between utopian space and the traditional that devalued fabric (Jameson,1991). Also, for Wigely (1998) and Friedman (1958), the *Piloti* disconnects the form from the ground and underground, being possible to conclude that it is a break-off from history and tradition (Chase,2016:7).



Figure 1-62- Pilotis in Villa Savoye bu Le Corbusier – (Source : archdaily)

The *Pilotis* remained Le Corbusier's Favourite element. However, he revised some details, such as the piers and columns thickness and placement, different from Villa Savoye and *Unite d'Habitation* in Marseilles (Murphy,2002:83).

The use of *Pilotis* was extended all over the world and inspired by Kenzo Tange in Japan (Lin, 2017:8) to Oscar Niemeyer in Brazil. Apartments with *Pilotis* have been the most typical examples of modern architectural history and will be the most specific theme to evaluate the modern quality of neighbourhoods.

The thesis aims at investigating the modern personalities of the selected districts based on the use of *pilotis*.

#### **Thin External Walls**

It is widely accepted that the walls in modern architecture are thinner since concrete and steel columns and beams support the structural loads, unlike the traditional walls, depending on the ground (Fredrick, 2007:119). The Modern movement accentuates volume by displaying light walls due to an open plan (Colquhoun, 1962). One of the proper uses of the thin wall in the modern movement is the Curtain wall as mentiond in the free façade part. This application is often built of fabricated elements such as metal and glass, often functioning as an external wall (Mijovic et al., 2018:2).

The beginning of thin walls, specifically the curtain walls, dates back to the 19th century. The Crystal Palace located in Hyde Park by Joseph Paxton, built-in 1851 for the exhibition, was cited the most as a referencing point for the thin curtain wall and as an influencing moment for the architecture to look

differently at the external walls other than load-bearing masonry in a cast-iron and plate glass (Hwang Oh, 2020:113). Nevertheless, for some scholars, such as Yeomans (2001:13), it is not a significant example of a pioneer for these walls. According to him, the more concrete instances might be evident in the Hallidie building of San Francisco in 1918 and, later on, the Bauhaus building in Dessau designed by Gropius in 1926.

What were the motivations for the thin walls? Like the other factors discussed, industrialisation resulted in economic considerations and rapid construction. Thus, the standardisation and mass production resulted in thinner walls (Coffman, 2019:105) which could justify prefabrication. Subsequently, the walls became lighter, shifting the focus from stability to light and climatic consideration.

External walls were made of concrete, metal, Aluminum and glass. As time moved on, prefabrication stepped in to be a priority. Consequently, the unitised panelling system was introduced in the 1970s. The unitised system collected almost all the parts of the curtain walls in the factory, and other than the fast preparation, the aluminium walls built with this technique significantly reduced the cost of commercial skyscrapers (Hwang Oh, 2020:13).

The thin walls were not favourable enough toward wind load and started to be the primary concern for architects in the second half of the 20<sup>th</sup> century (Mijovic et al.,2018:7). Another weak spot could be addressed in their ageing problem as they might be condensed and fogged and if they were built in steel and bronze. Also, they might face the degeneration and penetration of water through the wall (Carmichael, 2011:3).

The thin external walls are still in numerous buildings throughout the cities of their mechanism for energy and sustainability. These walls started to be introduced and enriched in the 20<sup>th</sup> century by modern architects. The continuous effort toward improving these walls is still one of the central subjects.

The thesis aims at observing the critical projects of case studies regarding the thinness of the wall based on their literature review and reports.



Figure 1-63- A building with a thin external wall

#### **Reinforced Concrete**

encyclopedia.

"Concrete in which steel is embedded in such a manner that the two materials act together in resisting forces. The reinforcing steel—rods, bars, or mesh—absorbs the tensile, shear, and sometimes compressive stresses in a concrete structure. Plain concrete does not easily withstand tensile and shear stresses caused by wind, earthquakes, vibrations, and other forces and is therefore unsuitable in most structural applications. In reinforced concrete, the tensile strength of steel and the compressive strength of concrete work together to allow the member to sustain these stresses over considerable spans. The

invention of reinforced concrete in the 19th century revolutionised the construction industry, and concrete became one of the world's most common building materials." defined by the Britannica

Reinforced concrete is known by the terms such as "Beton Arme", "Ferroconcrete", and "steel concrete".

The Modern movement exhibited a new vision toward architecture through abstract forms with the assistance of new materials such as concrete and steel (James-Chakraborty, 2014:82). Like the other factors, reinforced concrete was not exclusively the previous century's legacy, and it is possible to date back centuries before.

Roman architects invented concrete, and its use continued in the Middle Ages and Renaissance. In the 16<sup>th</sup> century, English builders imported *Pozzolana* and Lime from Italy (Boake, 2019), and the second half of the 19th century was the moment for concrete regeneration that appeared again in Europe and the United States.

According to William Curtis, the critical figures in the 1870s, such as "Ernest Ransome" in the United States and Francois Hennebique in France, advanced the frame systems consisting of vertical posts, lateral beams and slabs (1983:39).

There were recognizable efforts regarding reinforced concrete by the engineers like Francoise Coignet and Joseph Monier in France, Wayss and Freytag in Germany and William E.Wards in the United States, establishing the foundation for what is evident in the modern and contemporary era (Boake, 2019).

The Utilisation of reinforced concrete entered a new level in Europe with the popular design scheme of Le Corbusier's Maison Domino in 1914 (Curtis,1984). The desire for functional mass housing and prefabrication was possible through new materials and reinforced concrete facilitated this desire. Also, a standardised society of rapid urbanisation was an emergent need that this material could work as a catalyst, completing the integration between structure and enclosure and the wall.

Indeed, the structural role of reinforced concrete became the new aesthetic architectural element. According to Mies Van Der Rohe in 1923, reinforced concrete buildings are inherently skeletal, including the skin and bone (Conrads, 1971:75). Modern architecture served abstract and homogeneous spaces. These spaces should be represented by unified spaces, a materialisation of the famous motto "the form follows function". Every fluctuating behaviour contains ascending course toward a peaking point after post-war II for the reinforced concrete. The material itself was on the top list of architects. It became one of the distinctive "-isms" influencing modern architecture, entitled "brutalism" by Alison and Peter Smithson for the first time, derived from the Le Corbusian-invented terms "Beton Brut" as an economic

and time-saving approach of construction, evident before in the Unite Habitation outside the Marseilles (1947-52) (James-Chakraborty, 2014:83).

Brutalism justified the rapid urbanisation and repetitious use of the material not only in a monumental manner but in everyday life reflected in apartments, even though August Perret's work in 1903-04 was an apartment building at two *Bis rue Franklin*, as his first reinforced concrete work (Forty,2013: 245). Brutalism declined in the 1970s since phenomenologists and postmodern critics, philosophers and architects targeted it. Nonetheless, the revolutionary uses of exposed concrete are still on the agenda. The thesis aims to find the approach to using reinforced concrete in the buildings of selected districts.



Figure 1-64-*Unite d'habitation* by Le Corbusier, a typical example for the reinforced concrete (Source: Foundationlecorbusier.fr)

#### **Ribbon Windows**

One of modern architecture's essential features is the ribbon windows from the 1920s. The ribbon windows consist of a series set side by side, forming a continuous band horizontally across a façade (Merriam-Webster). These windows are listed in Le Corbusier's five points of architecture, and like the other four principles, Villa Savoye represented that as the archetype. The ribbon windows are known as a technological advancement since the walls are independent of the load-bearing system, liberating the façade from the structural forms near them (Winterhalter,2017:39). Indeed, this term follows the cause and affects the previous factors such as the free plan and later on, the free façade (Schumacher, 2002:31).

These windows critical characteristic as a continuous strip and the building created a panoramic view of inside and outside as a screen presenting daily life, which could also symbolise the *Greek Metope* (Trisno et al.,2019,657), reminding the journey of Le Corbusier to Greece. The ribbon windows do not differentiate the characterised sub-spaces of the buildings. Thomas L. Schumacher (2002), in his article "the outside Is the result of an inside" believes that:

"Some sources of one of modernism's most persistent doctrines, states that the *ribbon windows that* spread out across the front of the piano nobile are the same as those of the less critical bedroom or above; the kitchen on the left receives the same window treatment as the library in the centre and the stair hall on the right" (2002:27).

Besides Le Corbusier, Mies Van Der Rohe continued using ribbon windows in his Reichsbank design competition (Frank and Ciucci,1985) and the Bauhaus architects. As a Bauhaus director from 1919 to 1928, Gropius issued the curtain walls and ribbon windows derived from "the international style" (Salingaros and Mehaffy, 2008:192). He exhibited this attribute more seriously in the Torten project, using ribbon windows and flat roofs (Stackmann, 2019). The architects continued the architects such as Frank Lloyd Wright and Philip Johnson and modern architects worldwide, extending from Sydney to Buenos Ayres.

Ribbon windows were criticised for endangering the houses thermal comfort. However, in terms of lighting, Le Corbusier believed that horizontal windows are efficient eight times more than typical vertical windows (Almssad and Al musaed, 2014:444). Notwithstanding, the windows still function in houses and offices, placed in front of the living room, kitchens, staircases, and bedrooms.

Chapter 4 of the thesis will be the part to identify the ribbon windows to indicate the modern character of the selected case studies.



Figure 1-65- Ribbon Windows in Bauhaus in Dessau built in 1925 – (Soruce : https://www.bauhaus-dessau.de)

## **Physical and Urban Scale Elements**

#### Clean Horizontal and Vertical Lines

The other utterly obvious element to discuss modern architectural characteristics is the repetitious usage of horizontal and vertical lines. In a broacher image, these concepts depend on each other due to their horizontality and verticality. This point also established and magnified diverse perspectives and interdisciplinary influences.

It is possible to address the importance of horizontal and vertical lines in different impulses of modern architecture. In a few examples, there is an insistence on horizontality, while others concentrate on the vertical and horizontal lines as a matter of harmony and balance for space itself. For instance, it is

possible to locate horizontal lines in the organic work of Frank Lloyd Wright (Schumacher, 2005), while there are clear examples of vertical and clean horizontal lines in De Stijl, Art Deco and International styles (Ahmad Nia and Rahbarian Yazd,2020). Notwithstanding, it seems essential to investigate the reason behind this tendency.

One can confirm that the horizontal and vertical lines generate sharp and precise edges for the rectangular form of plans, primarily for building flat roofs (Jones, 2011 & Iranfar, 2018:25). Architectural design formulated the inevitability of dialectic between horizontal and vertical lines. They are entirely dependent on the presence of each other.



Figure 1-66- repetitious horizontal and vertical lines in Calouste Gulbenkian Museum- (Source:FCG archive)

A vertical line is parallel to the gravity axis and perpendicular to the ground tends to achieve balance. It also might represent the process of building (Norberg-Schulz, 1971:16). On the other side, the horizontal line and axis tend to facilitate movement as a line of repose (Arnheim, 1977:38).

Enclosing space for achieving functional spaces such as dwellings is possible through horizontal and vertical elements such as surfaces, columns and roofs. The horizontal roof needs vertical elements to support it. Elements like column capital and base are mediators of intersection between these vertical and horizontal surfaces (Snow, 1986:15).

Returning to the central concept, the fundamentals regarding horizontal and vertical lines created the ideology of modernism by creating vertical and horizontal combinations of volumes as long as with the surfaces and frames from the macro to micro scale.

The buildings and planning lines indicating horizontal and vertical clean lines will be the objects of evaluation in this thesis for the case studies.

#### **High-rise Buildings and Vertical Urbanism**

The erected high-rise buildings all over the cities nowadays reflect modernity with this primordial depiction regardless of being the typical public image toward modernity or the professional historical view in architectural and urban discourses. This image exhibited the importance of perspective in the architecture of the building and the matter of urban growth.

The *Ziggurats* of ancient times. Throughout history, Babylonian towers and Egyptian pyramids were the initial efforts of tall buildings. Nevertheless, building high structures that influenced the whole city was not ordinary until the 17<sup>th</sup> century (Gifford,2007:3). The new phase for High-rise buildings was undoubtedly in the second half of the 19<sup>th</sup> century when the Chicago school remarked on the contemporary architecture with the influential work of William Le Baron Jenney and Louis Sullivan afterwards (Yeung,1977).

High-rise buildings and vertical urbanism entered European architectural discourses. At the beginning of the 20th century, theorists bore concerns about land use, influenced by zoning laws in the United States and cities such as New York. Nevertheless, the confidence in constructing high-rise buildings in Europe was still in the shadow of historical value leading to the pessimistic view that the high-rise buildings might negatively reflect the city. In this manner, most tall buildings did not exceed 100 meters until the 1950s (Peitzrak, 2013:31).

Regardless of this view, the 1920s were the golden years of rejuvenated high-rise buildings introduced by the figures like Gropius, Mies Van Der Rohe, Le Corbusier, Hilberseimer and Ernst May. The themes and context for these tall buildings were still a dilemma as the prior versions in the United States were exclusively for office and commercial buildings in Chicago and New York. The "city of towers" in 1920 and the *Ville Contemporaine* in 1922 were among the first skyscrapers built in Western Europe, with a significant turning point in modern architecture. Moreover, the plan *Voisin* of 1925 and later *Ville Radieuse* in 1933 consisted of a considerable scale of tall buildings (Marmot, 1978:32).

Skyscrapers and, in general, high-rise or tall buildings were identified as modern. The main reason for that is the product of time functioning as a machine for the contemporary civilisation and large-scale industrialisation as a miracle of urbanism (Le Corbusier,1937:53).

Confusion was still on the agenda regarding whether to appropriate the high-rise buildings as a habitation space for families or the exclusive design for offices. Nonetheless, it looked inevitable for the vanguards of modernity, such as Gropius and Le Corbusier, to consider the high land costs at the CIAM3 and build widely spaced slabs with elevators instead of the four-story Zeilenbau (Mumford,2002:293). However, the incompatibility of vertical circulation for family life was recognised by Le Corbusier himself (Le Corbusier,1923:54). The Post-war discourses hosted the discussions introducing local context in countries like the United Kingdom, facing several criticisms of high-rise urbanism in the 1970s and 1980s in Western Europe. This situation was unlike the Eastern side, where the process was continued (Drodz,2018:471).

Items like the high-rise buildings as offices built in the 20<sup>th</sup> century influenced the fabric and districts, the high-rise slabs function as apartments, and any other possible paradigms of vertical urbanism will be observed in the case studies in this thesis.



Figure 1-67-High-rise metropolis introduced by Hilberseimer-(Source: Hilbersiemer, 1927:13)

#### The Separation Between Pedestrians and Vehicles

Managing movement in cities was a crucial part of authorities in the 19<sup>th</sup> Century. Before the middle of the century, the main transportation was based on walking and horses. This situation remained until the industrial revolution. Then it led to introduce machines to human society. Also, this circumstance was the motivation for presenting a moving platform for the New York exhibition in 1874 and, afterwards, the moving sidewalk for the 1893 world's Columbian exposition and Paris exhibition in 1900 (Gunnarson,2004:3). However, the binary between pedestrian and the vehicles were not a serious issue until the turn of the century.

The initial grounding occurred in France and Paris in Napoleon III and Haussmann by establishing vast boulevards. Through these wide avenues, the separation between the people walking and any vehicles instigated an urban "surgery" for this city (Buck-Morss,1992). Le Corbusier also praised the structure of avenues as a practical action to clear out the arteries (Stravrides,2016:133). Nevertheless, people could walk freely in the streets until the 1920s (Gunnarson, 2004).

Tony Garnier and Futurism's industrial city were among the prominent impulses for making the dream of a utopian city come true. However, Le Corbusier's critical step was formalising all possible movement patterns for vehicles and pedestrians. Le Corbusier's writings in the 1920s were full of antagonism toward the status quo of the streets and how pedestrians and cyclists disrupted the traffic, similar to futurists and Marinetti's manifesto (1909) regarding the situation (Banham, 1967).

For Le Corbusier, the street was the machine for circulation (Von Moos, 1979). This machinery perception made him design and publish *Ville Contemporaine* and *Ville Redieuse* as a total rejection of the traditional 'corridor-street' model by substituting highways and subways. The initiative completely separated pedestrians and cars (Cui et al., 2013). This separation was submitted as an instruction in Athens Charter calling for pedestrians parallel networks with slow paces and rapid movements for the cars (Logan 2015:86), which was admired by Giedion (1952).

Although the critical strategy was to liberate and facilitate movement for pedestrians and automobiles, the priority was for cars (Urry, 2007). The more automobiles boosted from the 1940s onwards, the more

the concentration on automobiles increased. The other reason for this separation as a product of abstract space was the development of single-use zoning. Indeed, the decline of mixed-use zoning separated activities and movements and subsequently separated streets and pedestrians (Marshall, 2005:3).

The isolation in post-war urbanism caused by zoning policies magnified this separation. The pedestrian sidewalks were called "islands" (Logan, 2015). Over time, the critiques began to publish based on unfavourable circumstances on the boundaries that disconnected the road and the pedestrian, mainly by post-modern writers.

Factors such as highways and subways without any solid pedestrian connection, parallel networks of boulevards, streets and sidewalks and boundaries separating pedestrians and cars will contribute to a modern entity.

The thesis will identify any policies or physical implications contributing to the separation of pedestrians and vehicles in chapter specified for place.



Figure 1-68-A separation between the pedestrian and vehicles in NYC- (Source: NYC Street design info,2022)

#### Wide and Straight Streets

Understanding the city in an industrial scope and as a factory in the modernist creed reveals that the container for executing the production in this system could be streets and avenues. The mental denotation of a street possibly generates other terms like avenue, highway, route, and boulevards. Inside such denotation, it is possible to convey movement and traffic between nodes and places (Moughtin, 2003:129). Nevertheless, the street started to transform in both physical and conceptual ways in the 20<sup>th</sup> century. Although the typical street character is a linear route surrounded by rows of houses, shops, and offices and broader than an alley, the perception of modernity changed before the physical considerations.

It was critical to know how the street is viewed and perceived. If the street is understood as a social paradigm, how can the interaction between people, vehicles, carts or bicycle's function? Even the physical standards for modern streets can be reinvented by answering this question.

Continuously accepting modernity started before the 20<sup>th</sup> century. The environmental issues resulting from crowded and poorer hygiene resulted in the development of transportation. However, the priority in the middle of the 19th century was the railroads in both European and North American cities. Later the influence of the boosted number of bicycles caused political lobbies to expand and enhance roads (South worth and Ben-Joseph, 2003:61).

Outside the Anglo-Saxon influence, French society introduced new generations of boulevards in Paris to improve the traffic by demolishing around 12000 structures (Aoki,1993:699). These boulevards were identified as a radical transformation in the 19<sup>th</sup> century. Moreover, these broad avenues with the treed rows changed the image of Paris and were accepted as a model to generate in cities worldwide.

At the turn of the 20<sup>th</sup> century, car users increased rapidly, so the development of streets and boulevard was almost impossible, and the reaction from the architects and planners appeared to be necessary.

The previous models for the cities like the Garden city and City Beautiful were inefficient. Consequently, Wright, Unwin and Perry in the United States and European modernists like Le Corbusier, Gropius and Hilbersiemer sought to find solutions for new cities based on automobiles and traffic, identified as problematic for contemporary society (Southworth and Ben-Joseph, 2003:79). The streets as a container for the technological advancement regarding vehicles and automobiles, became dehumanised. The vision was labelled as "the death of streets", a famous phrase mentioned by Le Corbusier. To him, the modern street should be identified as a new "organ" and equipped like a factory (Le Corbusier, 1929:131). A considerable number of scholars quoted Le Corbusier's statements to express their rejection of the street made by him with the examples such as "there should not be such a thing as streets" or "The streets are obsolete" (Moughtin, 2003:129).

Notwithstanding, the vehicle traffic was indispensable for him and the other architects. The mental denotation was impossible to be cleared from the mindset dealing with the age of automobiles. Hence, it is evident enough to conclude that he meant the traditional forms of streets (Dzwierzynska and Prokopska: 2017:2). As a result of this creed, streets became an abstract space that tried to separate themselves from pedestrians and humans. Buildings played the central layers in modern notions as they were more involved with the individuals than the streets.

The hierarchy of models from Clarence Perry's model in 1927 for Radburn as the first city of motorised vehicles (Alexander and Nastrasony, 2007:6), the radiant City in 1931 with the elevated streets and Hilberseimer's hierarchical system enlightened the pre-depicted image of rationalisation and standardisation. These models and their mental output concluded in a more specialised street like highways, separated from the pedestrians. The more industry-oriented vision toward streets, the broader and more straight they are.

In physical terms, land use, user density, and interaction between pedestrians and vehicles influenced the streets in size and form (Suchmacher, 1986). The abstract notions of streets were the aims of post-modern critics like Jane Jacobs and Charles Jencks since the link between social and physical importance in streets lacked enough harmony. Street functioned as a central element for urban

communities throughout history, and it appeared necessary to observe the street as critical as the public spaces. The modern street, a dangerous place without attraction, made people stay in houses (Barnett, 1982:168). Furthermore, the notion of elevated streets was rejected in the United Kingdom as they were in harmony with the cultural norms (Moughtin, 2003:130).

For Jacobs (1965), the rejection of streets by CIAM members resulted in the death of cities. To her, if the city's streets are interesting, then the city looks interesting. The continuity regarding the modernisation of streets, from the renaissance to *Ringstrasse*, Hausmann's boulevards, *Ville Contemporaine* and *Radieuse* by Le Corbusier and hierarchical streets, Hilbersmeier exhibited the desire to host automobiles and cars in a utopian framework. A metamorphosis was made from the entangled social centres to dehumanised wide and rectilinear generations.

The thesis will identify the wide and straight streets of the case studies as a factor of modernising them.



Figure 1-69- Areal view by the Radburn plan by Clarence Perry in 1927 – (Source: by Southworth and Ben-Joseph, 2003)

# 1.7. Traditionalism and Modernity: The Framework for the Next Chapters

The brief discussion on terms such as "tradition", " traditional", " traditionalism" as well as " modern", " modernity" and " modernism" brought about a etymological observation, philosophical perception and historical reading of them. The aim was to converge them with their mutual genotype being functionable enough to continue the discussion on the further steps. Hence, in the upcoming chapters, the sensitivity to differentiate them decreases since an arrangement was shaped regarding their correlations. Even so, the chapters time, humans and place have to face subjectively with them regardless of general image of the terms in architecture and urbanism. Thus in the chapter II, the correlation between the term "new and old" and "modern and traditional" seems to be indispensable. Furthermore, the chronological perspective of the chapter manifests the modern urban development. Also, socio-political stance in a historical context could elaborate the role of institutional and political powers shaping traditional and modern developments. In chapter three, the modus operandi of each generation and architects is the central core of discussion. In this regard, traditional architecture and urbanism converges more with

advocating vernacular qualities in architecture or criticism of the modernity. On the other side, architects and planners influenced by the modern movement could imply the modern scope. Understanding the design philosophy and its representation in the projects could generate the generations orientation toward traditionalism and modernity. In chapter 4, the task has a more concrete while syntactic approach. Traditionalism and modernity are evaluated with both the temporal developments and the keywords identified in the chapter 1.

Vertex	Traditionalism	Modernism
Time	<ul> <li>The correlation between the terms "past" and "tradition"</li> <li>Development of cultural and religious institutions over time</li> <li>Socio-political incidents empowering traditional architecture</li> </ul>	<ul> <li>The correlation between the terms "new" and "modern"</li> <li>modern urban developments through time</li> <li>Socio-political formation between state and society</li> </ul>
Human	<ul> <li>The architects advocating vernacular qualities in architecture</li> <li>The design philosophy supporting the importance of heritage and cultural preservations</li> </ul>	<ul> <li>The architects and planners advocating the principles of modern movement</li> <li>The projects necessitating the presence of architects practicing modernism</li> </ul>
Place	Keywords for traditionalism in architecture	Keywords for modernism in architecture

Figure 1-70- The intended traditionalism and modernism for each chapter

## 1.8. Literature Review and the Derived Roadmap

The first task was to track the subject as a whole structure. Based on this task, the efforts to reconcile modernity and traditionalism in the global term were the central core of the primary step. The second objective was to break down the subject to obtain detailed definitions and relationships. The key terms led the research into the previously introduced" triad of time, place and human" as critical realms of the research.

The place factor initiates the necessity for introducing two case studies. Considering the concepts discussed before, such as intersection, border, centrality, orientalism, and so forth, two cities were selected. Istanbul in eastern Europe, and Lisbon, a western city in Europe, are the appointed case studies for the research.

The thesis faces the critical stage of identifying the main keywords for modernity and traditionalism, which is essential for continuing the other parts. The realm of the research categorises the subject with the triangle of spatiality consisting of time, human and place. Conversely, the methodology exhibits an approach for scanning the hypothesis or answering the thesis questions. Hence, the central moment of discussion is how the triangle elements react and interact. This part links the theoretical and qualitative parts of the work to the methodology and expected results.

As discussed in the current document, the research variables are inside the time, human and place triangle (The T-H-P triangle). When the narrative order is dominant in every investigation and writing, then one observer (view) point is necessary. In that case, the viewing point will be frozen to analyse other points interactions (sometimes dialectic). As a result of this, there are three possible conditions:

- Time is halted (frozen). Now we should investigate the human and place
- Human is halted, indicating specific architecture or architectural generations. The first focus will
  be on the generations and then on overlapped individual scholars to avoid the broadness of the
  study.
- The place is Halted (frozen), meaning that case studies and their selected districts are the subjects, and the task is to concentrate on the act of humans during the time.

#### 1.8.1. Case Studies

Investigation of the architectural culture all over Europe, mainly in the visual borders and diverse physical and non-physical intersections, brought about a selection of case studies. Istanbul and Lisbon are the two ends of European architecture dealing with modernity and traditionalism. Moreover, understanding the behaviours of what is known geographically as the "in-betweens" seems necessary. It provides the attitude to process the possibility of following a deterministic model. Each case study needs to be investigated inside the T-H-P realm.

## The rationale behind case studies

Identifying traditionalism and modernity based on time as the dialectic of past and present (even future) is entirely inaccurate. Also, it is not only the battle between new and archaic. When the primary intention is to crystallise the structures of those concepts, then the reference for these two words, their role as centre and periphery and the moment, place and society of intersection matters. That does not mean the whole process of selecting the case studies is controllable and independent. Nevertheless, the entire rationale is raised by synthesizing the mentioned inside the triad of spatiality and the topics such as borders, intersection, and centrality.

Defining traditionalism and modernity is not the outcome of freezing only one vertex of the T-H-P triad. It is the result of the dialectic between freezing, which is stable. The synthesis of all realms obtains the dynamism to create a triangle as a trialectics<sup>13</sup>. This vision is helpful for a comprehensive definition of traditional and modern architectural spaces and their essential elements.

The literature review section addressed some notions of geographically addressing modern and traditional space and the concept reflected later in architecture.

For scholars influenced by the "colonial" and "post-colonial" states, the automatic reference to east and west arises and pops into the mind, leading everyone into the polarity of Eurocentric architecture academies in Europe and the Middle Eastern anti-material mindset licensed by religion in some perspectives. Even though that division may seem popular, the belief could still pertain forever. Therefore, this straightforward reference to modernity and traditionalism is inevitable as the primary image and assumption.

The second perception comes when the representatives of both sides meet each other. Hence, the intersection arrives at the critical point of discussion, enlightening the concept of borders. Then an important question waits to be answered. Which cities can manifest the image of intersection and

borders and even contain the symptoms of modernity and traditionalism in the T-H-P triangle? Therefore, there is no way to imagine Europe like a rope in an East-West direction. On the eastern side, Istanbul intersects Europe and Asia (even west and east). On the other hand, Lisbon is the west-east capital of Europe and the place where Africa, Europe and America meet, bearing its subjective tradition and objective modern space<sup>14</sup>.

## Istanbul inside the research triangle: an essay

Time as an influential factor for the perception and investigation of space deals with two critical points: first socio-political and second, the architectural periodisation, The Turkish independence war resulted in the republic of Turkey, and the military coups are socio-political turning points in life.

The architectural movement regarding modernity and traditionalism began a little bit before the century as the reformist groups called "The young Turks" (Hanioğlu, 2001) questioned the architectural dominant western styles and requested a more "classic" architecture defining their identity.

The reformation continued even in the 20th century until the end years of the 1920s. Architectural scholars say the period is known as the "first national architecture" (Bozdoğan, 2001:18).

Breaking from the fascination with classic Ottoman architecture and identifying a more "secular" architecture generated a second period known as the "second national architecture". The second national architects started to learn more about Turkish identity thousands of years ago, from *Hittites* to *Seljuks*. The experience lasted 20 years since it was practised without a precise result. This situation led to a more westernised architecture and an inevitable role of American and European financial corporations. Istanbul was the second priority since Ankara was appointed as the capital, and the memories of the previous dynasty had to be forgotten.

In the 1960s, the military coup era created more anxiety in societies. The socio-political crises produced a more vulnerable society towards modernity and traditionalism. Also, global criticism regarding modern architecture was not ignorable in Turkish societies.

Therefore, it is possible to visualise Turkey and especially Istanbul, in three different periods. The first period is between the latest years of the Ottoman Empire and a new republic (1908-1930). Also, the period was the moment for young Turks like Mimar Kemalettin and Vedat Tek and foreign architects like Alexandre Vallaury, August Jasmund, Henry Prost, Julio Mongeri, Raimondo D'Aronco and Bruno Taut, which will include more focused personalities in the following chapters.

The second national movement begins from the 1930s to the latest years of the 1940s with the target of secularizing the society and modernizing the country simultaneously with national tendencies. The era was for the architects like Sedad Hakki Eldem, Emin Onat, Seyfi Arkan and Vasfi Egeli

After the second national movement, companies like SOM entered Turkey. Turkish architects started cooperating with European and North American companies. Architects such as Turgut Cansever, Sedad Hakki Eldem, Behruz Cinici, and Cengiz Bektaş were the most noticeable noblemen and the concentration point for the thesis. Also, architects played a decisive role even in the period between the 1960s and 1990s.

Based on urban development during history, five zones will be investigated in a more in-depth view:

• The Historical Peninsula (Fatih)

- The Beyoğlu, Galata (Pera ) and Taksim zone is known for the place of foreign habitats
- Beşiktaş
- Şişli
- Üsküdar

In the beginning, six different parishes were selected. After deeper consideration, it was decided to concentrate on five different parts. The first motivation for such a decision was to ease the broad scope of such selection. The second ulterior motive is to generate the critical urban nucleus based on the historical maps. Moreover, the historians such as Çelik, Kuban, Bozdoğan, Yavuz and Tekeli try to look at these five parishes as a whole. Also, *Kadıköy* was part of *Üsküdar* until the 1930s, and since the designation of a masterplan for Istanbul had been a severe crisis for years, perceiving Kadıköy as a continuous part seems to be unclear. *Kadıköy* represents almost a similar character to Üsküdar as an Asian part. Nonetheless, like the other parts not observed in Lisbon, the thesis tried to involve a few projects in *Kadıköy* realised in the last years of the 19th century, such as Haydarpaşa medical school (university of health sciences) and *Haydarpaşa* train station in chapter two.

Period	Period	Generations	Architects
The First National architecture	(1908-1930)	The First generation	Alexandre Vallaury Raimondo D'Aronco Guilio Mongeri Vedat Tek Mimar Kemalettin Arif Hikmet Koyunoğlu
The Second National Architecture (1930-1950)	(1930-1950)	The Second Generation	Seyfi Arkan Sedad Hakki Eldem Emin Onat Vasfi Egeli
The Age of	(1950-2000)	The Third Generation	Behruz Çiniçi Turgut Cansever
Political Transition		The Fourth Generation	Kemal Ahmet Aru Dogan Tekeli Cengiz Bektaş

Figure 1-71- selected generations working in Istanbul for Human Section



Figure 1-72- Istanbul and the selected case studies

## Lisbon inside the research triangle: an essay

Understanding Lisbon's architectural and urban space and how it is conceived, perceived, and lived inevitably enters the taxonomy of place, time and human interaction as a trialectics system. Hence the research tries to investigate every three aspects and then synthesise them. Considering the time, focused historiography, inside the automatic periodisation (assuming the socio-political incidents as turning points), the interaction of place and humans generated distinct districts, making the urban fabric much more identifiable.

Given the concentration on the Human vertex of the triangle, the stratification mainly concentrates on noblemen, including politicians and designers ranging from urban planners to architecture, regardless of their political orientation. This kind of classification is more evident in Portugal as most periods were governed by an authoritarian government industrializing the country with the aid of technocrats. Finally, the place is the outcome neither without reference to traditionalism or modernism nor being recognised as a totality which is Lisbon (even as a metropolitan) or the neighborhoods.

Periodizing the city led the research into a political core and dominant force of the 20th century known as "Estado Novo". Hence the other periods appear pre- and post- to reinforce the architectural heritage of this regime. Pre- Estado Novo, as a short and brief period, will be the core of the investigation to know the city's context after King Carlos I's assassination (1863-1908) and the establishment of the first republic (Sardica,2011). After the coup and formation of new power in 1933<sup>15</sup>, an utterly significant era took place for even rapid modernisation of Lisbon. The city was monumentalised as a manifesto for a proud nationality and underwent numerous master plans.

In the late 1940s, some clear proofs of this critical era implicate the shift toward a more flexible system, distancing from a more oppressive ideology reflected in architectural space. For instance, the first national congress of architects in 1948 and then the "survey" project of 1955 to identify the regional architecture of Portugal were the two architectural turning points in the second half of *Estado Novo*. The global impact of regional-national and French-English planning dialectic did not appear deniable to Portuguese society.

The Post *Estado Novo* mainly discusses the situation that influenced the nation as the new republic formed. This thesis is a brief part moving forward toward the end of the century, although the exact political model continues to rule society. This era also ends with Expo 98 as the most important legacy, influencing the fabric before the beginning of the new millennium.

Besides rulers and political figures, architects and planners are the more influential characters in Lisbon. In this regard, four main generations based on typical classification (Tostões, 2005&2014) will be discussed. Also, a few architects will be outside the category as they are born before 1898 or after 1940, besides the foreigners. Moreover, some architects of the generations are the most important figures of each generation, and therefore, the central concentration will be on these noblemen. For instance, for the First Generation, architects such as Porfilio Pardal Monteiro(1897-1957), Jose Angelo Cottinelli Telmo (1897-1948) and Cassiano Branco (1897-1910); for the second generation, the architects such as Francisco Keil Do Amaral (1910-1975), João Guilherme Faria da Costa (1906-1971), and Fernando Silva (1914-1983) will be most critical figures.

Later on, the architects like Alberto Pessoa (1919-1985), Pedro Cid (1925-1983) and Nuno Teotónio Perreira (1922-2016) will be essential examples for the third generations. The last identified generation includes critical characters like Nuno Portas and Vitor Figueiredo (1910-2004).

The architects born after 1940 will also be in the study, such as Manuel Vicente, Raul Hestness Ferreira and Gonçalo Byrne.

The thesis focuses on Lisbon rather than the metropolitan area. Subsequently, overlapping of urban morphology during history went toward the selection areas like *Baixa Pombalina*, *Alfama*, *Mouraria*, *Castelo*, *Graça*, *Intendente*, *Arroios*, *Anjos*, *Alameda*, *Areeiro*, *Alvalade*, *Olivais Norte*, *Olivais Sul and Chelas*.

In the beginning, fifteen municipalities such as Parque das Nações, Marvila, Beato, Penha de França, São Vicente, Santa Maria Maior, Estrela, Campo de Ourique, Santo Antonio, Arroios, Campolide, Avenidas Novas, Areeiro, Alvalade and Olivais were selected. However, to decrease the broadness of the chapter and the advice derived from the CAT presentation, it was decided to analyse the thesis into six categories. Nevertheless, the most critical ulterior motive was overlapping different historical maps to reach a development axis moving through different parts of the cities.

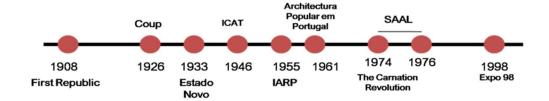


Figure 1-73-Timeline for Lisboa

Period	Generations	Architects
First Republic (1910-1926)	The Architects in Republic period	Miguel Ventura Terra, Raul Lino, Alvaro Augusto Machado, Jose Luis Monteiro,Adães Bermudes
	First Generation Born between 1898-1900	, Porfilio Pardal Monteiro, Jorge Segruado, Luis Cristino Da Silva, Jose Cottinelli Telmo,
Military regime and Estado Novo	Second Generation 1910	Guilherme Faria da Costa, Francisco Keil do Amaral, Inacio Peres fernandes Fernando Silva
(1926-1974)	Third Generation 1920	Ruy Jervis d'Athougia, Alberto Pessoa, Pedro Cid, Nuno Teotonio Pereira, Fernando Tavora, Sebastião Formosinho Sanchez, Manuel Tainha
The Carnation Revolution	Fourth Generation and further 1930	Nuno Portas, Francisco Silva Dias, Tomas Taveira, Goncalo Byrne, Manuel Vicente , Raul Hestness Ferreira, Alvaro Siza
Beside the Category  Jean Claude Nicolas Forestier , Étienne de Gröer, Donat Alfr Agache, Hermann Distel, Konrad Wiesner		

Figure 1-74- categorised generations of architects and planners working in Lisbon



Figure 1-75- Selected neighborhoods in Lisbon



In this chapter the time is halted, freezed and limited by the periods based on the previous historical stratification. In this regard the reaction of human toward place (case studies) is explained in this part.

## 2. Time

## 2.1. Halting (freezing) "Time"

What will the central perspective be if freezing the time factor is possible? Freezing time can make the other factors dynamic. Therefore, the interaction between society and place has to be investigated. Yet, Human and Place as the dynamic vertex have to be limited to avoid the broadness of the thesis. Also, putting different moments of frozen time can provide a sequence of moments. Again, the prevention of the broad scope freezing every year in time is not possible, which is why freezing time concludes to stratified decades or a specific period of twenty or 30 years. Abstraction, after all, is inevitable in architectural science. However, on the other side, concreteness is addressed. To sum up, halted time represents the "status quo" of the interaction of human and place( city) as in different segments of time divided by periods.

Figure 2-1- Freezing time diagram

## Which Status Quo?

Freezing time provides a section from the city or case study. This section can be anything; the typical example is 2d representations or plans. What are the main criteria for these sections? It could be critical societal events, such as an architectural event, socio-political anxieties, revolution, etc. These turning points make the selected period more recognisable. Indeed, freezing the time will illuminate the socio-political status of the city and the roles of architects and planners in shaping the city. That is why one can trace the establishment of the city's traditional and modern layers and the feature of time, considering traditionalism and modernity. The schematic representation shows that different time sections can manifest diverse stories of a city and its development. In simpler terms, the halting time is a brief historical narrative of how specific case studies developed.

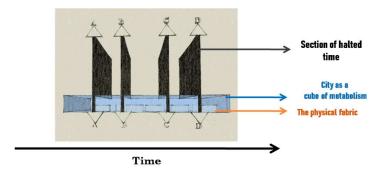


Figure 2-2- The visual image for status quo regarding spatial triangle

## 2.2. Time-Lisbon

#### 2.2.1. Lisbon before Estado Novo

A halted time before a critical socio-political incident conveys the historical narrative of interrelated layers. These layers include the interaction of place and people, such as urban quarters, socio-political reality, diverse classes, architects, and approaches toward the urban environment city.

The years before the 20<sup>th</sup> century have witnessed an enlargement similar to other European countries and their capitals. In the 1890s, the population of Lisbon increased from less than two hundred thousand to about three hundred and sixty thousand (Silva,1997:15). Later on, the official announcement represented around 80000 inhabitants increase in the first decade of the 20<sup>th</sup> century, similar to the last decade with a 20 per cent rise (França,1978:72).

Simultaneously the reckless industrialisation of the 19<sup>th</sup> century continued in the new era. Besides its possible outcome, the population growth and the amalgamation of these two paradigms resulted in the capital's urban development. However, the industrial increment could be the cause of the population growth.

What was the legacy that the new era inherited? The reminiscent of urban fabrics occurred since the post-1755 earthquake era when almost the whole city ought to be rebuilt. The *Pombaline* advancement founded a rational and specifically "enlightened absolutism" (Walker,2015:322) platform for a city. This perspective moved further toward the 19th century, regardless of the political anxieties afterwards. Later, it appeared that shaping Lisbon was influenced deeply by international paradigms, taking place in all European capitals. If it is possible to use the so-called term "the architecture of the city", coined by Aldo Rossi (1931-1997) being in line with scholars such as Camillo Sitte (1843-1903) and Ludovico Quaroni(1911-1987), Lisbon inherited the rationalism of the *Pombaline* era in the 18th century and the progressively orthogonal *Haussmannian* ambition of 19th century.

The socio-political reality in Portugal unveiled the desire to achieve a republic regime since there was a debate between the monarchy and Republican Party. Besides this informal and gradually formed ambition, even before the 20<sup>th</sup> century. The city was adapting to forming different classes resulting from higher rates of immigration, and the architectural problematic was the product. By placing this situation in time, the problem could be called "the question of styles" Raquel Henriques da Silva (1997) merged this title with another title known as "the uncertainty in architecture". In other words, even in a progressivist atmosphere, Lisbon witnessed the global problem of styles in the 19<sup>th</sup> century, transmitted to the new era. Putting these global issues with other cases like "inhabitation of the classes" possibly generates the amplified necessity of urban models to serve the classes. In this regard, the problem of styles had to domicile the proletariat and the distinctive bourgeoisie stages. One of the fundamental problems was accommodating the proletariat living in the old neighborhoods of medieval origin.

This class awareness was transmitted to the architects; despite the seemingly progressive character of

the urban fabric. However, the social context did not sound monotonous. The national identity was in jeopardy since the traditional neighborhoods were left aside. This crisis regarding history and identity similarly arose in many European cities, making society find the solution to revive the lost, hidden and required one. The historical investigation in the 1870s made the ethnologists research cultural sources of Portuguese society (Santos,2012).

One of the significant problems of pursuing cultural resources in terms of time belongs to the beginning point of pure identity. Also, it refers to the *loci* filled with pure physical examples that the inhabitants practice in their everyday life or it had been a memory. Since the desired memory is collective, the required identity is national without overlapping foreign cultures. This formula for seeking the Portuguese-ness made the ethnologists like Rocha Peixoto (1866-1909) investigate the north, where the official paradigm of the state is born without any alienated or mixed layers. However, no matter how pure the sources might look, they never represented all parts of the Portuguese state. The southern part became the central investigation theme, inheriting more diverse cultural layers registered and turned into the spirit of place. Raul Lino's investigation of Southern Portugal and his journey to Alentejo and Morocco were influential (Almeida, 1970:38).

Besides studies on places for identifying culture, specifying the period was another attempt. There had been an attachment to reviving the glorious period. Hence, studying the 15<sup>th</sup> and 16<sup>th</sup> as a glorious period for the Portuguese was critical to reflect the successful moments other than the vestiges of ancient Lisbon and the organic neighborhoods with curvy alleys.

Apart from ethnology, in that era, style as the content of representation had been the dominant mindset to materialise the cultural demands of Portuguese society. In this regard, several styles were on the agenda to absorb the continuous essence of Portuguese-ness. Among those, It seemed that the Romanesque architecture felt as a more true national than late gothic or Manueline, which might obtain some other late gothic examples in a broader European context (Silva, 1997).

The central aspiration in the city did not only refer to class awareness and public cultural desire. Progressive ideals for Lisbon formed the visions of the noblemen in the second half of the 19<sup>th</sup> century. In this regard, the universal role of schools like *École Nationale des Ponts et Chaussées* and *École de Beaux*-Arts *de Paris*, in shaping the capital is indispensable. They made their mark in the country's and capital's urbanisation with the footsteps of critical urban planners and architects such as Frederico Ressano Garcia (1847-1911), Miguel Ventura Terra (1866-1919) and Manuel Joaquim Norte Júnior (1878-1962).

The schools, as mentioned above, with the Portuguese graduated architects, were in line with the rational urbanisation started in the previous century. The authentic way for them to develop was the dominant global mindset formed in French schools, despite the pluralistic taste that the 19<sup>th</sup> century witnessed. Therefore, the global uncertainty was transmitted to the Portuguese society on the notion of style as plural modes of presentation or the authentic approaches toward an architecture with significant figures like Viollet-le-Duc (1814-1879).

On the identity concerns, two distinctive opposing factors were initiated: The urban paradigm scenography on one side and ruralizing with its specific aesthetic containment on the other (Silva, 1997:17). In the broader term, it can be identified inside Francoise Choay's category of progressivism

and culturalist (Choay, 1965:31-108). The critical representative of culturalists was Raul Lino against the graduates of Beaux-arts such as Ventura Terra. However, the source of this dichotomy is not certainly local or a translated mere global dilemma. Also, it was not certainly imported to society since even the culturalists like Lino were influenced by the revivalism of prominent personalities like Albrecht Haupt and the pioneers of the arts and crafts movement like John Ruskin (1819-1900) and William Morris (1834-1896).

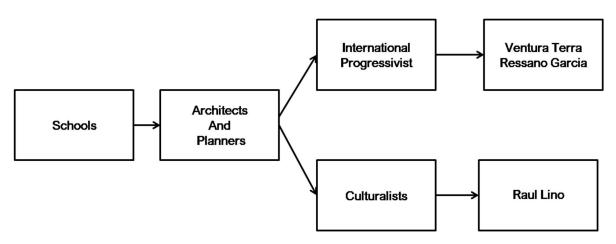


Figure 2-3- Culturalist and Progressivist Queuing in architects

The 20<sup>th</sup> century inherited the uncertainty marched by revivalism, eclecticism and historical solicitude as a step toward Art Nouveau. Such discourse entered the architectural podium earlier in Northern Europe countries like Belgium and France, along with structural values and formal rigor visible to grasp in the architecture of 1900 (Silva, 1997:16).

As mentioned before, when it is possible to halt time, the main objective will be to investigate society's status quo, including the public and noblemen, and then their interaction with the place. In the previous sector, different perspectives were explained, like the formation of classes, the respective desires for the development of Lisbon, the influence of styles and schools, and their products as a dichotomy initiated by architects and planners. However, it is critical to know how the city was developed.

The perceptible phase of modernity in Lisbon was sensed in the 1870s. In addition, the desire was implanted in the second half of the 19<sup>th</sup> century (1859) by designating boulevards for most researchers. The beginning points of this impulse occurred in 1885 with the inauguration of *Avenida da Liberdade* as a cause for transformation and demolishing the public promenade known as "*Passeio Público*", designed previously by Reinaldo Manuel (1731-1791) in 1764 (Silva, 2006:127).

The general outlook was to modernise the city from *Rossio* to *Campo Pequeno*, in line with the development toward the north. Based on the study entitled "General plan for improvement of the capital" (*Plano Geral Dos Melhoramentos da Capital*) was set up to accomplish this need under the authority of Ressano Garcia in the years between 1874-1909. The development of Paris influenced him, instituted in the Napoleon III era, executed by Georges-Eugène Haussmann (1809-1891). It was the turn for Lisbon to shine and witness the transformation after the developments in Paris and Barcelona. It is critical to refer to the French capital since the tragic effect of the *Paris Commune* in 1871

(Bernstein, 1952) disrupted urban progress. It also resulted in the staying of prominent personalities like Ressano Garcia to concentrate more on what was physically shaping the capital. He studied various facilities such as pavements, sewers, street profiles, landfill supports and viaducts. Based on the decree-law of 9 August 1888, the state was responsible for the vast allotment operation. It paved the way for vast developments on large scales and contexts, specifically hygienic (França, 1982:74).

Besides the urban development, the most significant project shining in the scripts written by historians belongs to the "New Avenues" (*Avenidas Novas*) to urbanise the zones surrounding the Liberdade Park (later on called *Parque Eduardo VII*). This approach prolonged Ressano Garcia's dream in the 19<sup>th</sup> century to come true. The spaces surrounded by *Avenidas Novas* consisted of two phases. The first phase consisted of three-floor buildings with large windows trying to gain the attention of the street view. In the second phase, buildings with five or more floors were constructed to meet the required densification (Silva, 1997:19).

The state was in a vulnerable economic and cultural situation. However, several neighborhoods appeared along *Avenida Liberdade*, such as the aristocratic *Barata Salgueiro* neighborhood functioning as an urban artery with the older zone of *Rato* and *São Mamede* on the side and *Largo de Camões* with *Conde Redondo* Street on the other (Silva, 2000: 129). *Avenidas Novas* made the focus toward North and Northwest of the *Marques de Pombal* rotunda, with the two essential avenues of *Antonio Augusto Aguiar* extending toward the *Praça de Espanha* and *Fontes Perreira de Melo* avenue, with 873 meters in length and one in the third of the *Avenida da Liberdade* (França,1982:75).

These two avenues were the beginning points for the general improvement plan of 1901-04 approved by the Lisbon city council. Several points include the central targets such as sanitizing the city, widening the city, installing infrastructures, wide avenues with tree-lined sidewalks and extensive gardens, large blocks of densified collective housing and neighborhoods appropriated for the upper bourgeoisie were considered (Silva,2006a:219). The neighborhoods between these two avenues were designed along with the eastern side of *Fontes Perreira de Melo* avenue and the growth of the *Picoas* zone with the completion of *Duque de Loulé* avenue passing over *Andaluz* going up to *Cruz do Tabuado* toward the *Camões* high school (França,1982:73).

Later on, the project reached another crucial avenue of Lisbon, inaugurated with the name of *Ressano Garcia* in 1904 and nowadays is known as the Republic Avenue (*Avenida da República*) and the critical roundabout of *Duque de Saldanha* with the statue built in 1909. The *Avenida da República* and its development at the beginning of the 20<sup>th</sup> century led to another parallel avenue such as *Antonio Avellar* (changed to *Avenida Cinco de Outubro*) and Pinto Coelho (*Defensores de Chaves*) extended until *Campo Pequeno* and *Entrecampos*. The growth of the neighborhoods formed in an almost orthogonal shape reaching toward *Jose Martinho da Silva Guimarães* avenue, now known as "*Avenida Berna*", opened in 1897(Silva, 2006:128).

Before the execution of *Avenidas Novas*, the neighborhoods like *Estefania* and avenues such as Dos *Anjos* was functioning on an urban scale, subsequently, another link from the riverside to the north seemed crucial. Therefore, *D<sup>a</sup>. Amélia* Avenue was opened on 20 July 1903, giving importance to other symmetrical streets, such as *Francisco Sanches* and *Antonio Pedro*, inhabiting the Petit-Bourgeoisie class (França, 1982:75).

The name for the avenue was changed to *Almirante Reis* in 1910, bearing the same destiny as the others. The first decade of the century was the outcome produced by the predominance of deductive-whole planning started from the 19<sup>th</sup> century rather than the details, although critical buildings, whether they show a monumental or residential character, were constructed.



Figure 2-4- The Intersection between Berna and Republic Avenue- (Source: CML, 1909)

The political instability from the regicide in 1908 to the implantation of the republic on 5 October 1910 did not transform the general outline. The new political regime initiated by republicans continued the previous municipal plans to expand other areas of the city, such as *Campo de Ourique*, *Almirante Reis* and *Bairro das Colonias* and *Alto de S João* a priority for hygienist projects (Mangorrinha, 2007:122). Furthermore, it was the time to focus on designing buildings reflecting the republic's ideals since the previously founded Valmor Prize (*Prémio Valmor*) in 1902. Also, the "Portuguese Architecture" magazine in 1908 motivated the architects such as the republican Ventura Terra, Norte Junior, *Adães Bermudes* and *Nicola Bigaglia* (1852-1908) to participate in numerous projects, mainly in Art Nouveau (Silva, 1997:19). Therse projects were articulated along the Grand Boulevards, which influenced the *Avenidas Novas* the most (Fernandes et al.,1991). Also, the law of expropriation in 1912 provided the opportunity to introduce new buildings and even new zones like two social districts of *Ajuda* and *Arco de Cego*, which was continued in 1919 another time under the Decree-Law No.5397 to construct 100 houses (Mangorrinha, 2007:124).

Among the vast developments in all parts of the capital, a few areas, such as *Alto do Pina*, were mediocrely urbanised (França, 1982:77). The occidental zone covering the districts *like Lapa/São Bento*, *Principe Real/Praça da Alegria*, *São Mamede*, *Campo de Ourique*, *Amoreiras* and *Campolide* witnessed

a minor occurrence of architecture in the period between 1900-25. The central and Eastern Coastal part was the zone enriched most with architectural representations (Fernandes et al., 1991: 37-55)

It is possible to claim that the first two decades of the 20th century were the years of the dilemma for a city with the highest rate of migration, coincident with industrial development that activated zones like *Xabregas* and *Alcantara* (Silva, 2000:7). Indeed, what happened in Lisbon was quite the opposite with the other capitals as the older parts did not interfere the districts were being initiated (Silva, 2006a).

Even the places like *Rossio*, *Praça do Comércio* and in general, spaces built and enriched physically in the *Pombaline* era remained structurally and geometrically without significant change. In other words, the rational grid structure conveyed the modernised view of *Baixa Pombalina*. Also, such a view confirmed the Progressivists mindset, like *Ressano Garcia*. Notwithstanding, the critical problem was still unresolved. It overlapped the political, economic, and architectural layers. The urban models instigated in the 19<sup>th</sup> century and continued in the new era did not represent pluralistically enough since they favor the bourgeoisie, especially the upper level (França, 1982:76).

The housing for Proletariat was a severe potential for a crisis since the majority of the working class lived in *Alfama*, *Mouraria*, *Madragoa*, *Bica* and *Boavista* (Silva,2000:7). The class struggle also concerned traditional and modern fabrics in the city as the Proletariat living in older vestiges were deprived of life quality improved in the newly constructed parish of *Avenidas Novas*. Moreover, the placement of class generated a spectrum where the upper Bourgeoisie with a higher income occupied the areas starting from *Avenida da Liberdade* to *Avenida Berna*. The Pettit Bourgeoisie lived in a zone extended from *Rua da Palma* to the north with the centrality of *Avenida Da. Amélia* or *Almirante Reis* (Fernandes et al.,1991:47). Accordingly, the working class settled in the adjacent eastern neighborhoods with the organic structures.

One of the significant ambitions for political instabilities could address this situation. Nonetheless, the republican taste toward architecture tends to be toward time. Consequently, its current standard product possibly is reflected globally. Even the consensus constituted by the term "*Casa Portuguesa*" as a mediator for finding Portuguese resources compatible with the progressivist's contemporary desires did not end in a sufficient target. It is preferable to call 1900-25 a "time of transition", coined by Raquel Henriques Da Silva (1997).

A transition is often between two dominant forces; the former has lost its power due to inefficiency or theoretical paradoxes. The "latter", as the desired norm, is structuralised by the noblemen in society. The transition necessitates a period in that uncertainty takes place inside it to look for a new systematised order. The "former "was the age of historical, artistic values advocating traditional values with a cult for memory replacing the "latter" consisted of progressivism introducing the prior generations of modernism trying to substitute rural with urban scenography. The period between them is the pole between these two ideas that typically coincide with political incidents. Given the overall view of the city, the detailed dichotomy of modernism and traditionalism includes different points.

One of the significant branches of the so-called debate is the memory that creates two poles of nostalgia and humiliation of unknown past and present periods. This attempt occurred in most societies experiencing rapid changes. Another detailed critical scope addresses the modes of representation, facilitating the transition in architectural and urban space. For instance, representations from historical

revivalism and Eclecticism from Neo-Moorish to Neo-Romanticism, Neo-Manueline, Art Nouveau, and Art Deco exhibit this transition more evident than the other examples. The other critical element refers to the role of schools that made the architects and planners practice the accepted approaches imposed by time.

Although the educational use of "international" dates back to the second and third decades of the 20<sup>th</sup> century, the centrality of the French Beaux-arts School in creating a new standard was crucial besides the influence of critics such as William Morris and John Ruskin. The following place-oriented dichotomy identifies the dialectics of center versus periphery and urban versus rural. Such so-called dichotomies could magnify cultural and economic layers.

# 2.2.2. 1925-1930- Socio-Political uncertainty leading toward the preliminary wave of modernism

The pragmatic planning system before the 20<sup>th</sup> century by Ressano Garcia facilitated the foundation for improvement plans. It introduced *Avenidas Novas* with grand boulevard networks linking the old and new parishes on one side and structuring the framework, which is still comprehensible nowadays. Nevertheless, the hygienic urban networks contributing to life quality resulted in a need to fill the empty lots between them. Consequently, the architectural orientation influenced by stylistic concerns was not on a particular path. However, the overall scheme framed by progressivists with the leadership of Ventura Terra was more concrete to grasp and build upon than the culturalists to shape the capital.

The stylistic plural languages were still alive, presenting themselves in pale contrast to a unifying language. As a result, in a consensus by the majority of architectural historians, the first wave of modernity began in the mid-1920s by the young generation of architects such as Luís Cristino da Silva (1896-1976), Porfírio Pardal Monteiro (1897-1957), Cottinelli Telmo (1897-1948), Veloso Rais Camelo (1899-1985), Cassiano Branco (1898-1969), Carlos Ramos (1897-1969), Adelino Nunes (1903-1948), Paulino Montes (1897-1988) and Rogério de Azevedo (1898-1983) with the commitment to the official architecture of the nation (Marina and Andre,2017:48). Nevertheless, the coming-of-age moment for these architects began a little bit earlier since the primary signs emerged in the early 1920s with buildings and houses designed by Pardal Monteiro along with *Agência Havas* by Carlos Ramos as one of the first office buildings in 1922 (Tostões, 2004:106) and also Miguel Nogueira's *Casa dos Açores* in (1921) (Licodari, 2017:7). These buildings represented the new architectural aesthetics freed from decorations with large functional windows.

In parallel with the development in architecture taking place in the capital and other cities, the transition in politics faced a severe and ending phase. On 28 May 1926, a period of sixteen years of the republican regime was ended by a military coup<sup>16</sup>. The central target was to end the political and social instability accepted by most of the population (Caldas, 1998:26).

The role of the modern architectural generation in a newly formed regiment had never been in interfering mode at all. The architects born between 1896 and 1898 reflected a united desire for modernity despite plurality. It can be traced in its superstars' characters, such as Porfírio Pardal Monteiro's efficiency-oriented design based on classical orders of architecture, Carlos Ramos independency toward flexible design and Cristino da Silva's creativity with fragility toward a positive sense of values of fine arts

(Tostões,2004:106). Hence, this young generation of architects was one of the crucial tools for the new political state, desiring to manifest the regime's role in shaping the Portuguese cities.

International development made its mark in diverse ways once again. In 1925, following Gropius's designation of the Bauhaus school in Dessau, Luís Cristino da Siva designed the *Capitólio* project (finished in 1929) to represent the central aspects of critical changes in Portuguese architecture. This significant turning point in architectural history introduced rationalised and purified geometric shapes of pavilions. The project was in coincidence with the international exposition of modern industrial and decorative arts in Paris in the same year (Caldas,1998:23). It gave the opportunity also for the architects like Luís Cunha, Pardal Monteiro and Cassiano Branco to acknowledge Le Corbusier and Melinkovs's works (Carvalho,2018:160).

These two turning points in architecture were combined with the transitional reality of Portuguese society. Also, it paved the way for the new language of architecture with the rationality of construction to be inside the eminent grammatical role. Since every transition has an inevitable product, the indispensable outcome was the technology and the instigation of new materials, specifically the reinforced concrete that, according to Cristino da Silva, modern architecture was recognised for this reason (Tostões, 2004:109-110).

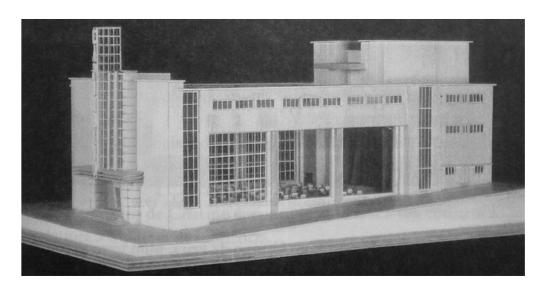


Figure 2-5- The model for Cinema Capitolo based on its initial design- Source (Rodolfo, 2002)

The context of architectural and urban works in an authoritarian regime needed a link to connect itself with the architects and planners. This link is simple to find in terms of the time of place. Regarding the time, it is noticeable that the regime was framed in a clear time frame. On the other side, the architects are the generation with the central concern of meeting the current needs produced at that time. In the matter of place, the rejuvenated capital necessitated designing new buildings and appropriating spaces. Moreover, it created an obligation to collaborate with the political power to reach a consensus.

However, considering the humanistic role looks to be vital. Thus, the link in this perspective ought to be a technocratic character. That is why one of the most notable characters of the era is Duarte Pacheco, the former dean of the Higher Technical Institute (Instituto Superior Técnico-IST), later on, the Ministry of education and the ministry of public works. Pacheco was the essential character for the country and the capital to connect the rejuvenated city with the young architects. This link occurred through the institutional relationship between him and Pardal Monteiro as assistant architect in IST, even though the political priorities and architectural desire might not be in the same direction (Caldas, 1998:27-28).

These architects made the marks by publishing new magazines to practice, at least theoretically, the incoming architectural outline with the magazines like Arquitectura, co-founded by Jorge Segurado (1898-1990) in 1927 together with Presença (Licodari,2018:8), Arquitectura Portuguesa and Construção Moderna (that did not last long in those years). However, the magazine Arguitectura did not manifest a detailed view with a less theoretical background without imposing a substantial influence compared to those occasionally reviewed in the newspapers out of curiosity (Caldas, 1998:23). Although the projects designed before the 1920s remained in their eclectic scheme, the second half's project consisted of a purified and simplified geometry affected by Art Deco. The intersection between the Ministry of public works, ephemeral modernism, and oppressive regime demands is a monumentality that the period evidenced in public buildings. The most critical example on an urban scale is Instituto Superior Técnico, designed by Pardal Monteiro in 1927. This project ended one of the fringes of Avenidas Novas, with cubic pavilions confirming the free façade, the wide window, and the limited use of decorations in the central pavilion. Almost the same year, Carlos Ramos, another critical figure of this generation, designed the "Radio Pavilion" - the building dedicated to radiology, in Instituto Português de Oncologia - with a radical attitude toward smooth surfaces (Tostões, 2004:111). Cais do Sodré Railway station was built in 1928 by Pardal Monteiro. Cottinelli Telmo designed the South and South East Fluvial station in the same year, inhibiting reinforced concrete art deco examples from amplifying the effect of the first wave of modernism in the Portuguese capital.

Even though the critical theme in these years represents monumentality, the government also executed the general improvement plan (*Plano Geral de Melhoramentos- PGM*) (Marat-Mendes and Oliveira, 2013:96). In February 1927, the Municipal Council elaborated a general plan for the improvement of the city. This plan concentrated on initiating and extending green places. Their perimeter ran through *Avenidas Novas*, *Avenida da República* and *Campo Grande*. Then it turned to the limit of *Carnide* and *Benfica*, descending through *Monsanto* to *Alcântara* for utilitarian purposes such as landscaped areas, sport complexes and homes. The planning approach introduced by Forestier in 1928 for the first time was inspired by Garden city since the title of the project represents it precisely known as *Ville De Lisbonne*, *Etude de la* continuation *de la L'Avenue de la Liberté et de L'amenagement d'un Grand Parc avec cites-Jardin et Terrains de Jeux* (Casals Costa,2009:26).

The fundamentals of essential phases in the next decade were the synthesis between modern monumentality and a moderate utilitarian plan.

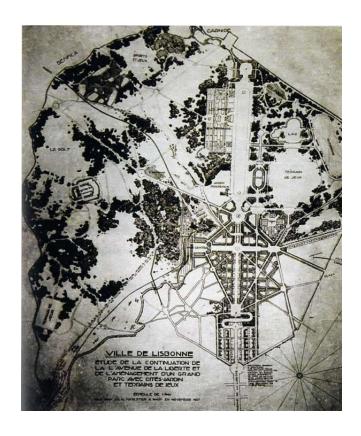


Figure 2-6-Forestier's project for Lisbon in 1928 based on his sketches-( Source: Morais and Rosetta, 2005:31)

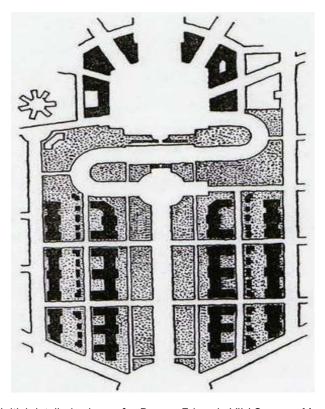


Figure 2-7-Initial detailed scheme for Parque Eduardo VII-( Source : Montez,1935)

## 2.2.3. The 1930s- Outlining the state policy toward architecture and urbanism

Whenever a phenomenon or a term acts in an ephemeral and transitory mode, it does not necessarily convey the mode in the specific discipline. For this reason, the first wave of modernity in Portugal necessitated scrutiny by the public and a newcomer state to inspect the performance inside a specific defined place centralised by nationalism. Also, ephemeral modernity is expected to be rejected by a definitive form of presentation, which the state started to recognise. The *Estado Novo* regime may not present a concrete requirement regarding architecture. Conversely, the regime knew what to denounce: stateless and denationalised architecture (Brites, 2017:106). The seemingly problematic requirement was to identify the national architecture. On one side, the technocratic approach of Duarte Pacheco valorised the young generation of modern architects. On the other side, the secretariat of national propaganda- *SPN/SNI*, under the leadership of Antonio Ferro dictated its idealised policy. This establishment aimed to monitor its contribution to popular culture and Portuguese architecture (Marina and Andre, 2017:48). Nevertheless, a compromise between the young architects and the state's idealist image occurred with the numerous public works were constructed.

The previous approach moved on until 1932. In the same year, Antonio Oliveira Salazar concluded that the Portuguese architects had not been successful enough to generate an architectural manifestation like what happened in Italy (Carvalho,2018:154). In 1933, the regime was officially defined, and the powerful authority rose to claim the official architecture of *Estado Novo*. Duarte Pacheco was a recently appointed minister of public work responsible for redefining the city and the public buildings. Consequently, he made the general urbanisation plans mandatory in 1934 for agglomerations with more than two and a half thousand inhabitants (Caldas,1998:25).

The building activity grew from the beginning years of the decade up to the years following the second world war. This growth was because of the *Estado Novo*'s inherent centralised nature in decision-making even before its official announcement with *Casa da Moeda's* design by Jorge Segurado between the years 1933-1941. It was an integrated program exhibiting the administration building with the desired utilitarian character.

The construction of public works was accelerated since the new wave of expropriation was executed. As a result, one in third of central Lisbon was expropriated starting in 1932 and continued until the beginning years of the next decade. The government was able to sell the land valued for the urbanisation projects (Carvalho,2018: 150). Moreover, the monumentality approached the fading tonality of Art Deco since buildings expressed the integration between Art deco and European artistic Avant-Garde. For instance, the Eden project (specifically the second project, which was never conceived) or Hotel Vitoria by Cassiano Branco support this integrated image of Mallet Stevens' works with the decorative Art Deco with apprehensible and reproducible formal code (Tostões,2004:115). This diverse context of monumentality, such as cinemas, schools, universities, and even churches, did not accomplish state desire. The culturalist and progressive dichotomy between Ventura Terra and Raul Lino were transformed to enter a new phase of modernity and traditionalism with a political taste. The harsh

criticisms and polemics occurred toward the inauguration of the *Beja* High School in 1935 and *Nossa Senhora de Fátima* church which was started in 1934 and completed in 1938.

These polemics changed the direction toward the axis of modernity-nationalism resulting in the intervention of the cardinal patriarch of Lisbon (Caldas, 1998:30). Later, the influential article entitled "let Portuguese houses be made in Portugal" was published in the newly merged magazine *A Arquitectura Portuguesa e Cerâmica e Edificação* in 1939 (Marina and Andre, 2017:52).



Figure 2-8- Casa de Moeda by Jorge Segurado in 1941 – (Source : CML)

The problem always persists through the perception of time and in the political scope for the Fascist regimes refers toward the notion of the past, as Pedro Vieira de Almeida (1998) confirms, extended from the beginning of the century even before.

The critical question is about the notion of the past in these political regimes. It indeed encounters the periodic taxonomy asking, "which past?", "which period?" and "which architecture?" Furthermore, the regime neither affirms the former past in the linear perception of time nor rejects modernity's "present presence". What will be the most suitable approach in this situation? The answer lies in the matter of place. If the architecture answer were modernity, it would be tempered by Portuguese contexts such as adaptability to climate, landscape, and national life (Ferro, 1949:38), avoiding internationalism's alienation.

The dominance of domesticity could be investigated reanalysis of the "Português Suave" by Jose Manuel Fernandes (2003) in three different types. Although the term was introduced in the primary years of Estado Novo and not by Jose Manuel Fernandes, the works recover this terms in a comprehensive approach which is in line to define the required traditional image by the Portuguese society. The first type of neo-traditional vision of regional nature as a continuity to "Casa Portuguesa" was practised by Raul Lino, although he was influenced by British national craftsmanship and the eclectism of Albrecht

Haupt (1852-1932).

On the other side, the second approach is national-neo classicism, like what was practiced in the German Nazi regime. The last way is neo-conservatism, linked chiefly to the religious buildings and churches reviving the medieval Romanesque, Gothic, Joanine, Pombaline and neo-Baroque (Marina and Andre,2017:53-54), valorising the Catholic morals by Estado Novo (Carvalho, 2018:12). However, avoidance of alienation was not radically severe regarding architecture and architects. For instance, Pardal Monteiro was sent to Spain, France, Belgium, The Netherlands, and Italy to study harbors, ports, and maritime stations in 1936 to prepare the architects to make more professional choices on the periphery of Europe. Cottinelli Telmo travelled to the Netherlands, Belgium, and Germany to study prisons in 1935. Adelino Nunes visited the United States to investigate post offices in 1938 and studied theatres in Italy (Carvalho,2018:152).

Besides the traditional formation of the country in the leadership of *Estado Novo*, the expropriated lands needed planning. There were no noteworthy planning phases on urban or neighborhood scales until the last years of the 1930s. Lisbon was expanded toward west to *Belém, Restelo* and *Ajuda* areas, simultaneously with the initiation of an highway, the *Autostrada do Sol* (Licodari, 201:11)

The signs of radical change appeared in 1938 when Cristino da Silva designed the *Praça de Areeiro*. This project was the most emblematic example of nationalist architecture proposed by the regime using stone frames, pilasters and wrought-iron balconies (Teotónio Perreira,1997:34). In the same year, the preliminary work entitled "Elements for the study of the Lisbon urbanisation plan" was published by Antonio Emilio Abrantes and suggested that Gröer prepare a master plan in the 1940s (Marat Mendes et al., 2010:6).

Salazar desired to ritualise the nation in the German approach and image (Almeida, 1998:95) since German architects and engineers were called to Portugal at the end of the decade. As a result of this policy, various projects like Jamor Sports complexes and the national stadium were constructed as a link to Lisbon, along with the Hospital designed by Hermann Distel (1875-1945).

This centralised strategy did not avoid the regime's perspective on getting support from other countries. Duarte Pacheco felt the lack of successful planners since he invited urban planners and designers like Marcelo Piacentini (1881-1960), Calza Bini(1881-1957) and Giovanni Muzio (1893-1982), Donat-Alfred Ágache (1875-1959) and Étienne de Gröer (1882-1952) to enrich the regime's language of national resurgence (Gori and Carvalho,2020). From 1938 onward, modernity's pure and independent traces reached a critical phase. Cottinelli Telmo replaced Pardal Monteiro as the closest architect to the state and ministry of public works to achieve the desired character of national architecture.

The state-architecture dialectic represented neither the isolated and neutral character nor the oppressive and interfering image of Nazi Germany in this decade. The government proposed a modernisation limited by public and traditional rituals. The architects contributed to conceiving a compromised model responsive to the imposed modernity by time and place-oriented climatic contexts. Notwithstanding, two concepts of Sweet (*Doce*) and Soft (*Suave*) architecture moved on in the upcoming decades.



Figure 2-9- The Front page for one of the first issues of the magazine "Arquitectura Portuguesa"- (Source: FAUP archive)

#### 2.2.4. The 1940s: Socio-Political Versus Architectural Moult

The 1940s was the most critical decade for the state on one side and the architects and planners on the other. The *Estado Novo* needed to form and practice a new feasible perspective on political discourse and architecture. Architects and planners needed to outline the incoming path, whether imposed by the regime or the universal standards of modernism. Apart from this image, political imposing was the dominant force in the years turning to the 40s.

The critical moment as an endeavor for the definition of official architectural models refers to the 1940 Portuguese World Exhibition<sup>17</sup> aiming at the exaltation of the nation, the past and the glory of the empire and traditional popular culture. Consequently, the exhibition was a laboratory that included a series of public facilities (Marina and Andre, 2017:53). Also, cultural references were erected in *Belem* area to represent the spaces to converge the present to the mystified memories of the past with the centrality of the *Império* square. The square hosted thematic pavilions, recreated styles of past, popular villages or the ethnographic vestiges of the overseas colonies (Tostões,2004:119).



Figure 2-10- Portuguese world Exhibition in 1940 – (Source: CML)

The 40s witnessed the continuous and parallel themes of "Português Suave" (Soft) and "Português Doce" (sweet) Portuguese. The influence of this decade was the most (Marina and Andre, 2017:48). According to Jose Manuel Fernandes, the third and final phase of the "Soft Portuguese" took place between 1938 and 1943. This period officially made ephemeral modernity decay. In an architectural context, the "Português Suave" happened between 1940 and 1955 (Fernandes, 2003).

The humanistic role in this decade is inevitable since the death of Duarte Pacheco in 1943 marked a new age in monumentality. Furthermore, the 1940s was the coming of age for the second age of architects and planners born around the 1910s and graduated around the 1930s, such as Franciso Keil do Amaral (1910-1975) and João Guilherme Faria da Costa (1906-1971).

The primary critic of the regime and even Salazar himself was placeless of the proposed architecture by the first cycle of modernism, such as climatic problems leading to exploration of the central source. The latter impulse was an approach between time and place or amalgamation.

The monumental instances were the public work programs advanced toward a new historicist and regionalist vocabulary, as a classic narrative close to the Nazi and Fascist models of the time. Such programs contributed to the "policy of spirit" of restoration toward specific history and a rural folkloric

Portugal (Tostões, 2004:118).

The German approach was still more valorised between two Italian Fascism or Nazi models to articulate the new urbanism for the regime (França, 1982), as outlined in two significant points. First, the clarified trace was clear to grasp by Cristino Da Silva and *Praça do Areeiro* (the designing process started in 1938) and later on, with his work on the plan for *Praca dos Restauradores* in 1946. The second refers to the presence of Albert Speer to exhibit at the Great Exhibition of Modern German Architecture to confirm this model as a mandatory one in official order (Teotónio Perreira, 1997:35).

This approach generated crucial projects in the 1940s on an urban scale. The initial drawings and texts for promoting the master plan in 1938 defined the new limits of Lisbon, transforming the previous rural areas (as a result of one in third expropriated) to built-up areas. Henceforth, the social quarters such as *Bairro do Alvito, Encarnação, Alto da Ajuda, Alto da Serafina, Alvito* and *Madre de Deus* and the vast woodland park known as the Monsanto park were initiated (Tostões, 2006a:24).

The most critical neighborhood planned besides *Areeiro* belongs to "Alvalade", designed by João Guilherme Faria da Costa (1906-1971) as a collaborator with his supervisor at IUP (*Institut d'Urbanisme of the University of Paris*), Etienne De Gröer and with the participation of architects such as Keil do Amaral, Jacobety Rosa and the engineer Guimarães Lobato (Camarinhas, 2011:6).

The plan "Sitio de Alvalade e Areeiro" was finalised in 1945 (Preliminary studies were conducted in 1942). The plan consisted of 12000 dwellings for 45000 inhabitants placed on 230 hectares of land to relocate the people living in older districts like "Martim Moniz" (Beja,2009:583-584). The neighborhood was defined by eight housing cells separated by roads and organised around schools (Barroco, 2012:1). The renovation was another part of the plan since de Groër created a regulating law primarily known as the "central zone" or specifically Baixa (Marat Mendes and Sampayo, 2010:7).

The designed and developed neighborhoods like *Areeiro*, *Alvalade* and the urbanised *Restelo* and monuments like IST, the *Joanine* style *Fonte Luminosa* combined with green belts and ring roads to constitute the Grand Master plan of Lisbon in 1948.

After World War II and Hitler's German defeat, the Salazar dictatorships were declared neutral. They began to turn toward the allies to ensure the regime's survival post-war (Teotónio Pereira, 1998:35). Accordingly, the initial signs of democracy shone. If the architecture had to adapt to the state's requirements, modern architecture was confirmed politically to solve the housing problems and land use planning. In 1946, *ICAT*<sup>18</sup>s (Cultural initiatives- Art and Technology) appeared in the capital with the leadership of Keil do Amaral believing in the debate and transforming the old *Arquitectura* Magazine in parallel with *ODAM*<sup>19</sup> (Organisation of Modern Architects) in Porto (Tostões, 2005: 25).

Until the mid-1950s, the architects were unified and opposed the stylistic restrictions imposed by the government. They promoted the principles of the Modern Movement and the Athens Charter (Licodari, 2017:14). These institutions led to a turning point in architecture regarding traditionalism and modernism. The memorial exhibition for 15 years of public works (1932-1947) led to the official recognition of *ICAT* and *ODAM*. Subsequently, freedom of expression calls for industrialisation and architects' participation in resolving housing problems irrespective of style (Tostões, 1998:42).



Figure 2-11- Lisbon Master plan in 1948- (Source: CML)

As explained, the decade was the time to form a new dialectic between the state, architect-planners, and society. Modernism declined in the 30s and started to revive in a more substantial wave. The state approached a more democratic stance of Estado Novo, affecting society and even class consciousness. Unlike in the previous decade, there was a balance regarding the concentration on urban and architectural policies.

There was a shift from the centre to the periphery due to expropriation. The situation was apart from the small beginning of the transformation from national language to regional vocabulary. The regional *Pousadas* (State-owned Inns) were launched to look for traditional motifs (Tostões,2004:122). Hence, modernism appeared in a new moult with the second cycle of reinforced concretes, and traditionalism was about to take distance from national centrality.

### 2.2.5. The 1950s: The Decade of Rupture

The 1940s witnessed the formation of a new system following the post-war period that marked the end of the public works cycle, the new age of economic policy for the Estado Novo, and the second period of the concrete cycle with Ferreira Dias was started (Tostões,2004:124).

The ICAT was modified at the beginning of the decade, followed by the national congress in 1948 exhibited and practiced the confirmed modernity. Various factors shaped this continuation of the dominant modernism. One of them belongs to the *Arquitectura* magazine was the instrument for the dissemination of what has been produced again with works of young new generations as well as famous figures of international modernity like Giuseppe Terragni (1904-1943), Marcel Breuer (1902-1981), Erich Mendelssohn (1887-1953), Ernesto Rogers (1909-1969), Richar Neutra (1892-1970), Walter Gropius (1883-1969), Alvar Alto (1898-1976), Le Corbusier and so forth (Ibid,2004:124).

The other impulse was the radiant form derived from the Athens charter and its radical urban planning principles that attracted the architects to follow its four functions (Tostões, 2005:25). Furthermore, standardisation and modulation related to multi-unit housing were other tools to achieve the rationalised utopia for the architects.

Alberto Pessoa's study in the National Civil Engineering Laboratory (*LNEC*) and its publication on "the Modulation of Construction" is based on the international adoption of the 10cm module. The study was an example of enabling disciplined freedom in the technique and art of construction (Farinha, 2016:40). The role of expositions was indispensable to introduce the proposals to the experts, the public and the state. They indeed represented a concrete road map for the future. In particular, the Portuguese industrial fair in 1952 paved the way for the architects such as Keil Do Amaral to design his most international work adapting modern principles to Portuguese technological reality. The General Expositions of plastic arts, between 1946 e 1956, made its long-term influence to characterise the neorealistic tendency (Tostões,2004:128&133).

Previously, the clear image of the special bond between religion and the regime was amplified through the polemic raised in *Nossa Senhora de Fátima's* church. However, a new synthesis was established between society's progressive and religious values. This synthesis also motivated the progressive Catholics to liberate themselves from the former system by organizing the Renewal of Religious Art (*MRAR*) at the begging of the decade.

The desire showed by *MRAR* was tested in a peripheral location with the examples like *Moscavide Parish* Church by Freitas Leal and João de Almeida, Chorão Ramalho's (1914-2002) cemetery chapel in the *Cemitério das Angústias* and *Igreja de Águas* designed by Nuno Teotónio Pereira (Tostóes,1998:47).

The movement consisted of architects, visual artists and theorists such as João de Almeida(1927-2020), Nuno Portas (1934-), Nuno Teotónio Pereira(1922-2016), Erich Corspeius(1929-2009), Diogo Pimentel (1934-2019), Luíz Cunha(1933-2019), António Fereira Leal (1927-2018), Manuel Cargaleiro(1927-), Jose Escada(1934-1980), Madalena Cabral (1922-2015) and Maria José de Mendonça (1905-1984). Inside this framework, the First Exhibition of Contemporary Religious Architecture was established in 1953 in *São Nicolau* Church. This movement could be identified as a synthesis between progressive construction and religion as an institution of traditionalism. Moreover, the mutualism between modernity and traditionalism was suggested by Nuno Teotónio Perreira as a third way to have a critical view of modernity to control it. This perspective led to the possibility of rehearsing how to bridge modernity and vernacular architecture (Tostões, 2004:128).

There was a shift from the centre toward the periphery combined with confirmation of the contemporary. This transformation could solve the disability of objectively perceiving the" past" and practising its intended form. Also, this argument can illuminate the role of other cities like Porto in dissolving the concentration on capital. Notwithstanding, on the urban scale, the principles of modern urbanism were still on the agenda with the emergence of *Infanto Santo* and *Estado Unidos da* América avenues, the *Estacas* residential complex located in *Alvalade* and *Olivais Norte*. The preliminary studies of *Tenente Valadim*, which was changed to *Infante Santo* avenue, were revised between 1953 and 1955 by the architects like Alberto Pessoa(1919-1985), Hernâni Gandra (1914-1988) and João Abel Manta(1928-).

This project included the architectural project of different building types with diverse functions, such as shopping, low-rise housing buildings, mixed-use towers and five housing units (Farinha, 2016:39).



Figure 2-12-Infanto Santo Avenue- (Source: CML,1957)

Sebastião Formosinho Sanchez (1992-2004) and Ruy Jervis d'Authouguia (1917-2006) designed the *Estacas* Neighborhood. The surrounding avenues such as Brasil, Dom Rodrigo da Cunha and Estados Unidos America are also the most important examples of using modern movement principles such as the urban structure, parallel buildings, perpendicular buildings and *pilotis* being influenced by the Athens Charters (Barroco,2012:9).

The confirming wave of modernism in architecture and urbanism followed by Faria da Costa's plan continued persistently until the mid-1950s. Despite such consistency, the regionalist approaches entered a more serious phase, being presented as identity condensers of Portugal's cultural diversity (Brites, 2017:110). The *Inquérito à Arquitectura Regional Portuguesa*<sup>20</sup> (Survey on Portuguese Regional Architecture) was the decade's most crucial turning point between 1955 and 1960, divided into six regions (Maia,2012:252).

This work was published in the 60s and impressed Salazar himself, being a basis for an open, active and healthy regionalism according to Keil do Amaral (Keil Do Amaral, 1947).

Besides the Survey project to promote regionalism, just in the period modernism liberated and justified itself in Portuguese society, the route was set for moving toward the locality against modernism's placeless and indispensable international face.

Among the appearance of critical writings on modernity, the question raised by Ernesto Rogers entitled "Crisis or continuity of modern architecture" and published in the Italian magazine "Casabella" in 1957<sup>21</sup> affected the architectural society the most. The influence was visible in the third generation of architects

to pursue equilibrium between contents and forms (Tostões, 2005:28).



Figure 2-13- A residential complex in Bairro das Estacas – (Source :Aefaup.com,2021)

From 1956 onwards, a young generation of architecture born in the 1930s, such as Frederico Santa'Ana, (1933-1960) Carlos Duarte(1926-2019), Pedro Vieira de Almeida (1933-2011), Hestnes Fereira (1931-2018), and Nuno Portas (1934-), commenced a new phase in the *Arquitectura* magazine. Subsequently, the output was a critical publication spreading the roots of modern movement from the cultural and historical point of view (Tostões, 2004:141).

Although the central focus was on Lisbon, as the result of emerging regionalism internationally and nationalism was diminished. Important monuments were designed at the end of the 1950s. The *Calouste Gulbenkian* Foundation became the reference for the country's architecture bringing together a group of professionals like Alberto Pessoa(1919-1985), Pedro Cid (1925-1983), Ruy Jervis D'Authouguia (1917-2006), who remained faithful to the rationalist proposals together with adapting toward the site. The project comprised the integration of horizontal volumes confirming the continuity of the site and the green space.

This project could convey various meanings at the end of the decade. For instance, the sense and taste of monumentality were translated in contemporary times to harmony with human marks, ideas and collectively integrated objectives. On the other side, this project can portray Cultural and Progressive mindsets (Tostões, 2003:110).



Figure 2-14- Calouste Gulbenkian Museum and Foundation – (Source: FCG archive)

### 2.2.6. The 1960s-Toward a new rupture

The 1960s was a crucial moment for the country to face diverse problems. In the first place, the country had to deal with the outbreak of independence war in the African colonies such as Angola in 1961, Guinea in 1963, Mozambique in 1964 and some regions located in India like *Goa*, *Damão* and *Diu*, affecting the political hegemony and economic stability of the country<sup>22</sup> (Fernandez, 1997:55).

The 1960 census showed that the population of Lisbon had increased by about 20,000 in the last decade, from 780,000 to 800,000. Moreover, the urban agglomerations of the suburb boosted from 345,000 to 530,000, conveying a critical message for the planners (Keil Do Amaral, 1969, 13-26).

A decentralised philosophy has emerged all over the world in the previous decade. As a consequence, its evidence was the cities converting into suburbs.

Right at the beginning of the decade, with the publication of *Arquitectura popular em Portugal* as an essence of the 1950s investigation of regional architecture, the periphery was an inevitable priority to develop. *Chelas* and *Olivais* were the intersections of contemporary needs raised in the country. These projects also indicated social housing and urbanism discourses marked in the decade's first half (Tostões, 2004:146).

By extending the city toward the northeast, the *Olivais* project was divided into two parts: North and south, being developed at different times. *Olivais Norte* covered a smaller area of 40 hectares for 8500 inhabitants, while *Olivais Sul* was located in a site with 186 hectares for 40000 inhabitants functioning as a satellite city (Tostões, 2003:108).

Rafael Botelho (1923-) and Carlos Duarte (1926-2019) materialised the spirit of the English New Town concept, developing the complete picture of architectonic trends of the time as a laboratory of urbanism and construction technology (Tostões, 2004:146).

In general *Olivais Norte* project manifested the disappearance of the traditional street, the separation of pedestrian and mechanical movement and a more modern image. However, this formula was not an absolute road map for *Olivais Sul*. This project focused on the integrity between the green spaces and residential areas in favor of the public interest. It was influential in reflecting a small amount of the sense of community. The other critical project of the decade was the master plan for *Chelas*, approved in 1964. The aim was not to follow the cellular approach in *Olivais* but to form a linear, clustered, more compact and multifunctional model to advocate a sense of community and neighborhood (Heitor, 2016:62). The transition process started from *Olivais Norte* to *Sul* and then in *Chelas*.

The project was an example of the topics discussed in decades as another uncertainly haunting Portuguese architecture and witnessed several changes since the residents opposed projecting. The outcome was the fragmented distinct parts and later phased intervention. Each defined the distinct spatial character as interconnected and isolated (Ibid,2016:62).

The *Chelas* project led to the most critical discourse of disintegration in Portuguese architectural and urban ambience. It subsequently brought about the problems such as the lack of empty spots in the historic centre, demolishing the older buildings, the inability of poorer classes to accommodate, preservation of the historic centre and the most important of all, the dispersed population in the suburbs. A similar situation was described a year later by Antonio Freitas (1961) in "*Arquitectura*", entitled "The Clandestine neighborhoods (*Bairros Clandestinos*)", with examples picturing the illegal construction outside the central core with poor quality.

Based on the articles written in the beginning years of the decade, it is possible to note that the concepts like "urban centres", "places", "collective spaces", and "housing" formed the discussions. Notwithstanding, if these words became problematic, the solutions would not be abstract since these issues were interrelated.

While historical integrity was a key factor for the new architectural generations and writers like Francisco Silva Dias (1962-) by presenting the urban transition from *Alfama* to *Olivais* (Correira, 2018:84). The economic problems and housing were at the same time problematic. Therefore, it could be concluded that part of the criticism and problems were indispensable due to topographical characteristics. Economic problems leading to interrupted and fragmented phases began in 1967 and continued for years (Heitor, 2016:62).

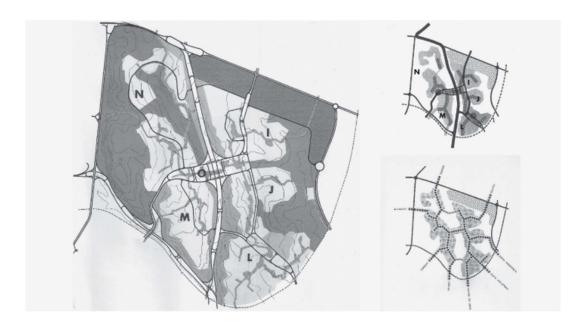


Figure 2-15- Chelas comprehensive plan – (source: Heitor, 2016 & CML, 1964)

The architectural culture was experiencing a new transition phase compared to the confirmation of modernity. The new perception of the link between architecture and urban public space was initiated with examples like the "Pink Panther" building in Lisbon designed by Byrne/Cabrita (Tostões, 2005:35). The regularity and authenticity derived from modernity fell into question at an international level with the debates taking place in CIAM. Later, the publication of the Venice Charter in 1962 influenced Portugal to mark the start of postmodernism in the country.

Besides the suburban development and the concentration on historical ensemble, the coastal urban growth led to the development of real estate, tourist developments, and hotels (Tostões, 2004:147). Two books and their influences on the Portuguese architectural culture, specifically in Lisbon, are vital in 1966. "Complexity and Contradiction" by American postmodernist Robert Venturi and "The Architecture of the City" by the Italian Aldo Rossi made their mark on jeopardizing the functionality of modern architecture.

Altogether with the articles written by the Portuguese before and after, like architecture for today (*Arquitectura para Hoje*) in 1964, "The City like Architecture (*A Cidade Como Arquitectura*) in 1969 by Nuno Portas and Lisbon, a City in transformation (*Lisboa, Uma Cidade Em Transformação*) by Keil do Amaral in the same year (Tostoes,2005:34). Besides the writings focusing on architecture and urbanism, several articles and books regarding urban sociology found their way to Portuguese society, such as "The Right to the city" (*Le Droit à la Ville*) by Henry Lefebvre in 1968 (Correia,2018:86).

It was evident to perceive the influences on the several new edifices in the city, such as the church of Sacred Heart of Jesus, The *Sassoeiros* convent and *Almada* church, and the commercial buildings like Franjinhas by Nuno Teotonio Pereira (Tostoes, 2004:151). The decade was the time for the coming of age for young architects like Raul Hestness Ferreira (1934-) studied with Kahn and Manuel Vicente, unlike the artists who preferred to emigrate due to political repressions (2004:146). As time progressed, this repression declined with the death of Antonio Salazar in the ending year of the 1960s with the presidency of Marcelo Caetano and the period known as "the *Marcelist* spring" (*Primavera Marcelista*)<sup>23</sup>.

The initial and conditional freedom, along with the conduction of the Master plan for Lisbon (PDCL) by George Meyer-Heine (1905-1984) and the national meeting of the architects in 1969, was the latest vital development of the decade concerning the country the capital.

### 2.2.7. The Post-revolutionary period

The 70s were divided by a central political turning point into two points: before and post-carnation revolution in 1974. Social housing projects that started in the second half of the 1950s and the beginning of the 1960s faced significant delays due to the unstable socio-economic situation the country was experiencing. The significant parts of *Olivais Norte* and *Sul* were developed in the 60s. Nevertheless, most of the neighbourhoods in *Chelas*, such as clusters I, J, and N2, began to be constructed in the 70s. Later, clusters L, N1 and M were completed in the 1980s and 90s by diverse groups of architects (Heitor, 2001).

The western side of the city encountered Lisbon City Council commissioning the detailed plan for Restelo EPUL in 1970. This plan substituted Zinho Antunes's drawing in 1964, ranging from detached houses to high-rise blocks with a maximum of four floors (Tostões,2021:91). The street-corridor system was the dominant identifying element for Restelo, and a gallery system distributed the collective blocks while the patio-houses were diffused with the yards (Ibid,2021:91).

The other recent urbanisation project apart from Portela was *Telheiras Sul* as cooperation between OTAM-Interlande coordinated by Gilles O'Callaghan being assigned to the architects Pedro Vieira Almeida (1933-2011) and Augusto Pita(1941-), and the outcome was the detailed plan for *Telheiras* approved by the CML in 1974 in an area of 63.5 ha including 3300 dwellings for 14400 inhabitants (Tostões and Ferreira, 2021:65-66). The revolution influenced the plan based on new regulations in 1978, substituting the housing categories with a single category. Such an approach was egalitarian enough to promote a hybrid approach of traditional urbanism and the solutions derived from the modern movement (Ibid,2021:66).

The revolution years brought about the importance of concepts such as the right to housing, which became the most potent voice. Consequently, SAAL (Local Ambulatory Support Service) operations were the popular result of this demand dividing the program into north and south (Tostões,2005:35), which was established by Costa Bras as the minister of internal administration and Nuno Portas as the secretary of state for housing and urban planning in July 1974.

Apart from the participation of distinguished figures such as Alvaro Siza(1933-), Fernando Tavora (1923-2005), Sergio Fernandez (1937-), and Alexandre Alves Costa (1939-) in the north, well-known architects such as Manuel Vicente (1934-2013), Gonçalo Byrne (1941-), Francisco Silva Dias (1930-), and Raul Hestnes Ferreira (1931-2018) participated in the projects centred in Lisbon and the southern parts. The boosting number of the rural population in the 1960s and the returning population after the revolution and independence of African countries were the dynamics for the appearance of slums.

In Lisbon, the main concentration was on the periphery, and subsequently, 25 areas were central spots for the designing teams considering the metropolitan area. A few projects include housing in *Curraleira-Embrechados* by Jose Antonio Paradela, and Gratava Filipe, *Bacalhau-Monte Coxo* by Manuel Vicente

and *Quinta das Fonsecas-Quinta da Calçada* by Raul Hestnes Ferreira were the noticeable projects designed in central Lisbon being integrated with the whole urban design (Bandeirinha, 2011:364).

The temporary effect of SAAL was recognised as a critical moment since it imposed the concepts like independency from the formal presupposition, participation and low-rise apartments with medium or high density (Baia,2011:66).

Despite the success of SAAL in northern Portugal with the dominancy of Porto school starring Alvaro Siza in international architectural environments, the Lisbon projects did not require attention. The political and economic pluralism became a potential threat to dismissing the Nuno Portas campaign and later ended the whole project on 27 October 1976 (Ibid, 2011:66) as the municipal power rose.

The second half of the 70s witnessed the reopening of the two architectural schools in Portugal, in 1976 after the educational system was revised. Also, theoretical-wise *Arquitectura* magazine reappeared in 1979 (Almeida, 1998:74).

The European influence on abandoning the values of innovation and reintroducing the problems of recovering the past brought about its validity. This point could be considered as a solution to design problems of the present affecting the capital itself in the first place. Also, it caused the arrival of figurative historicism and vernacularism as popular sources in parallel with revivalism in the form of re-establishing the roots of modern architecture, according to Rogerio Vieira de Almeida (Ibid,1998:74).

The cultural exchange between Portuguese architecture and the global discourse became much more consolidated. In the second half of the 1970s, Portuguese architecture commenced being diffused in European countries like France, Germany, Spain and Italy thanks to the contribution the significant figures such as Nuno Portas made to publicise diverse modes of representations (Furtado,2013:2-3). Conversely, postmodernism at its global level was assimilated in Lisbon at the beginning of the 80s precisely. It was an atmosphere that reflected a depolarisation between the discourses regarding national traditionalism and modernism were depolarised.

It is indefinite to identify if all the possible traces of postmodernism were imported as an intentional transmission of the discourse. Moreover, tracing the subjective influence of international characters distanced from the modernist standards was not definite. Nevertheless, the second possibility tended to impose itself as a primary motivation since architects like Louis Kahn conceived a bridge between the past and present, facilitating an even more tenacious position toward historicism by Robert Venturi. This perspective could be reflected in the modus Operandi of the architects like Raul Hestnes Ferreira and Manuel Vicente (Figueira, 2009:51).

Apart from Hestnes Ferreira and Manuel Vicente, it was Tomas Taveira's role illuminating the new image portraying a specific type of critical eclecticism being started even before the 80s with the architectural language beyond the postmodernism in the projects such as *Valentim de Carvalho* store (1966-1969), residential buildings in *Chelas* (1975-1978), the building at D. João XXI (1978) and *Complexo das Olaias* (1979-1984) (Ibid,2009:125). All these buildings reflected diverse languages from Pop experimentalism to metabolism, urban scenography, and high-tech allusions (Ibid,2009: 25), which might depict a faraway perspective from the questioned modern architecture of CIAM in the Post-war discourses.

The *Depois Modernismo* (after modernism) exhibition in January 1983 could be addressed as the possible moment of an official welcoming for postmodernism in the capital and other cities to promote

plural visions. However, it was not supported by the architects of Porto due to the denial of any post-modern possibility in the country confirming the Portuguese difference. Furthermore, it was not supported by the architects such as Tomas Taveira. He preferred, apart from the participating young architects such as Manuel Graça Dias (1953-2019) and João Luís Carrilho da Graça(1952-), following different approaches later (Almeida,1998:77-80). Nevertheless, the ephemeral impacts were clear enough to grasp in the *Amoreiras* complex as one of the most critical projects of the 80s, along with the BNU buildings advocating a reintegration of history and narrative way of presentation through free use of colour and decoration.



Figure 2-16- The Amoreiras shopping center by Tomas

If the cities, until the first half of the 1980s, were not following a concrete way of development, the regulations considering urban subdivisions were implemented to promote the first legal instruments on land use and heritage (Almeida,1998:80).

One of the practical approaches toward a trialectic production of traditional space could be addressed inside the heritage and its preservation, rehabilitation, and remodelling. The 1980s was also the temporal barrier for heritage, with two different turning points. The first was the XXVII council of Europe Art, science, and culture exhibition in 1983, resulting in intervention in Lisbon's architectural monuments, such as *Casa dos Bicos, by Manuel Vicente and José Daniel Santa Rita*. The next crucial point in Lisbon's history was, without doubt, the Chiado fire in 1988 and its reconstruction by Alvaro Siza, an architect recognised for his works in the north until then. Previously the urban renewal project for Martim Moniz was organised in 1981. Despite announcing Daciano Da Costa's design as a winning project, it was not executed.

The intervention project for *Casa dos Bicos* began in 1983 by restoring the facades based on a panel of blue-glazed tiles from the 18<sup>th</sup> century. The interior space intersects mediaevalist ornamentation with

expressionist images embedded inside a post-modern lexicon (Figueira, 2017:238).

As mentioned before, the reconstruction plan for *Baixa-Chiado* by Alvaro Siza was a significant event in the last years of the 1980s regarding the modern and traditional dialectics of the site. The primary objective was to recover the original feature of the Pombaline plan amplifying the inherent modern quality of the site based on the principles being practised in 1758 (Tostões,2021:23). For this reason, reinforcing and integrating with the whole urban fabric seemed to be central apart from the restoration of buildings and approaches toward amplifying the functionality.

The diversified environment in the 80s end especially after 1985, provided the spaces for reappearing the architects such as Teotónio Perreira and Fernando Tavora, and Vitor Figueiredo introduced in the 50s and 60s (Almeida, 1998:81). The faculty of Psychology of Lisbon university, by Manuel Tainha (1922-2012) in the latest years of the decade was one of the most crucial examples of this re-emergence manifesting a synthesis of various generations with different ideas.

All concepts regarding the urbanism of the capital were connected to a decentralised context. Before the revolution, George Meyer Heine was appointed to take responsibility for a new master plan for the capital in 1963, and then his plan was finalised in 1967. However, it took eleven years to formalise (Oliveira and Pinho,2008:91). In the 1980s, the conservative union inside the city hall used the plan in a mandatory manner for a temporary period until 1990, when a new plan by Bruno Soares has implemented the rules for occupation, land use and significant changes of urban territory (Ibid,2008:92-93).



Figure 2-17-Centro Cultural de Belem

The new urban approach supported the policies regarding riverfront development as neglected spaces during the 20<sup>th</sup> century, coincident with the joining of Portugal to the EEC. The amalgamations of diverse factors, such as the globalisation of Portuguese architecture, and the city's propensity to its traditional heritage, necessitated the existence of new projects. These factors and the city versus reconciliatory river policy concluded the works in the latest years of the century. This vision continued in the opening years of the 21st century like Centro Cultural de Belem (1988-1992) by the Italian architect Vittorio Gregotti (1927-2020) in cooperation with Manuel Salgado and later on the Expo98<sup>24</sup> with the *Pavilhão de Portugal* by Alvaro Siza (Tostões,2021:21-23).

The urban waterfront regeneration, including expo 98, followed a linear pattern hosting an ensemble of monuments like Oriente train station by Santiago Calatrava, *Parque Ribeirinho* and *Parque das Nações*. Pedestrian routes were prioritised to promote cultural activities and leisure spaces, contributing to integrating the site with the city (Ochoa,2022:3). Indeed, a combination of diverse qualities like public-private spaces, pedestrian-car networks, green spaces and accumulative modern and traditional experiences of the century occurred. Nevertheless, it is not still connected to surrounding municipalities such as *Marvila* and *Olivais*.



Figure 2-18- Portuguese Pavilion at expo 98 by Alvaro Siza

The post-revolutionary years provided a framework for various experiences fluctuating between architecture's modern and traditional qualities. The revolution's first years were the initial practice of participatory approaches raised from the critique of modern movements embedded in a political transition and instability. The 1980s was the decade of all possible architectural practices ranging between the mentioned modern and traditional points of view, as Rogerio Vieira de Almeida (1998:81) identified almost all possible approaches:

- Historicism with formal elements in the works of Tomas Taveira and Luís Cunha,

- Pop eclecticism in the works of Manuel Vicente, Antonio Marques Miguel and Manuel Graça Dias
- The extension of the field of intervention to border areas of architecture
- Large urban buildings, exacerbating the technological and formalist components in the works of Tomas Taveira and Manuel Salgado)
- Pragmatic eclecticism between neomodern and critical regionalism is present in the works of Jorge Gigante, Manuel Tainha and Gonçalo Byrne)
- Radical modernity considering the sense of place and intervention scale in the buildings designed by Fernando Tavora, Alvaro Siza, Souto Moura and Carrilho da Graça)
- Complex and accessible typologies, abstractly or figuratively, are witnessed in the works of Carillho da Graça, Souto Moura and Manuel Graça Dias (Ibid,1998:81).
- The stylistic diversity in the architectural presentation did not last very long. A more logical vision was obtained whether in the remaining cells of *Chelas* and the sites occupied for Expo 98 fluctuating between the approved concepts of modernity and conservative necessities of the urban fabric.

### 2.3. Time-Istanbul

## 2.3.1. The 1900s- The New Era for The City: The Synthesis Between the State and Time

Reviewing the incidents happening in the Ottoman capital in the 19th century is crucial to understand the capital situation. It is obligatory to remind that several stages of reform took place almost a century before to modify living circumstances. After the death of Sultan Mahmud II, several reforms were set out by the declaration of an imperial command by his brother Abdülmecid (1839-61), entitled the *Tanzimat* (Reorganisation) Period. This decree was presented by the young Ottoman bureaucrats headed by Mustafa Reşid Pasha, the ministry of foreign affairs. (Inalcik, 1964).

This reform seemed utterly essential for the government to reorganise overcrowded Istanbul by prioritizing hygienic issues, building quality, public transport and street pattern based on the standards implemented in the European capitals. The *Tanzimat* period facilitated the situation for Istanbul to enter a new phase of westernisation, specifically in French cities' ambience. It was the consequence of the journeys by the young bureaucrats to European capitals such as Paris, Vienna, London and Berlin, leading to modern public buildings such as schools, post offices and train stations.

Besides, the role of a cosmopolitan population whole in Istanbul mitigated this rupture with the cooperation of European, Levantine and other non-Muslim architects such as Armenian (specifically the *Balyan* family) and Greeks representing the families of the same ethnicity living in *Pera* (Galata) district of the city(Bozdoğan,2002:28).

The classical Ottoman architecture was influenced in the 18<sup>th</sup> century by the Baroque and Rococo styles fused with the inherent essence of Ottoman principles. Notwithstanding, these Eurocentric remarks in the city impacted palaces, barracks, and schools. Also, post offices, with their sizeable envelope, challenged the traditional urban morphology of the city. Such morphologic challenges led to the awareness raised toward domestic identity. The first waves began to present themselves in the 1860s to confront western supremacy (Gül,2017:18).

How did the public buildings start to become problematic? The classical Ottoman architecture, similar to what is perceptible in most Islamic cities, established a large-scale complex (called külliye as a whole consisting of Schools (*Medreses*<sup>25</sup>), Public baths (*Hamams*<sup>26</sup>), nursing homes and libraries altogether with mosques and Bazaars as the central cores of the cities. On the other side, the western influenced buildings resulted from global demands, constructing several banks, hotels and office buildings. Hence, regardless of their distinct values, both approaches brought about different contrasting images.

Cultural consciousness worldwide led to stylistic approaches to revive the previous styles and also in eclectic mode. Every architectural revivalism could contain eclecticism, especially when a foreign architect has to revive the classic order, and Istanbul was the most specific example of it. The facades of the buildings were in European order. The ornamental sources for Ottoman revivalism were not the mosques built in the glorious moments of the empire in the 16<sup>th</sup> century, as they represented other Arabic-Islamic motives. European architects practised Psuedo-Moorish as a fashionable tool in Western Europe (Gül, 2017:18). The evident examples could be the *Taksim* Army Barracks gatehouse by Kirkor

Balyan(1764-1831)<sup>27</sup> and the Ministry of Defense gatehouse designed by the French architect Marie-Auguste Antonie Bourgeois(1821-1884) in 1867. The elements in this work, like onion domes or horseshoe arches, reminded everyone of the Alhambra and Taj Mahal (Bozdoğan,2002:22).



Figure 2-19- Ministry of Defense Gatehouse in Islamic Eclecticism and Moorish Revivalism-(Source: Gül,2017)

This position altogether, with the ambition to invent a tradition in a modern world, stimulated a group called the "Young Ottomans". One of their critical ambitions was to look up to the stylistic language of Ottoman architecture. As an output, the contribution was published in a book entitled "The principles of Ottoman architecture" (*Usuli- Mimari-i –Osmani*) in 1873 to launch at Vienna's international exposition. The book reflected the systematic qualities of Ottoman architecture, being synthesised with the writings of John Ruskin and Eugene Viollet-Le-Duc (Hearn,1990).

Even though these efforts were to exhibit the deserved place of the empire's architecture along with the *Pertevniyal Valide* mosque in 1871 by Sarkis Balyan and Pietro Montani, the overall political status had not improved. The political status weakened as the empire lost the Crimean war, and both economically and politically, King Abdulaziz's era was more dependent on European powers. For this reason, the political opposition formed against Abdülhamid's regime in the 1880s by a young group of students known as "the committee of union and progress "or CUP, demanding the reopening of the Ottoman Parliament.

The decade was the second most critical turning point in Turkish society as it challenged the problem of Turkish-ness and Islam later on that were once amalgamated inside the Ottoman ideology. The gradual attempts for secularisation and specialisation were noticed as time moved on. One of the key figures is Osman Hamdi Bey (1841-1910), the well-known artist and intellectual of the era and the founder of the Istanbul Archeology Museum in 1881. Also under his supervision, the Academy of Fine Arts (*Sanayi-I Nefise Mektebi- Alisi*) was established as the first architectural school based on the

Beaux-arts principles. Accordingly, the office of royal architects was closed (Bozdoğan, 2002:28).

Architectural education in this era was guided by European architects such as the Levantine Istanbulborn Alexandre Vallaury (1850-1921)and August Jasmund(1859-2011), who designed various public buildings such as *Sirkeci* Train Station (1880-1890), the imperial museum in 1891, Imperial Ottoman Bank in 1892, *Pera* Palace Hotel and public debt administration (*Düyûn-ı Umûmiye*) in 1897 (Gül, 2017:25).

Most buildings contained *Beaux-art* principles such as classical details, symmetry and axial plans. Furthermore, Art Nouveau made its mark in the 1890s by breaking apart from the historical stylistic languages and creating a framework for the official modernism that later on was imported from Western Europe.

Another critical foreign personality in forming the modern Istanbul is Raimondo D'Aronco, who was invited in 1893 for the projection of the Ottoman exposition complex, unlike the traditional cooperation between the empire and French architects like Alexandre Vallaury(1850-1921), Adolf Milord, Leon Parvillee (1830-1885) and Marie-Auguste Antonie Bourgeois (1821-1884)(Burnak, 2021:6).

His collaboration with other foreign architects imported Art Nouveau to the capital, where he witnessed the desire for Ottoman revival. His most critical project, with the assistance of Vallaury, led to the Imperial School of Medicine (*Mektebi-Tibbiye-I- Şahane*), constructed between 1893 and 1903 as a meaningful work.

This work facilitated other projects for D'Aronco, such as Imperial stables at *Yildiz* Palace, *Şeyh Zafir* Tomb and Library at *Beşiktaş* and Jean Botter Apartment in *Grande Rua Perra* to make his impact with ephemeral Art-Nouveau (Gül,2017:27).



Figure 2-20- Sirkeci Train Station by August Jasmund (Source:Fikriyat website)

Although the effect of this style opened the space for new and institutionalised modernity, the style was translated into Turkish architecture and other styles like Baroque and Rococo. However, the translation did not reflect the purity of Ottoman architecture. It was unfamiliar to distinguish between the practiced

ornamental details and spatial quality in Ottoman architecture and North African Pseudo-Moorish eclectism. Thereby, the Turkish architectural renaissance was about to shape in a more nationalistic approach with the leadership of local architects such as Kemalettin Bey and Vedat Bey (Bozdoğan, 2002:28).

Kemalettin Bey(1870-1927) had been the assistant of August Jasmund before he graduated from *Charlottenburg* school of technology. Besides training in European architectural culture, he oversaw restoration programs for classic monuments. His training prepared him to observe the classical Ottoman values in architecture. Notwithstanding, the traces of Baroque architecture are evident in some of his works, like the *Laleli* Mosque (Setintaş, 1944). Vedat Tek (1873-1942), another well-known figure, enrolled at *École Monge*, *École Centrale*. Later, *École des Beaux*-Arts in Paris materialised the political dream of Zia Gokalp (1968) to nationalise the government. Hence, for some historians like Sir Bannister Fletcher(1986), the national architectural renaissance was "modern", "anti-orientalist", and " non-historical".

The government formed a political relationship in the 1890s with the German empire as a rising European state that did not colonise any Muslim territory over time. The Ottoman empire was becoming increasingly dependent on western powers economically and the necessary preference for national independence. This link had become more robust since a decorative fountain was designed in *Sultanahmet* square by Max Spitta(1842-1902) as a gift for Kaiser Wilhelm II and the returning respect for funding Istanbul-Konya railway construction (Gül,2017:21-22).

In the 20th century, Istanbul kept hosting public buildings concentrating on Art-nouveau, such as the ministry of post and telegraph in *Sirkeci* and *Vlora Hanı*. King Abdul Hamid's capital encountered many problems following the migration after losing the Crimean war. This problematic situation included massive migration and the city's population doubling. Abdulhamid ordered Salih Munir Pasha to offer Joseph Antonio Bouvard (1840-1920) to design an urban renewal plan for Istanbul (Nuri Ergin, 1938:46-7). Since urban renewal and urban master plan for the capital seemed obligatory, developing further transportation started in the 19th century was in order by Germans. *Haydarpaşa* Railway Terminus was the most notable instance of European architecture between 1905 and 1908 (Gül, 2017:30). Vedat Tek and Kemalettin Bey were still the superstars among the local architects besides foreign architects. On 23 July 1908, due to the liberal reform, leaders of CUP established the constitutional revolution to restore the parliament and dethrone the king.

It is possible to observe the continuous process of modernisation beginning from the second half of the 19<sup>th</sup> century with Ottoman Revivalism (Basa,2015), then shifting to the architectural renaissance. Eventually, the new style was named as "First national style of Architecture" (*Birinci Milli Mimari Üslubu*). Besides, in political terms, this transformation was linked with the *Tanzimat* period (1839-1876), the

Ottoman constitution in 1876 and the Young Turks constitutional revolution in 1908. The same year, the land and tiles Office, designed by Vedat Bey, was a sign of materialised architectural reform. In addition, Kemalettin Bey founded the Society of Ottoman engineers and architects.



Figure 2-21- Haydarpasa railway station as a gift by Kaiser Wilhelm II to Sultan Abdul Hamit II – (Source: Gül,2017)

Over time, more Muslim and Turkish architects entered the scene, whereas the profession of Architecture was not common in the community. Arif Hikmet Köyunoğlu (1888-1982) was another shining figure in the later decade to represent the Muslim community, along with other masters like Ali Talat Bey (1869-1922), Mehmet Nihat (1878-1945), Hüsnü Tümer (1900-1945), Mimar Rüştü (1899-1964), Vasfi Egeli(1890-1962), Tahsin Sermet (1889-1969) and Mimar Muzaffer (1881-1921) (Burnak,2021:10).

The foreign locals born in Istanbul, such as Levantine<sup>28</sup>-Italian Giulio Mongeri(1875-1953), still played a critical part when he was appointed an instructor at the academy of fine arts in 1909 (Gül,2017:45). The Velocity of constructing public and commercial buildings increased. Towards the last years of the 1900s, the Central Post Office in *Sirkeci* was constructed by Vedat Bey in 1909. This project exhibited the combination of styles from the classical period, like pointed arches, tiles and domes over the corner towers to symmetrical orders and axial plans of *Ecole des Beaux*-Arts (Bozdoğan,2002:16).

The problem of identity in Ottoman architecture followed the political circumstances. It was represented first as a classical Ottoman revival, which was a failure because of the unfamiliarity of foreign architects. Then the locals aimed to identify a language by publishing "principles of Ottoman architecture<sup>29</sup>". This work was simultaneously taking place with the weakening of the empire and losing the territories in Balkan. Accordingly, Turkish nationalism appeared firmer than the empire's Islamic principles. Still, it was difficult to dissolve the religious tradition with the identity. Art Nouveau assisted the architects in breaking with revivalism in parallel with the efforts to reveal national character. From the fin de siècle to the twentieth century, political reform facilitated the disintegration between Islamic principles and Turkish-ness in architecture. This weaker integration, first seen in the urban atmosphere of Istanbul,

could lead to the breaking point of the political system in the upcoming decade.



Figure 2-22- Istanbul Sirkeci Post Office - (Source: PTT museum archive)

#### 2.3.2. The 1910s- End of an Era

The second decade of the 20<sup>th</sup> century was the most challenging time for Turkish society experiencing a political crisis. The constitutional revolution in 1908<sup>30</sup> weakened the political supremacy of the Ottoman Empire. It was about to be transformed by the young Turks over time. The revolution as a modernised policy was not capable enough to save the remaining territories in Balkan and, currently, Arab countries. Still, modernisation was being resumed as the capital set foot on a new phase with the establishment of infrastructures such as the first power plant and electrical facilities. Andre Auric's (1896-1967) plan (1910-1913) proposed a first road network for the city starting from *Sarayburnu* to *Yedikule* (Akpinar et al.,2010:1).

The Muslim Turkish architects played a critical role with their increased involvement in architectural schools and public works besides the Levantine locals and foreign invited architects. Notwithstanding, Istanbul was the host of modern architecture pioneers such as Le Corbusier. His first visit took place in 1911 to find authenticity in the orient, similar to other popular orientalists and unlike the total image one might have of Le Corbusier. He also abominated Young Turks' modernisation and applauded their ancestors' simplicity in old wooden houses and traditional mosques. His praised design framework had the potential to be the abstract model for the modern vernacular (Bozdoğan, 2002:4).

As previously mentioned, the national identity was split by the religious culture that was once combined with the identity imposed by the Ottoman Empire. Notwithstanding, the Muslim character was being amalgamated with the regional identities like the Albanian and Arabs following the empire's loss in the

Balkan war in 1912 (Yavuz, 1976:13). The situation continued to be worsened resulting in the independence of Balkan League countries, Greece, Bulgaria, Serbia, and Montenegro. Even Turkish nationalism between 1908-1918 was in an ephemeral phase with the king's symbolic role. However, the distinction was between culture (*Hars*) and civilisation (*Medeniyet*) as a transition from *Gemeinschaft* to *Gesellschaft*<sup>31</sup>, influential in forming national architecture. Nonetheless, it was difficult to differentiate because of the inherent Islamic-ness embedded in the Turkish-ness (Bozdoğan, 2002:35). That is why modernity in Turkey, like in other Middle Eastern and even Balkan countries, was in line with nationalism. The influence made by Kemalettin Bey, Vedat Bey and Mongeri was repetitious in the 1910s. Kemalettin's several popular public works for almost all historians were summarised in his four inns entitled *Vakif Hans*. The first *Vakif* Han was started in 1911 and completed in 1918 with six-story buildings, including 50 offices on the upper floors and a commercial area on the ground floor (Gül, 2017:40). Three of four projected buildings were completed in the scheduled time. The fourth Inn was completed later on (in 1926) after the official collapse of the empire due to economic oppression, First World War and the independence war in 1923 (Yavuz, 1976:13).

A year later, the beginning of *Vakif Han* buildings, *Mongeri*, the former president of the academy of fine arts in 1909, left the country in 1912 to Italy. It took six years to return to Turkey in 1918 to build various buildings, not in Ottoman revival style but Neo-Gothic, Neo-Byzantine, Milanese or Florentine Palazzo style, indicating the effect of his stay in Italy (Gül, 2017:45). Monumentalisation of Istanbul was at its peak before the First World War, along with the ferry stations built between 1913 and 1917. The identity problem was not resolved since the capital became the exposition for buildings of diverse styles. Still, the passion for Ottoman architecture was evident in Kemalettin's works, like the *Bebek* Mosque (1913) (Bozdoğan, 2002:18-29).

The pursuit of national identity was in harmony with urban modernisation in the upcoming projects of street regularisation, giving Istanbul the first boulevard with 50 meters width built between *Yenikapi* and *Aksaray* (Gül,2017:63-67). It caused the decentralisation of the capital for two main reasons. First, practising Turkish-ness and other national identities cannot be represented clearly. Consequently, a new atmosphere for hosting new public buildings looked essential. In the second and historical sense, besides the pluralistic role, Istanbul lost its significance due to the First World War. The surrender of the city by foreign forces such as Britain made Anatolian cities and Ankara the centre for a new nationalism with the leadership of Mustafa Kemal Pasha (Bozdoğan,2002:36).

As the mayor of the city two times, Cemil Pasha described the city as highly damaged, degraded, dirty and neglected. This situation was the immediate result of occupation by foreign forces (Gül,2017:47). In architectural scopes, such as the artistic duality of *Alafranga* (westernisation) and *Alaturka*<sup>32</sup> (Turkishness), the usual synthesis was handed over to the next generations of architects such as Arif Hikmet (1888-1982), Necmettin Emre (1891-1961) and Sedad Çetintaş (1889-1965) in other Anatolian

cities. The Eurocentric theoretical and practical sciences were a necessity. Also, the morality rooted in domestic culture differentiated the national culture and international civilisation (Bozdoğan, 2002:35-36).



Figure 2-23- 4th Vakif Hans as the crucial buildings began to be built in 1910s

### 2.3.3. The 1920s- Istanbul After Ottoman Empire: Total Ignorance

Although decentralisation was evident in the late 1910s with the formation of Ankara as the centre of resistance, no one could imagine that the city was utterly left aside. On 23 April 1923, the Turkish National assembly was formed in Ankara to control the resistance movement. In international terms, the assembly was recognised as the "Government of Grand Assembly of Turkey", leading to diplomatic talks with European states and the Lausanne treaty on 24 July 1923 (Gül, 2010:85) to the concession of the Republic of Turkey. The era was marked by the leadership of Mustafa Kemal, known as Atatürk (The father of Turks). Before the official recognition of the republic, the interrupted public works during the First World War were completed in the 1920s, such as *Elhamra* Han and Fourth *Vakif* Han. The buildings in Istanbul were still designed with Ottoman revivalism, especially in residential projects. The most noticeable one belongs to the *Harikzadegan* in *Laleli* (centre of the peninsula), designed for the recent fire victims in Istanbul. The project was finished in 1922, including four block units with curvilinear overhangs and arched and circular windows to harmonise with the *Laleli* mosque in the Ottoman baroque style (Gül,2017:53).

The British, French, Italian and Greek Forces left Istanbul. Consequently, non-Muslim locals, such as Armenians and Greeks, were exchanged after 1922. This circumstance affected the city's cosmopolitan existence and decreased the non-Muslim architects working in the former Ottoman capital who graduated before 1923 (Bozdoğan,2002:33). Turkey witnessed radical modernism compared to the previous two efforts of the *Tanzimat* Period in19th century and the constitutional revolution in 1908. Rapid modernisation took place on several grounds before architecture and urbanism. For instance, the Roman alphabet was replaced instead of Arabic script, the Georgian calendar instead of the Islamic calendar and the replacement of Friday as an Islamic calendar with Sunday (Gül, 2017:45). Moreover, the caliphate was abolished, resulting in a replacement of the Islamic law (Sharia<sup>33</sup>) with Swiss civil code to westernise the country (Bozdoğan, 2002:57).



Figure 2-24- Harikzadegan Apartments in Laleli by Kemalettin Bey in 1920s- (Source: Gul,2017)

A decision by Mustafa Kemal was a turning point in the history of Turkey, influencing not only the political circumstances but also architectural and urban development. That decision was nothing but to declare Ankara as the new capital of Turkey, which was not a new idea at all. If the dichotomy considering the traditional and modern factors were distinguished through demographic diversities collaborating with foreign architects in the 19<sup>th</sup> century and temporal turning points, the 1920s represented a clash between the two places. The old Istanbul and its residents could not believe that an Anatolian town with 20,000 people would function as the capital. At the same time, the other side for the republicans, Istanbul was degraded by the old Ottoman system, low-quality streets, timber buildings and non-monotonous entities (Gül,2017:46).

Nationalism, as always, tends to be identified in two scenarios. First, research to identify it and its elements in the regions with more architectural purity and second, practice it in an almost a place as an almost tabula rasa. Ankara was not a tabula rasa with its unique history but possibly a relative tabula rasa compared to Istanbul. Until the first half of the 1920s, the country unofficially had two capitals, and until 1927, the opposition to the decision persisted (Tankut, 1990).

The apparent duality was still on the agenda, which was nothing but to select between the "capital of Islam" and modern Anatolia. Nevertheless, the architectural dichotomy was transmitted to Ankara. At the same time, the popular figures of the Turkish renaissance movement, such as *Kemalettin Bey*, *Vedat Bey* and *Mongeri*, were invited to design public and governmental buildings.

On the other side, a group of German architects like Wilhem Schutte(1900-1968), Margarete Schutte-Lihotzky(1897-2000), Ernst Egli(1893-1974), Bruno Taut(1890-1938), Martin Elsaesser(1884-1958) and Clemens Holzmeister(1886-1983) imported the primary wave of institutionalised modernism in Ankara at a global level. The western influence of the architects was accompanied by first urban plan drafts by Hermann Jansen (1869-1945) (Gül,2017:46-47). The new capital inherited an architecture practiced in Istanbul and a vast amount of modern architecture buildings by Germans. On the opposite side, the neglected Istanbul with three different republican mayors hosted the Izmir palace apartment in the *Maçka* district, being designed by J.D.Armi with a combination of Ottoman revival and Art Deco Styles besides a new 30-metre-wide-road (Fevzi Pasa street) and tramline and Republic monuments in *Taksim* square in 1928 (Gül,2010:89).

A few numbers of Ottoman revivalism were presented inside content known as the National Architecture Renaissance in Ankara. In addition, the appearance of Art Deco in a decentralised Istanbul illuminates the time for removing the latest and still alive heritage of the Ottoman Empire had arrived. However, for almost all historians, the more important point was the death of Kemalettin Bey in 1927. After his death, the style was central to debate and criticism (Bozdoğan,2002:46).

Apart from the points above on Ankara's political and cultural importance and the neglect of Istanbul, the economic depression of 1929-imposed pressure on old Istanbul regarding the quality of life. The government had to prioritise the urban growth of its capital rather than other cities, amplifying the demographic decline noticed in 1927.

An outwardly forgotten city gained attention in the next decade by conceiving the economic centres and educational system reforms with the collaboration of Turkish and foreign architects, primarily German. Notwithstanding, according to Feroz Ahmad's idea, Istanbul turned into "New York" for the new republic (Ahmad,1991:91). Yet, the scale of degradation and ignorance was not comparable to any other significant capitals in the world.

### 2.3.4. The 1930s- A Rejuvenated Istanbul

Istanbul was in the shadow of the recently- announced Ankara as the capital. Several factors, such as the occupation of Istanbul by foreign militants, cosmopolitan population group bearing the Ottoman identity and memory, low urban quality, and economic depression, concluded the neglect of this vital city. However, it was impossible to be neglected forever, especially for a country eager to be modernised. In this regard, Istanbul is geographically located at the Europe-Asia border. A city that is not to be neglected anymore. That is why old Constantinople gained attention again.

In 1932 the municipality of Istanbul decided to create a new master plan for the city based on the Kemalist desire, and an urban design competition was established. The major Governor Muhittin Üstündağ invited four foreign planners, Henry Prost(1874-1959), Jacques Henri Lambert(1884-1960), Donat Alfred Agache (1875-1959) and Hermann Ehlgotz(1880-1943), to design the draft master plan (Akpinar, 2014:60). Henry Prost withdrew due to the lots of responsibly he had in the planning of Paris and the criticism on the feasibility of these kinds of competition (Bayindar, 2007:116).

Agache's project aimed to make the city homogeneous by connecting the city's different districts by great circulation highways, paying attention to zoning, road networks, railway stations, ports, airports, hygiene, recreation and preservation of historical sites. This design scheme is similar to what Lambert designed, with a slight difference like placing industrial zones outside the city, large public squares, modern suburban residential complexes and public parks (Gül,2010:94).

Contrary to the modern Istanbul that Agache and Lambert proposed, Hermann Ehlgötz's approach was different. His plan focuses on economic principles, general circulation, zoning, housing, displacement of the harbor and the preservation of the urban configuration with less demolition than the previous two French planners (Akpinar, 2014:76). The municipality approved Ehlgötz's proposal. However, later for unclear reasons was set aside. Besides the urban design competition, in 1933, Le Corbusier presented his proposal to the Turkish Embassy in Paris.

The proposal included a cover letter to Mustafa Kemal Paşa and introductory sketches. It insisted on

the value of old urban fabric, the necessity for its preservation and the new development areas outside the *Theodosius* Walls towards the west (Gül and Lamb,2004:63). Also, It was the opposite image created on the typical Le Corbusier that the architectural historians depicted which he later on labelled as a mistake of his life. The government rejected Le Corbusier's plan. The more prominent and clear point was that the government supported plans to break traditionalism to align with modernism and secularism.

Martin Wagner's (1885-1957)plans were never implemented, but his articles and report in the architectural magazine "Arkitekt" were influential for upcoming projects before he moved to The United States and joined his friend Walter Gropius (1883-1969). Although the Turkish architects and writers condemned the government for recruiting foreign planners that created the first modern-traditional binary in the decade, the municipality kept up to finalise the decision regarding the foreign planner. In 1936, the municipality (Atatürk for some authors such as Theo Leveau [1960]) invited Henry Prost for the second time without competing with anyone else to prepare a master plan for Istanbul. Finally, he approved the request to be a key figure for Istanbul until 1950. His first attempt, besides the plans for Yalova thermal baths, was the first master plan known as *Le Plan Directur* (1937), including the wide boulevards to connect the zones, and this plan represented the influence of Baron Hausmann, Eugene Henard's *embellishment* and Camillo Sitte (Akpinar, 2014:79).

Prost's plans were never comprehensive on a large scale. On the contrary, he implemented master plans for the Istanbul peninsula, Beyoğlu, and other parts of cities to contain six key strategies such as the clearance of unattractive buildings in the proximity of historical buildings, revising the old street networks with new boulevards, rehabilitation of traditional neighbourhoods, constructing hygienic housing, zoning and preservation of monuments (Gül,2010:97).

Despite the successful process supported by the governor and mayor, the master plan faced several difficulties in the first two years. Istanbul was struggling with economic depression during Muhittin Üstündağ's era. After his replacement with a new mayor, Lütfi kırdar, criticism of Prost's plan was on the agenda. At last, the plan was approved to enter the physical implementation stage by order of the new president, Ismet Inonu, on 28 April 1938 (Bayındar, 2007:125). None of the projects moved further according to the schedule due to the financial difficulties this time raised by the Second World War.

Although the theme in the 1930s was centralised in urbanisation and planning, Istanbul entered a new stage of metamorphosis from Ottoman revivalism to the first wave of modernism in an architectural sense. The primary example of this modernisation was for sure the apartments built in *Beyoğlu*, *Telimhane*, *Gümüşsuyu*, *Cihangir*, *Nişantaşı* and *Şişli* with balustrades of balconies, stuccoed string courses, zigzag motives and chevron patterns to confirm the signs of Art Deco in 1930s Istanbul (Gül, 2017:61).

Two significant Turkish figures of the decade in Istanbul were Seyfi Arkan (1903-1966) and Sedad Hakki Eldem(1908-1988), making their mark with significant numbers of apartments. The emergence of Turkish architects appeared to be necessary since the polemic between Old Istanbul and New Ankara was transformed into Turkish versus foreign architects. The Turkish architects opposed Art Deco and the construction of many apartments. Cavit Baysun(1960) addressed the debate on *apartmentisation* based on the writings of Mustafa Reşid Paşa to illuminate the social tendency toward British detached

housing over apartments. Based on such argument, the privacy of Turkish families, in general, was questioned as an Islamic principle. Osman Nuri Ergin (1938:59) also believed that the high-rise apartments were contaminating the total spirit in Istanbul, reflecting the lifestyles of the minorities and motivating the foreigners to design without the local knowledge needed to understand Istanbul.

As mentioned, this debate was spread through urbanisation since Burhan Arif (1933:157) differentiates Istanbul's distinctive aesthetic reality from other cities worldwide.

This Orientalism should be achieved either to be a local or to live for a long time. Architectural magazines like *Mimar* and *Arkitekt* aligned with the public reaction to advocate domestic architects (Gül, 2017:70). Sedad Hakki Eldem(1931:2) appeared as a leader for the opposing sound when he criticised the rapidly demolishing process in Istanbul. The government received these messages and also the leading foreign architects.

Istanbul was the central location for the German architects to note and practice the regional architectural characteristics, besides the French architects and planners facing it in North African colonies with oriental culture. Ernst Egli began working as a professor at the Academy of Fine Arts in Istanbul for three years and supported regional consideration in architecture (Dündar, 2011:100).

Later on, Bruno Taut(1880-1938) advocated this approach in his return to Istanbul. This mindset was evidence of a consensus between the Turkish and Ankara-centered German and Swiss architects appointed to modernise the new capital with cubic buildings. Another turning point to clarify this situation was the National Architecture Seminars<sup>34</sup>, organised by Sedad Hakki Eldem in 1934 to identify the national language for architecture, concluding with identifying the "*Turk Evi*" (Turkish house) that was published in *Arkitect* magazine and also a-three volume-book entitled "The Turkish House" (Bozdoğan,1996:12-13).

The concept of houses was the intersecting point between modernists and traditionalists in nationalist governments and even in transitional periods before, and this time in the Turkish context. Ernst Egli(1893-1974) supported the idea as he confirmed that old Anatolian houses could implement as modern architecture to be specified in Turkey (Dündar,2011:101).

The convergence point in the 1930s was in line with the peasants of the *Kemalist* government and facilitated the formation of the "Second National Architecture" movement in Turkey.

Turkish architects engaged in public project competitions with foreigners in the 1930s. Seyfi Arkan won the project for designing a Seaside pavilion on the western fringes of Istanbul in Florya. As a consequence, the Istanbul locals faced the beach lifestyle for the first time (Gül, 2017:67). The competition of the Passenger Hall of Istanbul port in 1937 was another attempt at modernisation of Istanbul, which ended successfully for Arkan as a first prize winner besides his success in Municipalities and Sümerbank buildings (Dündar, 2011:148).



Figure 2-25- Atatürk Sea Pavilion in Florya was designed in 1937- (Source: Aras Neftci's collected Archive)

The 1930s could be known as the most critical point for the former Ottoman capital to be rediscovered by the new state. The projects in the master plan by the Prost, such as several apartments beside the public buildings and shoreline mansions, were influenced by the traditional Turkish timber house. The last years of the decade were affected by World War II. The rejuvenated Istanbul got along with the war years of the 1920s and a neglecting period; this time, it had to face the global crisis in Europe.

## 2.3.5. 1940s- Re-Politicised City

While the planning of Istanbul seemed to be in the safe hands of Henry Prost, the death of Atatürk in 1938 and World War II began to shape the political order and subsequently, Istanbul was not outside the exception of influence. Besides the political agendas, the second national architecture introduced by Sedad Eldem made the European architects change their former attitude. The shift aligned with the desire to compose a new architectural language for Turkish architecture. German and Austrian architects were more affected by the national socialists in Germany to consider the design context. Architects like Paul Bonatz, Holzmeister, and Bruno Taut believed that Anatolian houses had evident factors such as topography, sun, air, and vegetation. Hence it had to be considered for Turkish architecture's contemporary and contemporary shaping (Gül,2017:76).

On the other side, the government supported the agrarian inherent in the country to avoid rapid urbanisation. It resulted in a centralised national architecture distancing itself from an unquestionable universally westernised modernism. However, this agenda could appear problematic. The main character of the decade, Eldem, was about to formulate his survey "Turkish house" based on the regional identity, which was unfamiliar and even popular for the government with the priority of a unified Turkish identity. For him, local architecture does not necessarily equal national architecture (Eldem, 1939). Thus, the state preferred to concentrate on monumentality to practice national architecture.

Eldem also approved of being part of the project for state-oriented identity. The state-funded model was tested before in countries like Nazi Germany and Fascist Italy, and the new German Architecture exhibition in 1943 in Ankara encouraged the government to invite Bonatz to teach at Istanbul Technical University (Bozdoğan, 2002:271).

In the beginning years of the 1940s, the slowly executed master plan hosted essential projects. One is the extension of Atatürk Boulevard, with a length of 1100 meters in the first phase in 1942 and 55 meters in the second phase in 1944 (Gül,2010:112). In the same year, the Turkish house idea was embodied in monuments that had to be built in Istanbul. Being Designed by Sedad Eldem and Emin Onat(1908-1961), the faculty of sciences and letters for Istanbul University were the most crucial examples of materialising the Turkish house elements in a large-scale monument. The monumental entrance porticos with tall columns are the first point of connotation, along with the use of Seljuk and Ottoman "Porcupine Cornice", stalactite column capitals, open pavilions with tall columns, composite Ottoman walling techniques and imperial kiosks (Bozdoğan,2002:274).

Monumentality was not the only policy for rebuilding Istanbul, despite its centrality. *Taksim* square was reorganised based on Prost's plan with the demolition of Ottoman *Topçu Barracks* and generating public parks and promenades such as Park No 1 or Gezi, Park No2 or the archaeological park and park No 3. The botanic garden modernised the city as a prominent gesture toward the liberalisation of females and a diverse society (Akpinar,2014:82). Regardless of the success that Prost's master plan brought to Istanbul, critical points began to appear. For instance, besides the economic difficulties in implementing some parts of the plan, the city's topography was not always considered, along with the lack of anticipating the upcoming population of Istanbul. These problems made him revise his road proposals between *Eminönü-Sirkeci*, *Sirkeci-Sarayburnu*, *Sirkeci-Sultanahmet*, *Taksim Tepebaşı* and *Karaköy-Galatasaray* in 1942 (Gül,2010:110).



Figure 2-26- Faculty of Science and Letters by Sedad Eldem and Emin Onat

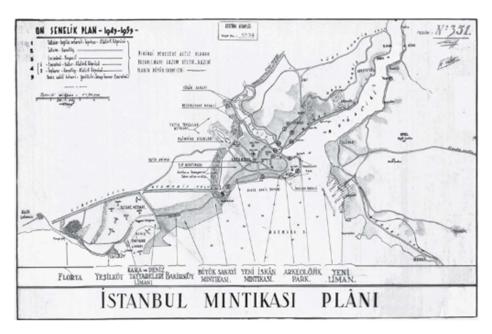


Figure 2-27- Prost analytic plan for Istanbul (Source: Istanbul Metropolitan Municipality)

Besides the criticism of modern urbanisation, reviving the Turkish identity was not simple. According to foreign architects like Bruno Taut, political funding of the projects was condemned to be a mere pursuit of format representations. Even after his surprising death in 1938, there was no concrete road map to evolve the Turkish essence in modern architecture. In 1943, the Germans suggested a second approach, being in charge of the architectural education systems of Istanbul and Ankara's universities. In a new German architecture exhibition in 1943, Bonatz's speech on the criticism of Bauhaus and the necessity of implementing new formulas brought about a mutual way, and that way was nothing but classicism (Bozkurt,2012). According to Bozdoğan, the Roman, Hellenistic and Greek heritage is rooted even more than the supposedly Turkish roots of Hittites and Sumerians. Furthermore, Bozdoğan (2002:279) believes that this approach might be suitable for young republican architects since they practiced the percepts of classicism at Beaux Art academy. Accordingly, modern Turkish architecture could be national and international. In other words, a consensus between the Government, young Turkish architects, German architecture and even society was about to be achieved regarding traditional and modern values. However, the suggested third way did not seem to last for long.

The end of the Second World War was a new political era for the state. Germany lost the war, its influence diminished, and the increasing power of the Soviet Union as a threat made Turkey have no choice but to form alliances with western countries (Gül,2010:122). After the war, the government became a multi-party system and was included in the European recovery program to receive Marshal Plan Assistance (Schick and Tonak, 1987:294). The rural appraisal had to be paradoxical since the country began mechanising agriculture and transportation network improvement (Kerwin,1950). Consequently, the number of farmers decreased inevitably due to the massive migration rate and 47 per cent population increase in Istanbul, questioning Prost's master plan when the shanty house was boosted rapidly on the outskirts of the city (Gül,2017:82).

The modern and nationalised essence of the state went under significant revisions, such as the allowance to reopen religious schools and facilities due to political openness (Gül, 2010:125). Unlike the

previous decade, the last years of the 1940s exhibited the dominancy of public works rather than planning and residential buildings. The lands surrounding the Inonu promenade were designed with numerous vital works, such as the *İnönü* stadium in 1947 by Paolo Vietti-Violi(1882-1965) and the Openair theatre by Nihad Yücel and Nahid Uysal, *Sedad Hakki Eldem's Taşlık* Coffee House in 1948<sup>35</sup>, The Justice Palace in 1949 and Sports and exhibition palace in the same year. The old-fashioned architecture of Fascist states like Germany and Italy still influenced the buildings in this decade.



Figure 2-28- Taşlik Coffee House By Sedad Eldem in 1948 – (Source :archnet.org)

The survival attempts of the second national movement had to yield. The political circumstances faced new circumstances regarding the market-oriented economy and the alliance between Turkey and the United States. The RPP (CHP), which formed the central pillars of the republic in 1923, lost its power to DP (Democratic Party) in 1950<sup>36</sup>. In the same year, the cooperation between Henry Prost and the municipality was about to finish due to problems that Istanbul faced, such as a double-sized population and shanty houses.

# 2.3.6.The 1950s- The Liberalised, Globalised and Americanised Istanbul

Following the multiparty political system pursued since 1946, the RRP party (CHP in Turkish) lost its power in the general election of 1950. Democratic Party (DP) won the majority of seats in the parliament and municipality chambers in most cities. Subsequently, Adnan Menderes was the republic's new prime minister. 1950 was the political turning point as a pluralistic approach to unifying various social groups and starting the liberal economy. It is important to note that the new political establishment facilitated the entrance of high modernism in architecture and urbanism since the large-scale interventions were executed directly by Menderes (Bozdoğan,1997:116). In this decade, Turkey's westernisation velocity

was boosted due to participation in Korean War, receiving the Marshal Plan fund and joining NATO (Özorhon and Uraz, 2009:95).

Istanbul regained even more from DP at the beginning of the decade regarding the development process. One of the significant essential points affecting urbanism was, without doubt, the discharging of Henry Prost by the municipal assembly. The new government widely believed that the outcome of his plans was not considerable enough, he had not educated local planners, and the rapid urban growth made his plan even more problematic (Gül,2017:90).

The municipality had two options. The first was to cooperate with the local architects and planners, while the latter was to continue with the foreigners. The newly initiated government had to be the public's voice and desire. Therefore, the municipality formed an interim revision commission of professors and architects from Istanbul technical university and members of the union of engineers and architects in 1951. The critical objective was to commission analytical works on population, industrial sites, parks and recreation, transportation, and circulations.

At last, the local master plans and precisely detailed map of Istanbul, producing plans on *Beyoğlu* and Istanbul side, 30 meters boulevard between *Karaköy* and *Azapkapı*, the building of industrial zones in Golden Horn, land expropriation policy and large-scale demolitions in significant parts of the city such as *Taksim* (Gül, 2010:138-139).

Besides cooperation with the locals, the government invited Gordon Bunshaft (1909-1990), Schmauder and David Hughes (1915-1985) to investigate housing problems in Turkey due to massive migrations from rural areas to cities such as Ankara, Istanbul and Izmir. According to their reports, Rubble or mud brick construction techniques similar to rural houses and over-crowded living conditions do not meet the minimum housing requirement. Their criticism toward the nationalist style ended in proposing houses based on economy and flexibility (Akcan,2001:41). The SOP report possibility can be recognised as an official twist toward liberalisation in architecture.

The developments in Istanbul can be categorised into four items in this decade: implementations of urban and architectural policies, public buildings, Tourism facilities and residential complexes. Since Menderes's formed government had to reflect all the classes and groups, he had to balance the rapid westernisation and the alive traditional demands. Besides the political openness given to the groups, such as opening the mosques to Muslim prayers, Istanbul had to face significant revisions to attract foreign visitors. Hence, demolitions and expropriations were the party's central policy to change the face of the city. On the other side, monuments with religious importance ought to be preserved. Hence, a high council of immovable heritage items and monuments (*Gayrimenkul Eski Eserler ve Anitlar Yüksek Kurulu*) was set up, as well as the chambers of architects later in 1954 (Gül, 2017:89).

The necessity of building hotels for a neglected city was coined with the rise of a market-based economy and capitalism. After decades If it was possible to select the second title for this decade, it should prioritise the Hilton Hotel as the most crucial project of the 50s in Istanbul. The project was started in 1952, and Skidmore, Owings and Merill office (SOM) took the responsibility to design, cooperating with Sedad Hakki Eldem(1908-1988), a local architect. The Hilton hotel represented almost most principles of International styles such as "Architecture as a volume rather than mass"," the preference of regularity over axial symmetry", flat roofs, large windows and *Pilotis* (Akcan,2001:41).

Although the elevation might be the implication of the high modernism of that period with the western techniques and imported steel, marble and ceramics, the project was integrated with a few oriental elements such as domes on the roof of the restaurant and pavilions, ceramic wall tiles and the most evident one the flying carpet right in the entrance (Gül, 2017:98).

It took three years to open the project in 1955 with the presence of Turkish and American officials and celebrities. Besides the publicity the project got in Turkish magazines until 1956, the hotel became the model for residential, interior furniture and hotels. The façade was the initial tangible moment for the observers that was the practised elements of international styles and also resembled Le Corbusier's *Unit d'Habitation*, enough to motivate the architects to reproduce residential elements in that pattern. The "American bar" concept was another critical factor influencing modern Turkish houses as an imported element (Gürel 2009).

Architectural magazines were neutral toward the project. Notwithstanding, the critical theme was still the use of foreign architects as Zeki Sayar criticised the ministry of public works for repetition of the previous policy on the lack of opportunities for Turkish architects and for recruiting foreigners instead (Sayar, 1953:119).

Menderes's support for the modernisation of Istanbul on a large scale encountered a public appraisal and political credit even by the opposition. This positive vibe gave his administration the green light to impose the policies such as the Redevelopment Act and the publication of the Istanbul Redevelopment Regulation in 1956, allowing further expropriations (Gül,2017;89). These expropriations led to significant projects such as avenues, public monuments, hotels and apartments.

The hotel design was inevitably directed to approve Hilton as a reference with reinforced concrete, a front façade with balconies and restaurants in an open space on the ground floor (Bozdoğan and Akcan, 2012:22). Accordingly, Kadri Erdoğan (1911-1997) designed the *Tarabya* Hotel(1957) on the European side of Bosphorus. Turkish architects Rana Zıpçı, Ahmet Aydin and Emin Ertan designed Çınar Hotel two years later, following the standards executed in the Hilton Hotel (Kaçel, 2010:11).

As pointed out before, this decade was the period for the construction of residential complexes, specifically right after the post-war migration crisis in the 1940s. The rapid growth seemed to be a necessity in Istanbul's master plan. Moreover, the municipality could not initiate without the direct order of the Prime Minister (Sayar, 1956:51). A state-owned credit bank known as *Emlak Kredi Bankasi* (EMK) was established to fund the housing projects in the country (Gül, 2017:105).

Levent and Ataköy housing blocks were the outcomes of financial aid of *EMK*, following the modernist examples of rational design, sun angles, ventilation and greenery, even though the high-rise blocks in narrow urban lots faced severe criticisms later on (Bozdoğan, 1997:118).

Levent projects started earlier, in 1947. The initial positive feedback regarding the project led to the fourth stage in 1956 by Kemal Ahmet Arû, Including 345 units, 70 shops on the ground floor, a kindergarten, a cinema, and tennis courts with large modular windows and cantilevered balconies. In contrast, the *Ataköy* housing complex consisted of 618 units on 55 blocks in flexible numbers of stories from 3 to 13 stories and apartments from 85 to 240 meters. The *Ataköy* housing complex was the most significant project, as a collaboration between foreign consultants (Italian planner Luigi Piccinato for this project) and Turkish architects: Ertuğrul Menteşe, Ümit Asutay, Yümnü Tayfun, Muhteşem Giray (1927-

2014), Eyüb Kömürcüoğlu (1910-1997) and Tuğrul Akçura (1927-1984) (Gül, 2017:105-106).

The government itself monitored both works. Buildings in Istanbul intersected American experience and CIAM standards ranging from hotels to public works. The models implemented in Hilton Hotels were transmitted to the new municipal town hall at the centre of the historic peninsula in 1960, being raised on *Pilotis* with an eight-story block and terraced rooftop.

The main question on the 1950s covers the political influence of Adnan Menderes on Istanbul's urbanisation. He was elected by the votes of diverse economic and cultural groups, from low to high-class and religious to communists. His plans attempted to liberalise the city from the dictated approaches and balance traditionalism with modernity by allowing all groups to represent themselves while considering the contemporary urban needs for vast demolitions. The administration of Menderes was accused of illegal expropriations and public use in 19 cases against DP after the military coup to overthrow him.

The economic growth of Turkey began to decrease in 1954 from 13 per cent to 4 per cent. In the same year, the Marshal plan funding was stopped. Even though rapid modernisation got the expected admiration of society and opposition, the inability to solve urban problems was more realised in time. Moreover, large boulevards like the Kennedy road were constructed on the historic peninsula, facing harsh criticism from magazines like *Arkitekt*.

The urban projects were labelled impromptu or ad hoc, although the government contributed to putting locals and foreigners such as SOM consultants Hans Hogg (1901-1974) and Luigi Piccinato (1899-1983) together to reach a consensus-balanced approach (Gül, 2010). The liberalised and Americanised Istanbul was not the model to answer the urban problems since the state-oriented residential complexes such as *Ataköy* and *Levent* projects met the requirements of the wealthy class rather than the proletariat with traditional values facing expropriations. After a lengthy trial, Menderes was executed in 1961 by military court order<sup>37</sup>, and the age of coups commenced to influence Turkish society and Istanbul's future regarding urban challenges.

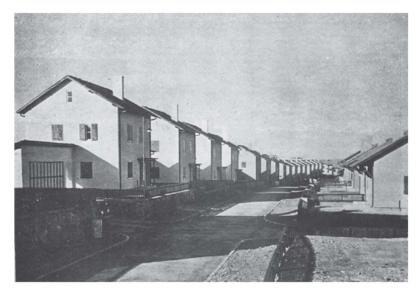


Figure 2-29-Levent Housing Project- (Source: Gül,2017)

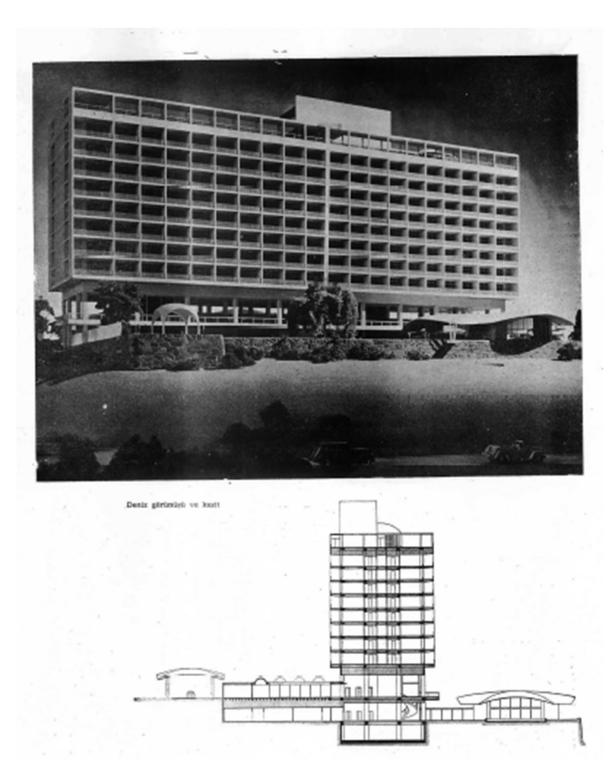


Figure 2-30 -Hilton Hotel in Istanbul - (Source: Arkitekt magazine,1952)

#### 2.3.7.1960-1980- Istanbul and the Start of Socio-Political Crisis

The lack of harmony in planning was transferred over the years and decades. Nonetheless, the 50s was a glorious moment for Istanbul to reintroduce itself to the globe. Also, any master plan had not considered multilayered factors such as the economy and housing. The term "planning" seemed to be politically read toward a more leftist paradigm, according to Democratic Party leaders such as Menderes (Gül, 2017:119). Being accused of an impromptu plan, the new government should focus on technocratic plans based on industrialisation right after the military coup in 1960 and the execution of Adnan Menderes a year later. Soon, political development led to an environment filled with freedom of speech following the referendum and elections that happened in the early years of the 1960s. However, the radical turning points led to the politicisation of architecture. The chamber of architects was incredibly politicised. It represented the tendency for a version of modernisation to be implemented in Third-World countries without a specific geographically centralised influence of western countries (Bozdoğan, 1997:121).

The issues like conservation had to deal with the threat of demolitions due to rapid urbanisation after the 60s. Consequently, the publication of universal principles after the latest 50s had to be necessary (Kayin,2008). Turkey followed a flip-flop model in which internationalism and nationalism were each period's heavier and dominant sides.

In this decade, new dimensions and situations had to be practiced as architectural style complexes (*Karasözen and Özer, 2006:109*) following the appearance of semiotic readings toward architecture. In this context, the first and new wave of regionalism intersected nationalism as an ongoing dilemma, with international discourses as an inevitable process. This intersection justified a kind of authenticity as an independent mindset of facing the issue in architectural design and finding the solution for it. Despite the modest voice of newly promoted regionalism, it was considered in planning and architectural design. The ministry of redevelopment and settlement founded the Marmara regional planning office (MRPO) and the Istanbul master plan bureau. MPRO developed the first drafts in 1963 to anticipate the future population and regulate the residential and industrial zones for decades (Gül,2017:124).

Even though anti-American emotions grew in public and architectural society, the organic architecture of Frank Lloyd Wright and Louis Kahn's new brutalism played significant roles in Turkish cities, specifically Istanbul (Özer, 1970). Turkish architecture in 1960s and 1970s achieved a new synthesis between what is perceived as regional subjectivity and organic-brutalism logic, which does not necessarily reflect an American centrality behind them. The most critical example of this context might be addressed in Social Security Complex in *Zeyrek* bearing Sedad Hakki Eldem's design. The project includes the spatial elements of Turkish houses and considers the scale and morphology of neighborhoods (Bastea, 2000: 276). However, modular window bays, pre-cast concrete mullions and cantilevered facades were the most evident implications of modern architecture (Gül,2017:124).



Figure 2-29- Social Security complex In Zeyrek by Sedad Eldem- (Source: Agha Khan Archive)

The other example was undoubtedly the Istanbul Textile Marchants' Bazaar (IMC), which started in the previous decade and was completed in 1967. A design competition was organised for this project, and 11 different proposals were sent. The projects of the first three winners had to be evaluated by the municipality to confirm if the project could be constructed based on the planning policies. Finally, the proposal by the architectural team consisting of Doğan Tekeli(1929-), Sami Sisa(1929-2000) ve Metin Hepgüler(1931-), which won the third prize in the architectural competition, was selected as the best option for the site.

The project on the Eastern side of *Atatürk* Boulevard comprised around 1100 shops with fragmented rectangular low-rise blocks interconnected by corridors and open courtyards without using any stylistic influence of adjacent buildings (Gül,2017:129).

Turkish architecture in the 1960s was much more progressive than building technology. The architects could practice the global architectural language with possible simplistic material approaches. Moreover, the construction sector was not prepared enough, causing a necessity for reform in the construction industry during the new decade (Tekeli,2007:32).

Public designs were still the subcategories of the public works ministry. Even the municipalities had to be in harmony with the governmental institutions regarding the design competitions leading to indispensable restrictions respective to possible renovations by the architects (Yücel, 2007:127).

One can conclude that the 1960s was another transition period regarding traditionalism and modernity. For this reason, the historian might call this decade the second republic of Turkey (Zurcher, 2001:241) in political history because of diverse factors. First, it began the global critique of modernism after the dissolution of CIAM. Second, it was the time to reject the Americanisation of the 1950s from Turkish architecture chambers to political parties such as RRP (CHP) and the newly formed Justice Party (JP).

Finally, the time for an independent architectural practice arrived since regionalism again entered the architectural society without insisting on traditional elements.

Unlike architectural differences, the planning policies follow the same process of starting with optimism and ending with pessimism.

Although the critical point of the local architects and planners was not to repeat the former mistakes, this decade began with hopes after the coup to avoid ad hoc developments. Turgut Cansever(1921-2009), the critical architect of the 60s, was appointed the planning directorate's head. His policies restricting the urban subdivisions were not under Piccinato's master plan based on linear East-West extension. However, this cooperation did not last long too. Due to the lack of convergence in the proposed plans, Cansever resigned, and Istanbul bore the persistent problems (Gül,2017:125-126).

The last years of the 1960s <sup>38</sup> witnessed the Building Industry Center (*YEM*) opening in 1969 and the Building Research Institute (*TUBITAK*). Besides the academic sectors like Construction Research Institute and Urban planning centre at Istanbul Technical University (Batur, 2005:55). Also, the democratic atmosphere paved the way for journals like *Arkitekt*, newly founded *Mimarlik* and later on *YAPI* in 1973 to make their mark in the architectural development of Turkey (Elmali Sen et al., 2014:543). The architectural culture in the global context after the 1960s faced a significant critique concerning high modernism's environmental and social failures. The Turkish architects denounced using concrete frames, slab block apartments and large-scale interventions (Bozdoğan,1997:119-120). However, postmodernism did not enter entirely into Turkish architectural discourse in the 1970s.

Verticality was the presiding theme of the decade, and various hotels and apartments were designed and constructed since tourism and housing were the most significant theme. Tourism in the political agenda was an essential tool for the country's economic survival, and the start with Hilton Hotel in 1950 had to move forward. Housing was a ceaseless problem for planners and municipalities

On a grander scale, the government and the apartments were the central focal point for urban decision-makers regardless of whether the participatory public policy regulated the shanty houses or the privatised residential complex for high-income families. In a vertical combination, the issues still alive in the social context led to skyscrapers in the historical peninsula as a severe challenge to the traditional fabric.

The most important event of the 1970s was, without a doubt, fulfilling the dreams of Istanbul locals to link the Asian side with Europe with a bridge. That dream came proper by British Firm Freeman, Fox and Partners to finish the project with a 1560 meters length and 33.40 meters width and 64 meters height in October 1973 (Altan Ergut et al., 2015:571).

Despite the postmodernist wave in universal discourse and the liberal practice of architecture among Turkish professionals, modernism's logical and rational representation was clear. By the arrival of the first half of the 1970s, the hotels and offices opened to function.

Opened in 1974, *Harbiye Orduevi*, one of the tallest buildings of its period in Istanbul, was indeed a residential project for military officers organised primarily as a subject of design completion in 1967 won by Metin Hepgüler (1931-), being proximate to Hilton Hotel with a Brutalist façade (Gül,2017:131). In the same year, Günay Çilingiroğlu (1936-2010) and Muhlis Tunca (1925-2000) revived the minimalist sense of Le Corbusier's five features of modern architecture in a building for *Tercüman* Newspaper with

the large cantilevered, pre-stressed reinforced concrete, stripped windows and white colour (Ibid,2017:139).

Another project from the same architect was opened in the same year as the first prize award for the Istanbul advertising site (*Istanbul Reklam Ajansi*). The building was located on a street corner with a U-shaped brutalist entity. It was organised around an Ottoman Tomb as a historical reference, possibly confirming the contextual attitude and subject of the architects and the design context (*Mimarlik*, 1969:29).

Hotels were the priority of JP in Turkey to attract tourists during the economic crisis that began in the first half of the 1970s.

Sheraton (now known as *Ceylan*), Intercontinental (*Marmara*) and ETAP were started in the late 1960s and completed in 1975 by local architects such as Kemal Ahmet Arû(1912-2005), Hande Suher(1929-2016), Mehmet Ali Handan(1915-1990), Yalcin Emiroğlu(1930-2014), Tekin Aydin(1969-), Altay Erol(1929-2002), Rukneddin Guney(1904-1970) and Fatih Uran (1922-2021); most of them graduated from Istanbul Technical University. Although hotels were different geometrically from Hilton in the 1950s, they still contained Brutalist elements, large windows and aluminium framing (Gül, 2017:131). Furthermore, tall office buildings like the Odakule office in 1976 and the Directorate of Highways in 1977 were built in the second half of the 1970s.

The possible image of Turkish architecture in the 1970s could be a space with practices independent face of modernity considering the site-specific context. The early perception of postmodernism was conceived rationally. In this dominance of modern taste, architects like Sedad Hakki Eldem insisted on the national rhetoric of architecture, while Turgut Cansever advocated the return to Islamic cosmology (Bozdoğan, 1997:120).

An excellent instance of this effort was when the central library for the university of Atatürk library opened to the public in 1975, bearing the signature of Eldem for his concern of reviving Turkish houses with forms roofs and spatial organisation (Gül, 2017:142). This project also reflects the transition of Eldem from a mere formal to a spatial and rhetorical revivalist while confirming the modern reality respective to material and colours.

The latest years of the 1970s were not fruitful enough regarding architectural projects due to the political crisis between the Right and left wings, leading to a military coup by Kenan Evren on 12 September 1980<sup>39</sup>. Urban issues like the increasing number of shanty houses continued to be a severe unresolved problem for Istanbul despite the politicians involved with the participation policy to rehabilitate and renovate them. In this chaotic moment, traditionalism reflected itself in the form of class consciousness, religious values and ruralised image of the periphery confronting the modern centralised policy with incorporated blocks.

# 2.3.8. The Last Decades of the Century

Turkey had been familiar with socio-political anxieties since the 1920s with several incidents like the independence wars, the Istanbul violent program against Greeks in 1955, the military coup in 1960 and the military memorandum. This time the political chaos in the streets of Istanbul faced an intervention of

the military junta on 12 September, suspending the political activities and discharging the parliament. Another military coup affected urban management as three military mayors were in charge between 1980 and 1984, even though a referendum ended in 1983. The *Anavatan Partisi* (Motherland Party won) the election, and the new government was formed by Turgut Özal (Gül,2017:153).

Participatory approaches have become widespread in global discourses since the 70s. However, the newly developing democracy in the country influenced the planning system. Indeed, it contributed to a non-participatory approach like previous master plans with limited influences on urban development (Kocabaş, 2006:114). The 1980s was the turning moment for Turkey to abandon the national policy of state centralism in exchange for global capitalism and integration with the international market, promoting the appearance of a consumerist society (Özaslan et al., 2011:2597).

Before the establishment of Özal's government, no further urban development occurred in Istanbul, generating the urban scenery aesthetically (Gül,2017:2). The rural realities of squatters or *Gecekondu* settlements were growing all over the city. In contrast, no concrete development plan was conceived to control the massive growth. Undoubtedly, the global economy necessitated a significant transformation in architectural and urban visions.

Badrettin Dalan, a new mayor appointed in 1984, conducted a radical approach similar to Hausmann in Paris. It transformed the traditional urban layout into new boulevards and green water-front spaces (Keyder,2010:181). Destruction of the traditional Ottoman houses provided space for a two-lane road in *Arnavutköy*. The transformation of *Tarlabaşı* street into a four-lane boulevard was conceived by bulldozing 1100 houses dating back to the 19<sup>th</sup> century, was among the most significant examples of a radical modernised attitude of Dalan (Kocabaş,2006:116). Indeed, he stated directly that conservationist scopes come secondary considering the urban development (Ekinci,1994:83). Moreover, the industrial complexes along the Golden Horn as contemporary forces of urban morphology were transferred to the periphery (Candan and Kulluolu,2008:15).



Figure 2-30- Intercontinental Hotel perspective and Site plan –(Source: Arkitekt,1972:287)

Apart from the road enlargement projects and massive destruction on the European side, the British firm of engineers Freeman Fox& Partners designed the second suspended bridge over the Bosphorus in the mid-1980s. The project is recognised as another attempt to promote modernisation in Istanbul (Gül, 2017:166).

Besides projects regarding urban infrastructure, the architectural scope of the 1980s was influenced by socio-political alteration. Hence, Turkish and foreign architects participated in remarkable projects such as the international terminal by Hayati Tabanlıoğlu (1927-1994) in 1983 and the Galeria shopping centre by the same architect (2017:174). Unlike Tabanlıoglu's modern design with a steel-framed structure in Atatürk airport, his design of the Galeria Shopping centre followed a covered-street layout of Ottoman

Bazaars (Yapi, 1988:11).

Dalan's policies paved the way for new hotels like the Swiss Hottel Bosphorus, designed by Turgut Alton (1931-) and Kikaku Sekkeisha. This project could be worth noticing as it required the demolition of Seded Eldem's *Taşlik Coffee house* as a traditionally generated image of a Turkish house, disrupting the view of Dolmabahçe palace (Gül,2017:174). Furthermore, the reconstruction of *Çırağan* palace as another waterfront hotel with a six-storey modern extension building appeared as another controversial project instead of rehabilitating one of the significant heritages of the Ottoman empire (Ibid,2017:176).

Other projects promoting the modern political image in northern parts of Istanbul, such as *Şişli*, Maslak and Fourth Levent, witnessed business firms, hotels and shopping centres creating a new skyline (Berkoz,1996). The theme moved on in the 1990s creating a new *Zincrikuylu-Levent-Maslak* axis (Altan Ergut et al.,2015:584). The late modern reflections in the Northern part of Istanbul were *Yapi Kredi* bank by Haluk Tumay, Ayhan Böke(1928-2016), Kale Seramik Headquarters by Nişan Yaubyan(1928-2022) and the *Movenpick* Hotel by Ertem Ertunga (1940-2023)built as tall skyscrapers (Gül,2017:177).

Badrettin Dalan's modern ambition as a reminder of Adnan Menderes state in the 1950s ended since Social Democratic Party won the 1989 elections. The new mayor, Nurettin Sözen, appeared as a different character who halted the large-scale commercial projects and the Essen Plan (Kocabaş,2006:118-119). Nevertheless, his short-term responsibility portrayed a path full of myopic and populist approaches (Gül,2017:193). Such an image represented a mediatory space between the opposing parties supporting the historical character of cities, such as the chamber of architects on one side and a globalist-modern framework on the other.

During the 1990s, the collapse of the Soviet Union accelerated globalisation, and Istanbul's role was not outside this category. However, its historical roles and link to planning and its actors were transformed, unlike the 1980s. Subsequently, during the 1990s, the traditional CBD became less attractive to new financers (Kocabaş,2006:118). However, the economic situation experienced the most difficult periods. President Ozal died in 1993, and the new coalition formed by Tansu Çiller's government faced its worst economic crisis in 1994, resulting in massive job loss and an inflation rate of 120 per cent (Özatay,2000:313-14).

The continuous anxiety did not generate a fruitful outcome for Sozen's campaign since the Islamist Welfare Party (RP) won the election and Recep Tayyip Erdoğan became the mayor of Istanbul<sup>40</sup>, being considered a figure to implement a neo-traditionalist image of the former Ottoman Capital in the mid-1990s. Nevertheless, this neo-traditionalist image of Istanbul had been observed in the 1990s newly imported post-modernism and even before with the suburb housing projects as gated communities.

The neo-traditional Turkish-style residences with tile roofs, wide overhangs, modular windows and protruded window bays on the upper floor generated an image of Turkish Ottoman houses. The local concept of neighbourhoods (*Mahalles*) was materialised in the projects like Kemer country in European and *Beykoz Konaklari* in the Asian side as a short-term sedative against the global criticism of modern architecture (Bozdoğan,2013). The stylistic language of historical references continued to develop in the periphery with the projects such as Eston Mansions, *Sari Konaklar* Sitesi, Mesa Konaklar *sitesi*, *Bizim Vadi* Settlement, *Camlica* Villas, *Florya* houses, and *Kemerburgaz* in the latest years of the 20<sup>th</sup> century (Altan Ergut et al.,2015).

As mentioned before, the neo-traditionalist image was practiced primarily in residential projects promoted by the private sector between 1986-2000. Therefore, the political tracing of the projects to Islamist movements appeared to be a misconception in the first place. Moreover, Erdoğan's short-term period in the municipality before the postmodern military memorandum in 1997<sup>41</sup> could be recognised through continuous efforts toward the modernisation of Istanbul, like what Dalan and Sozen did. However, there were differences in the scales of intervention and approaches (Keyder,2010:181).

Construction of shopping malls, firms and media offices in a more modern and later modern lexicon was still the dominant pole. Notwithstanding, Turkey was experiencing one of its darkest periods of economic crisis. Metro City (1994-2000) by Doğan Tekeli, *Akatlar* congress and culture centre by Adnan Kazmaoğlu(1948-) and Mutlu Cilingiroğlu(1947-), Shell headquarters building by Nevzat Sayin(1954-), Maya Business centre by UMO architecture, ENKA school by Haydar Karabey(1948-), HSBC Bank Headquarters. *Levent Plaza*, *Yapi Kredi Plaza* in Fourth *Levent*, *Işbank* tower, Conrad hotel, *Sabanci* centre by Haluk Tümay and Ayhan Böke (1928-2016), and *Park Plaza* in *Maslak* are among the numerous buildings constructed in the late 1990s. All these projects are the latest preponderant forms of modernism with glass facades and skyscrapers. However, a few represented postmodern figurative architecture, such as stylised columns or muqarnas details (Gül,2017:208).

The media possessing the significant active political roles of the 1990s witnessed modern buildings such as *Sabah* newspaper by Mehmet Konuralp(1939-), *Hürriyet* new headquarters by Hayati and Murat Tabanlıoğlu (1960-), *Doğan Media Town* by Tabanlıoğlu architects and Chris Owen. Even on a grander scale, the projects represented repeated elements like concrete facades, overhanging glass bays, atriums and glass curtain walls (2017:202-204).



Human is halted by the generations of architects based on the secondary research of historical observations. Their evolution toward modernism and traditionalism is discussed briefly to know the dynamics of individual and general characteristics of each generation inside matter of the place (case studies) through time. The main concentration is on the experts (architects and planners) rather than social classes

## 3. Human

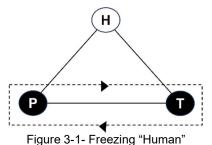
# 3.1. Halting (Freezing) Human

When the human factor is frozen, there could be two possible scenarios:

- The interaction between other vertexes, regardless of the human factor
- Specific generational perspectives toward modernity and traditionalism

For the first scenario, there are two central points to consider. First, when the human factor is frozen into categorised generations, it is possible to see the dialectic between the city and time under the scope of the halted generations regardless of their role. More simply, the city's status quo in the timeframe and its orientation toward modernity and traditionalism is the ground for study before analysing the selected architects. The information in the previous chapter is helpful to have a better understanding of the circumstances. Identifying the influential and dominant global literature review concerning traditionalism and modernity is also possible. In other words, it is a top-down approach from the global state of the art to the cities and the role of local classified generations.

For the second scenario, the only theme related to the thesis is to identify the reaction of architectural generations and the overlapped famous figures toward modern and traditional architecture.



The current task is to characterise the city's architectural elements of modernity and traditionalism based on the T-H-P. Also, identifying the traditional thinking system in both case studies and its influential factor seems vital. The thesis and specifically this chapter is expected to face the following steps:

- Identifying the dominant traditionalist power in the city inside the architectural discourse
- The transition between national and traditional, and also vernacular desires in the city
- Investigating the linear interactions between the zones concerning traditionalism and modernity and the possible role of architectural generations in shaping such situation
- The theoretical reactions of diverse architectural generations inside the city

Detailed information about the architects is discussed in the Appendix 1 and 2. The biographic description of each architect deals with the pedagogical formation, the role of the masters and individual design philosophy, critical projects and publication. Combining these factors brings about their orientation toward traditional and modern architecture (See Appendix 1 and 2).

## 3.2 Human-Lisbon

#### 3.2.1. Before Estado Novo

The period is simultaneously located when diverse styles and the problem surround the global architectural discourse. Then, in Portugal, the generation of architects appeared to grasp the dynamism and its determinism. It is impossible not to consider the impact of the place. Based on such impact, the architects had to build just in time the French-based *Beaux-Arts* imposed its footprint as the most recent design mindset. It occurred just in the decades that the identity crisis generated the problem of roots and etymological studies.

The most central character of the generation is, without doubt, Jose Luís Monteiro (1848-1942), considering the imposing time-place image in its best sense. If one assumes a possibility to address the most specific theme in Monteiro's design, it would be the influence of his master, Jean Louis Pascal(1837-1920). Classicism in its Greco-Roman sense and the emerging use of iron in that period were among the influences. This impact was apart from his projects during his academic career with precise international contexts. The designated academic design courses included more stylistic and revivalist senses like a Swiss chalet, a small Neo-Baroque Italian palace, a Neo-Gothic English farmhouse, and a Neo-Gothic English farmhouse Pseudo-Moorish Spanish House (Trigeiros,2004:10). The Rossio station (1886-1887) and the *Hotel Avenida Palace* (1890-1892) symbolise the three autonomous ideas of nineteenth-century architectural production. The first point belongs to applying iron architecture in a utilitarian program, bare and raw, and thus consistently used to cover the station's large hangar.



Figure 3-2- Rossio Train station designed by Jose Luís Monteiro- (Source: Arquivo de Sipa-Fonte De Sacavem)

The second point addressed a romantic *Manueline revival* applied to the facade of the innovative equipment by programmatic requirement. It was an initiative separating the exterior image from the

mechanical and "functional" interior. Finally, the eclecticism of the Hotel Avenida Palace revealed in a *Beaux-Arts* influence facing the *Restauradores square*, markedly announced the first and only Lisbon boulevard, the *Avenida da Liberdade* opened in 1879 (Tostões,1995:508). Indeed, based on this argument, Monteiro's work could be recognised as symbolically the link between the old urban fabric and the newly initiated boulevards in connection with Ressano Garcia's innovative and rationalist ideas to rejuvenate the Portuguese capital with *Avenidas Novas*.

The later architectural generations in Portugal were much more in harmony with his design philosophy. It confirmed modernity regarding construction technology, materials and functionality based on the plan's importance (Cordeira and Maia, 1990). In the age of transition, he was a transmitter of the stream toward progressive ideas and modernity in the next century. Nonetheless, possible deterministic powers of traditionalism stylistically grasped the *neo-Manueline* language.

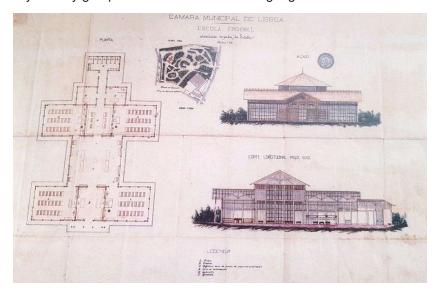


Figure 3-3- Froebel Kindergarten by Jose Luís Monteiro- (Source: CML)



Figure 3-4- Hotel Avenida Palace by Jose Luís Monteiro- (Source: Arquivo de Sipa-Fonte De Sacavem)

Mestre Monteiro's impact made its mark even on the architects of this generation as well. His Beaux-Artians typology, implemented in the Lisbon School of fine arts, affected diverse apprentices. A few are emblematic symptoms of the time dynamics and its transitional character, such as Alvaro Augusto Machado (1874-1944). In addition, the houses designed by Machado somehow resulted from José Luís Monteiro's influence in Portuguese architecture. The ones he designed for general Oliveira Gomes, Julio Cesar de Moura e Vasconcelos, and Manuel d'Almeida represented this influence the most. Roofs resembling the chalets the Monteiro designed and a more complex façade in eclectic taste was the most straightforward (Magalhães, 2007:66-87).

Machado presented his concern toward cultural nationalism in an eclectic approach, different from the romantic ruralism that architects like Raul Lino exhibited (Magalhães, 2007:38). Indeed, his nationalistic concerns directed him toward Neo-Romanesque fitted inside the Portuguese architectural atmosphere. The most significant work that characterises Machado's personality was, without doubt, the *Túmulo dos Viscondes de Valmor* in 1900, using limestone mortars, stone arches and columns supporting the columns structurally (Carvalheira, 1908:17).

His dedication to taking Romanesque architecture seemed repetitive on a more contemporary level, significant enough for him to participate in reconstruction, restoration and designing church programs. However, the sign of transition started to show more than ever. His projects moved toward a premodern sense with the concentration on constructive and technological formation described clearly in the article "Type of modern housing" in *Construcção Moderna* in 1900, advocating the free composition.

Thus, it is challenging to communicate Alvaro Machado with any single orientation toward modern and traditional perspectives. He could be recognised as a beginner with eclectic styles, a Neo-Romanesque master. Also, one can conclude that Machado was a concerned figure toward Portuguese culture, an enthusiast of Art-Nouveau and even the primary rising light of modern ideology.



Figure 3-5- Rafael Bordalo Pinheiro Museum by Álvaro Machado

The almost similar line was carried on by the Adães Bermudes (1864-1948) depending on the contexts of the projects. These varieties of representatives could be identified in projects such as the historicist language of Neo-Manuenline reference in *Jazigo dos Benefitores da Misericordia* (1905). Without

finding any intentional provenance, his proposal as a winning project for the monument in Marques de Pombal, a cylindrical building in Largo de Intendente defined in the eclecticism of French influence. The projects articulated the expression of the plat band planes, the tiles, and the metal profiles of the railings as a *Valmor* prize project. In this evolutionary and progressive path, it is noteworthy to address the economic houses in *Arco do Cego* briefly with a scheme of tiny, terraced houses combined with low-rise collective housing in 1919 (Tostões,1995:512).

This same line of using diversified architectural languages could be modelled as a triangular conceptual model formed by an eclecticism toward the progressive ideas of Paul Blondel (1847-1897), the positivist influence of Hippolyte Taine (1828-1893) as a philosopher. Moreover, the traces of the art historian and historicist approach of Gaston Maspero could form the development through his pedagogical approach. However, one can account for a personal-liberal design mindset or the time mandate imposing itself politically.

Over time, the diversified inconsistency of styles and identities was revealed more. The pathway architecture had to take could reach converged ideologies clustered by progressive rationales and subjective representations. Comparing the Lino-Terra vision toward the evolution of Portuguese architecture and Lisbon as the case study of the thesis might indicate a fallacious false dichotomy. However, this inherently realised polarisation was addressed in the theoretical scope. This image was depicted explicitly for the first and second decades of the century and even further.

Raul Lino (1879-1974) must be considered in this part, even though his influence was not dominant in the cosmopolitan ambience filling the Portuguese capital. In other words, he represented those with a Portuguese nationalist mentality opposing foreign influence (Gomes,1991:32).

Given the ideas to define Lino's philosophy, four factors must be highlighted to illustrate the importance of his presence as a critical character for this generation. The first point is the intersection of international reactions and his academic years. Under the supervision of Albrecht Haupt (1852-1932), his theoretical design principles were shaped around the context and Portuguese architecture. In a broader scope, his cultural consciousness was correlated through cultural identity materialised through concepts of British cottage (Lino,1929:68).

The second point refers to his journey to Morocco in 1902. This visit could appear as a significant turning in the importance of time continuity, revealing the diverse cultural significance of different periods in the country. Moreover, without a doubt, there was a definite taste from his side for Southern architecture (Tostões, 1995:515). Also, his travel might seem crucial for the traditionalist philosophers addressing the centrality of the oriental culture in the concept of the traditional mindset.



Figure 3-6- Tivoli Theatre centre designed by Raul Lino

Subsequently, the third point might designate a link between the Portuguese ethnologists of the 19<sup>th</sup> century, such as Rocha Peixoto . Also, his ideas on *Casa Portuguesa* were correlated to the central political discourse of Estado Novo and the possible connection with the neo-traditionalist agrarian image. The fourth point is his vision toward modernism in his writing since he refuses the acceleration of monotonous modern life, attacking a specific type of urbanism where the machine is against the dignity and authenticity of the artisan (Lino, 1936).

The progressive character of the pole, if Choay's classification is not necessarily dichotomic, could be addressed to Miguel Ventura Terra. A clearer image derived from Ventura Terra is mainly reflected in the rationalist projects such as the Association from Protection to First Childhood (1901), the first nursery in Lisbon, Liceu Pedro Nunes (1906), Escola Secundária Maria Amália Vaz Carvalho Camoes (1907), Maternidade de Alfredo da Costa (1907) and Escola Secundária Maria Amália (1913) besides his designed mansions (Tostões, 1995:513).

Terra's influence in more projects inside the urban context and class consciousness was inherited by the Republican state. Nevertheless, this does not make him a pure progressivist, as he participated in the preservation and remodelling of the projects such as Palacio Sao Bento. Moreover, one can address his enthusiasm for conserving and reusing old materials. That is why the progressive-cultural dichotomy is not necessarily the precise depiction of such an image. Ventura Terra was influenced by time rather than a place when his progressive formation in Paris coincided with a Proudhonian attitude not in a mutualism but in an approach affected by the necessities of time imposing a dominant class (Almeida, 1993:74).

The most realisable points to address Ventura Terra's Modus Operandi could be identified in his primal mind frame based on the direct influence of Victor Laloux in a continuous approach with Viollet-Le-Duc. In addition, his personal views exhibited the necessity of modern science and criticism of the "Portuguese house" as a movement. Since his desired architecture relied on the mental (or abstract

scheme (França, 1990:147), Ventura Terra could be identified as a character with a more evident mindset toward a more modern language.



Figure 3-7- Palacete Mendonca-Premio Valmor de 1909 by Ventura Terra - (Source: CML)

#### The Generation in Overall

What can be perceived as the essential character of the generation is the dominant discourses of Beauxart. This design school globally influenced this generation, along with the inconsistency in how architecture has to move forward with diverse stylistic diversities and the effort to identify the Portuguese ethnology that started in the 19<sup>th</sup> century. Therefore, it is considered a spectrum of transition toward a primary phase of modern elements in architecture. In this regard, Jose Luís Monteiro could be seen as the transmitter of the central essence of the generation influencing the transitory characters such as Adães Bermudes and even more and in a more voluntaristic way by Alvaro Machado. At last, inside the linearity of time, Ventura Terra becomes a character with a more authentic voice toward modern concepts. The reactionary figure without doubt toward this transition is Raul Lino, with a more embracement of traditional ideas, although calling him a traditionalist sounds like a simplistic vision.

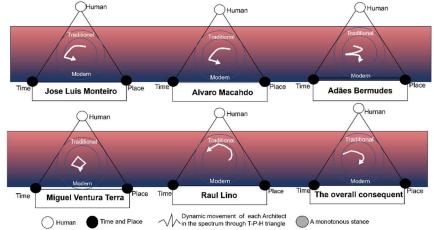


Figure 3-8- The principles of the architects in the generation based on the traditional-modern spectrum

#### 3.2.2. Estado Novo1926-1974

In this part, the modus operandi of four different generations will be discussed.

#### **First Generation**

The first two decades of the 20<sup>th</sup> century still supported Eclectic architectural tastes. However, the early 1920s was the period for the appearance of newly graduated architects. They began to distance themselves from the eclectic ornamentations in a coincidence with political anxieties leading to the military coup. The arrival of Art Deco was convergent with the coming of age for new architects like Luís Cristiano Da Silva (1896-1976), Porfírio Pardal Monteiro(1897-1957), Carlos Ramos (1897-1969), Cottinelli Telmo (1897-1948), Jorge Segurado (1898-1990), Cassiano Branco (1897-1970) and Adelino Nunes (1903-1948). The overall image of this generation was a continuous theme filled with the progressiveness of Ventura Terra with more freedom and independence with the age of historicism and the transition. Every paradigm shift needs to approach a new structure and dominancy.

This generation, in the first place, introduced new representations in architecture. For instance, Pardal Monteiro generated geometric references for ornamentation based on Art Deco with a volumetric approach. Also, he used dispassionately reinforced concretes to resolve the need for generating cantilevered elements and large spans in different projects, such as designing The new *Instituto Superior Técnico* in 1927 and *Cais do Sodré* (train) Station in 1928. These projects were amplified by other architects' projects, such as *Sul e Sueste* (fluival) station by Cottinelli Telmo, with a flat roof and large glass surfaces to represent the standards of international modernism (Tostões,2005:20).



Figure 3-9- Cais Do Sodre Train Station by Porfirio Pardal Monetiro- (Source: Serodio-CML,1963)

The image occurred on a landscape where almost all architects of this generation had graduated from Lisbon Fine Arts School (EBAL), where the training almost deviated from the European Avant-Garde

influence on architecture. This issue also surprised Nuno Portas. For Portas (1978:707-708), the effect began from 1925 to 1936 with around 20 to 30 noticeable works that the international Avant-Garde reverberated in Portugal being linked to the internationalism of Esprit Nouveau and Bauhaus through travels to Paris, Italy, Germany, and Spain.

The arrival of *Estado-Novo* since its official announcement did not affect the youngster modernity rooted in this generation in the early stage. The reason might root in the position every nationalistic stance had been taken over time. The state sought approaches for substituting the prior with the oldest glorious one. However, the fixed perspective might only concentrate on stylistic choices. As there was no concrete lexicon for this ambition, the current time or the status quo was accepted politically because the complete knowledge of the present architectural trend had not been achieved.

The generation found the opportunity to present their avant-garde projects in the 1930s in a "golden decade of public works". The era began with *Casa de Moeda* as the first grand project of the regime By Jorge Segurado in 1931 and Carlos Ramos Radio Pavilion in oncology Lisbon hospital in the same year (Tostões, 2004:111). These projects generally materialised the internationally advertised functionality and rationalism with unitary volumes, flat roofs–surfaces and the abstracted or lack of ornaments (Ibid,2005:22).

The synthesis between the political and architectural developments in the beginning years illuminated the recognition of architects based on the institutions they were committed to. Such attachments did not necessarily verify if they served the national ideals. Cottinelli Telmo, the chief architect for the Portuguese Railway Company, and Adelino Nunes, the architect of post offices, are examples of this generation.

The total concept of "ephemeral" provides the possibility of investigating the personalities of each architect respective to their reaction toward modernity and traditionalism. They graduated in the same environment and then travelled to European countries. For this reason, the international language of modernity was approved freely. This situation did not happen after the early phase of fascism of the flexible stand toward its repetitious practice. Hence, this generation experienced an oscillatory model reflecting the inevitable forces of traditionalism and modernity. It shaped the socio-political environment, meaning their works had no firm and pure orientation. However, unlike the transitional path toward a modern ambience, these architects might be identified as the first agents of official modernism at the international level.

In this regard, institutional architects seemed to be the more flexible characters considering the political forces. Also, the dichotomy between modernity and traditionalism was transferred from the previous generations.

It is necessary to categorise the modus operandi of the architects and their orientation toward modern and traditional mental schemes. Without a doubt, one of the most crucial characters of this generation is Porfirio Pardal Monteiro, with his essential role in developing the capital in the beginning decades of the 20<sup>th</sup> century.

Pardal Monteiro's architectural path reflected a network of parts such as classical perspective, geometric ornamentation, rational consideration, functional orders, monumentality, and modernity in the cosmopolitan sense. In this evolutionary sense, as mentioned, the role of Jose Luís Monteiro and Miguel

Ventura Terra is crucial to shaping his neo-classicism design principles in a more structural sense influenced by August Perret.

Pardal Monteiro's architectural responses toward each project differed from neo-classicism to Art-Deco and international modernism. Notwithstanding, he obtained a Vitruvian logic to consider every design composition inside an urban complex with a central axis and symmetrical dominancy. Such design mindset ranged from *IST* and *INE* to *Cidade Universitária de Lisboa* (Pardal Monteiro, 2016:26).



Figure 3-10- Nossa Senhora de Fátima Church by Porfirio Pardal Monteiro

Indeed, Pardal Monteiro's character in this generation is paradigmatic of what is known as the transition from eclectic revivalism and acceptance of ephemeral modernism due to his academic career. Also, international connections and the political transition in Portugal toward Estado Novo and its specifically imposed architectural image were other secondary symptoms influencing his design principles.

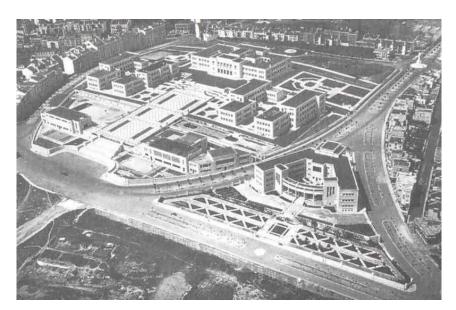


Figure 3-11- *Instituto Superior Técnico* by Porfirio Pardal Monteiro – (Source: DGPC)

If there are any characters to reflect the "in-between" attitude toward Portuguese architecture in this epoch, Carlos Ramos is the most crucial figure to be reflected as an example. It is necessary to note that this "in-between" manner could manifest the plural reflections. A character in transition, or what Carlos Ramos considers his role in the "generation of compromisers", faced several challenges. It was between international state-of-the-art or the necessities of the realities any architect could experience as a challenge to survive (Coutinho,2004). initial works of Ramos were on an evolutionary path from Art Deco to confirmation of the modern language. These signs are simple to find out in the Radio Pavilion. It was designed in the rationalist and functionalist way radically as a unitary volume without any decorations (Tostões,2005:22).

A turn could be noticed in his works toward an eclectic language as a revivalist outcome (mostly neoclassic) endorsing modern values, clear geometricisation, and external ornamental frugality. Besides, traditional shades of Ramos also reflected his enthusiasm for traditional building materials as a testimony to his consciousness. It somehow anticipated what ideologies or styles could be introduced in the future, whether as vernacularism, regionalism, or even critical regionalism.

This theoretical framework of Ramos might indicate his liberal manner either in his working studio in Lisbon or as an academic figure in Porto with considerable influences on the next generation figures such as Francisco Keil Do Amaral, Fernando Tavora, Nuno Teotónio Perreira. He is a transmitter of the "third way", with his liberal characteristics comparable to Jose Luís Monteiro's role in influencing the architects like Ventura Terra and Porfirio Pardal Monteiro. If it is possible to imagine a character in fluctuation and circulation toward the deterministic of place, time. and human, that has to be Carlos Ramos depoliticising the traditional and modern impositions.

The generation's possible resisting figure and even near-monotonous conceptual structures could belong to Cassiano Branco. At least looking at his works for the private sector could bring about this argument. His projects, such as the second proposal for the Eden project and Hotel Vitoria inside the urban context, are inside the matrices with cosmopolitan modernity. They indeed contained inventive elements influenced by the plastic qualities of the European *Avant-garde* (Tostões, 2005:23).

He tried to use various features like the asymmetric composition with horizontal cantilevers finished at the extremes by round balconies until the 40s. This application magnified his insistence to exhibit a most modern character of himself. Due to the state's authoritarian policy toward traditional representations, his modern image declined enough to be recognised as an inconvenient personality to the state (Tormenta Pinto,2016:31).

Branco's perspectives on urbanism manifested the synthetic influences of Sant'Elia's *Citta Nuova* and *Cite Industrielle* by Tony Garnier. These influences proved that his conceptual frameworks were saturated with modernism in their global sense (Bartolo,2011:40).

His modern impacts were strong enough to dominate little fluctuations in his works in the following decades, which shows a slight compromise between modernism and traditionalism. The depicted image was apart from the revivalism. Indeed, the inherent transitory character of the time factor had continued since the 19<sup>th</sup> century. Jorge Segurado is also the continuous representative of ephemeral modernism with his firm belief in the rationalistic connection between the character of a building and its facades and, subsequently, its link to plans and needs (Tostões,2005:21).

It is noteworthy to address the transitional character of Luís Cristino da Silva toward the state's architectural ideals materialised in monumentalism. Like other architects of the generation, he is recognised as a pioneer of modernism in the 20s as an aftermath of his studies in 1910s in Paris and Rome.

With its use of new materials and reinforced concrete, *Cinema Capitólio* resonates with the modern face of Cristino da Silva raised by the Art-Deco echo. His evolutionary path transformed into a traditionalist phase in the 1940s with his participation in the Portuguese World Exhibition and *Praça de Areeiro*. This transitional character is under José-Augusto França's (1976) categorisation in three different categories from the academic years in the 1910s to the 1940s. Nevertheless, his works in the last stages outside central Lisbon in the 1960s and 1970s reembrace modern ideas in proposals for the vast urbanisation plans in *Nova Oeiras*.

Cottinelli Telmo could also represent similar features of smooth modernity regarding the socio-political conditions in Portugal. Like the other architects that graduated around 1920, he appreciated the primary waves of modernity through his journey to European countries. The most crucial point was his possible presence in Paris and visiting the international exposition of modern industrial and decorative arts in 1925. His standing point toward nationalism and internationalism was an ongoing product of traditionalism and modernity images as two different views. The first image is on the hostility toward slightly picturesque views of Raul Lino in a lecture by Telmo in 1934 (Pereira, 2000). The other image is his interview at the Portuguese World Expo in 1940. The representative of the Portuguese exhibition was independent of preconceived architectural formulas, having the courage to be different from an international critic who would never understand sentimental reasons and domestic aesthetics (Telmo,1939:10).

In a nutshell, he could be recognised as a transitory character from the architect with the primary wave of modernism to the state architect with a specific smooth rotation toward the smooth tradition. A similar transitionary position with a slightly weaker stance could also be considered for Adelino Nunes.



Figure 3-12- Terminal Fluival Sul e Suleste by Cottinelli Telmo- (Source:SIPA archive of Forte De Sacavem)

#### The Generation in Overall

The generation's overall design philosophy follows a spectrum of transition from Art Deco and subsequent primary waves of modernism to a traditionalist scenery image supported by the state. Carlos Ramos had the most compromising character with a more liberal approach to influence the next generations, while Casiano Branco's role in resisting the imposing time-place status quo made him a modern architect. Porfirio Pardal Monteiro's role in this generation is the most vital and similar to Branco's, with a more transitional taste. Cristino Da Silva, Cottinelli Telmo and even Adelino Nunes are the original representatives of the generation according to the time-place determinism with the slightest deviation. Comparing the previous generation, the local imposition of time and place shows a more dominancy due to the subjective socio-political situation since the mid-30s.

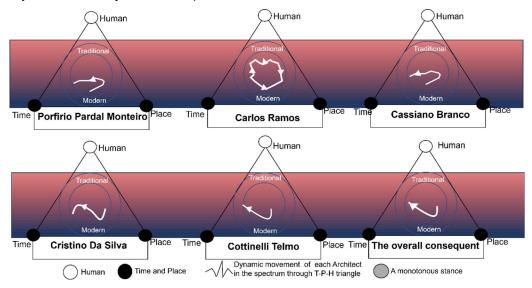


Figure 3-13- The principles of the architects in the generation based on the traditional-modern spectrum

### **Second Generation**

This generation played a short-term role in balancing traditionalist centrality by state and confirming modern architecture as an oppositional force. The generation almost bridges the previous with the crucial upcoming considerable architects. Notwithstanding, the slow pace of depoliticising architecture almost began. In addition, a problem-solving approach toward authentic design paths was used to decentralise the stylistic mentality.

The architects introduced and evolved professionally in the 30s-40s and shined until the beginning of the 70s. They were acquainted with the principles of modern architecture by their masters and restricted by the official state propaganda. In a general overview, a similar approach took place in almost all postwar discourses. Notwithstanding, the inherent character of the "third-way" approach must be discussed first. This approach as a reconciliation way is either a vision in-between in a selective manner or a synthesis. Moreover, rejecting the identified cons can be another possible definition for the "third way". If an architect and theorist are to be recognised inside this vision, that would be Francisco Keil do Amaral (1910-1975). The third-way look between the possible poles of traditionalism and modernity correlates with the influence of Willem Dudok (1884-1974). This effect supported any meeting points between the

traces of popular architecture and authentic cognition. This rational scope was possible by removing the stylistic valorisations and concentrating on the identity and roots. All these points are noticeable in his book *Uma Iniciativa Necessaria* (a necessary initiative) in 1947(Tostões, 2013:189-190). This argument can reflect also be reflected in the establishment of the *ICAT* group in 1946, the initiation of *Arquitectura: Revista de Arte e Construção* in 1947, the general exhibition of plastic arts between the years 1946-1956, the first national congress of Architecture in 1948 and finally the Survey of popular architecture in Portugal project during the years 1955-1961.

His career provides an adventure in pursuing a balance of modernity and traditionalism. Indeed, his devotion to national architecture in Paris Pavilion with the pure geometries and the ornaments. These elements were designated to portray the glorious and symbolic Portugal. It would be recognised as a separation between the political desideratum of the regime and a primary phase of popularity. For this reason, he did not ignore the need to resort the symbolic representations (Hestnes Ferriera, 1991:49). The liberal influence of Carlos Ramos is clear to notice in Keil do Amaral's design and theoretical philosophy. He moved from the public monumental projects to theme parks as a cognitive sign or connotation of urban rediscovery. Even in his designed project for greenery spaces such as *Campo Grande* and *Parque Monsanto*, the codes of modern movement exist (Tostões,1999:83). That is why the architecture of Keil do Amaral is vital to discuss as a matter of addressing a sense of symbiosis and mutualism as mentioned in the previous chapters to balance modernism and traditionalism. Hence, he must be introduced as the compromising character of the generation. The circularity of time might have vital theoretical influences on his ideas ranging from the first national congress in 1948 to the survey project (1955-1961).

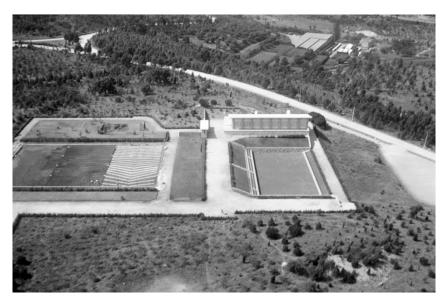


Figure 3-14- Monsanto Tennis Club by Francisco Keil do Amaral- (Source: FCG archive)

The following critical and noteworthy figure of this generation for a city which was evolving toward the north in a modern way is João Guilherme Faria da Costa, which has to be observed briefly. His drawings and sketches clarify the urban transformation to the urbanism established by modern principles. Also, the influences were evident from the French global influence on modern urbanism and architecture from

his masters like Marcel Poëte (1866-1950), Étienne de Gröer (1882-1952) and Donat Alfred Agache (1875-1959).

One can trace such influences on *Bairro de Alvalade*, residential districts for the North Zone in 1938, the layout of the area compromised between *Avenidas do Aeroporto* (Now called *Gaga Countinho*), *Infante D. Henrique* and *dos Estados Unidos* and the 1ª *Circular*. Furthermore, it is applicable to assume the demolishing of traditional fabrics such as *Mouraria* and *Rua De Palma* as actions to reinforce his modern vision. At last, his triumph at the *Alvalade* project facilitated the situation for the architects of the next generations to apply rationalists' contributions of the Athens Charter in the *Estacas* neighbourhood, and the *VaVa* complex and the blocks on *Avenidas dos Estados Unidos da America*.



Figure 3-15- Alvalade urbanisation plan – (Source: CML 1948)

The modern framework by Faria da Costa paved the way for Fernando Silva, another architect of this generation, to apply modern principles in his projects. His works in *Alvalade* and the projects for private owners and the Middle/High class in Lisbon, such as Cinema São Jorge (1946-1950), *Imaviz* complex, Hotel Sheraton, Philips building and large-scale design in the *Portela* neighbourhood, reflected the apparent influence of modernism. As a matter of fact, they were built specifically for the rising middle classes as an experiment using prefabricated elements (Tostões, 2005:32).



Figure 3-16- Sheraton hotel and Imaviz- (Source: FCG archive

#### The Generation in Overall

The overall character of the generation is a path toward the official confirmation of modernism. Subsequently, It accelerated the process of decentralizing nationalism and a shift toward regional authenticity. Keil do Amaral's role is more compromising mutually, while Faria Da Costa and Fernando Silva presented a more modern character. All in all, it could be considered comprehensively as a spectrum toward modernism.

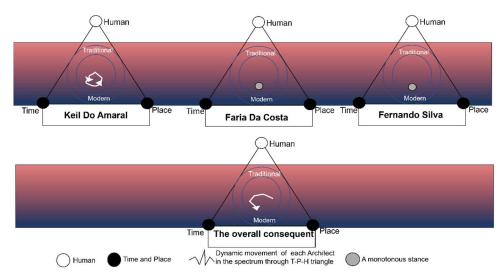


Figure 3-17- The principles of the architects in the generation based on the traditional-modern spectrum

#### Third Generation

This generation's contribution is the continuous evolutionary path of confirming modernity correlating with Keil do Amaral and the liberal Carlos Ramos's effect. Compared with the previous generation, this dissociation in the last years of the 1940s was influenced and imposed voluntarily by the younger architects. The projects between *Areeiro* and *Alvalade* were the experimental field to realise modern Lisbon more than ever by the architects of the third generation. Nevertheless, the generation's challenge was ending the dichotomy between modern and traditionalist architecture based on the influence of Frank Lloyd Wright and Bruno Zevi (Tostões,2005:28).

Alberto Pessoa (1919-1985) is a character with an active role among the architects of this generation (Tostões,1997:68). For sure, the political realities of the epoch made him participate in public works reflected in classical monumentalism. In his early stage, the influence of the state architects such as Cristino Da Silva and Cottinelli Telmo is evident, although their collaboration took place outside Lisbon (Rosmaninho,2006:356). However, the modern Pessoa's design philosophy in Lisbon consists of Keil do Amaral's impact and the First national architecture congress in 1948.

The physical evidence for this metamorphosis includes the semi-open blocks, landscaped backyards, and collective facilities in Lisbon. These instances were the symptoms of distancing with *Estado Novo*'s principle (Machado,2005:3). His participation in the most crucial projects like the complex for *Avenida Infante Santo* as a collaboration with Hernani Gandra, *Avenida de Paris*, *Praça Pasteur*, affordable

housing projects for *Restelo* and Calouste Gulbenkian Foundation manifested his critical role on modernisation of the capital.

Calouste Gulbenkian Foundation, one of the points that the modern Portuguese architect reaches its most mature level in the 1950s, introduces the other generation architects like Pedro Cid (1925-1983) and Ruy Jervis d' Athouguia (1917-2006). Cid's modus operandi in design moves a similar pattern to Pessoa. It was harmonious with the second wave of modernism in Portugal to apply the CIAM perspective and the Athens charter. Such principles were applied in housing blocks on *Avenida dos Estados Unidos da America*, the Portuguese Pavilion at the universal exhibition in Brussels (1956-1958), the collective housing project in *Olivais Norte* (1963) and the *Jean Monne*t building (1974). All these projects manifested the structural truth, the structural lightness, transparency, and the extensive use of reinforced concrete.



Figure 3-18- Portuguese Pavilion at Expo 58-(Source: Biblioteca de Artes de Fundação Calouste Gulbenkian)

Ruy Jervis d'Athougia follows the similarity of such an approach with multiple details. The project with four blocks of buildings in the *Estacas* neighbourhood in collaboration with Sebastião Formosinho Sanchez (1922-2004) is a footprint of his ideas. His design mindset reflected a design grammar based on the insertion of the blocks on *pilotis* connected to exterior green spaces with western and eastern lights as a standard paradigm in Brazilian modernist architecture (Carvalho,2016:46).

All his designed schools are framed with a roofed playground, balcony, pátio and yard. They indeed confirmed the modern problem-solving approach with solutions ranging from long passages of ramps and corridors to moving through the horizontal plane and using concrete and elements such as *brise soleil* (Ibid,2016:46).

These principles were apart from the most specific characteristics of modernism in architecture that d'Athougia applied, like functionalism as a necessity, free façade, horizontality, standardised modules, free plan and the free roof. He could be considered an architect with almost solid modern design principles despite his personal views as an effect of Carlos Ramos.



Figure 3-19- Ruy Jervis d'Athouguia and Sebastião Formosinho Sanches *Estacas* neighbourhood Bird Eye view- (Source: CML)

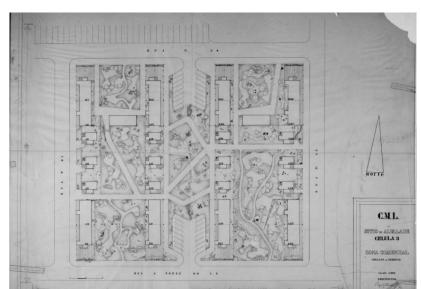


Figure 3-20- Ruy Jervis d'Athouguia and Sebastião Formosinho Sanches, Estacas Neighbourhood-(Source: CML)

On the other frontline, the generation consists of architects trying not to limit themselves inside the modern and international lexicon. The influence of Bruno Zevi (1918-2000), Frank Lloyd Wright (1867-1959) and also Ernesto Nathan Rogers (1909-1969) mediated the echoed voices of modernism until the first half of the 1950s. MRAR (Movement for the Renewal of the Religious Art) was an example of embracing the religious theme with its inherent traditional features and modern influences as a necessity. Later, the survey project also addressed the need for contextuality and vernacular qualities as an aftermath of global awareness and decentralising state-oriented nationalism.

The architects like Nuno Teotónio Perreira, Fernando Tavora and Manuel Tainha could be in this category not only to introduce a turning point on the evolutionary path of this generation but also to pave this unique path for the other generation.

For Nuno Teotónio Perreira, the general modern principles advocating functionalism form his central

design philosophy in projects like *Aguas Livres* block designed in 1953 and in collaboration with Bartolomeu Costa Cabral. Nonetheless, the project overall is where the application of modern international criteria and its criticism might encounter the same place (Tostões,2005:29).

It is crucial to note that spatial qualities began to take their deserved role from the stylistic vision of architecture regardless of historicist traditionalism and denotative-decontextualised lexicon. Teotónio Perreira's standing point is non-neglectable with what he did in *Igreja de Águas* to mediate modern functionalism and traditional imposition of a religious building. The matter of space and its sociocultural perception was the context to be dealt with. This understanding could also be identified in other churches, specifically *Sagrado Coração de Jesus*, to pose against historicism and integrate the urban and sacred space (Tostões, 2004).

Spatial quality and integration between modernism and traditionalism and valorising the traditional elements fluctuated and combined in other activities like the survey project (1955-1956), *Olivais Norte* (1959) and the *Franjinhas* (1965). This circumstance shaped his central methodologies based on modern ideologies as an oppositional force. It was pretty enough to introduce him as the person pursuing the "third way" and transmitter characteristic for the architects of further generations, some of whom began to raise their philosophy through the *Atelier da Rua da Alegria*, in Lisbon.



Figure 3-21- Franjinhas- (Source: DGPC)

The third-way approach also manifests in Fernando Távora's works, another character to discuss briefly. Tavora's works and education were centralised in Northern Portugal, not Lisbon. However, his design mentality is critical to discuss to manifest the evolutionary path of Portuguese architecture. Tavora's mental philosophy is the synthesis of these two approaches. Given such a framework, one can create a design based on the intimate solidarity between landscape and time, focusing on conservation, construction, and innovation (Tavora, 1986).

Like Teotónio Perreira, Távora aimed to criticise the historicist approaches with a different vision since he wrote: O *Problema da Casa Portuguesa* (The problem of Portuguese House). This text was in

response to the historians calling for the stylisation of traditional architecture and its adjustment to modern conditions (Bandeirinha,2012:13).

The House was the central theme for those involved in the problem of modernity and traditionalism. Thus, is why Távora was not the first person to concentrate on House despite his vision being critically different from previous movements. In other terms, Távora's third way is the continuous and evolutionary approach with both rejecting the stylistic obstacles of international modernism and the scenography centralised by the *Casa {Antiga} Portuguesa*. Conversely, it compromised with identifying authentic matrices composed of regional subjectivity and elements denoting the abstract space, which is utterly influential for the next generation. This considerable paradigm shift is grasped and experimented with through all the architects like Manuel Tainha, whether designing in Lisbon or Northern Portugal, in urban scope or within the survey context.

#### The Generation in Overall

The third architectural generation in Portugal amplified the approval of modernity and opposed to regime's monumentality and traditional desire in its scenographic sense. Ruy Jervis d'Authougia, Alberto Pessoa and Pedro Cid are among the personalities with an almost solid vision toward modernism. On the other side, there are other architects with more comprehensive language to use the best solution to the design problem. Nuno Teotónio Perreira and Fernando Távora are among the compromising characters taking the liberal heritage of Carlos Ramos by conceptualising the third way, either by integration or by criticism of any obstacles. Comparing the previous, the architects in this generation tended to move toward pluralistic ambitions and spatial practice as a main frame.



Figure 3-22- Sketch of *Igreja do Sagrado Coração*-(Source:Tostões,2004b)

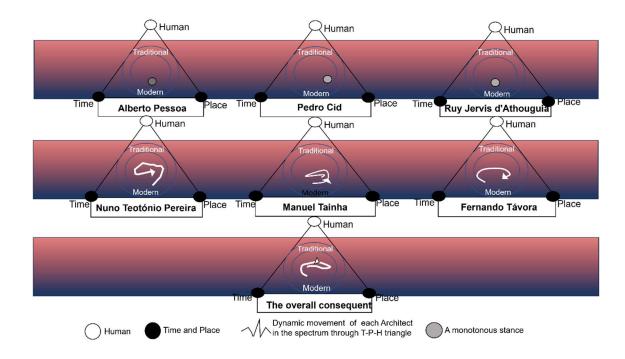


Figure 3-23- The principles of the architects in the generation based on the traditional-modern spectrum

# 3.2.2. Generation working in Estado Novo and post-revolution (The fourth Generation)

The fourth generation is crucial to note as it contained several architects working both in *Estado Novo* and after the revolution in 1974. The developments in the last years of the 1940s ranged from diverse moments. The themes such as accepting modernity, scientific research in *LNEC* and the gradual formation of "context" through *MRAR* and the survey were handed over to this generation. In Lisbon, the role of Nuno Teotónio Perreira's atelier is theoretically and practically indispensable. It facilitated the presence of architects like Vitor Figueiredo (1929-2004), Pedro Vieira de Almeida (1933-2011), Gonçalo Byrne (1941-) and Nuno Portas (1934-).

The physical paradigm of compromise between the subjective and objective contradiction is amplified through local material. This compromise could be exemplified in Alvaro Siza (1933-) in the plural and contrast mode.

Siza's role regarding traditionalism and modernity in architecture is not evident enough. Notwithstanding, the architectural scope at the global level was taking a more concrete position with discourses like postmodernism and, later, critical regionalism. These design principles parallel the other significant contributions in sociology, geographical science, and philosophy. Nonetheless, it is possible to track some mutual points in Siza's ideas and post-war intellectuals such as Martin Heidegger. For instance, they reached a similar notion of boundary being not the point of stopping an entity but a place of beginning for occurrence (Frampton, 2000:16).

In his pluralistic cyclic design process, the modern Siza is a fusion of different models by Frank Lloyd Wright (1867-1959), Adolf Loos (1870-1933), Jacobus Oud (1890-1963), Alvar Alto (1898-1976) and Luís Barragan (1902-1988) generating flexible and ample options from the Nordic to Mediterranean architecture with abstinent rationalism. This moderate spectrum adds organic, contextualism and even monumental features as time passes, transforming, cycling, and fluctuating considering the Time-Place-Human triangle.

Considering the projects in Lisbon, such as the renovation of *Baixa*, *Castro* and *Melo* buildings along with the Portuguese Pavilion in Expo 98, manifests the comprehensive design philosophy of Siza. Interestingly, Siza's studies of *Baixa Pombalina* made him realise the inherent modern nature of the urban fabric. Consequently, the buildings and layouts were preserved to revive their' rationalist nature (Tostões,2022). Unlike the other projects, this conceived ensemble is unique as there has been a correlation between conservation and traditionalism.



Figure 3-24- Chiado Fire before reconstruction by Siza- (Source: Revista Municipal,2007)



Figure 3-25- Portuguese Pavilion in Expo 98

Siza's modus operandi is a synthetic approach between individual and collective visions in a pluralistic reality. This mentality consists of the problem-solution scheme as a knowledge-base framework and the global state of the art. In other words, it was a system of checking and balancing the modern and traditional codes. Notwithstanding, the surroundings and environmental ambience are neither decentralised nor converted into a stylistic perspective.

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Figure 3-26- Bonjour Tristesse Sketches by Siza-(Source: Jodido,2013:97)

It is almost impossible not to address the role of another architect Nuno Portas, in this generation with his impact in both intellectual and practical aspects. In the theoretical aspect, his numerous writings, such as "The urban policy" and "The City as Architecture", and writing articles in *Revista Arquitectura*, *O Tempo e o Modo*, and *O Jornal de Letras e Artes* were accumulated of a broad synthesis from numerous theorists from Bruno Zevi ,Frank Lloyd Wright, Aldo Rossi, Martin Heidegger, Jane Jacobs and Robert Venturi.

All these publications were influential enough to prioritise the public space as a central element evolving through time to integrate the inside and outside. Accordingly, the buildings are perceived as objects to serve the public space. Moreover, Portas moves from Zevi's anti-rationalism to Rogers' culturalism and later toward the proposals of Christopher Alexander (Figueira,2010:79). His participation in the architectural projects bears the marks of Nuno Teotónio Perreira and Atelier de Rua da Alegria in the projects like Igreja do Coração de Jesus and Olivais Norte Towers with a moderated approach of modernism.

The fluctuation between the detailed elements of modernism and traditional architecture out of curiosity

toward the authenticity in design made Portas more involved in interdisciplinary discourse. These fields ranged from architecture to urbanism, philosophy and politics, anthropology to phenomenology and structuralism. The impact of Chombart de Lowe and Henry Lefebvre was the most evident influence on Portas' design ideology.

Portas considers stability a vulnerable principle for traditional culture as the tradition itself is not immutable. Hence, it is advisable to trust in the continuity of local architecture (Portas: 1963:4). In this regard, Portas' vision toward any attempts such as *Inquérito* was sceptical as they might lead to superficial formalism. In this sense, Portas valorised the spontaneous formation of traditional elements in architecture (Ibid,1963:17). In overall, it is possible to consider him as an architect and theorist to implement a third-way approach based on a methodological approach controlled by self-conscious, self-regulated nature of the space to balance traditionalism and modernism. His theoretical approach could be considered for the thesis as he decentralised both sides of the dichotomy by creating a methodology to impose policies on the urban space to be dynamic over time.

a cidade como arquitectura

Figure 3-27 -A cidade como arquitectura [The architecture of city] written by Nuno Portas-(Source: Portas, 1969)

A similar methodological approach is practised through diverse architects such as Gonçalo Byrne. It was when traditionalism and modernism started to be decentralised and depoliticised, with symbiosis and integration derived from the ample understanding of pluralism. Byrne's reaction to modernism and traditionalism is not considered a direct vision. On one side, he assumes the past and history as vital source as it links time with architecture through archaeology since architecture acts like a temporal stratum (Byrne,2007:98). However, for him, the continuity of time linking with the place to reach a dynamic vision, similar to Nuno Portas.

Byrne (2016:78) perceives Lisbon as a modern city built on an existing city as a response to an emergent

situation in a grand ensemble output and pragmatic view. Apart from the importance of history, it sounded critical for forming a mutualism between a self-referencing essence of the project and a contextual-territorial perspective.

If, according to Byrne (2007:299), time and history can be problematic based on Alberti's (1988) terms like innovation and restoration as they are inherently products of time perceived by the social practice, then the application of *Instituto* could be a specific kind of not balancing modernism and traditionalism but generating life and meaning in the cities. This perspective is undoubtedly raised by numerous scholars like Martin Heidegger, Jane Jacobs and Jan Gehl. For this reason, a decentralised vision toward traditional and modern prioritising the urban quality (a possible correlation with the right to the city by Henry Lefebvre) is formed. Furthermore, knowledge-oriented vision (as an influence of *Atelier de Rua da Alegria*) and his research in *LNEC* and monumentality in a rationalist sense are the themes forming the architect's fundamentals.



Figure 3-28- Pantera-Cor-de-Rosa(Pink Panther) social housing

The architects in this generation were influenced directly by the global discourse, precisely what was shaping in the United States by the frameworks Louis Kahn introduced to the grand scheme and, later, the ideas launching postmodernism. It is possible to address these signs more clearly in the architects like Manuel Vicente (1934-2013) and Raul Hestnes Ferreira (1931-2018).

As a student of Louis Kahn, he could be either object or space-oriented because of postmodernism to approve pop culture and diversity to be applicable inside the global market. Kahn's idea of supporting the revisited history combined with complexity, contradiction and between, nostalgia and irony affected Vicente's design philosophy. Other than his perspective reflects a universal third way formed by organicist and revisionist views of scholars like Bruno Zevi and Frank Lloyd Wright (Milheiro,2016:6).

This influence had already been shown by the architects of the second generation, from Keil do Amaral to Teotónio Perreira in the previous generation. It was transferred linearly to the architects discussed in this part. All the projects Vicente designed either in Macau or in Lisbon, such as the Social Housing block in the *Chelas* Urbanisation Plan Zone N2 to the historic preservation work for *Casa dos Bicos* and the preliminary study for the maritime industries pavilion for *Expo 98*, manifested a synthetic approach.

A fusion between modernism and traditionalism was probable in this framework through material and space or regional and universal concepts valorising the inherent quality of context (Milheriro, 2016).



Figure 3-29- Casa Dos Bicos

A similar line of Louis Kahn can be observed in the modus operandi of Raul Hestnes Ferreira. However, the influence of Nordic principles was embedded in Alvar Alto's ideas and his studies of urban planning and architecture in Finland with Otto Meurmam (1890-1994) and Heikki Siren (1918-2013).

As a result, the importance of the constructive system and structure as integral factors of the conceptual process formed his design mentality (Saravria and Pinto,2018:113). The early impacts of Carlos Ramos accompany these academic sources to import the authentic way of modernism.

The initial stage of the Hestnes Ferreira coincided with the third phase of *Arquitectura* magazine with the popular figure of the time, Nuno Portas. At that moment, they contributed to disclosing the roots of modern architecture in cultural and historical contexts, questioning the central theme of national architecture.

The transition appears in Hestnes Ferreira through the criticism of international modernism and the participation in *Inquérito* and SAAL. In other words, he was more flexible to topics such as the regional-historical axis, valorisation of the local material and surroundings, and the hierarchisation of space, sense of place, and participatory approaches. Furthermore, the use of pure geometrics broken by irregular hexagons, obsessive sharp angles, spans and structure rhythms, and brick stereotomy are all included in Hestnes Ferreira's designs (Neves,2002:7-8). This mentality resulted from a mutual intersection between Kahn's and Alto's conceptual matrices. For this reason, a brief look at his academic influence, working projects and cultural-geographical exchange of east and west make Hestnes Ferreira an architect who fluctuated cyclically between traditional and modern concepts.

#### The Generation in Overall

The fourth generation consisted of numerous architects working in different political states for a long time. This vast timeframe provided ample experimental grounds for them to work from the 50s to the last years of the century, ranging from the survey project to *Olivas Norte* and *Sul, SAAL* and *Expo 98*. Different architects found the opportunity to practice modern principles and value contextual necessities. On the other hand, one may conclude that traditional versus modern problems were depolarised by the global discourse, the translation of international works, and the ambition of Portuguese architects to be recognised worldwide. Apart from time determinism, individualism was still a powerful motivation for the architects of the generation to use various solutions to problems, despite the application of modern denotations.

Therefore, a knowledge-based mindset, as well as spatial priority, tended to show itself more. For this reason, almost the majority of the representatives of this generation distanced themselves from the traditional-modern dichotomy. Furthermore, the architects revisited them by fluctuating formed by the research on the project and studying the published works of international theorists. Hence, the architects like Siza, Portas, and Byrne are the most cyclic and synthetic characters, along with the transitional perspectives of Vicente and Hestness Ferreira to re-practice the third way.

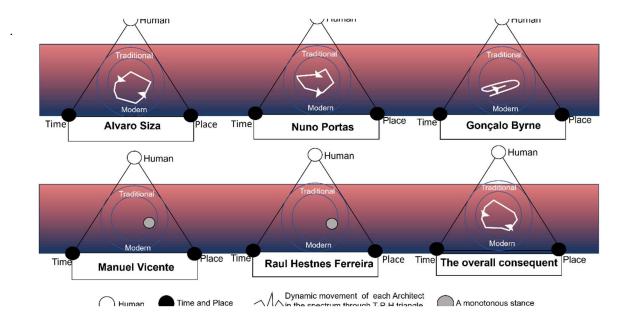


Figure 3-30- The principles of the architects in the generation based on the traditional-modern spectrum

Period	Generations	Architects	Overall Principle
First Republic (1910-1926)	The Architects Before Estado Novo	Jose Luis Monteiro, Miguel Ventura Terra Raul Lino Adães Bermudes Alvaro Augusto Machado	Application of diverse styles- The dominant presence of Beaux-Arts principles -The transition toward art deco and first wave of modernism- The Consciousness toward national identity
Military regime And Estado Novo (1926-1974)	The First Generation	Porfirio Pardal Monteiro Cassiano Branco Luis Cristino Da Silva Carlos Ramos Cottinelli Telmo Jorge Seguardo	The presence of projects in Art-Deco- The temporarily, appearance of first modern cycle Transition toward state- oriented traditionalism- A new age of political monumentalism- The primary efforts to find a "in-between" way between tradition and modernity
	The Second Generation	Francisco Keil Do Amaral João Guilherme Faria da Costa Fernando Silva	A "third-way" approach between the authentic modern architecture and the state's traditional-national representations, The transition toward the Athens Charter
	The Third Generation	Nuno Teotonio Pereria Alberto Pessoa Pedro Cid Ruy Jervis D'Athougia Manuel Tainha, Sebastião Formosinho Sanchez Fernando Tavora Manuel Tainha	The oppositional stage toward state's traditional ideals, The confirmation of modernism, The influential role of the international discourse ranging from the support of modernism and its' critique, The amplified efforts to find a "third way" between modern and traditional through vernacular authenticity
The Carnation Revolution	The Fourth Generation	Alvaro Siza, Nuno Portas Goncalo Byrne, Manuel Vicente, Raul Hestnes Ferreira	The continuous efforts to redefine the " third way", the cyclic notion toward time, The importance of context and place, Fluctuational path of the architects toward traditional and modern Architecture

Figure 3-31- The overall principles of the four generations in Portuguese architecture considering traditional and modern architecture

#### 3.3. Human-Istanbul

#### 3.3.1.The First Generation

The first national architecture reflects diverse socio-political status regarding the weakening power of the ottoman empire and, subsequently, the Turkish identity, architectural eclecticism in its global sense and the multiplicity of population groups living in Istanbul. For this reason, the architectural evolutionary path for the first national architecture consists of the overlapped participation of Turkish and local architects such as Alexandre Vallaury(1850-1921), Raimondo D'Aronco(1857-1932), Giulio Mongeri(1875-1953), Mimar Kemalletin Bey(1870-1927), Vedat Tek(1873-1942) and Arif Hikmet Köyunoğlu(1888-1982).

As mentioned before, the roles of the foreigners living in the Ottoman capital, especially the Levantines, are crucial to discuss in this thesis as they were influential members of the generations from the second half of the 19th century until the first decades of the 20th century. Alexandre Vallaury's role is not neglectable among these architects due to his design philosophy in private projects and public monuments. His pedagogical path was influenced by the historical classicism of the *Beaux-Arts* (Çelik,1996:123-124). Vallaury's works manifested similarities with other architects, specifically the Levantine masters of the time, such as D'Aronco and Guilio Mongeri. He used an artistic form of a synthesis between western and Eastern styles regardless of the subjects (Aktemur,2012:69).



Figure 3-32- Pera Palace – (Source:Aniktar,2013)

The flexibility toward new building technologies, such as iron, steel and glass, and reinforced concrete, are graspable points of Vallaury to use the western imported elements applied in the Imperial medical school of *Heydarpaşa*.

The design setting of the facades in Vallaury's designs were composed of a fusion between the forms borrowed from *Renaissance* and *Baroque* architecture, exemplifying the *Beaux Arts* principles exhibited in the projects such as *Osmanli Bank*, *Tobacco Regiment*, *Karaköy Han*, and *Decugis* house, all built in a time frame of 1892- 1896 (Aniktar, 2013:1210). Despite his preference for western eclecticism, Islamic revivalist styles outside Anatolia were applied to the works such as *Hidayet* mosque with *Pseudo-*

Moorish style (Aktemur,2012:69) and Egyptian motifs in *Khedivs* Mansion. For this reason, one may conclude that Vallaury categorised his works based on the stratification of the projects on social strata. These works were inside the western-eclecticism and rationalist network. Most of them were realised in *Pera*. Nevertheless, the oriental motives with sources outside the Ottoman architectural context were used in the public monuments belonged to the state.

Raimondo D'Aronco had taken the interchangeable approach. However, his works started with restoration projects such as *Hagia Sofia*, *Grand Bazar*, *Büyük and Kücük Mabeyn* (Barillari and Di Donato, 2010: 332) and the old city walls, historic Saray buildings and other mosques (Marcos,2008:277). Like Vallaury, D'Aronco's work philosophy relies on the influence of European eclecticism and revivalism (Batur,1992:147). The central difference might be D'Aronco's convergence with the subjective qualities of Ottoman architecture and Turkish houses.



Figure 3-33- Botter Building by D'Aronco- (Source : Salt Research archives)

Given the ideas in his eclectic framework, it is vital to address the effect of Viollet-Le Duc as his role model in using materials such as iron and glass, wood and stone and decorations to recognise the innovations of the age (Adiguzel,2019:163). The new roofs in the restoration of Grand Bazaar as a neobaroque ensemble exemplified this influence the most (Marcos,2008:277). In general, D'Aronco's works represented the mastery of the styles. He could switch between three main styles: Art-Nouveau, Secession and Ottoman Revival. Also, they were traces of Neo-Greek, Neo-Gothic, Italian and French Renaissance besides the Late Victorian spirit felt on some facades (Macke,2011:26). Giacomo Franco(1818-1895), Camilo Boito(1863-1914), and Viollet Le Duc (1814-1879) were three role models forming the design philosophy of D'Aronco. Although he did not stay in Istanbul long and was travelling between Turkey and Italy, his architecture affected the national architecture and the next generations.



Figure 3-34-Sheikh Zafir Tomb built in 1905 by D'Aronco

Giulio Mongeri, the other non-Turkish architect as a Levantine local, continues the European-oriented eclectic paths affected by Camillo Boito's ideas on the unity of structure, material, functional organisation and the aesthetics of decoration (Tanyeli,2007:374-376). On the other side, what he tries to link with European revivalism styles is a universal Islamic denotation rather than subjective elements of Ottoman architecture. Mongeri's importance to discuss briefly in this part would be his theoretical freedom in academia on tradition. His technical mastery of the elements of revivalist styles practised mainly in Italy was transmitted to Arif Hikmet Köyunoglu and Sedad Hakki Eldem.



Figure 3-35--Saint Antony Church in Pera by Mongeri

These combinatory principles of the non-Turkish architects, whether as the Levantine locals or the invited ones, tended to decrease with the Turkish consciousness and the constitutional revolutions in 1908. This circumstance was echoed until the first world war and then the formation of the Turkish republic. The presence of natives was boosted by the influential works of Mimar Kemalettin, Vedat Tek and Arif Hikmet Köyunoğlu.

The unceasing effect of eclecticism evident in Kemalettin's works coincided with the contributions of Turkish intellectuals for modernising and nationalising Turkey. The technological advancement on one side and his adherence to religious values on the other were the incentives of such a situation. Unlike the foreign architects, he did not reflect a receptive character to the imported European principles of planning and architecture. Furthermore, western techniques and imported materials such as reinforced concrete were accompanied using arches, domes, eaves, cumbas, towers, and geometrical ornamentations are the physical instances of Kemalettin's philosophy.



Figure 3-36- Istanbul 4th Vakif Han- (Source: Salt Research centre)

The same perspective applies to Vedat Tek. His conceptual ideology followed a stylistic and formal representation bearing the evidence of domes, ogive arches, eaves, and tile panels as the latest efforts for reviving Turkish architecture (Ozkan,1973:46) and pursuing historical traces of Arabesque, Ottoman, and Seljuk architecture (Erdoğan and Eynalli, 2015:47).

Vedat Tek's writing addressed his dream to reach the modern by historical continuity. It is considered one of the most challenging and closed ways to reach. The housing projects designed in Art-Deco in Istanbul were instances of early modernism using plastic masses. Accordingly, Kemalettin's approach was to remodel, learn and transform (Batur, 2006:42).

The Turkish identity was taking over the practised principles of Beaux-Arts. Nonetheless, Vedat Tek can be classified as a reactionary figure besides Kemalettin Bey.



Figure 3-37- Defteri Hakani building by Vedat Tek- (Archive: Salt Research archive)

The architectural development among the generation experienced a paradigm shift due to the first world war, civil wars and the introduction of Ankara as a new capital. This paradigm shift was manifested in Arif Hikmet Köyunoğlu's design principles. His academic formation bears the trace of Guilio Mongeri with the mastery of Ancient Greek, Roman, Renaissance and Ottoman architecture as a revivalist. However, he is a transitional character following nationalism fed by Ottoman principles shifted toward new nation-building affected by distance from the former modes of representation.

Köyunoğlu followed a hybrid model accepting that the secularised everyday life should be regarded as a necessity while challenging the ideas of any fixity, immutability, monocentric, uniforms, and generally accepted social memory (Gunenc,2016:144). His works after the establishment of the republics are carrying the principles practised in Ankara with the projects like *Recep Peker house*, *Maçka "Bizegöre"* apartment, *Eczaci Hasan Bey mansion* in *Florya* and Zia Gokalp's Mausoleum (Mimar,1982: 7). Therefore, Köyunoğlu is a condensed figure with the mastery of all oriental and occidental techniques. These design principles transitioned from the structuralised source like the book" The principles of Ottoman architecture" to the state-of-the-art buildings in Ankara and even Istanbul after establishing the new republic and cleaning the Ottoman traces.

#### Generation in overall

The generation overall practised the principles of Beaux-Arts. While the non-Turkish architects prioritised the western-oriented revivalist styles to realise in the parishes like *Pera*, the Turkish architects used the Ottoman elements as motives in the public buildings. The constitutional revolution and the establishment of the new capital appeared to be an obstacle for them to be replaced with the new

generations of architects to pursue the pure qualities of Turkish architecture. As a recap, Alexandre Vallaury, Raimondo D'Aronco and Guilio Mongeri manifested the essence of the generation, while Mimar Kemalettin and Vedat Tek could be classified as reactionary figures and Arif Hikmet Köyunoğlu as a transitional character.

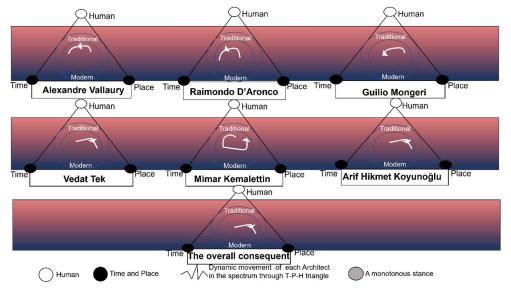


Figure 3-38-The first generation of Turkish architects during the Ottoman empire and the Turkish republic and their principles toward traditional and modern architecture

### 3.3.2. The second generation

Both politically and globally, the generation tended to transform all the revivalist styles regardless of geographical sources. The Islamic and Ottoman architecture declined in the secularised republic. International state-of-the-art or materialised research on Turkish vernacular architecture had to fill this architectural void. The first was realised the most in the republic's first years, specifically in Ankara as the new capital.

Initially, the pedagogical roles of the architects like Paul Bonatz (1877-1956) and Bruno Taut (1880-1938) in Turkey boosted the dominance of primary waves of modernity. However, the second national architecture movement took place inside the notion of nation-building. The matter of generating a Turkish identity for a new country seemed to be vital in the first place. Also, it was critical for a state not to produce a superficial entity practised before by the previous architects. Emin Onat's (1910-1961) role in finding the roadmaps for this socio-political objective appeared crucial.

Among the architects of this generation, the Bauhaus effect is evident in Emin Onat's works, as he becomes familiar with Bauhaus and the concepts like simplicity, functionalism, and plasticity under the supervision of Otto Rudolf Salvisberg (1882-1940) (Batur,2010:273). On the other side, Onat continued the lane of the previous Turkish architects to look for the sources of Anatolian architecture through studies on Hittite and Mesopotamian civilisation (Tekeli,2005:25). Moreover, stylistic signs of Neoclassicism were either as a translated form in Turkish architecture or a universal sense following the German influences and the figures like Albert Speer (1905-1981).

This theme was considered the core ideology of the second national architecture. Onat's architectural path was transformed into international modernism entirely in the 1950s when the work Istanbul Justice palace was constructed. It symbolised the decay of the second national movement and the transition toward an international style. The projects like *Yuksel apartment*, *Deniz Moda club* and *Devres İşhanı* were his latest works in Istanbul. All the projects showed the dominance of his works in the International style. In a nutshell, Emin Onat is a modern architect with vernacular concerns that aimed at monumentalising it with local materials. However, most of his works in Istanbul, except the fine arts faculty he designed with Sedad Hakki Eldem, typified the Bauhausian principles and the pedagogical roles of German and Austrian architects in Istanbul and Ankara.

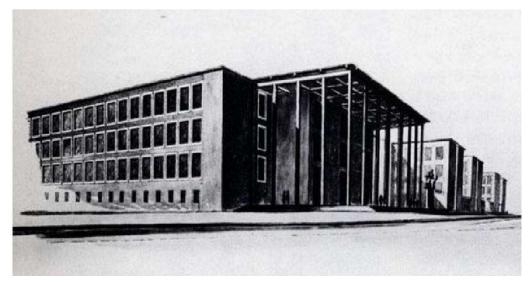


Figure 3-39- The perspective of Istanbul Palace of Justice built in 1948 - (Source: Bozdoğan,2002)

The 1930s witnessed a list of significant architects with novel attitudes; among them, the most eminent character is Seyfi Arkan. In a brief view, he is a modern architect with a few marks of Art Deco in a stylistic sense (Ahunbay,2013:22). The principles of Bauhaus were simplified. They repeated serially in the projects such as *Gündüz Villa*, *Ayhan apartment*, *Ihsan Sami mansion*, *Üçler Apartment*, Istanbul theatre and conservatory International competition project, Istanbul Port Passenger Hall and his most famous project, the *Florya Marine Mansion* designed as *Atatürk* Residence in Istanbul in his last days of life.

Despite Arkan's modern image being disrupted with vernacularly as the second national movement imposed its socio-political. He reflected on his climatic concern and inspirations for designing residential buildings. It was the result of his encounter with the wide extending eaves of old Anatolian houses, apart from the attention he made to women in the interior spaces of houses, manifesting his traditional approach (Akcan,2005:39). Also, this sense of monumentality in his symmetrical and classical proposal for Kamutay competition with the stairs and gigantic statue (Bozdoğan,2002:281-282).

Arkan is the outcome of a new republic's socio-political circumstances advocating the novel architectural principles magnified by the German and Austrian architects. Based on the training in different circumstances led by the first and second national architectural movements. Like the other generation of architects, it shifted from revivalism and eclectics to Avant-garde, expressionism, and modernism is

evident in Seyfi Arkan's works. Although Poelzig's effect seemed to be the dominant instance, his free and liberal teaching method clarified the individuality of Arkan's approach.

His modern works were transmitted in a monumental sense. For instance, the *Florya* mansion, a project designed for Atatürk, represents a clear Modern architectural language being approved as a "cubic whole". This project with whitewashed walls and a ship-shaped form reminded the idea of the machine as mentioned by Le Corbusier in *Vers Une Architecture* (Akcan,2005:44). All in all, Seyfi Arkan could be recognised as a modern architect ultimately, despite a few subjective considerations than might be traced in his design ideology.



Figure 3-40- Florya Atatürk Sea Mansion- (Source: Salt research)

It is impossible to ignore the significance of Sedad Hakki Eldem (1908-1988) in this generation. Le Corbusier, August Perret and Hans Poelzig's modern influences are clearly noticeable (Kuban,1994:151). On one side, the national revivalist effect of Vedat Tek. However, on the other side, it generated a widespread architectural language for the young Eldem. Eldem takes a straightforward approach to using wide Art-Deco and International styles in the works, such as *Ceylan* apartment, *Bayan Firdevs*, and *Satie Electric* company.

Notwithstanding, the national architecture seminar was established in 1932 and created a vanguard of Turkish national architecture with a significant study on the spatial elements of *Turk Evi* (Turkish House). It recognises the subjective quality of Turkish architecture in a modern way. The influence is crystalised in the *Ağaoğlu* house, *Ayaslı* mansion, *Sayfurlu Vila*, *Yalova Thermal Hotel*, *Taşlık Kahvesi*, Istanbul

faculty of science and letters (1942-1947) and Istanbul courthouse in 1948.



Figure 3-41- Ceylan Apartments- (Source: Salt Research) archives)



Figure 3-42- Yalova Thermal Hotel- (Source: Salt Research archives)



Figure 3-43 Taşlik Coffee House- (Source: archnet.org)

This period, similar to Onat, manifests the monumentality of Eldem's work using stone. Istanbul courthouse is a symbol of the end of seeking out the national architecture being recognised as a transitional epoch for modern international style (Bozdoğan,1987:77). His cooperation with SOM led to the Hilton Hotel in Istanbul exemplifies this transition with the heavy usage of steel and glass besides reinforced concrete. The use of modular façades is evident in Eldem's other works, such as *Sayfurtlu* Mansion II, *Riza Derviş* House and *Florya* Costal facilities.

The modern stage of Eldem was again turned into a soft traditional dilemma as the horizontal roof line, wide eaves, vertical windows, and overhangs (Tanyeli,2001), besides the previous efforts on traditional spatial arrangement. Zeyrek Social Insurance building, Dutch and Indian embassy building, Kırac and Sirer Mansion, Akbank headquarters and Ayazağa Alarko holding offices are manifested as the fusion of modernism and regional vocabularies.



Figure 3-44- Zeyrek Social Security Complex- (Source: Agha Khan)

Eldem is the symbol of cultural duality between East and West due to his different academic formation (Bozdoğan,1987:56). That is why his cultural and regional consciousness made him regenerate tradition through the idea of the Turkish House (Tanyeli,1988:252). However, his effort on this agenda concentrated on the spatial organisation of Anatolian houses based on the central space called "Sofa" and the similarity with modern language on how the residential projects should be treated. Given the information on his academic influence, research and architectural ways, Sedad Eldem's "in-between" approach is accompanied by a cyclic sense which could be similar to Portuguese architects in the fourth generation.

In the Turkish republic's secularised and modern environment, Vasfi Egeli is a character against this evolutionary path with a considerable shade of endorsing traditional architecture. Under the supervision and effect of Mimar Kemalettin and Nihat Nigizberk, his architectural path involved renovation and restoration of the historical and religious buildings such as the *Süleymaniye* Mosque, *Şehzadebaşı* Mosque, *Edirnekapı Mihrimah* Mosque, *Yeni* Mosque, *Yeni* Mosque Hünkar Pavilion, Hırka-i Şerif Mosque and the Tomb of *Sinan*, the famous architect of classical Ottoman architecture (Yucel,2015:75). The mosques he designed in *Şişl*i and *Feneryolu* station amplify his traditional philosophy more than ever with a masonry-based approach disapproving modern aesthetic approaches (Egeli,1953). The importance of discussing his design philosophy is where he defends the principles of Ottoman architecture, unlike the essence of this generation, paving the way to classify him as an architect resisting the time dynamics.



Figure 3-45- Şişli Mosque: The first religious building in republican era – (Source: SALT research archive)

#### Generation in overall

The generation's essence overall follows a modern architectural approach as the pedagogical transformation took place in Ankara and the presence of German and Austrian architects. This step was fundamental to following a modern approach by the architects of this generation. However, on the other side, the socio-political agenda was to reinvent the Turkish identity, filtering the Ottoman empire's heavy impact. That is why most of the architects in the generation practised their continuous philosophy in Ankara in the first place and then applied it in the rejuvenated Istanbul.

Seyfi Arkan's design ideology could be identified as the most monotonous figure. However, Emin Onat's modus operandi might differ slightly in monumental works. Sedad Eldem, the most influential architect of the era, might be recognised as pursuing the third way of moving between the traditional and modern design codes. At last, Vasfi Egeli is a character with an almost different personality, with his religious works magnifying the critical impact of the traditional concepts either formally or structurally, resisting the way that the second national architecture was moving inside.

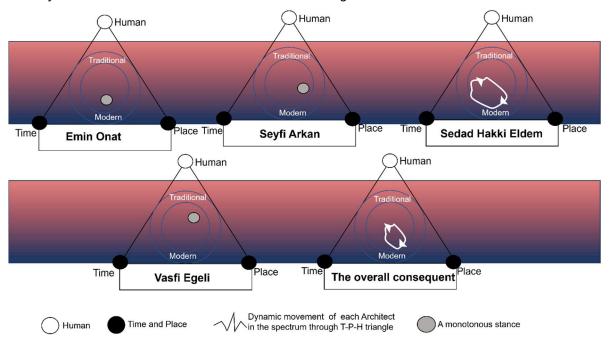


Figure 3-46-The second generation's overall orientation toward traditional and modern architecture

# 3.3.3. The Third generation

Global modernism is a short period after the failure to identify Turkish national architecture and the influence of American architecture with the firm's presence in the United States. This period is short before the country's political instabilities during the democratic party's establishment. Turkish architects received more freedom without any governmental limitations or regulations. This epoch does not mean the architects of the previous part did not participate in this age. Indeed, architects like Sedad Hakki Eldem also participated in critical projects in Istanbul, like the Hilton Hotel. Nevertheless, as a short-term timeframe, two architects with different visions of modernism.

One of the architects noteworthy to remind is Behruz Çinici (1932-2011) as a character under the

influence of Emin Onat, Paul Bonatz, Orhan Arda, Clemens Holzmeister, Sedad Hakki Eldem and Gustav Oelsner (Akcal,2002:3). The beginning phase of Cinici's works were representations of international modernism with a little bit reinterpretation of regional principles of Anatolia in the 1960s. METU campus is the most notable instance of his works (Savaş,2018:370). His campus projects often followed a rational and functional layout prioritising vehicle traffic (Elmali Sen et al.,2014:548-549). A transitional approach is like others toward a regional perspective. This perspective could be due to the symptoms of Anatolian timber houses brought into the construction structure (Kultermann,2000:316). Çinici's studies and enthusiasm for urbanism made him not differentiate between architecture and city, supposing the urban space as a living organism where terms such as inside-outside and house-courtyard are deeply interconnected. Also, Çinici's vision possibly was influenced by the critique of modernism. The appearance of postmodernism with various colours and materials was used in his works apart from the subjective elements inside the houses. Turkish scholars said this design mindset introduced his works as a *Gesamtkunstwerk* (Kulturmann,2000:325).

It is possible to conclude that his design principles follow moderate principles of modernism and his independent free-will force to apply based on a combination of ideas from Aalto, Bakema, Rudolph, Gowan and Stirling. However, his vernacular, influenced by Eldem, could represent a popular trace of the second national architecture using the load-bearing bricks and courtyard-oriented central Anatolian scheme (Erdoğan,2018:18). Therefore, Çinici's design philosophy is a modern voluntaristic approach embracing the deterministic of the place.

On the other side, the reactionary image inside the modernism of the 50s as the aftermath of the second national architecture movement is Turgut Cansever (1929-2009).

His ideas, both theoretically and practically, reflect criticism of international modernism. Cansever's design principles are centralised to the concept of tradition itself. Cansever shapes a different and metaphysical understanding of culture, history and religion around the previously realised discourse, such as Islamic and Ottoman architecture (Findikil,2016:133-134). According to Cansever, an Islamic city is a united and dynamic organic system built by accumulative social forces being reversed to modern cities as static, monolithic, monocentric, symmetric, and large entities (Aman,2018:1247).

Contrary to Çinici, Cansever is a character against the modern direction and in harmony with further concepts of contextuality, the importance of surroundings, prioritising the city's spatial inherent quality and valorising the local materials. Hence, he reflected a more traditional character than the other architects in the 20<sup>th</sup> century.



Figure 3-47- Understanding Istanbul by Turgut Cansever- (Source: Cansever,2015)

#### The Generation in Overall

The modern-traditional dichotomy of the second national movement still influenced the generation overall. It was apart from the modernisation process in Istanbul in the 1950s, witnessing the demolition of traditional fabrics. In this regard, Cansever has recognised a reactionary figure, while Çinici could be classified as a modern architect.

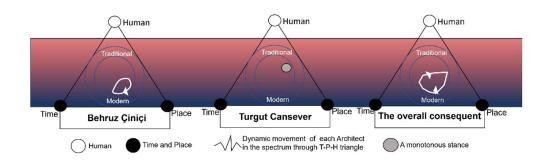


Figure 3-48-The generation's orientation toward traditionalism and modernity

#### 3.3.4. The Fourth Generation

The architects of this generation theoretically became familiar with diverse discourses divulgated by Louis Kahn, Alvaro Alto, Martin Heidegger, Jane Jacobs and Robert Venturi. However, the political instability and the economic integration with the global market facilitated more office networks with the application of modern architecture.

One of the architects and urbanists essential to discuss in this part is Kemal Ahmet Arû. The binding effect of the second national movement is vital in the pedagogical sense with the presence of Clemens Holzmeister (1886-1983) and Gustav Oelsner (1879-1956). In Arû's case, the impact is crucial to address. Under the supervision of Oelsner, Arû learned the detailed principles of planning, such as Zeilenbau (Alexander, 2017:357) and Garden Cities, which can be found in his work for the Levent project (Arû,2001:33). His concentration on zoning might illuminate his modern formation more than ever by dividing the city based on administrative, commercial, former residence areas, new residence areas, vineyards, small craftsmen, sports fields and green fields, large industrial zone, military zone and prisons for other cities. Siedlung was a central theme in the formation of contemporary discourses as well as cities in the republican era, becoming an exciting concept for Arû to use as an experimental case in Levent I and IV with other international standards considering functionalism in collaboration with Rebii Gorbon in 1948 (Akbulut, 2012:16-17). Besides the elaborated modern features in Arû's mentality, The existing road and topography were preserved by him in most of the projects, such as Eitler, unlike Levent's linear design (Alexander, 2017:357). They could represent, in a way, the traditional factors in his practical approaches. In his theoretical scope, the book "Turkish City" is comparable to Sedad Eldem's "Turkish House" as the book's main objective is to centralise rational approaches. Nonetheless, it took a postmodern perspective toward the preservation and spontaneous forms of traditional cities. Similarly to Eldem, it is recognisable as a "third way" for all Turkish cities.



Figure 3-49- Intercontinental Hotel- (Source:Salt Research)



Figure 3-50- The Levent Project in 50s- (Source: Salt Research)

The role of the Agha Khan awards in Turkish architecture participating in the second half of the 20<sup>th</sup> century is crucial not only for architects like Turgut Cansever but also for the architects of the generation like Cengiz Bektaş and Doğan Tekeli to integrate their prominent modern mentality with cultural preservation or to design modern adaptive to context. One of the architects with a more liberal character toward both sides of the poles was, for sure, Doğan Tekeli.

Known as "the industrial facilities architect", Tekeli's modus operandi is dispersed in multiple solutions in a modern centrality. The projects like Istanbul textile manufacturers (IMC), renovation and landscape design of *Rumeli Hisari*, Australia wool yarn factory, *Neyir Knitwear* and clothing factory, Chrysler truck assembly factory, *Kadırga* student residence, *APA Ofset* printing plant, *Turkey İş Bankası* headquarters complex, *Metro City* and *Show TV* complex manifested such approach. His soft modern architectural language is a consequence of the critical influence of his educational period, as Emin Onat and Paul Bonatz played a massive role in it. Tekeli, in an interview, confirms the effects of Onat's teachings by describing a few details, like the best spatial perception in rectangular volumes or the positive sense of transitional spaces by movement magnifying the formal experiences of Emin Onat (Tekeil,2019). His designs outlined a problem-solution approach indicating no meaning to finding patterns, ideas, and forms in the past since the architecture must represent the status quo of time and place (Ibid,2020).

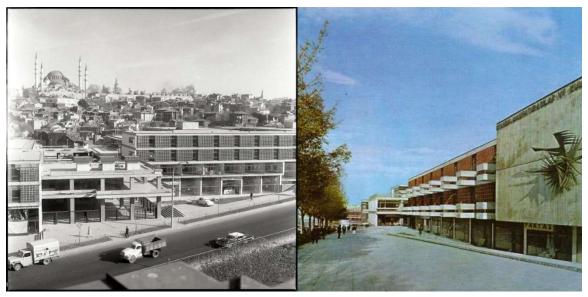


Figure 3-51- Istanbul Textile Traders Market –(Archent and salt research )



Figure 3-52- Metro City By Doğan Tekeli-(Source: Salt Research)

It is crucial to address Cengiz Bektaş as another most critical figure with a slightly different influence by both postmodernism and critical regionalism with diverse influences ranging from Le Corbusier to Bruno Taut, Juhani Pallasma, Rudofsky and Kennet Frampton.

By putting together the terms such as cultural consciousness, folk architecture, and houses as real needs reflectors, it is possible to justify the existence of public awareness in his works. Therefore, finding traces of participation in Bektaş's ideas is not unpredictable. Bektaş is neither entirely a traditionalist architect nor intellectual. Unlike his traditional signs of poems or interest in historical buildings, his architectural designs reflect an utterly rationalised manner. Bektaş is one of the apparent supporters of "form follows functions", justifying it as an essence of Turkish Folk architecture. Yet he believed that it has to be following the local body measurements. Form in Bektaş's vision transforms as fashion changes over time (Bektaş,2001). Also, he rejects traditional construction methods, believing it disrupts present and future needs. However, at the same time, his concern was the incorrect technological influences. Accordingly, prefabrication can bring about more with less since his TMO project was Turkey's first example of prefabrication, bridging the past with the present (Ibid,2001). While the traditionalists recognised symbols, Bektaş was against ethnic classification and national symbolism in Turkey (Ibid,2001).



Figure 3-53- Bakirköy Industrial International Bank in 1985-(Source: Salt Research, 2022)

It is possible to confirm that Bektaş is the product of the time overlapping modernity and postmodernism (Ibid,2007:43). His humanistic vision is a hybrid approach of local specifics and modern standards. In terms of place, his architectural language follows mostly a similar approach to Kenneth Frampton's to generate cultural consciousness based on local identity.



Figure 3-54- Etimesgut Mosque in 1965 By Cengiz Bektaş- (Source: Salt Research center,2022)

#### The Generation in Overall

It is not reasonably possible to identify the generation's modus operandi since diverse architects had the opportunity to participate in grand Istanbul. Nonetheless, three architects were selected based on their influential works, international popularity, and the concepts shared to summarise the essence of the generation and decrease the vast realm of the thesis.

It is not deniable that all the architects are heavily influenced by their academic period during the second national architecture. Their academic path made them aware of the critical environment's objective and subjective features with a modern centrality. However, theoretically, they are deterministically influenced by the discourses in the global environment ranging from Frank Lloyd Wright, Bruno Zevi, and Louis Kahn to Jane Jacobs, Robert Venturi, and Kenneth Frampton.

In an atmosphere where traditional and modern necessities were depoliticised and the political instabilities embracing Liberal Democracy towards the last years of the 20<sup>th</sup> century, architects tried synthesising all these theoretical readings as a knowledge-based mentality and solving the design problems based on individual perceptions. Doğan Tekeli and Kemal Ahmet Arû, and Cengiz Bektaş have typified examples of such an approach with modern centrality with the projects both perceived at the urban and architectural level. However, each of them was involved in projects with a different context. Indeed, correlated to the Portuguese fourth generation, they tried to implement a third-way

approach by prioritising the historical concept and typography with a more modern tonality.

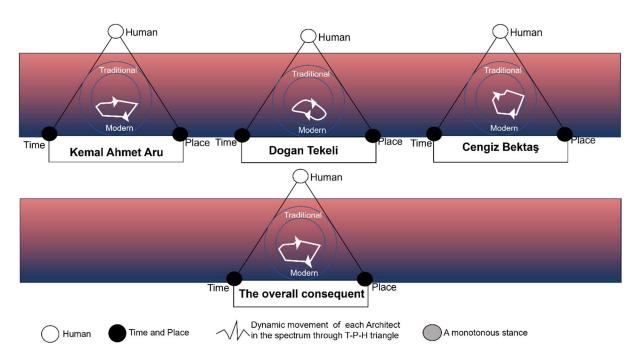


Figure 3-55—The Generation's overall principle toward traditional and modern architecture

Period	Generations	Architects	Overall Principle
First national architecture (1908-1930)	The First generation	Alexandre Vallaury Raimondo D'Aronco Guilio Mongeri Vedat Tek Mimar Kemalettin Arif Hikmet Koyunoğlu	The appearance of eclectic styles , The influential role of Beaux-arts principles, The fusion between Non- Turkish Islamic and European principles by non-Turkish architects, The combination of Turkish and European formal Elements by the locals, The vast usage of neo- classiscm in Pera, Transition toward the the cultural void after the establishment of the new republic
Second national Architecture (1930-1950)	The Second Generation	Seyfi Arkan Sedad Hakki Eldem Emin Onat Vasfi Egeli	The acceptance of international modernism in the primary socio-cultural void, the increasing ambition to define the authentic identity through the theme of Turkish house, The "thirdway" by Sedad Eldem to balance modern and traditional concepts
The age of political transition (1950-2000)	The Third Generation	Behruz Çiniçi Turgut Cansever	The failure of second national architectural movement, The dominancy of international modernism in a radically modern Istanbul
	The Fourth Generation	Kemal Ahmet Aru Dogan Tekeli Cengiz Bektaş	The influence of modern critique , the individuality in terms of modern representation, the third-way approach through combination of modern and traditional architecture

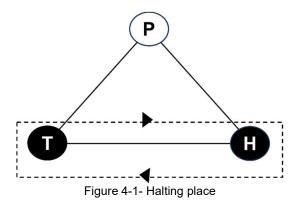
Figure 3-56- The Turkish architects' modus operandi toward traditionalism and modernity

# Chapter IV Place

Placed is halted, limited and freezed based on the districts being discussed by the urban and architectural historians. In this regard, the selected districts (6 for Lisbon and 5 for Istanbul) are the central themes of this chapter to know their orientation toward modernism and traditionalism through the interaction of Humans inside the matter of time.

#### 4. Place

## 4.1. Halting "Place": The Role of "Human" through "Time."



When Place is fixed, then the Human and Time are dynamic. Time is dynamic per se. It makes the other factor dynamic as well. Human, no matter whether the public and ordinary population or the architects and planners, move inside this evolutionary path since they grow and transform through time. Architect and urban planner aims to design and plan for the future. Politicians adopt new law and order through urban policies for a more acceptable quality for the society by appropriating space, shaping and reshaping the built. Such perspective is inherently inside specific fragmented times, identified as periods.

In other words, the interaction between time and human happens inside the container of place. That is why the fragmented places recognised as neighbourhoods are observed theoretically in this chapter. The outcome is the accumulation of in-field observation, historical notes on the neighbourhoods and their evaluation based on the keywords discussed in chapter 1. Hence the modern and traditional extent of the defined zones will be obtained. The fixed place or the interaction of humans through time will be divided into two parts:

- The establishment of neighbourhoods, their characteristics toward modernity and traditionalism (interaction of abstraction and concreteness in the city)
- The role of specialists consisted of architects and their products regarding modernism and traditionalism in shaping the neighbourhoods.

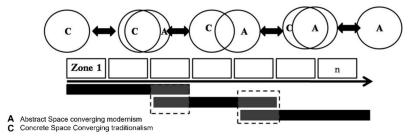


Figure 4-2- The interaction of "Humans" through time considering traditionalism and modernity

#### 4.1.1. The Criteria for Selecting the Neighbourhoods

For selecting the neighbourhoods, the following points must be considered:

- The selection of neighbourhoods should be inside the city's central core.
- The task in the thesis was to know if a zone with the most traditional and modern character is inside a city and whether the neighbourhoods follow a spectrum model in general or not. In a more straightforward explanation, if it is possible to draw a line between the most modern and traditional zones, the neighbourhoods crossing the line follow a spectrum model.
- For the previous part, it is necessary to understand the city's development. The time chapter is crucial to revisit the previously selected neighbourhoods.

All these points together explain that although there are eligible neighbourhoods, such as Belem in Lisbon and Kadıköy in Istanbul, selecting neighbourhoods inside the central core of cities is preferable.

#### 4.2. Place: Lisbon

Six zones are selected for the studies in this part of Lisbon. zone one includes the area known as the city's historical centre, mainly developed as "Baixa Pombalina". In the next part, zone 2 covers the areas such as Alfama, Mouraria, Castelo and Graça, followed by zone three, consisting of the areas such as Intendente, Anjos, Arroios and Alameda. Zone 4 is exclusively dedicated to Areeiro. Zone five discusses the Alvalade. The parts such as Olivais Norte, Sul and Chelas will be the centre of discussion for the last zone. The main criteria for selecting these neighbourhoods were the time chronology of Lisbon and the development axis. The areas like Telheiras Sul and Restelo were omitted from this chapter, although the aim was to place them as a centre of concentration in time and human chapters.



Figure 4-3-Selected neighborhoods for Lisbon

#### 4.2.1. Zone 1: Baixa Pombalina

The zone covers almost the spaces developed as *Baixa Pombalina* since the 18<sup>th</sup> century, dating centuries before. The area is a crucial part historically being recognised as a space inside two incidents: the 1755 earthquake and the 1988 fire. Nowadays, *Baixa'*s function as a tourism hub and business centre is indispensable. Also, *Baixa* could be considered a significant basis for the further development of Lisbon (Tostões,2008:178-179) toward the north through two main axes: *Avenida da Liberdade* and *Avenida Almirante Reis*.

Following the catastrophic earthquake in 1755 and the great-scale damages afterwards, the primary phase of reconstruction began in 1760 since the major decision was to realise new networks and make the streets recognisable based on the activities (Santos,2005). Thus, the main streets, such as *Rua Nova D'el Rei*, now *Rua do Comércio*, for China and tea traders. *Rua Áurea* was for the goldsmiths; *Rua Augusta* was specifically for wools and silks. Also, *Rua Bella da Rainha*, currently *Rua da Prata*, was the centre for silversmiths and booksellers. *Rua Nova da Princesa*, today *Rua dos Fanqueiros*, was initiated for trinkets and small goods merchants. Consequently, the secondary streets were named after artisans and the patron saints of the old chapels and churches. Their identity is preserved to this day: *Rua dos Sapateiros*, *Correeiros e Douradores*, referring to the artisans and *Rua de São Julião*, *São Nicolau*, *Vitória*, *Assunção*, *Madalena* and *Santa Justa*, regarding the saints (Santos, 2005: 79-80).



Figure 4-4- Status Quo of Baixa Pombalina – (Source: ©Google Earth)

During the 19th century, Lisbon's changes were mainly urban connections connecting the *Baixa* with the rest of the city towards the territory's interior. The plan for downtown Lisbon ends, symbolically, with the inauguration of the *Arco da Rua Augusta* (1873) and the monument to the heroes of the restoration (1875). Reconstruction of *Baixa Pombalina* paved the way for the realised identity later in the 19<sup>th</sup> century. Buildings such as the *D<sup>a</sup>*. *Maria II* national theatre in 1846, the triumphal arch of *Praça do Comércio* in 1861, the statue of *D. Pedro IV* in 1873 and *Rossio* train station in 1888-1891 are examples affecting the zone and the later development streets (Araújo,2004:251).

At the end of the 19<sup>th</sup> century, *Baixa Pombalina* and *Chiado* functioned as the cities' political and cultural centres, providing a cosmopolitan character (Tostões and Rosa,2008). Also, the last years of the century were the moment for more modern and technological progress the elevators like *Lavra* in 1884, *Glória* in 1885, *Bica* in 1892, municipality-mibrary (demolished) in 1897 and *Santa Justa* in 1902 (Ibid,2008:20). The foreseen fate for a more modern Lisbon also tried to find its way inside the *Baixa Pombalina*. Electric trams and materials such as concrete and iron dictated themselves more than ever in this age. The rapid modernisation of this area occurred with more pace. Buildings like *Banco Lisboa & Açores* (1905), designed by Ventura Terra, were the instances to enrich the progressive image of Baixa.

Despite all these efforts, it was still essential to integrate *Baixa Pombalina* with the adjacent parts toward the north. The *Baixa* remodelling plan in 1946 was initiated to connect Rossio and Almirante Reis. It was indeed a critical step for circulation and hygiene in a high density. This policy also resulted in the demolition of several blocks. Accordingly, it gave rise to the spaces such as Martim Moniz (1930-1960), linked to *Praça da Figueira* and Rossio.

*Baixa's* cultural and historical influence increased until the devastating *Chiado* fire in 1988. The reconstruction process lasted until the last years of the 90s. Several architects and planners made their mark in the historical development of the selected zone. Considering the post-earthquake reconstruction in *Baixa*, forefathers like Manuel de Maia (1677-1768), Eugénio dos Santos (1711-1760) and Carlos

Mardel (1695-1763) attained recognition through the fundamental plans and projects influencing even contemporary everyday life. Manuel de Maia's plan is centred on demolishing the previous fabric and building a new entity based on the necessity of the time (Rossa,2004:24). It was an urban ensemble of hierarchical streets connecting *Praça D. Pedro IV* and *Praça da Figueira*. Also, this grand entity facilitated the link to the south, with *Praça do Comércio* and *Praça da Patriarchal* (Municipal Square) (Tostões and Rosa, 2008).

Eugenio Dos Santos followed almost a similar pattern with more specified detail in the items such as types of windows, balconies, details of the streets, such as size, specifications for carriages, pedestrians and riders, porticos and colonnade advocating certain modular rationalism (França,2012), while Carlos Mardel's designs are far from the monotony being suggested by Dos Santos. In the 20th century, many architects intervened in this city area, such as Raul Lino, Cristino da Silva, Jorge Segurado, Keil do Amaral, Cassiano Branco, Pardal Monteiro and Cottinelli Telmo.

The building of *Banco Totta e Açores* (*Rua Áurea*) and the *Teatro Politeama* was completed in 1906 and 1912, respectively, both projects by Ventura Terra. The *Loja das Meias* building, *Rossio*, was completed in 1930, a project by Raul Lino. Two years later, the South and Southeast Fluvial Station were completed, a project by Cottinelli Telmo.

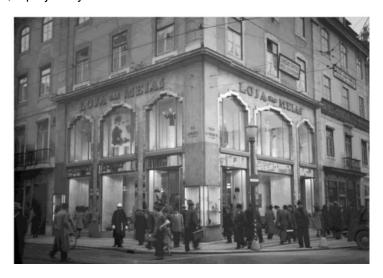


Figure 4-5- Lojas das Meias by Raul Lino – (Source: Manta Perreira, 2020)

Not all architects of the modern period recognised the importance of *Baixa* as a cultural and urban heritage. Nevertheless, it is worth noting the appreciation given by Carlos Ramos (1897-1969), Francisco Keil do Amaral (1910-1975), and Porfírio Pardal Monteiro (1897-1957). There was a consensus among these architects on the convergence between *Pombaline* and modern architecture (Rossa,2008:27). For instance, Carlos Ramos confirmed that this parish should be investigated as a whole, criticising even his building in *Rua Do Ouro*. Porfírio Pardal Monteiro believed Eugenio Dos Santos was the predecessor of modern architecture and urbanism, supporting monotony, repetitiveness/seriality, utilitarianism/simplicity, and its particular standardisation (Leal,2004:11).



Figure 4-6- Santander Bank, previously known as Banco Totta e Açores designed by Miguel Ventura Terra

The modern dominancy of the time received an even more radical image when planners such as Faria da Costa and De Gröer considered circulation, hygiene, and economic priorities despite the cultural and historical values of the site (Tostões,2008:209). The monotony in architectural generations' view toward *Baixa* and *Chiado*, except *Raul Lino*, facilitated further regulation between time and place and even culturalist and progressivist models. Even the reconstruction process in *Chiado* in the 1990s by Alvaro Siza followed a continuous way of understanding the zone as a united entity (Nunes and João,2016:396). Siza also perceived the modern character of *Baixa Pombalina* since the typological features embedded in *Eugenio dos Santos* and *Manuel de Maia*'s plan and the homogeneity of the façades in convergence with his consideration of pre-existence (Tostões, 2022:70).

Therefore, through the movement of time, a more harmonious way and minor rupture were uncovered inside the intellectual discourse.

#### The Overall Character:

Considering *Baixa*'s time and human development and the previously defined terms for both traditionalism and modernity, it is possible to characterise the selected zone inside a modern mentality rather than a traditional mindset.

Overall, *Baixa Pombalina* follows a systematic language with a network of diverse critical keywords identifying modernity. Initially, the objective was to regularise the city and take out the primitive forms, narrow and disordered forms inherited from diverse cultural layers during the medieval epoch. It is possible to assume that time was a dominant factor as its production was enlightenment and Renaissance advocating humanism and rationalism. The grid network of perpendicular streets and continuous facades might be the most common examples representing the *Baixa*, *Chiado* and even *Bairro Alto*. Also, pre-manufactured and standardised entities had been initiated since the beginning of the zone's realisation. It was a key tool to reconstruct the buildings as soon as possible and then consider the anti-seismic systems such as the so called "*Gaiola*" (Ibid,2017:83).

Even in the 19<sup>th</sup> century, the stylistic discourses penetrated different parts of the city and disrupted the unity of the *Baixa-Pombalina* fabric, preserving its central character. To be precise, diverse styles in monumental design are simple to grasp. Besides the three building typologies that Jose Augusto França (2012) recognised, the symmetrical and homogenous whole is the dominant language inside the downtown.

Regarding the roles of architectural generations, two critical factors are observable. The first factor addresses the roles of planners in conceiving architecture, from Manuel de Maia to Eugénio Dos Santos and Carlos Mardel to Miguel Ventura Terra, Carlos Ramos and Alvaro Siza. The second factor illuminates the intellectual ideas of planners and architects, specifically the ones in the 20<sup>th</sup> century. As mentioned before, they tried to prove that a modern line was followed in harmony with the principles of the modern movement. Also, they defended a radical rejuvenation approach, creating a rupture.



Figure 4-7- Buildings in the *Praça de municipo, Praca D.Pedro Iv, Praca de S.Paulo and Rua João Perreira da Rosa*—(Source : França,2012: 17-39)

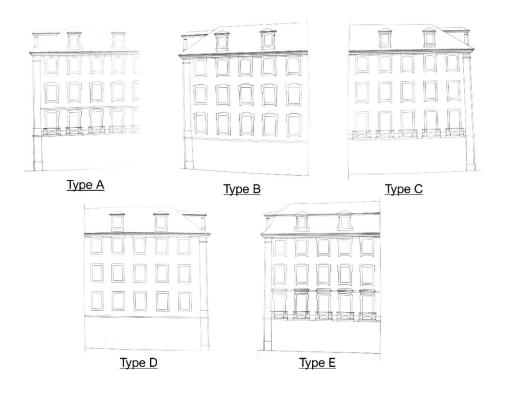


Figure 4-8- Building Typologies frequently used in the façades of Baxia Pombalina –(Source: França,2012)

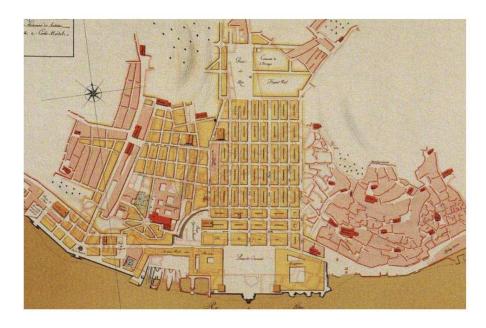


Figure 4-9- reconstruction plan for Baixa Pombalina by Eugenio Dos Santos and Carlos Mardel - (Source: Arquivo Municpal CML)

Do all the generated keywords through historical references and literature review prove the pure modernity of the zone?

A few signs indicate a possibility of sharing the same or exclusive themes of modernity. For instance, it is understood that this hierarchy is still present in *Baixa* today, and the identity of the streets through their functions still exists in some way. For this reason, a hierarchy-oriented space might be the keyword representing a traditional sign. Furthermore, the topography is a crucial item that imposes itself on the site and interrupts the will for modernisation. On the western side of the zone, it is visible enough to identify this topographical necessity trying to deform the grid, even though the buildings' status quo does not reflect a different personality

Putting aside a few notes on traditional possibility, *Baixa Pombalina* could be a role model for modernism. At the same time, the zone itself experienced modern facilities in the 19<sup>th</sup> and 20<sup>th</sup> centuries. *Baixa* also experienced ruptures of modernity or was praised by contemporary architects in humanistic terms. The link between the contextual continuity of *Baixa*, the rational urban layout and the uniformity in the facades of the buildings generated a new perception of a monumental urban layout. It was the impulse for future works like *Belem* Cultural Center (1988-1993) by Gregoti and Salgado to consider the form of city blocks as the principal structure of this grand project (Tostões, 2022:73).

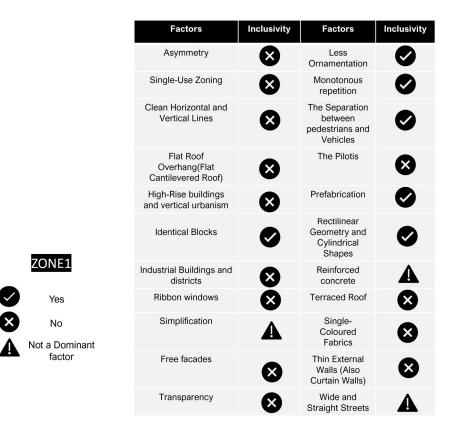


Figure 4-10-Evaluating the zone 1 based on the modern factors



Figure 4-11- Evaluating the zone 2 based on the traditional factors

## ZONE 1

Factors imposing modernity	Factors imposing traditionalism
Statements by the famous local figures such as Pardal Monteiro, Keil Do Amaral and Carlos Ramos indicating the modern aspect of the zone	The Presence of Streets based on activities
Modular rationalism and simplicity	Time as an imposing factor of sui-generis
Standardized way of building	The presence of chapels and churches
Repetitiveness and seriality	The influence of adjacent zones and topography
Grid and rectangular networks	-

Figure 4-12- Overall classification based on imposing factors

## 4.2.2. Zone 2: Alfama, Mouraria, Castelo and Graça

ZONE1

Yes

No

Not a Dominant

factor

The zone includes historical parishes and neighbourhoods of the Portuguese capital, such as *Alfama*, *Mouraria*, *Castelo* and *Graça*.

Before the earthquake, a multi-layered historical development influenced these neighbourhoods. *Alfama* (with the *etymology Al-Hamma*) has been significant since the 8<sup>th</sup> century. The Islamic dominion limited the town with the Moorish fence until the *Reconquista* in the 12<sup>th</sup> century. Later, the *Fernandina* wall in the 14<sup>th</sup> century paved the way for the settlement of a new population group of Christians in the age of

discoveries. The exact structure continued before the earthquake (Guimarães, 2014:2-6). *Castelo* also shares similar historical records making it difficult to detach from other neighbourhoods. Nevertheless, *Castelo* covered a broader area beside the castle as an initial core of the city known as the "*Encosta da Se*" (Madeira da Silva et al.,2016:88), from the iron age to Islamic nucleus and then the remains of the palace of the Counts of Santiago in the 18<sup>th</sup> century (Gaspar et al.,2013:207-209).

*Mouraria* possesses different historical sourcing dating to the 12<sup>th</sup> century when the first king of Portugal, D. Afonso Henriques, recaptured the city from the Muslims in 1147. Former inhabitants were allowed to remain there, establishing a territory outside the walls to settle in. The outskirts were away from the busiest places, in a valley to the city's north. Such circumstances concluded in an unsanitary rural area between the hills of the castle, *Graça* (Teixeira et al., 2020:19-20).

Throughout the late Middle Ages, the neighbourhood was still outside the physical limits of Lisbon. The new walls of 1373-1375 included the population centres of the city that had been created outside the old Islamic fence in previous centuries, excluding *Mouraria* (Silva,1948:42-48). Later, *Mouraria* witnessed the construction of Christian churches in the 16<sup>th</sup> and 17<sup>th</sup> such as *Nossa Senhora de Saúde* and *Nossa Senhora de Rosa* (Teixeira et al.,2020:23-24).

*Graça*'s historical identity is recognised outside the Islamic occupation as a large part of the place belonged to the *Augustinian* monks who constructed diverse churches in the 12th and 13th centuries. In the 14th century, all the convents of the order of *Saint Augustine* also became the invocation of *Nossa Senhora da Graça*. At this time (from the 14th century), the toponym "Graça" was defined. The construction of houses next to religious buildings and along the old demarcation paths of the fences allowed the solidification of the area between *S. Vicente* and the *Convento da Graça*. Most new residents worked in the conventual properties (Calado and Ferreira,1991).

Following the establishment of the *Fernandina* wall, some parts of *Graça* started to be recognised inside the new urban perimeter. During the next three centuries, urban consolidation occurred, and the houses tended to be built next to the convents and churches.

The zone experienced significant destruction after the earthquake, and the neighbourhoods should face new urban policies. However, their morphology did not significantly transform along with their inhabitants' everyday life, even though buildings did not necessarily follow the pre-earthquake structures (Calvo,2015:22).

In *Alfama*, the time was the departure of the wealthiest families. Indeed, the moment arrived for rebuilding the houses on the ruins by the poorer class. The situation persisted in the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century. The life quality faced severe degradation with the decay of the buildings and insalubrity. The presence of rural migrants and the working class brought about primary concern in the 40s on the necessity of rational urbanisation (Calado and Ferreira,1992).

The urban layout remained unchanged, and the working class was dominant. In the 20<sup>th</sup> century, in 1910, the Castle area was classified as a national monument encompassing *Castelejo*, its walls, and some buildings in its square that the former barracks would have occupied. In 1928, the *DGEMN* (General Directorate of National Buildings and Monuments) was created. Later, the 30s and 40s witnessed a series of interventions, particularly in medieval constructions. The idea of restoring the original was generally maintained.

Regarding urban structure, *Mouraria* possessed the same situation. Until the end of the 19th century, families of the aristocracy and bourgeoisie settled. They also occupied the final section of *Rua do Terreirinho* and *Rua do Benformoso*, with buildings of better architectural design and larger dimensions, contrasting with popular housing (Menezes, 2004: 42).

In the 20<sup>th</sup> century, *Mouraria* encountered perceptions respective to the beautification of the city and appearance of ample avenues such as *Rua Nova de Palma* (Teixeira et al.,2020:26). The similar policy of *Estado Novo* influenced the *Mouraria*. The problems like circulation and insalubrity of *Mouraria* were dealt with radically in the first years of the *Estado Novo*. Many buildings in disrepair were demolished, including some with historical value (Pellitero and Batista,2017:6).



Figure 4-13- Rua Benformoso and Rua Terreirinho

*Graça*'s urban development witnessed a more moderate approach, although the parish represents a similar fabric and similar population class. During the 17th and 18th centuries, the area's prestige grew with the construction of large urban palaces along the sidewalks of *Graça de Santo André* and in *Largo da Graça*, Counts of *Figueira*, *Senhores da Trofa and Abelhos* (Calado and Ferreira,1991).

After the earthquake, the axis along *Estrada Velha – Largo and Rua da Graça* was built (Leite,2014:31). This development continued persistently in the 19<sup>th</sup> century. In the last decades of the century, new landmarks such as *Voz de Operario* were built to promote the socio-political associations supporting workers' rights (Pereira,2016:69). The other sign of a more moderate character of *Graça* is the realisation of *Bairro Estrela d'Ouro* designed by Norte Junior in 1908. The later decades witnessed other significant works, such as *Vila Berta* by Joaquim Francisco Tojal, *Royal Cine* and *Radio Graça* (Calado and Ferreira,1991).

During *Estado Novo*, isolated spots like *Alfama* and *Mouraria* were under the first urban renewal policy. The result was a systematic demolition without dominating perspective toward patrimony (França,1982). It, in a way, depicted traditional neighbourhoods to revive the nationalist image. These two parishes became the centre of tourism after the 1974 revolution as their population transformed toward a

multicultural character, disrupting the sense of community and Portuguese identity. In *Castelo* and *Graça*, different approaches were implemented as the caste and territory were rehabilitated, and *Graça* encountered more projects. The typical situation in all neighbourhoods was the awareness of preserving the cultural identity of all parts since the 1980s. Moreover, the neighbourhoods have been facing a multicultural population and gentrification for tourist purposes.



Figure 4-14- narrow and winding passages in Graça, Castelo, Mouraria and Alfama

#### **Overall character**

The selected zone was recognised as a traditional core of the city or "the village within the city" (Texeira,2018:28). However, the intention was to characterise the zone based on counteraction of time and human factors. Urban development through time reflects a multi-ethnic layer of Roman, Islamic, and medieval influences besides the Portuguese environmental reality. The outcome would be the organic planning of entangled narrow networks (Alcântara,2020:56).

The other factor for identifying the traditional character is the richness of monuments and cultural centres. Church of *Conceicao a Velha*, *Chafariz del Rei*, *Chafariz de Dentro Argo*, *Cerca Velha and Cerca Femandina* special protection zones, *Palacio de Coculim*, *Ermida do Senhor Jesus*, *Casa dos Bicos*, *Fado* Museum, Church of *Sao Antonio*, Church of *São Miguel*, *Sao Jorge's castle*, the church of *Nossa Senhora de Saúde*, *São Lourenco* church, *palaces of Marques of Tancos*, *Palacio da Rosa* and *Sao Antão de Velho e Novo* are the among the monuments dictating their existence on the place as the crucial landmarks.

The hierarchical organic layout of the neighbourhoods also provided public states with a way to revive the sense of community, which *Largos in Graça*, *Alfama*, *Mouraria and Castelo*. Regarding the human

factor, the role of the architectural generation is less than the residing population, with a few exceptions in *Graça* by the architects such as *Norte Junior* and *Joachim Francisco Tojal* and in *Castelo*, the musealisation of the archaeological structures by João Luís Carrilho da Graça and creation of local museum by Vitor Mestre (Gaspar et al.,2013:203). The role of residents became chromatic since the presence of different dynasties.

After the earthquake, the migration of people from rural spaces generated a new phase of traditional everyday practice. Also, a non-bourgeoise entity decreased the possibility of a modernised zone. Habitation of working-class society could be another reason for persisting a previously traditional fabric. Another possibility could be addressed to the multicultural population besides the old residents. After the revolution, the presence of Eastern Asian society reinforced the possibility of practising the oriental culture, such as Islamic and Indian cultural centres and the Portuguese Fado tradition in neighbourhoods like *Alfama*. All these keywords implied the traditional character of the zone, imposed by history, topography and even the residents.

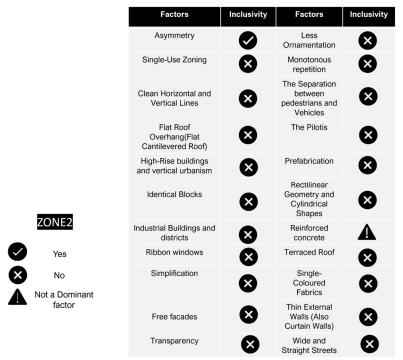


Figure 4-15- Evaluation of the zone based on the modern factors



Figure 4-16- Evaluation of the zone based on the factors of traditionalism

## ZONE2

ZONE2

Yes

No

Not a Dominant

factor

Factors imposing modernity	Factors imposing traditionalism
Modern reconstruction in the 20th century	Time as an imposing factor
Radical demolishing from 1937	The imposed historical layers since the Islamic Period
17	The presence of cultural and religious centres such as churches and the Sao Jorge Castle
+	The multicultural character after the revolution
-	Traditional urban characters as a reminiscent

Figure 4-17- Overall points based on the imposing factors

# 4.2.3.Zone 3: Intendente, Anjos and Alameda D.Afonso Henriques

Zone 3 includes the areas linked by *rua da Palma* and *Avenida Almirante Reis*, such as *Intendente*, *Anjos*, *Arroios* and *Alameda D.Afonso Henriques*. The critical point in this zone is their separated functions outside the *Lisbon* limit being linked with the South-North axis from *Martim Moniz* to *Estrada de Sacavém* and *Santarém*.

Intendente (formally, the Largo do Intendente Pina Manique) is the first spot beginning the urbanisation zone for Lisbon since post-earthquake. The place is accompanied by modern catalysts to be connected to the capital soon as possible. Intendente is an adjacent locale to historical zones such as Mouraria, Alfama and even the Enlightenment legacy of Baixa Pombalina. Hence, it shared a patrimonial totality consisting of Travessa do Maldonado, Travessa da Cruz aos Anjos and Travessa do Forno aos Anjos, the former Intendente Pina Manique, the Viúva Lamego ceramic factory and Chafariz

*Intendente/Desterro*. Inside this image, historical references to *Mouraria* and *Desterro* with the streets like *Rua de Bemformoso* at the east surrounded the place. However, *Intendente* faced contemporary facilities to be integrated within the city in the 19<sup>th</sup> century through *Rua Da Palma*.

The Olisipiographer Júlio de Castilho (1937:249), who lived in the corner of *Travessa do Maldonado* for a few months in 1886, refers to *Largo do Intendente* as one of "the most trodden and noisy places in modern Lisbon". The place functioned as a node with most integration hosting all types of vehicles and their occupants passing through the square.

In the 1900s, *Intendente* presented the installation of a series of equipment of a social and utilitarian nature. Fountains, public wash basins, bilges, and economic kitchens with a less ostentatious aesthetic were among these (Ribeiro, 2000: 126-127). It was affected deeply by several famous Art Nouveaustyle buildings, like the winning *Valmor Prize* edifice of *Adães Bermudes*, as a landmark to make its mark on the newly introduced *Avenida Donna Amélia* (changed later to *Avenida Almirante Reis*) (Ibid,2000:123).



Figure 4-18- The Valmor prize winner building in Intendente by Adães Bermudes in 1908- (Source : Arquivo CML)

The sharing *status quo* regarding urban conditions between *Intendente* and the neighbour parishes influenced the zone with various renovation policies in the 1940s. It also demolished the *Igreja Socorro* and surrounding streets and the urban renovation of *Martim Moniz* in 1982 based on Meyer-Heine's suggestions in 1967 on the necessities of revitalisation.

Avenida Almirante Reis with Avenida dos Anjos became a place to inhabit the lower-income class compared to the bourgeoise people mainly residing in Avenidas Novas, as another vital axis for modernising Lisbon.

Anjos and Arroios are the next critical spots in line with the Rua Da Palma-Almirante Reis axis. They were also limited to the south by Rua da Palma and to the north by Rua Pascoal de Melo. The history of the parishes dates back to the 16<sup>th</sup> century with two major crucial religious centres, the Church of Santos Anjos (1551) and the Convento de Santana (1562).

During the earthquake of 1755, Anjos was almost destroyed. The urbanisation of place developed in a small pace in 18<sup>th</sup> and the first half of the 19th century. In the 20<sup>th</sup> century, the undeveloped part of the *Quinta da Charca* started to take the attention. Accordingly, between the late 1920s and the establishment of *Estado Novo*, *Bairro das Colónias* (Nowadays *known as Bairro das Novas Nações*) were constructed with the residential buildings mostly in *Art-Deco*. Within a short period, *Praça das Colónias* which was etymologically influenced by its neighbourhood, was renamed to taking its name from the main square, *Praça do Ultramar* in 1933 (George,2023).

With the significant concentration on Riverfront zones after the earthquake, *Anjos* and *Arroios* were not the priority to be involved in radical transformations. Hence, their function was still as religious boroughs enriched with other churches and convents like *Ermida do Resgate das Almas* and *Senhor Jesus dos Perdidos* and the former *Igreja dos Anjos* (Ribeiro,2000:107). Nevertheless, the urgency for revising the old *Largo do Intendente-Avenida Dos Anjos* Axis in its primary was formed. The reason was the topographical constraints and the introduction of a new regularisation policy for the layout of *Rua Direita de Arroios*. Furthermore, constructing three longitudinal streets connected the Rua dos Anjos to the Circunvalação road (currently *Rua Morais Soares*), facilitating the condition for a more modern reality (Lourenço,2019:96). *Alameda* received a more symbolic image than others, representing the architecture of power inside the *Estado Novo* ambience. *Intendente*, *Anjos* and *Arroios* were the parts with dubious perceptions toward traditional and modern aspects of architecture, urbanism, and even everyday life. In that case, perceiving an ensemble of monumental rationalism in *Alameda D. Afonso Henriques* is more probable. In a way, it balanced the dominant axis of *Almirante Reis* with another axis consisting of *Instituto Superior Técnico* as a new urban acropolis (Tostões, 2003:102).



Figure 4-19- - Ermida Dos Resgate in 2022

Indeed, *Porfirio Pardal Monteiro* developed a fantastic composition in the good "*Beaux Arts*" tradition in which the Central Pavilion is located at the intersection of the two compositional axes as an effort to envisage a modern acropolis, finishing off the extension of the *Alameda* inside the IST and also ended with the other margins of *Avenidas Novas* with symmetrical-Art Deco design language (Ibid,2005:21). The *Alameda*, including its two architectural poles, was primarily built between 1927 and 1948. *Alameda*'s size and central location make it a significant example of the urbanist policies in the first decades of Salazar's dictatorship. Being named after the first Portuguese king, it refers directly to Portuguese history and its mythical idealisation in national historiography. The *Alameda* gains additional symbolic and practical significance in the city's fabric by its location in the middle of the central street. The place also connects the historic city centre and the airport (Ibid,2003:102). Apart from the increased housing around *Alameda*, Cassiano Branco's *Cinema Imperio*, designed in 1947, highlights the modern tonality more than its primary status with its obvious layout.

#### The Overall Character

It is not easy to classify zone 3 as consisting of Intendente, *Anjos, Arroios* and *Alameda* inside the Modern-traditional scope as, in the first place, they acted as independent islands outside Lisbon's centrality. Also, the characterising keywords for modernism and traditionalism were not evident and numerous enough to finalise. However, it is more probable to recognise zone 3 as a transitional zone linking the historical areas. The zone was the place combination of traditional neighbourhoods and a pale initiation of rationalism to a more modern atmosphere. This perception is impossible without understanding the deterministic role of time and place. Urban development toward the north had to align with the productions of the time, whether as a euro-centric architectural trend or the rationalist centrality of urban policy. Consequently, the buildings had to be filled with contemporary grammar in the lands perceived as tabula rasa.

This critical axis functions as a "time machine" of Lisbon's high-rise buildings, reflecting the political and social changes that took shape there. It led to extensive plans considering the buildings and projects and, less objectively, issues related to rehabilitation or its initial objective (Appleton, 2018:776). The metamorphoses of this avenue regarding construction and development underwent an organic way to reflect the spirit of time and place (Ibid, 2018:776), symbolising it as an avenue of "transition".

Alameda represented the role of time more than ever. For those historians identifying the reality of Estado Novo with a more traditionalist tone, Alameda D. Afonso Henriques could be a better example of questioning such certainty. Alameda was the meeting point between the abstraction of modernity and the concreteness of Portuguese. The role of humans in shaping the zone is not equal in each part. In General, Avenida Almirante Reis was the habitat for the workers, Petit-bourgeoise and poorer populations with less architectural significance comparing Avenidas Novas. Nowadays, the zone has experienced a massive, degraded situation with the presence of immigrants. The post-revolution era faced new obligatory policies to revitalise Intendente. The most crucial point in this regard could be the municipal contributions to revive the sense of neighbourhoods in the multicultural population. Although

this diversity and touristic attention were recognised as a threat, the presence of Eastern Asian communities and Africans could be a positive opportunity.

The probable tendency of the immigrants from Pakistan, Bangladesh and India might be the crucial point to form their community and its correlation with sui generis of *Intendente*. Furthermore, the mutual historical aspects harmonised the city and other parts, such as *Arroios* and *Anjos*, based on its omnipresent essence. The more one approaches Intendente to *Alameda*, the easier it is to comprehend the transformation and transitional role since the layers of abstraction and concreteness intersect. The roles of architectural generations increased a little with the construction of the park, IST, monumental *Fonte Luminosa* and, at last, the *Cinema Imperio*. The projects identified at the same time the monumental nationalist ambition of the state in combination with the rationalistic representation of architectural space. That is why the time and human factor amplified a transitionary role for zone 3 in *Alameda*.

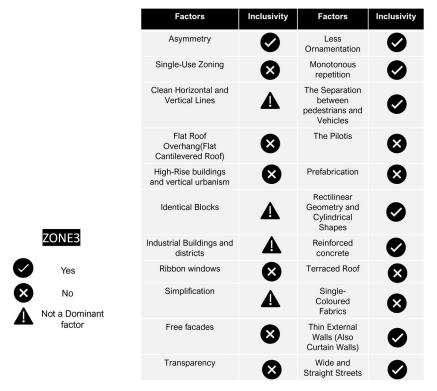


Figure 4-20- Evaluation of the zone based on the modern factors



Figure 4-21- Evaluation of the zone based on the traditional factors

### ZONE3

Factors imposing modernity	Factors imposing traditionalism
The existence of Almirante Reis Avenue as well as other longitudinal streets	Areas such as Intendente which is influenced by the Mouraria and Alfama
Rationalist and rectangular axis	The Presence of Historical References
Increasing modern tonality by modern spaces such as Cassiano Branco's Cinema Imperio	Presence of romantic and revivalist villas in some parts
The Time as a imposing factor on the newly developed lands	Monumental image imposed by Estado Novo
Linear development	Presence of Asian communities practicing the oriental culture
-	The existence of rural realities in areas such as Penha de Franca, Anjos and Arroios

Figure 4-22- Overall classification based on the imposing factors

## 4.2.4. Zone 4: Areeiro

ZONE3

Yes

No

Not a Dominant

Zone 4 consists of *Areeiro* as a critical point developed during Estado Novo.

The *Areeiro* area is located in the north of Lisbon. The primary radials and circulars of the city cross the area. It is an extension and completion of the city's structure in the 1940s. The urbanisation of *Areeiro* was a public initiative on expropriated land, with an area of about 44 hectares. In addition to the predominant residential use, it contemplated a church, various public buildings (schools and others), shops and a cinema space.

Four critical streets are defined around the *Areeiro* urbanisation plan besides *Almirante Reis*, such as *Avenida* Paris, *Avenida João XXI*, *Rua President Wilson*, and *Rua Actriz Virginia*.

While there is no concrete historical chronology, the *Areeiro* neighbourhood, planned during the *Estado Novo*, developed between 1938 and 1942 under the procedural control system exercised by the Chamber, was designed for 9,000 inhabitants, with 2,680 dwellings, on 32 hectares. (Lamas, 1993:284) The urbanisation in the *Areeiro* area is linked to the construction of the *Instituto* Superior *Técnico* (1927-1932) and the expropriation of adjacent lands. Likewise, the plan of *Praça do Areeiro* (currently *Praça Sá Carneiro*), whose project dates back to 1943, by Cristino da Silva, precedes this general plan.

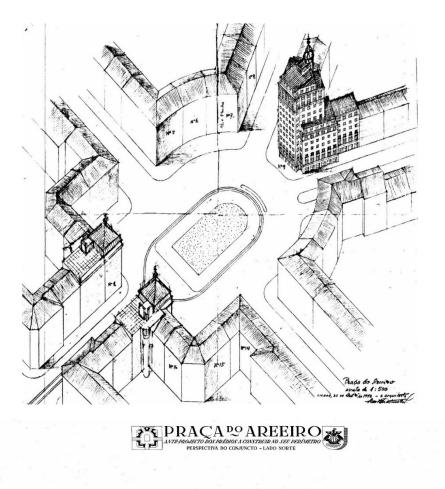




Figure 4-23-Isometric plan of Areeiro square (FGC-BIblioteca de Arte e Arquivios)

The *Praça do Areeiro* project began in 1941 and lasted until 1956, with the tower's final solution only materialising in 1952. However, the execution and alteration project were only completed in 1956. several authors describe dates differently. Yet officially the contract for the square project was signed in 1940. It is from 1941 that there are records of drawings made by Cristino da Silva between 1941 and 1943, and the preliminary project was carried out. Between 1951 and 1952, the final design of the central tower and its variants were made. Subsequently, in 1955 the central tower was completed (Fernandes, 1998:75).

Three central figures could be recognised in terms of Human involvement in urban development. Duarte Pacheco initiated an administrative role model to desire a complex as purely urban and contextual. The complex necessitated the symbolic landmark as a grandiose at the end of the *Almirante Reis* axis to promote the capital (Silva,1943:2). However, the most critical character belongs to Cristino da Silva as a professor at the Lisbon School of Fine Arts.

He exerted a notable influence with the monumentalism engaging at the end of the 1930s. Cristino Da Silva's design path was changed with his participation in *Areeiro*. It was just similar to the way that Portuguese architecture was shifted. The outcome was stylised to a traditionalist vision of forms and symbols. In other words, "Soft Portuguese" began in a critical atmosphere caused by traditionalists (França,1983).



Figure 4-24- Praça De Areeiro in 1950s - (Source: FCG-Biblioteca de Arte e Arquivos)

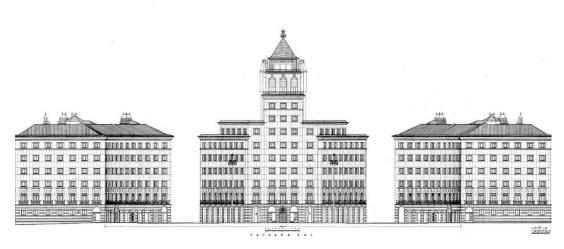


Figure 4-25- South Facades of the monumental design –(Source: FCG Biblioteca de Arte e Arquivios)

There are several sources of inspiration for *Cristino Da Silva's* monumental language of *Praca do Areeiro*. The most apparent one belongs to German Architecture during the Nazi era, exhibited by Albert Speer with rigid, neoclassical monumentalism, using stone as the dominant material, giving a heavy and austere appearance.

Another model that influenced Cristino was the "Escorialense style" or the Austria style, which in Francoist Madrid was marked by a monumental ensemble of the capital's "official" architecture (Fernandes,1998:76). Cristino would try to make a piece of modern architecture, having sketched a tower with a horizontal finish. A design that was made unfeasible for some reason, perhaps because of awareness or a refusal by Duarte Pacheco to want an "official regime" architectural work. Cristino then assumed nationalist/traditional urbanism (Ibid,1998:75).

The other critical character is Faria Da Costa, who designed three avenues like *Avenida Paris*, *Avenida João XII* and *Rua Presidente Wilson* in the second phase beginning in 1940. Faria Da Costa took a little progressive and modern role as a planner. He abandoned the traditional concept of the street by changing the transit streets from the residential ones or freeing buildings from the obligation to line up on both sides of the street, leaning, parallel and symmetrical (Fernandes,2015:61). Both *Avenidas João XXI* and *de* Paris, and *Praca Pasteur* could describe this approach by Faria Costa. Apart from the three central figures, the housing projects were developed by two different teams of architects and were divided into two areas. *Alberto Pessoa* collaborated with *Raúl Chorão Ramalho*, *José Bastos* and *Lucínio Cruz* on *Avenida Paris* and *Praça Pasteur*. *Avenida João XXI* and *Avenida Presidente Wilson* was the place of participation between *José Segurado* (1913-1988), *Joaquim Ferreira* (1911-1966), *Filipe Guerreiro* and *Guilherme Gomes* (Lamas, 1993: 284).



Figure 4-26- Critical networks of the zone: Praca De Pasteur (Top -left), Avenida João XXI (Top-right), Avenida da Paris (Down-Left) and Rua President Wilson (down -right)

#### The Overall character

It is possible to classify that zone 4 exhibits entangled layers of modernity and traditionalism like Alameda D.Afonoso Henriques and with apparent differences.

The time factor through the development of *Areeiro* did not play a crucial role chronologically in defining its imposers except the contemporaneity and contextuality. Nevertheless, humanistic roles, specifically regarding architecture and politics, are worth noting.

The central dominancy in the realisation of the zone is political to revive the nationalistic image through symbolic collages derived from the time. Based on this mentality, the architects and planners were assumed to be in the same direction. However, *Areeiro's* urbanisation plan and its emblematic production, *Praca de Areeiro*, might reflect a slightly different notion. Consequently, Cristino Da Silva's design as a project aligned with Duarte Pacheco's desire had to be considered separately. Indeed, Faria Costa's urbanisation plan consists of a rational metabolism based on symmetrical grids prioritising the streets despite hierarchising them with aesthetic uniformity (Mascarenhas,2005:40). Faria Costa's plan for *Areeiro* is a model confirming modern urban grammar without any paradox with any possible neoclassical urban disciplines inside the plan.

*Praça do Areeiro*, designed by Cristino da Silva, defines the paradigm of regime architecture from 1938 onwards. Its classicising design was based on a traditionalist pattern of stylisation of the erudite architecture of the 16th or 18th centuries. It was obtained from its composition the maximum monumentality: a noble floor with a veranda, pilasters and openings framed in stone, upper eaves, peaked roofs and stone arches on the ground floor. Furthermore, thus, denying the modern postulation

of the technical determinant would lead to the eradication of style. The buildings of the urban complex of *Praça do Areeiro* confirm the use of a sophisticated structure of reinforced concrete, masked on the outside by a historicist and ornate façade, denying the principle of the truth of materials (Tostões, 2004:120).

Cristino da Silva considered that the construction of these buildings was monumental, not only because of the size they occupied in this part of the city but also because they were located near *Alameda D. Afonso Henriques*, the *Instituto Superior Técnico, the Instituto Nacional de Estatística* and *Casa da Moeda*. To mark this place in the city with a complex as or more majestic than these projects, he utilised a deliberate uniformity of treatment of the facades in what seemed to be the only attempt to understand the Pombaline formally. This attempt fails due to the insufficiency of its architectural characterisation in terms of volumetric organisation, scale and form (Almeida, 1986: 116).

Despite the monumental signature of *Praca Areeiro* by Cristino Da Silva, his modern background with the works such as *Cinema Capitólo* (1925) and *Liceu de Beja* (1930) is not ignorable, along with his initial modern proposal for the square with the horizontal finish and flat roof.

The buildings on the square have a sober decoration, noticeable only on the cornices, window frames, railings, lamps. and weathervanes.

The pyramidal spire with tile roof and eaves finish will influence Raul Lino, associated with housing programs. This pyramid is commonly used to support a decorative/symbolic element in wrought iron, for example, an armillary sphere, weathervane, etc. (Fernandes, 2003: 98).

To sum up, considering *Areeiro* as a meeting point of subjective and objective layers of architecture and urbanism is discussed by describing the mentality of architects, planners and the state besides the urban layout, buildings and their facades. *Areeiro* could reflect a harmonious continuity with *Alameda* before what was intended to be executed in *Alvalade*. *Areeiro* could reflect time determinism fluctuating between the progressive and cultural models. Also, one can claim that the contemporaneity of ideas approaching modernity dominated the inherent tabula-rasa reality of the site. To Nuno Portas (1973:712) it was not enough to make functional crates, it was necessary to wrap them in memory paper, and memory was called "*rustic*" (the roots of the people) and "*Joanine*" (the roots of power, the juice of the empire) or, better still, the collage of both and no statements than the words by Portas can represent the reality of *Areeiro*.



Zone 4

Yes

No

Zone 4

Yes

No

Not a Dominant factor

Not a Dominant factor

Figure 4-27- Identification of the zone based on the modern factors

Factors	Inclusivity	Factors	Inclusivity
Adaptation toward slopes	8	Collective memory	×
Circle and Circularity	A	Mixed Land- use development	
Courtyard Houses	8	Narrow and Winding paths	8
Cul-De-Sacs (The Dead End passage)	A	Non- Monotonous repetition	8
Culture	lack	Organic Organizing	×
Hierarchical Organizing	A	Ornaments and Decorations	
Intensified Boundaries	8	Pedestrian Oriented Networks	8
Horizontal Walls Liking houses	8	Strong Centres	
Local Material	8	Connotative Symbols	
Local Symmetry	×	Visual contradiction	A

Figure 4-28- Evaluating the zone based on the traditional factors

## ZONE4

Factors imposing modernity	Factors imposing traditionalism
The progressive and modern role of Faria da Costa in the whole urbanization project	State-oriented nationalist-traditionalist urban image of Praca de Areeiro
The changing transit streets from the residential ones in Avenidas Joao XXI, Paris and Praca Pasteur	The monumental role of Alameda and Rural influences of neighbour areas
Time as imposing factor on vacant lands	The Principle of truth of materials was denied in some buildings
The active role of young modern architects such as Raul Chorao Ramalho, Jose Segurado, Alberto Pessoa and Joaquim Ferreira	Historicist and ornate facades

Figure 4-29-Evaluating the zone based on the imposing factor

### 4.2.5.Zone 5: Alvalade

Zone 5 involves one of the most discussed parts in Portuguese architectural and urban discourses known as the "urbanisation of south of *Avenida Alferes Malheiro*" or later as "*Bairro de Alvalade*". After establishing *Estado Novo*, the central policy tackled issues like Lisbon's expansion, housing problems and degraded historic neighbourhoods (CML,1948:6) like Martim Moniz since 1938. The minister of public works organised the first cornerstone of *Alvalade*, Duarte Pacheco and the great planner Etienne De Groer with the conclusion of "*Sitio de Alvalade e Areeiro*" in 1945 (Beja,2009:583).

Designed by Faria da Costa in 1945, the project was defined to generate diverse housing projects in a land with an area of 230 ha for the number of residents set at 31000-45000 residents in collective low rent housing, 9500 non-limited rent housing, 2000 in one-family low rent housing and 2500 non-limited rent single-family houses (Tostões, 2021:29).

The whole project was based on eight cells considering the primary school as the core element of each cell as a deciding factor for the size of each cell to mitigate the walkability of the path between the schools and houses (Ibid,2021:30).

Cells I and II were appropriated to low-income and affordable houses organised by the Federation of Pension Funds in a united standard (Ibid,2021:33). *Cell III* obtains the same residential character with more mixed-use functions like local industry, craft and commercial areas heading toward *Igreja* and *Roma Avenue*. Also, the residential buildings in *Cell III* range from 4-floor economical apartments with commercial spaces on the ground floor facing *Avenida da Igreja* to 8-floor dwellings perpendicular to *Avenida do Brasil*.

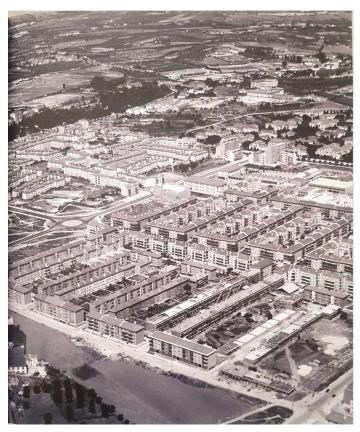


Figure 4-30- The aerial View of Alvalade- (Source: CML)

Cell IV contains a more unified character considering the residential spaces with affordable semidetached and detached villa houses. The only exception was for the perpendicular 4-storey apartments with the front garden in the north of the cell facing *Avenida D.Rodrigo da Cunha* and the 10-floor collective houses with Pilotis in the south toward Av EUA.

Cell V includes similar affordable housing schemes with the third cell except for apartments influenced by the Athens charter facing Av. EUA. The zone also takes a similar position to the third cell regarding the commerce areas. The centrality of sports facilities and the park characterises this cell with the others. Cell VI possesses the largest green area of *Alvalade* with the presence of "*Mata de Alvalade*" or "Jose Gomes Ferreira Park". This recreational space took the attention of the landscape architect *Ribeiro Telles* (1922-2020) to illuminate the role of landscape planning and the connectivity of all the green spaces of *Alvalade* (Neves and Pinto,2020:163). The other distinguishing characteristics of the cell are the religious buildings, such as *Igreja de São João de Brito* (1955) by Vasco de Morais Palmeiro (1897-1968). A few signs of modern apartments with semi-detached and detached villas and low-rise affordable houses are the noticeable points in this cell.

Gago Coutinho Avenue marks the seventh and eighth cell facing in the east, *Avenida Republica* in the west and *EUA* in the northern part. The main principle of the cells exhibits a residential character with main traffic networks. These networks appeared as transitory zones from detached and semi-detached villa houses to modern high-rise apartments with *pilotis facing Avenida* EUA. The cells are well-known for representing the most discussed projects in architectural history and the introduction of the most valid examples of modernism in Lisbon.

The humanistic role in shaping the *Alvalade* is, without a doubt, crucial. Besides Etienne de Groer as the senior urban planner of the capital and Faria da Costa as the principal designer of the *Alvalade* plan, several young architects took the responsibility of realising notable projects. Jacobetty Rosa (1901-1970), Sergio Gomes and Fernando Silva (1914-1983) were among the young architects generating repeatable architectural typologies in *Bairro de S. Miguel*. Moreover, the eastern side of *Av.da Igreja* was reinforced by the works of the juvenile generation of landscape architects (Tostões,2021:33). However, it was not the beginning. The generations took an influential role in the national congress of 1948, confirming and justifying modernism with the introduction of the Athens Charter.

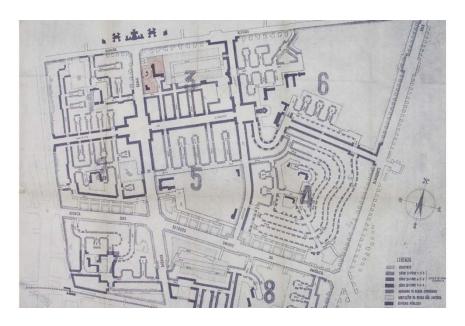


Figure 4-31-Urbanisation plan for the Southern zones of Alferes Malheiro- (Source: AML)

The Isolated perpendicular blocks on *Av. D. Rodrigo da Cunha* by Joaquim Ferreira (1911-1966) and the well-known collective houses in "*Bairro das Estacas*" by Ruy Jervis Authouguia and Formozinho Sanchez were the most significant examples of new architectural projects. They replaced the traditional settings of urban fabrics (Ibid,2021:35). These pioneer works paved the way for Filipe Figueiredo and José Segurado to implement the high-rise collective and isolated blocks as a modernist landmark on the intersection of *Avenida Roma* and EUA.

The latest works of the 1950s could be accounted for by the high-rise apartments built on *Pilotis* along the Av. EUA axis by Manuel Laginha (1919-1985), Pedro Cid (1925-1983) and Vasconcelos Esteves (1924-2014). Furthermore, series of blocks in *Avenida do Brasil* by Jorge Segurado manifested a similar modern scheme distinguishing themselves with yellow tiles (Ibid,2021:39).

As mentioned before, schools were the central cores of the cells, organising their sizes and borders. Schools with modular, standardised and functionalist settings enriched the modern character of *Alvalade* with the crucial presence of the young modern generations of architects such as Ruy Jervis d'Authouguia (Tostões,2021:43).



Figure 4-32- Bairro das Estacas-( Source :CML)

The other crucial feature might be commercialising the neighbourhoods with the efforts of Fernando Silva to design commercial galleries on the ground floors of economic rent houses (Costa,2010:58-59). Besides the roles of planners, architects, and noblemen, *Alvalade* is a hybrid character of settlements for a spectrum of social classes reflected in different types of dwellings (Beja,2009: 587).

The time factor was less decisive than the humanistic roles because of a short effectivity period. Notwithstanding, it could be the beginning dynamics of the neighbourhood.

The central founding part of the *Alvalade* belongs to the mid-40s. The necessities of the modern mindset were practised before by planners. Later, the architects objected to any efforts from the state to generate a political traditionalism. That is why the mid-40s and 50s were the most critical periods of the neighbourhood. It was behaved as a place to be designed from scratch.

In the 70s and until the mid-80s, *Alvalade* still was a zone of development with the appearance of commercial areas and shopping centres (Andre et al., 2016:12). The second half of the 80s could be recognised as a point of urban decay due to the prominent population decrease, impoverishment of the residents and poor conservation quality of buildings (Ibid,2016:12).

#### The Overall Character

Alvalade could be identified as the first neighbourhood evidencing the entrance of a transparent form of

modernism being mutual in the international architectural context. Nevertheless, it does not necessarily exhibit a totality of pure and monotonous modernism. The project keystone could be attributed to the amalgamation of Clarence Perry's neighbourhood unit and Unwin's Garden City because the area is organised upon cells, neighbourhood units and pedestrian mobility. Also, a public facility like a school is the centre of cells dividing the area by the motorised circulation routes. Based on such a framework, It also manifests the hybridity of factors to shape the space

The appearance of apartments heavily influenced by the Athens charter and the modern schools of each cell portrayed a dominant modern residential-educational whole. They were surrounded by wider avenues such as *Avenidas Da Igreja*, *Do Brasil*, *Roma*, *Rio De Janeiro*, *Alm. Gago Coutinho* and EUA exhibit a more modern image comparing the discussed zones. However, there were a few traditional indicators, such as religious churches and the hierarchical networks between public and private realms with detached and semi-detached villas. Considering all the factors, *Alvalade* is the beginning point of 20th-century modernity generated by time dynamics and followed by the young generation of modern architects in Portugal.

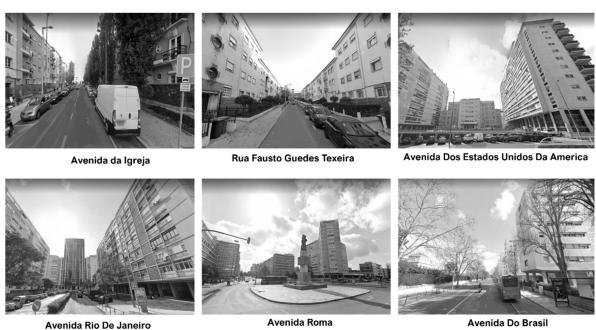


Figure 4-33-Alvalade and its main networks

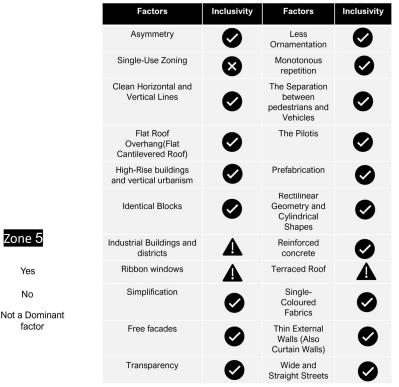


Figure 4-34- Evaluating the zone based on the factors indicating modernism

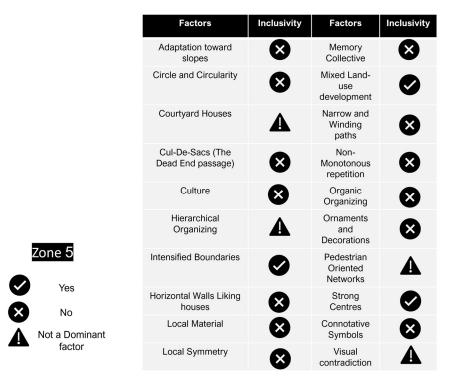


Figure 4-35- Evaluating the zone based on the factors indicating traditionalism

## Zone 5

Factors imposing modernity	Factors imposing traditionalism
The effective role of the architects participating in the national congress of 1948	Presence of a few religious buildings
Athens charter principles implemented	Hierarchical networks between public and private realms
Commercializing the neighbourhoods by Fernando Silva	Considering the pedestrian mobility
Time as an imposing necessity on a vacant site	-

Figure 4-36- Overall classification based on imposing factors

# 4.2.6. Zone 6: Olivais Norte, Olivais Sul and Chelas

Zone 6 covers the latest urban development that began in the second half of the 20<sup>th</sup> century and was among the most discussed themes. *Olivais Norte-Sul* and *Chelas* are the areas being evaluated in this part to know their orientation toward modernity and traditionalism.



Figure 4-37- The zone 6 -Oliavis Norte, Olivais Sul and Chelas (Soruce : CML-GTH)

The detailed plan was drawn up by GEU between 1955 and 1958, preparing the first and official phase of work in November 1959 (Heitor, 2004).

The GEU team included the engineer Guimarães Lobato (1915-2008), the architect Sommer Ribeiro (1924-2006), and Pedro Falcão (1961-) designed the plan in a levelled platform (Tostões,2021:61).

Olivais Norte is the materialised effect of the New-Towns doctrine being implemented in the English "garden cities" environment facilitating the concept of the "city in the park" in a distributed way with lower density, according to Teresa Heitor (2016:59).

Olivais Norte takes the distance with the traditional urbanism indicators such as the street-block system with the presence of the Athens Charter. The principles such as the isolated residential buildings prioritising the sun, ventilation and green landscape, the independency between the orientation of the road and buildings and the hierarchical network between the road and pedestrian circulation were applied (Tostões,2021:63).

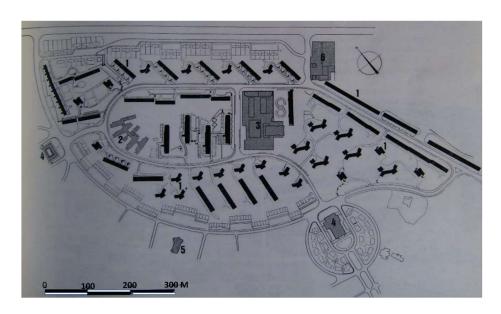


Figure 4-38-Olivais Norte Master plan- (Source: GEO – Gabinete de Estudos Olissiponenses, DP 1272 CMLEO — Olivais Norte)

The housing support equipment-commerce, culture and recreation form the nucleus of the civic-commercial centres, and the school appear as an isolated segregated building (Heitor,2004). Diverse typologies of the terrace, block and tower were investigated. Two scales of solution based on social groups were identified: the higher categories (III and IV) correlated with more significant buildings (8 and 12 floors), and smaller buildings with four floors are linked to categories of I and II (Tostões,2021:63).In humanistic terms, it is worth noting that the whole plan intended to implement a space of social integration with the participation of several groups of architects. For instance, Category III and IV possessed more rationalist elements such as the pilotis, the flat roof terraces and wide window openings with long balconies. They enlightened the footsteps of *Artur Pires Martins* (1914-2000), *Palma de Melo* (1922-2003) and João *Abel Manta* (1928-). On the other side, categories I and II included the projects by the architects such as João Vasconcelos Esteves (1924-2014), Braula Reis (1927-1989), João Matoso, Pedro Cid (1925-1983), Fernando Torres (1922-2010), Nuno Teotónio Pereira, António Pinto



Figure 4-39- Olivais Norte Areal view in 70s- (Source: GTH-CML)



Torre de Habitacao- Cetegory II-(Source: GTH)



R.1 Cabo Jose Martins Silvestre



Rua General Silva Freire



Rua General. Silva Freire



Rua Capitao Tenente Oliveira e Carmo



Rua Alferes Barrilaro Ruas

Figure 4-40- Olivais Norte

The other project inside zone 6 is *Olivais Sul*, being implemented as a housing program due to the enactment of decree law nº 42 454 on 18<sup>th</sup> August 1959, obliging the municipality and, subsequently, the Technical Housing Office (GTH) led by the architects Jose Rafael Botelho (1923-) and Carlos Duarte (1926-2019) to generate large housing units (Marques,2009:13).

The plan of *Olivais Sul* included a site of 186 ha providing accommodation for almost 34000 residents. *Olivais Sul* was formed based on four basic housing levels, depending on the number of residents.

The resident groups are established inside the neighbourhoods' units around a principal civic-commercial centre with the placement of school and primary schools at the centre of the cells (Tostões, 2021:75).

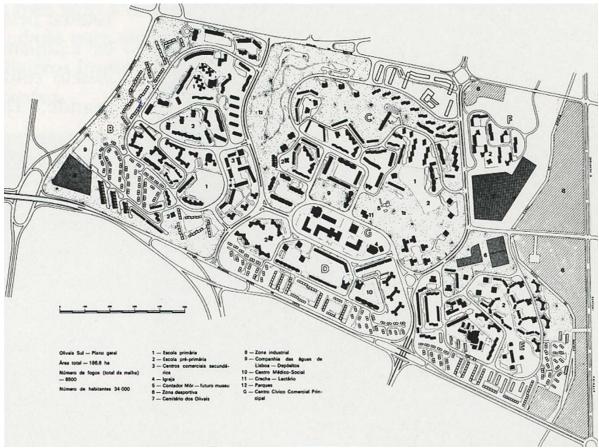


Figure 4-41- Olivais Sul Master plan-( Source: GEO – Gabinete de Estudos Olissiponenses, DP 1272 CMLEO- Oliavis Sul,1961)

Six cells were defined in the plan of this neighbourhood apart from cell A identifying the *Olivais Norte* previously. Accordingly, Cells B, C, D and E were recognised as cells specified for housings. Cell F was appropriated for Cemetery and rehousing nucleus along with Cell G for the civic-commercial centre (Heitor, 2004:159).

The buildings in *Olivais Sul* stand in an organic manner considering topographic specificity with the tower blocks at the highest point and the adaptive location of buildings on the slopes (Tostões,2021:77). While avoiding social segregation was the central theme in a more pluralised architectural scene in *Olivais Sul*, 26 teams of architects amplified that diversity. The team represented a combination of politically familiar and oppositional architects with diverse standing points toward modernism and traditionalism. It also paved the way for the participation of well-known architects such as Hernâni Gandra (1914-1988), Vitor Figueiredo (1929-2004), Bartolomeu Costa Cabral (1929-), Nuno Portas, Leopoldo Leal ,Fernando Gomes da Silva, Manuel Laginha (1919-1985), Manuel Tainha, Raul Hestnes Ferreira, Raul Chorão Ramalho, Formozinho Sanches, Fernando Torres and Nuno Teotónio Pereira (Ibid,2021:79).

The diversity of ideas from the architects introducing the Athens Charter to the Portuguese societies to flexible ideas, even with critical perspectives to modern urbanism, created two different urban perspectives. The rationalist and also plural principles were implemented by architects such as Vitor Figueiredo, Costa Lobo (1929-2013), Costa Martins (1922-1996), Hernani Gandra (1914-1988) and

Jose Neves Galhoz (1920-). They aimed to regenerate the traditional mentality by conceiving outdoor spaces to create a collaborative atmosphere (ibid,2021:81).

One can trace the influence of the revised Cumbernauld's plan and Abercombie's theoretical scheme, concentrating on densification and diffusing residential areas around a civic centre. Like the previous projects, the neighbourhood units remain the central theme (Heitor,2004:159). The clear evidence of English garden cities is two large parks: *Vale do Silencio* and *Quinta do Contador Mor*, located in cell C (Marques,2009:168).

The project was postponed due to the specific socio-political and economic situation that the country was experiencing. In addition, it delayed even the construction of the *Chelas* housing project. Notwithstanding, the project continued to develop in the following decades, and problems began to be perceived. The increased number of vehicles transformed the extensive green space into car parking (Ramos,2012), and diverse typologies caused disordered spatial organisation (Heitor,2015). Accordingly, the neighbourhood was segregated following the other parts of the cities.

The latest development, such as the initiation of underground networks and Expo 98 urbanisation, contributed a little to disrupting this discontinuity felt since the beginning of the project (Tostões,2021:86).



Figure 4-42-Olivais Sul in a nutshell

The 60s and the years toward the end of *Estado Novo* witnessed another critical project, *Chelas*, located in Eastern Lisbon. By approving the master plan in 1864, the third phase of the large-scale project for housing in Lisbon covered an area of 737 hectares. Like the other projects, the studies for conducting the urban development of *Chelas* were attributed to a team organised by the Housing Technical Office (GTH) consisting of town planners, architects and other specialists (Heitor, 2016:59).

Based on the topography, two axes parallel to the central valley and the secondary axes developed five housing areas. The rectangular shape of the centre extended in two perpendicular lines. It also connected the housing sectors as the most concrete points forming Chelas (Heitor, 2004). *Chelas* did not follow the cellular structure of *Olivais*. Nevertheless, the rationalist zoning structure is the most

critical reminiscent (Gonçalves,1972:163). Residential areas occupied around 318 ha (62%), while the oriental park's area was 70 ha (14%). Moreover, the industrial areas took 13% of the area with around 66ha, and long-distance roads along with green spaces possessed 11% of the area with 56 ha (Heitor,2004).

Chelas was the field for the presence of younger generations of architects such as Francisco Silva Dias (1930-), Tomas Taveira, Gonçalo Byrne, Vitor Figueiredo, Manuel Vicente, Vitor Consiglieri (1928-2019), João Braula Reis and other less well-known architects testing various innovative forms of social housing (Borges and Marat- Mendes,2021:2) apart from the more experienced architects like Nuno Portas and Nuno Teotónio Perreira.

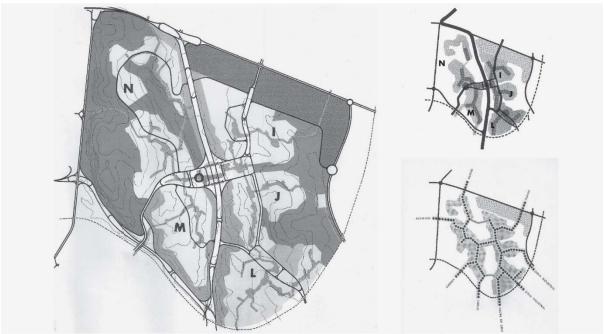


Figure 4-43- The Comprehensive master plan for Chelas based on cells and parallel axis – (Source: GTH-CML)

The first construction phase of housing clusters I, J and N2 began in the 1970s, concentrating on linear principles of the compact and formally coherent urban whole (Heitor, 2016:63).

Adapting to the terrain was another significant factor in cluster I with curved forms. In Cluster J, the main principle was to implement a continuous building structure connecting the elements placed on the structure of the outdoor space, according to Teresa Heitor (2016:63). In Zone I, there are significant influences of Kevin Lynch, whereas in Zone J a mixture of ideas between Candilis and Team 10 along with the Corbusian ideas in *Marseille* based on the architects' arguments such as Silva Dias (Borges and Marat-Mendes,2021:10).

Zone J is the accumulative cooperation of Lobo de Carvalho as a person managing the zone and the architects Tomas Taveira and Vitor Consiglieri. They aimed to make a platform, keep its volumetric and give rise to galleries with a set of buildings in colour and white (Ibid,2021:12).

Zone N2 in the mid-1970s contained many buildings as independent entities defining their own public space. Factors like discontinuity, reduced clarity, and legibility could appear problematic. They produced

an image of opposing urban organisation (Heitor, 2016:63).

Noteworthy buildings such as *Cinco Dedos* (five fingers, because of the position of the five blocks) by Vitor Figueiredo, Jorge Gil (1969-2019) and Eduardo Trigo da Sousa (1939-2008) and the *Pantera Cor de Rosa* building designed by Gonçalo Byrne and Antonio Reis Cabrita (1942-) were the most critical projects of the time. The target was to take advantage of all the experiences to make the city as it is traditionally done, which is building by the building, not supported by the other architect (Borges and Marat-Mendes,2021:16).

Zone L, N1 and M were the remaining parts that had to be completed in the 1980s and 1990s. The post-Estado Novo policies influenced them. Their linear principles vanished, and monofunctional residences were the most common ones with strip and block types in a grid system. At the same time, zone O experienced a revision of the plan with a significant concentration on circulation and megastructures, ruling out the model of multilevel centres (Heitor, 2016:65).













Figure 4-42- Chelas and the dispersed residential complex

## The Overall Character:

It is possible to conclude that a spectrum of ideas influenced zone 6. *Olivais Norte -Sul* and *Chelas* bore the expected effect of Garden Cities. In *Olivais Norte*, the initial support of the Athen Charter is utterly evident. However, in *Olivais Sul* and *Chelas*, the dominancy tended to fade.

Depending on the categorised zones, the number of architects participating in the projects was the most in Chelas. However, the various generations of architects, apart from the individuals' evolutional perspectives, facilitated the pluralism between the contrasting ideas. Given the overview of projects from north to south, the projects tend to display a more dispersed form. The presence of diverse architectural teams might be the primary reason for the inconsistency of various ideas, difficult socio-political circumstances and economic crisis.

The only rupture interrupting the perception of the miniaturised spectrum model for the capital could be the Encarnacao neighbourhood being developed before in the beginning era of *Estado Novo* in the 30s,

which the desired traditionalist of the image of the state was planned to be built based on *Casa Portuguesa* as a central discourse. While *Olivais Norte* is a project pursuing modernism, *Chelas* might be the project in revitalising the traditional city perspective. Diverse factors like the socio-historical aspect of the site, geographical reality and topography, multi-coloured apartments, informality, multi-centrality, the direct influence of the survey project with its regional ambience, and the participatory process of SAAL were discussed in this part. For this reason, *Chelas* could be considered a city distancing from modern standards even though, the zones built in the 80s and 90s were more likely to reflect a more rationalist view. As an overall understanding, zone 6 is a true reflection of modernity following a microscopic tonality of diverse urban disciplines from north to south, contrasting the regularity of modernity to its rising critique.

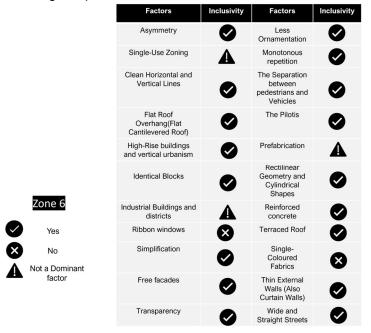


Figure 4-43- Evaluating the zones based on the factors indicating modernism

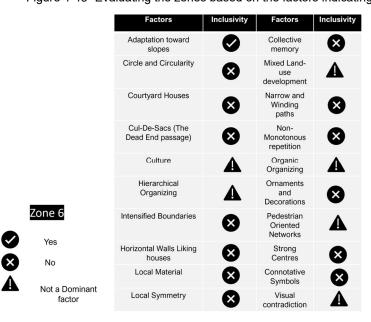


Figure 4-44- Evaluating the zone based on the factors indicating traditionalism

# Zone 6

Factors imposing modernity	Factors imposing traditionalism
Distancing from traditional street-block system in Olivais Norte	Critical perspectives toward Athens charter in Olivais Sul and Chelas
Dominant presence of Athens charter	Socio-historical aspect of Chelas as an imposing factor
Independency between the orientation of the road and the buildings	Multi-coloured apartments, informality and multi-centrality in Chelas
Time as a factor imposing on the vacant lands	State-oriented semi-detached villas in Encarnacao imposing neo-traditionalist image as a rupture
The Rationalist Zoning structure	-

Figure 4-45- overall classification based on imposing factors

## 4.3. Place-Istanbul

Five Zones in Istanbul are selected for the studies in this chapter. Zone 1 covers the areas inside the peninsula, such as *Aksaray*, *Laleli*, *Sirkeci*, *Eminönü*, *Hocapaşa and Kumkapı*. Zone two is also located on the European side consisting of the sites such as *Karaköy*, *Galata*, *Beyoğlu* and *Taksim*. The northern neighbour to zone two is *Şişli*. The area for Zone 3 includes the areas such as *Nişantaşı*, *Teşvikiye*, *Bomonti* and *Mecidiyeköy*. The last zone on the European side is *Beşiktaş*. It includes the areas such as *Bebek*, *Levent*, *Yildiz*, *Ortaköy* and *Arnavutköy*. Zone number five, *Üsküdar*, is the only area on the Asian side selected for this chapter.



Figure 4-46- Selected neighborhoods in Istanbul

### 4.3.1. Zone 1: Historical Peninsula -Fatih



Figure 4-47- the location of the zone

Zone 1 discusses the urban characteristics of the historical Peninsula in Istanbul through historical layers and humanistic interaction. This zone, as a primary core for the formation of the capital, includes critical parishes such as *Eminönü*, *Sirkeci*, *Aksaray*, *Laleli*, *Fatih*, *Ispartakule*, *Hocapaşa*, *Çağaloğlu*, *Taşkasap*,

Zeyrek and Süleymaniye. Numerous monuments, hills, and a crucial road axis like Divanyolu (Mese) make this part crucial for discussing architectural and urban development (Cerasi et al., 2004).

Four historical layers define the zone: The Greek, Roman, Ottoman and Turkish Republic. The Megarian fortification in the city illuminates the presence of Megarian Greeks as fishermen building harbours on the waterfront.

The Northeastern hills where *Topkapı* palace is located were the probable Acropolis for a city called *Byzantium*, with several Greek temples standing toward the Golden Horn (Çelik,1986:11).

The primary cores of *Byzantium* in the Greek era were the built environment surrounded by the walls with the *Acropolis* (now *Topkapı palace*), *Agora* (the commercial centre), amphitheatre, temples, Stadion, theatre and public baths and the grid pattern for residential areas (Kubat and Kürkçüoğlu, 2014: 564).

The Roman dominancy transformed the city. The new walls limited a significant proportion of the land since *Septimus Severus* of Rome captured the settlement in 196 A.D. As a consequence, The forum *Tetraston* along with *Embolos Avenue*, sided by porticos, the *Hippodrome* to the south and *Zeuxippus* baths were built in the new borders (Çelik,1986:11). This was not the beginning of the empire as Constantine created a new capital known as the second Rome in 330A.D.

The urban nucleus gained the renewed walls, grand palaces, *Hippodromes* and *Obelisks*, *Aqueducts*, golden gates and *Necropolis* (Kubat and Kürkçüoğlu,2014:565). Constantinople, the new name for Eastern Rome's capital, began to be weakened through wars, diseases, and fires from the 7th century until the end of the era and the start of a phenomenal period in the 15<sup>th</sup> century by the Islamic Ottoman empire.

At the beginning of the Ottoman era, Istanbul was the ground for revitalising *Theodosian* walls and resettling the Jews and Christians in the city. However, the central target was to create an Islamic capital. It was vital enough to notice major urban transformations in the city to form Muslim communities. The output was the generation of Islamic neighbourhood units growing around mosques (converted churches), Tombs and *Tekkes* (*Sufis* convents)<sup>42</sup> with a more irregular and denser pattern (Çelik,1986:23). Besides mosques on a local scale, the great complex or *kulliyes* were built consisting of religious schools, bathhouses, health clinics, fountains and kitchens.

The Mese Axis was renamed to "*Divanyolu*", and the hippodrome was transformed into a great plaza called "*At Meydani*". In Comparison with Roman and Greek urban layouts, *Mahallas* (Islamic neighbourhoods), mosques, complexes (*Külliye*), *Madrasah* (schools), Ottoman palaces, *Han* (*inns*)<sup>43</sup>, baths, bazaars, harbours, warehouses, *aqueducts*, and renovated city Walls was the urban nucleus of the historical Peninsula (Kubat and Kürkçüoğlu,2014:568). The 16<sup>th</sup> century was the era to formalise what is known as classical Ottoman architecture as a legacy of Mimar Sinan, the greatest architect of the empire. Hence, the peninsula was monumentalised on a significant scale, with massive domes and Minarets standing over the hills and combining the Anatolian-Turkish emerging elements with Byzantine architecture in residential houses (Çelik,1986:26).

The rapid process of building monuments in the peninsula continued in the 17th century with *Kulliye* of *Ahmet I* in (1616) and *Valide* mosque (1597-1663) (Ibid,1986:29). However, 18th century and its recognition with the title of "*Tulip Period*" was the turning point of decline for both the empire and

peninsula. With the technological advancement in Europe, new villas, mansions and palaces were built adjacent to *Bosphorus* in the *Saadabad* district and *Baroque*. Rococo found its way to the Ottoman religious complexes such as *Nurosmaniye* in the *Tulip period*<sup>44</sup>(Kuban,1970:39).

The extent of transformation in the 16<sup>th</sup> to 18<sup>th</sup> century was respective to buildings typology, monuments, and new census formation. However, the urban morphology of the peninsula exhibited a deterministic change in the 19<sup>th</sup> century. This transformation coincided with *the "Tanzimat*" period in 1839, known as the Westernisation epoch. In this era, the residential Turkish wooden houses were the central theme of concentration, making them unprotected against fire.

Between 1663 and 1839, 109 fires ended in destructive urban disasters and continuing this situation with the fires of *Aksaray* in 1856 and 1865, *Hocapaşa*. Such a *crisis* urged the central government to establish new policies toward the neighbourhoods (Çelik,1986:53). They ought to be organised with wider streets with rectangular blocks and square along with the replacement of timber walls with Kargir (masonry)<sup>45</sup> brick structures (Yerasimos,1999). Also, for security reasons, cul-de-sacs had to be disappeared.

The major transformation of the historical peninsula happened in Aksaray. As a result of such situation, *Luigi Storari* was recruited to implement the European standards in a destroyed place. The *Hocapaşa* fire, later on, was the next target to be adaptive through the same strategies influencing the most critical parts of the peninsula, specifically the eastern hills. However, despite a few demolitions and widening the networks, the numerous monuments and the topography made the operation very difficult (Çelik,1986:59).

Apart from the great impression of the *Parisian Haussmann* and *Viennese Ringstrasse* in global urbanism and Istanbul, the Ottoman Sultans' greater scheme for urban regulation was a strong demand. Helmuth Von Moltke, Arnodin and Joseph Antoine Bouvard were suggested to the state. Von Moltke's proposal could have affected the peninsula the most. It concentrated on the urban networks, such as the axis from *Topkapi* to *Aksaray*, continuing toward the west through *Divanyolu*, Kadirga to Yedikule and *Eminönü* to *Eyup*.

Arnodin's network-oriented and monumental proposal did not affect the zone considerably, while Bouvard's regularised and beautified schemes and sketches targeted three central squares: The *Hippodrome*, *Beyazit* and *Valide Sultan* Square. Bouvard's proposal seemed unfeasible because of ignoring the geographical reality of the site (Çelik,1986: 119-125) and the lack of fieldwork research.

As explained in previous chapters, architectural development in Istanbul, like other types of worlds, took an eclectic path, whether with the presence of Turkish or *Levantine* locals or the invited western architects. The architectural pluralism ranged from neo-classical style to pseudo-Moorish and Turkish revivalism until the last years of the empire.

The architects like August Jasmund (1859-1911), Alexandre Vallaury (1850-1921), Raimondo D'Aronco (1857-1932), and Guilio Mongeri (1875-1953) tried to combine Islamic motives with western building technology. Locals such as Mimar Kemalettin (1870-1927) and Vedat Tek (1873-1942) approached a more vernacular synthesis. The historical peninsula hosted a few prominent buildings such as the *Sirkeci* train station, the public dept building, the Grand Post office, and Istanbul 4<sup>th</sup> *Vakif Han*.

After the first world war, the invasion of Istanbul by foreign forces and the announcement of Ankara as the new capital of the Turkish Republic, the historical zone faced devastating isolation. The city was neglected until the first half of the 1930s. The republican party recruited Henry Prost to take responsibility for a more disciplined master plan aiming at modernising the city by building new recreational facilities and ring roads, preserving the landmarks and historical patterns and demolishing the old neighbourhoods (Kubat and Kürkçüoğlu,2014:570). English Sir Patric Abercombie (1879-1957), German Hans Hogg (1901-1974) and Luigi Piccinato (1899-1983) were the new specialists in resolving the urban issues facing the peninsula and other parts.

The initial phase of *Atatürk Boulevard* was the most important example of the era. Nevertheless, only a few proposals were implemented. The Government under *Adnan Menderes* (1899-1961) desired an extensive revision of a more radical but populist modernisation approach facing the city and the peninsula (Tekeli,2015). *Vatan and Millet* Streets, *Ordu* Street, *Sirkeci* - Florya Boulevard and *Sehzadebaşı* – *Edirnekapı* Road gave a new and modern impression to the historical peninsula.

Under *Menderes*'s presidency, the new plazas such as *Aksaray*, *Eyup and Eminönü* were constructed due to the massive demolition of 7000 structures and replacement of the historical landmarks. The adverse outcomes of industrialisation affected the peninsula as the slums were built over the slopes of the hills resulting in a transformed urban morphology (Kubat and Kürkçüoğlu,2014:571).

Even after *Menderes*'s government and the military coup, the zoning policies continued in a more populist way. The regionalist policies implemented by the municipalities were not efficient enough to solve the shanty town crisis. Moreover, after the 1960s, Istanbul was planned according to metropolitan standards. Economic decentralisation was taking place in the growth axis. Nonetheless, the zones like *Eminönü*, *Sirkeci* and Grand *Bazaar* were approved as the first MBD sectors functioning as economic spots (Tekeil,2015:212).

In the last years of the century, there were no significant changes in the peninsula due to geographical constraints except the network-oriented plans considering the traffic jam and the preference for modernisation of Istanbul outside the classical zone. This situation was realised from industrialisation in the 50s until the 90s.

The post-Ottoman architecture in the peninsula almost moved in a similar path to urban development. Nonetheless, a few noticeable works were mentioned by historians as significant building. Also, it was the turning point signature respective to the classification of periods. Art-Deco apartments of *Harikzadegan* in *Aksaray* were the first timid modernised structures raised on the peninsula in the 20s. Later, Sedad Eldem, a critical character in Turkish architecture in the 20th century, played a significant role in the 30s and 40s in the zone's development. He tried to exemplify what is known as the second national architectural movement. Faculty of Science and Letters and Sultan Ahmet courthouse, both in the central core of Istanbul, were two significant works in a modern and functional approach marking the end of the second national movement in Turkey. Moreover, *Istanbul Manifaturacilar ve Kumaşçılar Çarşısı* (IMC) was another critical project designed by Doğan Tekeli (1929-), Sami Sisa (1929-2000) and Metin Hepgüler (1931-) in the intersection of historical fabrics of the mosques and the modernised symbol of *Atatürk Boulevard* (Altan Ergut et al.,2015) indicating the international modernist mentality.

The project was completed right before Sedad Eldem's Zeyrek Social Security complex as a manifestation of synthesis between modern minimalism and regional ambitions, newly introduced to the Turkish Society of Architects. The conservationist visions toward the peninsula appeared in the postmodernism epoch, so there are not several residential projects built modernly inside this zone.



Figure 4-48-Fatih district in a nutshell

#### The Overall Character

The overall feature of the peninsula could be traditional due to rich historical factors imposing the traditional character of the zone. Four main historical layers formed the zone. The urban nucleus comprises the Greek, Roman, Ottoman and republic period. The Roman and Ottoman layers were the dominant ones with the significant-scale monuments, churches, hippodromes, squares and forums, traditional Turkish houses, neighbourhoods with *cul-de-sacs* and traditional *Bazaars*.

This zone's modernisation began in the 19<sup>th</sup> century as a necessity to regularise the neighbourhoods such as *Aksaray*, *Hocapaşa* and *Beyazit*. However, the topographical constraints were the central obstacles to avoiding radical rationalisation.

The diverse political contribution to rejuvenating the peninsula was inefficient enough. Nevertheless, modern institutions and projects were built around the historical parishes. Istanbul's religious and racial diversity was not a critical factor in creating a dichotomy inside the historical peninsula compared to other parts of the city. Furthermore, the appearance of the shanty towns outside the walls could not be among the factors to rationalise or modernise this part of the city.

Architectural generations, the Levantine-Turkish locals, or the post-republic generations, played a role in the zone through their buildings. The foreign architects mainly represented an architectural pluralism with Islamic revivalism and neo-classic buildings. At the same time, the post-republic Turkish architects fluctuated between national and international paradigms. The national architectural representation also

oscillated between non-secular vernacularism and religious-regional conservatism. Still, the traditional impacts were the dominant ones regarding humanistic interactions. The only successful modern contributions could be the grid regularisation of a few neighbourhoods after massive fires and construction and grand boulevards in the post-Prost era during the presidency of Adnan Menderes. Therefore, it is possible to grasp a more traditional image of the historical peninsula.

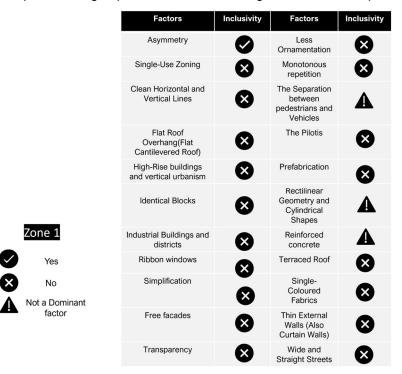


Figure 4-49- Evaluation of the zone based on the factors indicating modernism

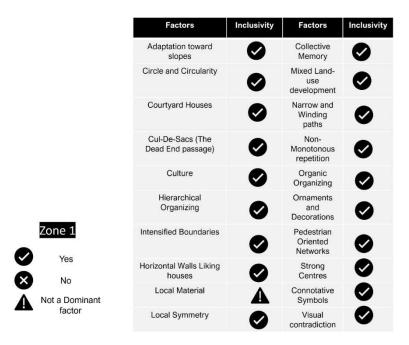


Figure 4-50- Evaluating the zone based on the keywords indicating traditionalism

#### Zone 1

Factors imposing modernity	Factors imposing traditionalism
Modern riverfront development in 1950s	The rich impact of traditional urban layout such as Mahalas, Bazaar and mosque
Transformation of cul-de-Sacs to the grids since 19th century	Monuments as strong centres
Replacement of timber walls with masonry brick structures in some areas	Presence of preserved timber courtyard houses linked in a linear way
Construction of Boulevards such as Ataturk, Millet Caddesi and Turgut Ozal Avenues	Adaptation toward geographic limitations
-	Time as imposing factor
-	The presence of Greek movement network such as Mese

Figure 4-51- Overall classification based on imposing factors

# 4.3.2. Zone 2 : Beyoğlu-Galata-Taksim



Figure 4-52-The location of zone 2 in the map

Zone 2 includes the *Galata*, *Pera*, *Beyoglu* and *Taksim* as crucial parts of Istanbul. This zone is in line with the urban growth axis toward the north.

The area was known as *Sycae* (*Sykai*) or *Peran en Sykais*, meaning the "Opposite of the shore". During the Byzantine period, walls surrounded the settlement, and the parish included Roman spaces such as a forum, a theatre, a church, a harbour, bath buildings, and 431 large houses (Batur,2007:1).

The area became the waterfront trade centre, and subsequently, diverse trading colonies (mostly Italians) such as Amalfians, Pisans, Venetians and Genovese were settled in this zone since the 10<sup>th</sup> century. Before the fall of the Byzantine empire, the area was developed Northwest and East toward *Şişhane* and *Tophane*.

During the conquest of Istanbul by Sultan Mehmet II, an agreement was made between the dynasty and Genovese to demolish the upper walls. In return, both sides could accept their mutually privileged rights.

From that moment onward, *Galata-Pera* was under the Ottoman dynasty, and the local Voivode Administration was replaced with *Podesta* (Batur,2007:2). The area's population comprised only 35 per cent of Turks. At the same time, the majority belonged to Greeks and Europeans (Mostly Italians), and Armenians were only four per cent of the residing population in the 16<sup>th</sup> century. In the following centuries, the lands between *Galata* and *Pera* started to be filled gradually with mostly Turkish people and great axes such as *Voyvoda* (*Bankalar Caddesi today*) and *Rue de Pera* (*Istiklal Caddesi*) were designated (2007:2).

As the Ottoman Empire yielded economically to the west during the *Tanzimat* era in the 19<sup>th</sup> century, *Galata* became the first region to receive western values freely. The first waves occurred in architecture and urban layouts (Kinaci and Gülersoy,2018:1). The scale of urban interventions was more than the historical peninsula as administrative institutions like the sixth municipality were initiated in the *Beyoglu-Galata* axis in 1857. They were in line with the presence of European countries like the United Kingdom with their economic enterprises and Banks all over the region (Ibid,2018:2).

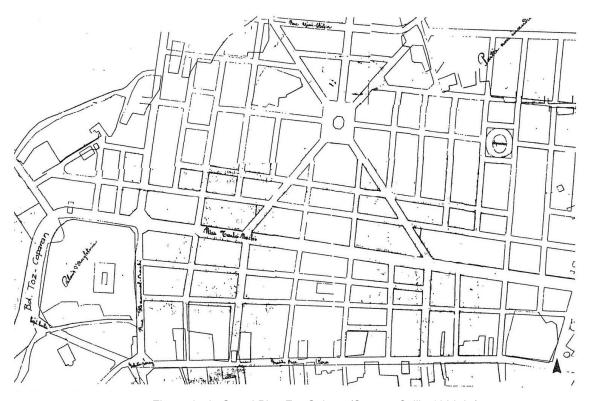


Figure 4-53- Grand Plan For Galata- (Source: Çelik, 1986:65)

Regarding the road network schemes, rapid urbanisation led to significant transformations such as removing cul-de-sacs, opening broader networks, and distributing green spaces (2018:4). The dense fabric of Galata had to be extended toward the north and northwest. Hence, the remaining fortification in *Galata*, except the tower, was demolished in 1863. This situation resulted in the construction of new roads, such as *Yeni Kapi Caddesi*, *Sishane Sokak*, *Buyuk Hendek Sokak* and *Bogaz Kesen*, besides the improvements on *Mumcular Sokagi* with a picturesque effect (Çelik,1986:70). The dominant discipline in all these networks was the *Hausmann* model except *Şişhane* with an isolated without any significant connection to other main urban arteries (Ibid,1986:72).

The target of making *Galata* a European city by implementing the European model was widely accepted by the residents with the hotels, Theatres, restaurants, coffee shops, stores, hospitals, schools, banks, insurance companies and modern office buildings and apartments (Ozus et al., 2011:335). *Bon Marche Pera* (1850), designed by the Bartoli brothers, Pinto Fresko Passage (1870) and *Pallazio Corpi* (1873) by Italian architect Giacomo Leoni , Casa D'Italia (1865), *Pera Palace* Hotels (1895) and *Union Française* (1896) by Alexandre Vallaury (1850-1921), The Britain Consulate (1830), *Cite De Pera* building (1876), *Baudoy* Building (1880) and *Banque* Ottoman (1896) are the newly built landmarks indicating the westernised phase of modern facilities entering to an oriental capital

The same development persisted in the area in the 20<sup>th</sup> century with the increasing numbers of foreign banks, insurance, and apartment buildings such as *Casa Bottier* designed by Raimondo D'Aronco (1857-1932) in 1908, even though the empire was experiencing economic restrictions. Nevertheless, unlike the other parts, the region was the point of interest of foreigners and non-Turkish locals. The critical public buildings of the era were lined in *the Voyvoda-Kemeralti* axis. Then department stores were built in *Pera*, thanks to active foreign construction sectors being developed inside the zone (Batur, 2007:6).

The Republican era was a period facing the area that was pivotal in representing the state in its best manner. Istanbul tended to grow toward the north, and areas such as *Taksim*, *Nişantaşi* and *Pangalti* became attractive places to practice a non-Ottoman and *Kemalist* space. Therefore, *Taksim* square became a symbolic republican centre. Accordingly, as the first symbolic works arranged on the centre, the memorials were built by the sculptor Pietro Canonica (1869-1959) and the architect Guilio Mongeri (1875-1953) in 1928 (Altan Ergut et al., 2015).

This project began with a more comprehensive perspective by the state and municipality. Henry Prost's plan for Taksim consisted of demolishing the remaining derelict artillery barracks and converting them to public facilities like the promenades and stadiums. Consequently, The *Inonu Gezi and Stadium* were one of the area's major urban hubs, named to respect *Ismet Inonu*, the Turkish president, after Atatürk's death ( *Gül* I et al., 2014:65). The project was recognised as the first modern park with tree-lined walking routes, grassed areas, and seating benches.

The vernacular-historicist-traditional vs modern western architecture in the 1940s architectural society of Turkey was transmitted to *Taksim*. The protagonist of the second national architectural movement, Sedad Hakki Eldem designed the *Taşlik* Coffee house in a vernacular form was a particular example of his effort in *Taksim*. It reminded a small scale of *Amcazade Yalısı Divanhanesi* among all the modernised projects in the area, such as the Radio House designed in a monumental way (Altan Ergut et al., 2015).

This short wave was not strong enough in an echoing ambience of primary modernism with projects such as the apartment buildings, *Cumhuriyet* Avenue, and the sports and exhibition palace. The 1950s was the time to widely accept the International Style through the implementation of various hotels such as the Hilton Hotel in 1956, the Military officers club (1968), *Ceylan* Intercontinental Hotel in 1973, and *Marmara* Hotel (1977) (*Gül* et al.,2014:66). However, the most crucial projects which its construction lasted for decades and functioned as a landmark in Taksim was *Atatürk* Cultural Centre (AKM).

The beginning phase of the project happened to be realised by the architects Ruknettin Guney (1904-1970) and Feridun Kip in 1946 as the Istanbul Opera House. Then, due to the numerous problems during the construction process, it was decided to function as Istanbul cultural palace in 1969 based on Hayati Tabanoğlu's design (Altan Ergut et al., 2015). The devastating fire delayed the opening until the late 1970s. This building was the latest modernist generation of building in this area with straightforward and minimal mass with a transparent façade synthesised with ceramic panels, a vast entrance hall and its specific lighting approach.

If the cosmopolitan nature of *Galata*, *Pera* and *Beyoglu* was the dominant factor for implementing Westernised buildings, it was not the central motivation after the 60s due to the organised mass attack against Greeks in 1955 in Istanbul. The population started to become more homogenous (Batur, 2007:7). *Istiklal Caddesi's* decay regarding the socio-cultural structure was felt, and the residents of *Beyoglu* left the area (Kartal,2021:5) just before the enormous rural migrations and the appearance of shanty towns.

The city was growing toward *Nişantaşı*, *Gümüşsuyu*, *Talimhane*, *Teşvikiye* and *Şişli* with numerous residential projects. For this reason, there were no sudden urban developments in *Pera* in the last quarter of the 20<sup>th</sup> century. There were a few exceptions, like the renewal process in *Istiklal Caddesi* and the conversion of *Tarlabaşi* street to a boulevard connecting the historical peninsula *to Galata* and *Taksim* (Batur,2007:7-8). Furthermore, *Taksim* was among the urban renewal targets in the 80s with different renovation proposals. The monuments were subject to preservation, and passages like *Istiklal* were pedestrianised and converted to shopping networks.



Figure 4-54- Buildings located in the zone varying from Stylistic revivalism to Art Nouveau and Modernism

#### The Overall Character

Zone 2 could be realised as a transitional space with the dominant modern zones. Comparing the historical peninsula, populations from European countries such as Italy, France, Germany, and Britain contributed more to imposing modern character since the 19<sup>th</sup> century when the Ottoman state and the residents approved this westernised model. Hence, foreign architects such as Alexandre Vallaury, Raimondo D'Arronco and August Jamsmund designed in line with the public demands and representations.

The stylistic approaches and architectural pluralism of the 19<sup>th</sup> century could be recognised as obstacles to rationalisation. However, these stylistic choices, such as neo-classicism, converged with rationalised desires and models. Moreover, the residents were more receptive to approving the urban transformation, such as replacing masonry stone and concrete walls with timber walls and demolishing the *cul-de-sacs* and road enlargement.

The republican government aimed at modernising Turkey and, later, the neglected Ottoman capital due to civil anxieties. The saturated Ottoman-built environment in the historical peninsula did not persuade the state to see this zone as an opportunity to advocate republican symbolism and make it widespread all over the region. As a result of such perspective, *Taksim* Square is where 20th-century modernism was born and enriched more than ever. Even the short-term second-national architecture was not able enough to practice the authentic Turkish instances in this zone, although it was a strong voice in the 1940s. The Americanised modernism in the 1950s was another motivation to see the area in such perspective with the introduction of Hilton, *Sheraton* and *Marmara* Hotel surrounding the *Gezi* Park. In an overall image, the humanistic roles, whether the population formation, significant roles of architects and planners, or even the *Kemalist* idealism, represented more tonality than the zeitgeist and its dialectic output being implemented right in the urban growth axis.

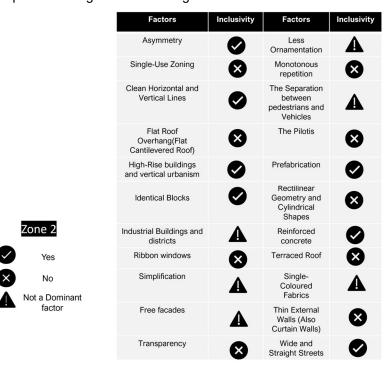


Figure 4-55- Evaluating the zone based on the factors indicating modernism



Zone 1

No

Not a Dominant factor

Figure 4-56- Evaluating the zone based on the factors indicating traditionalism

## Zone 2

Factors imposing modernity	Factors imposing traditionalism
Presence of Italian, Greek and French families and merchants as advocates of a more modern architecture	The dense fabric and organic development
Construction of new boulevards and streets	The abundance of religious monuments as strong centres
Construction of banks and commercial spaces by western architectural companies	Hierarchical organization between private and public spaces
Emergence of new quarters such as Taksim as a republican modern development	The emergence of Shanty towns built in a traditional manner
Increasing amount of demolished Ottoman houses in 19th and the latest years of the 20th century	Policies promoting pedestrianization and preservation
Emergence of international modernism in touristic spaces and apartments	-

Figure 4-57- Overall classification based on imposing factors

## 4.3.3.Zone 3: Şişli



Figure 4-58- The location of the zone in the map

Zone 3 covers the *Şişli* parish of areas such as *Mecidiyeköy, Kurtulus (Tatlava), Tesvikiye, Nisantasi, Bomonti* and *Osmanbey*.

This zone's most evident historical traces belonged to the 19<sup>th</sup> century as it represented a set of agricultural lands even though the shift toward industrial facilities such as *Bomonti Brewery* was realised at the beginning of the 1800s (Aksel,1994). After the Tanizmat period and constitutional reforms in 1830, *Pera* and *Beyoglu* were the priorities of development (Hacihasanoğlu and Hacihasanoğlu, 2006:907). The Galata fire in 1870 was crucial for moving the *Levantines* and other non-Muslim groups toward the masonry buildings between *Harbiye* and *Osmanbey* (Aksel,1994).

The closest neighbourhoods to *Pera*, such as *Pangalti* and *Tatlava*, were influenced by westernisation. Subsequently, the houses started to be constructed in line with the *Cumhuriyet* avenue axis and *Halaskargazi* at the beginning of the 20<sup>th</sup> century (Hacihasanoglu and Hacihasanoglu, 2006:908). Nevertheless, this was not the first westernised network. The first generation of tree-lined avenues between *Taksim* and *Harbiye* (military school) was constructed in 1869, widening the boundaries of following accommodations in *Şişli* (Çelik, 1986: 57).

*Şişli*'s urban character witnessed the most rapid development after the arrival of the electrified tram in 1913. Then, the houses and apartments began to be developed along Halaskargazi street between 1910-1920. They were followed by Abide-I-Hurriye, Firiköy Firin, Hanim Efendi, Perihan and Siracevizler street with the construction of Luxury apartments in the 30s and 40s (Aksel,1994).

The industrial character of *Şişli* kept on with the *Parma* and *Dmourdja* Distillation factories based on *Jaques Pervitich's* maps of different periods (Hacihasanoğlu and Hacihasanoğlu,2006:909). Furthermore, Egyptian Knitwear (1923), *Yenen-Şark* Chocolate (1926), New Turkish Textile Factory (1928), and *Nestle* Chocolate Factory (1928) were other important companies in the slow industrial progress until the 1950s (Aksel,1994). Based on Prost's plan, the areas such as *Kâğıthane* and *Bomonti* were recognised as organised industrial zones. The social structure was transformed toward the low-

income class in the 60s and 70s.

The zoning laws, green bands, moving the industrial factories, land use preparation plans and expropriations were the modern policies to reshape *Şişli* and surrounding areas like *Bomonti* due to the generation of shanty towns (ibid,1994). Also, *Şişli*, *Mecidiyeköy* and *Büyükdere* were recognised as CBD areas hosting foreign banks, headquarters, and insurance companies (Tekeli,2015).

If foreign architects designed some buildings in *Galata, Beyoğlu, Pera* and *Taksim*, then the Turkish locals realised the majority of the built environment. The first mosque in the republican era, after decades, was traditionally designed by *Vasfi Egeli* (1890-1962). Numerous apartments like Cukurova, Bayer, Haseki and Mecidiyeköy surrounded it.

Several architects such as Adil Denktaş(1885-1966), Arif Hikmet Holtay(1896-1968), Seyfi Arkan(1903-1966), Rebi Gorbon(1909-1993), Zeki Sayar(1905-2000), Ruknettin Güney(1904-1970) and Emin Necip *Uzman* (1911-1997) participated in the projects urbanising Şişli (Altan Ergut et al.,2015). The apartments started from small-scale buildings in the 20s and 30s. The building process developed toward high-rise buildings in the second half of the 20<sup>th</sup> century.



Figure 4-59-Şişli and its tendency to modernity

#### The Overall character

*Şişli* is the first zone where the modern layer starts to overcome the inherent traditional factors. However, in the last 20 years of the 20<sup>th</sup> century, postmodernism imposed a sense of nostalgic past as an urban collage (Tanyeli,2004). Furthermore, the buildings like Harbiye (army school), *Tesvikiye* mosque and *Notre Dame de Sion* French high school were the noticeable landmarks influencing the surrounding neighbourhoods (Hacihasanoğlu and Hacihasanoğlu, 2006:908).

It is possible to identify the modernisation of the district as a product of the zeitgeist in a place more converging to a tabula rasa. The last borders of the Ottoman capital were marked by *Taksim* and a road

connecting to Pangalti.

The zeitgeist imposed an industrialised zone toward *Şişli*, *Nisantasi* and *Mecidiyeköy*. Later, the apartments with Art Nouveau, Art-Deco and international-style modernism were filled all over the lands. The industrial factories were relocated or revised since Henry Prost's preparation plan or the regional planning after Adnan *Menderes*'s presidency.

In the 60s and 70s, the area started to function as CBD with towers and Skyscrapers with the same approach. Nowadays, commercial centres such as *Cevahir* and *Trump Tower* have given a nontraditional character to the zone. The human population seemed to be a sold factor respective to modern settlements as the Greeks and Armenians formed after the *Pera* fire in 1870. The retired officers from the Balkan war in the 19<sup>th</sup> century were the first group settled in *Pangalti* and *Bomonti* toward *Tatlava*, *Nişantaşi* and *Teşvikiye* until the 1960s and their migration due to the socio-political effects of September 1955.

The presence of the Turkish population in this place and the shanty towns led by the great extent of migration from rural spaces did not change the character of the place. The changing lifestyle of locals towards the west kept the modern ambience as a dominant language. Also, due to the architectural discourses imposed by the time factor, the architects tended to design and fill the empty lands with more homogenous apartments. They indeed respond to contemporaneity's necessities. Unlike the other neighbourhoods, *Şişli* represented a grid and rational layout filled with apartments and industrial facilities as a catalyst factor of the initiation of modern parishes. Combining all these factors will bring about a notion justifying the modern character of *Şişli* as a place where traditionalism tends to fade.

Inclusivity **Factors** Inclusivity Factors Asymmetry Less Ornamentation Single-Use Zoning Monotonous repetition Clean Horizontal and The Separation Vertical Lines between pedestrians and Vehicles Flat Roof The Pilotis Overhang(Flat Cantilevered Roof) High-Rise buildings Prefabrication and vertical urbanism Rectilinear Identical Blocks Geometry and Cylindrical Shapes Zone 3 Industrial Buildings and Reinforced districts concrete Ribbon windows Terraced Roof Yes Simplification Sinale-No Coloured **Fabrics** Not a Dominant factor Free facades Thin External Walls (Also Curtain Walls) Wide and Transparency Straight Streets

Figure 4-60- Evaluation of the zone based on the factors indicating modernism



Figure 4-61- Evaluating the zone based on the factors indicating modernism

# Zone 3

Zone 3

Yes

No

Not a Dominant

factor

Factors imposing modernity	Factors imposing traditionalism
Time as a imposing factor on the vacant lands	A few traditional spaces such as Sisli and Tesvikiye mosque
The rapid construction of apartments	-
The primary industrial character	-
Emergence of the Area as a popular CBD centre	-
Grid and Rational layout	-

Figure 4-62- Overall classification based on imposing factors

## 4.3.4. Zone 4: Beşiktaş



Figure 4-63- The zone 4 location in the map

Zone 4 covers the *Beşiktaş* area located on the European side being surrounded by the Bosphorus in the east, the *Sariyer* district in the north, the *Şişli* district in the west and the *Beyoğlu* district in the south. *Abbasağa, Akaretler, Arnavutköy, Bebek, Dolmabahçe, kuruçeşme, Levent* and *Yildiz* Palace.

It was the Turkish people gave the name "Beşiktaş" to the area, coming from "Beştaş" since Barbaros Hayrettin Pasha erected five stones columns and it was used for mooring the ships (Ayvansarayi et al., 2001:493). There are traces of settlement in Beşiktaş before Byzantium was captured by the Ottoman empire in places such as Köyiçi and Ortaköy between the years 1261-1453 (Çağlayan,2020:38). However, the zone was developed more in the Ottoman era as the mansions for the sea captains were built during Beyazit period in 15th and 16th century (1481-1512) by Hayrettin Pasha, Sinan Pasha and Kılıç Ali Pasha (Akbayar,1998:22).

The next imposing landmark was a summer place built by Sülyeman on the hills behind *Beşiktaş* garden (Göyünç,1948:8). The area was developed with a mosque, a garden, *a Madrasah* and a Turkish bath on the site of the *Necarzade* tomb is located (Çağlayan,2020:39).

The urban layout of *Beşiktaş* had been developed with renovated buildings and the initiation of *Beşiktaş* palace in the 17<sup>th</sup> century. The strong relationship between the state and *Beşiktaş* was reinforced by the upper-class society deciding to live there (Akbayar,1998:24). Hence, thousands of waterfront mansions and houses were built on the slopes (Göyünç, 1948: 30). During this period, the *Abbasağa* and *Vişnezâde* were generated.

In the 18<sup>th</sup> century, *Beşiktaş*'s importance was realised more than ever in the *Tulip* period moving further the designated walls. They were developed along with *Beşiktaş* and *Ilhamur* stream. Then, the *Serencebey* ridges began to be inhabited by people apart from constructing and renovating kingdom palaces (Çağlayan,2020: 39).

The political influence was increased even more in the 19<sup>th</sup> century as Sultan Mahmud II decided to leave *Topkapı* in the historical peninsula and live in *Çırağan*, *Yildiz* and *Dolmabahçe* Palace. The

circumstance encouraged more upper-class people to live in the parish (Göyünç,1948:32), unlike the historical peninsula and *Galata-Pera* without religious restrictions.

Another critical point to note, compared with the other zones, was the urban regulations. Like the urban developments in other parts such as *Galata*, *Hocapaşa* and *Aksaray* due to the devastating fires. As an aftermath, *Beşiktaş* witnessed some renovation and regulation policies. In 1857 the Dolmabahçe pier was renovated. The main roads were connected to palaces, and pavilions were widened in 1870 (Çağlayan,2020:40). The *Dersaadet Municipality* Law of 1877 enforced the prohibition of wooden buildings (Ibid,2020:40). Toward the last years of the centuries, several mansions were utterly ruined. Furthermore, the earthquake in 1894 affected the area significantly. The minarets of two significant mosques, *Sinanpaşa* and *Beşiktaş*, were destroyed, and the roofs of public facilities were damaged extraordinarily (Ibid, 2020:41).

After the establishment of the Turkish republic, *Beşiktaş* did not still have an utterly urban character with a set of garden houses. Also, it was the commencement of commercial activities (Akbayar,1998:17). The ownership of rowhouses was moved to the General Directorate of Foundations for public institutions and organisations. Furthermore, row houses have been used as officers' residences, post offices and police stations (Ronael and Oruc,2019:23).

Like the other zones, the 1930s to 50s were the periods of significant change in *Beşiktaş*, specifically on Lutfi Kirdar's responsibility as a mayor and Henry Prost's activity as a planner. Prost's scheme involved opening major road networks and boulevards, squares, parks, creational areas, and monumental symbols of the republic.

The roads like *Dolmabahce* to *Rumelihisari*, *Zincirlikuyu* to *Beşiktaş* and *Ilhamurdere* street were widened. In contrast, the streets behind *Beşiktaş Pier* and, most importantly, *Barbados* Boulevard were constructed. Accordingly, significant expropriations occurred, and historical monuments such as *Barbados Hayrettin Paşa* and *Yahya Efendi's* tomb were demolished (Topcu,2011:5).

The modern emblem of the 20<sup>th</sup> century in *Beşiktaş* is the *Levent* housing project designed by Kemal Ahmet Arû and Rebi Gorbon between 1947 and 1950. The project was financed by EKB, including 391 single and double-story villas for middle-class habitants (Gül,2017:105).

The *Levent* project was developed until the fourth phase by Kemal Ahmet Arû alone. The last phase reflected a more modern face with three to ten-story apartment blocks. Rectangular prisms with large windows and cantilevered balconies specialised the project the most. Moreover, the constructed facilities such as shops on the ground floor, kindergarten, cinema, tennis courts and amusement parks were designed (Ibid,2017:105). The Levent housing project was among the first ones supporting future development in an international style. Other neighbourhoods, such as *Konaklar*, *Akat*, *Etiler*, *Nisbetiye*, *Levazım* and *Kültür* neighbourhoods have been formed on the years toward the last years of the 20<sup>th</sup> century (Akbayar, 1998: 20).

During the *Menderes* presidency and the successive presidents in the 60s, the urban textures of *Beşiktaş* were affected the most. It was realised due to the zoning policy and expansion of *Dolmabahçe* street was widened. Accordingly, the wooden garden houses were transformed into apartments in other places (Çağlayan,2020:36).

The housing projects such as Levent was raised based on the housing problems as an aftermath of post-war discourses. However, the proposed neighbourhoods did not solve the situation. It was because of the mass migration and appearance of shanty towns facing the middle-income apartments in *Akatler*, *Etiler* and even *Levent* (Gül,2017:121).



Figure 4-64- Evaluating the zone based on the factors indicating modernism

In the 1980s, *Beşiktaş* was inside the CBD zone, and two hotels of, Conrad and Swiss, were built in the green area of *Yildiz* Palace. *Çırağan* palace was restored to work as a hotel. One of the gardens, known as the *Şeref* stadıum gave its place to the *Kempinski* hotel (Gökay,2000:18). Moreover, the *Akaretler* row houses as the only Ottoman mass housing project, were restored (Ronael and Oruc,2019:23). Conversely, HSBC bank, *Levent* and *Yapi Kredi Plaza*, *Sabanci* centre and *Akmerkez* commercial centre reflected a modern image at the north.

Although the 1980s until the last years of the century were the years of pluralism with privileged conservation ideas, vertical development toward north and areas like *Mecidiyeköy*, *Şişli* and *Nişantaşı* were spotted on a large scale.

#### The Overall character

Labelling zone 4 as the zone between traditional and modern layers is possible. Beşiktaş began to be developed later than Historical zones and Galata, except for a few spots of mansions and piers. Beşiktaş's layout was shaped in the 17h and 18th centuries with windings, alleys, cul-de-sacs, state palaces and tombs. The traditional development was taking place on the waterfront, the influence of the areas in the vicinity. However, areas such as Maçka, Beyoğlu and Pera were the settlements of Armenian, Greek, and Jewish populations. They showed a more flexible character to urban transformation. Consequently, the wooden houses were replaced by masonry buildings and regularised roads, despite most garden-courtyard houses. The republican era also found the zone as a potential site to represent the symbolic representations of space. The radical modernisation of Beşiktaş happened in Henry Prost's network-oriented maps with widened Dolmabahçe, Çırağan, Muallim Naci, Bebek Arnavutköy and Kurucesme street apart from the opening of Ahmet Adnan Saygun and Barbaros Avenue in a modern tree-line form of a boulevard. The residential housing projects such as Levent, Etiler, Nisbetiye, Levazim and Akat represented this zone's new waves of modernism. The role of architects such as Fatih Uran, Haluk Tümay, Turqut Alton, Kikaku Sekkeisha and Doğan Tekeli is clear in northern Besiktas with the emergence of tourism sectors and commercial firms. It is possible to conclude that the urban layout and traditional sui generis did change significantly, especially in the waterfront settings. Nevertheless, the modern legacy of Beşiktaş made its mark in northern parts near *Şişli, Karaköy, Tophane* and *Galata*, other than the westernisation since the *Tanzimat* period. *Beşiktaş* is a zone in-between modern and traditional factors with more dominant modern evidence because of the zeitgeist imposition.

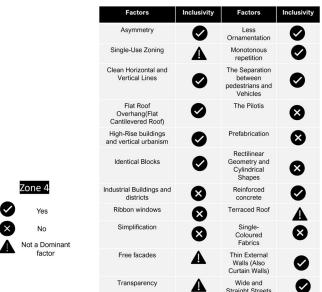


Figure 4-65- Besiktas: From traditional settlements to the modern development in late 20th and 21 centuries



Figure 4-66- Evaluating the zone based on the factors indicating traditionalism

## Zone 4

Factors imposing modernity	Factors imposing traditionalism
Enlarged roads and construction of boulevards influenced by Henry Prost's plan	The presence of Ottoman mansions and tombs
Demolition of historical sites in 50s and 80s	Religious facilities such as mosque and school and bath
Modern housing projects such as Levent, Etiler, Nisbetiye and Konaklar	Islamic urban unit in the waterfront containing Turkish houses
Northern areas recognized as CBD such as Levent and Yapi Kredi Plaza	-

Figure 4-67- Overall Classification based on the imposing factors

# 4.3.5. Zone 5: Üsküdar

Zone 4

No

Not a Dominant factor

Zone 6 includes Üsküdar, located on the Asiatic and Anatolian side of the Istanbul metropolitan area. It consists of vital neighbourhoods such as Salacak, Doğancılar, Bağlarbaşı, Altunizade, Selamsiz, Acibadem, Paşalimanı, Kuzguncuk, Çengelköy and Çamlıca. Being located on the opposite side of the historical peninsula and the opening spot of the Bosphorus, Üsküdar's origin is rooted in Khrisopolis, Skutarium and Scutari with the meaning of golden and shield city (Üsküdar Belediyesi).

The historical layer respective to *Üsküdar* is as important as the historical *Peninsula*. It was one of the most ancient provinces of *Bithinya*, the Persian Settlement after Darius I was captured in the 6th century BC later on the *Albiciades* of Athens territory (Gül,2017:165).



Figure 4-68-The zone location in the map

The Ottoman period for *Üsküdar* started a century before the conquering of Constantinople as the most critical territory with its separate judicial regime (2017:169-170).

After the official establishment of the Ottoman Empire, the first realizable textures of the Ottoman neighbourhood units (*Mahalle*) were initiated with the first mosque and piers. Then, in the 16<sup>th</sup> century, the second most critical urban growth occurred as several mosques, baths, piers, fountains, and Caravanserais filled the area. They indeed transformed this Anatolian village into an urban one whole (*Üsküdar* Municipality).

The waterfront development gave an important socio-political character to the region. Nonetheless, western areas toward *Baglarbaşi* and *Altunizade* functioned as a necropolis opening to vineyards and orchards.

The homogenous population in the 16<sup>th</sup> and 17<sup>th</sup> changed in the 18<sup>th</sup> century with the arrival of *Armenian* master builders and then the Greek families. After the *Tanzimat* period and the implementation of urban regulations, *Üsküdar* became one of the 14 municipal offices (Tekeli,2015). The architectural role of *Armenian* families like *Balayans* became more evident than in the past. They were involved with the vital imposing heritages in the 19<sup>th</sup> century, like *Nusretiye* mosque (1823-6) and *Selmiye barracks* (1820-7) by *Krikor Amira Balayan* and *Beylerbeyi palace* by Sakis Balayan (Gül,2017:272).

Despite the presence of Greek and Armenian neighbourhoods, the residential spaces exhibited an untied set of dense two- or three-story wooden houses. The neighbourhoods denoted an image of large tiled eaves, wide overhangs, latticed bay windows constructed in windings, and narrow and sloppy roads (Behar, 2003:45).

Like the other zones discussed in previous sections, the wooden houses were the potential threats for fire in the last quarter of the 19<sup>th</sup> century with the devastating influence on the neighbourhoods such as

Kuzguncuk, İcadiye, Selamsız, and Yeni Mahalle in 1873. These circumstances provided no other choices but grid plans, ample avenues, and modern roads for the Ottoman Mahallesi<sup>46</sup>, such as Bulbuldere and Posta Yolu streets. Until the end of the 19<sup>th</sup> century, eclectic and revivalist architecture found its way to Üsküdar with noticeable monuments like the Mimar Sinan Bazaar, Mihrimah Sultan Mosque and Valide Sultan complex giving the traditional character to Üsküdar.

The first quarter of the 20<sup>th</sup> century and the weakening status of the empire affected *Üsküdar* as well. Moreover, the post-fire confusion in the region did not contribute to significant developments. During the Republican era, the residential areas extended from north at *Kuzguncuk* to the south at *Selimiye* barracks. In addition, the easter border grew until *Baglarbaşı* and *Nuhukuyusu* avenue. However, the residential fabric did not form a very dense mode. Also, *Üsküdar* was not still connected to Kadıköy, another parish on the Anatolian side (Şahin,2015).

Unlike the other parts of Istanbul, construction techniques did not change rapidly toward reinforced concrete and masonry buildings. House construction changed the municipal borders to the eastern zones. One of the few noticeable residential complexes in *Üsküdar* belonged to the *Koşuyolu* project by EKB and Istanbul municipality for the low-income class. The project's first phase consisted of 103 houses as detached, terraced villas influenced by the Garden City movement in the late 40s (Gül,2017:50).

The second half of the century was the period of rapid urbanisation for *Üsküdar* (Kivilcim and Duran,2015:15). It was affected by population growth and the replacement of timber houses by substituted by concrete (Gül,2017:170). Like other zones, the waterfront spaces were an attractive point for Henry Prost to open up and develop as a square (Bilsel,2015).

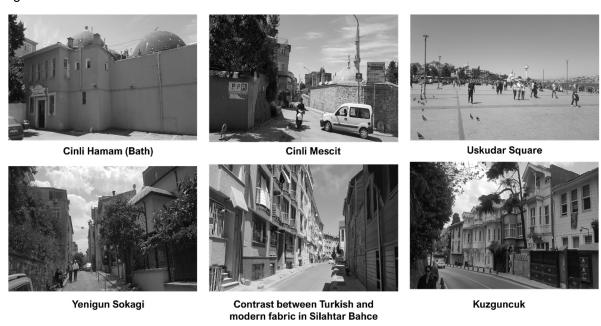
A few efforts for modernizing *Üsküdar* began by Seyfi Arkan to prepare plans for the *Selamsız* neighbourhood and new residential complexes (Altan Ergut et al.,2015). Nevertheless, these plans faced the appearance of shanty towns in *Üsküdar* more than ever. Due to not quite successful campaign of Prost *and* Piccinato in preparing master plans for Istanbul, *Üsküdar*'s development did not happen pragmatically despite the specific zoning plans prepared in 1940.

Between 1966 and 1970, 22 areas were redeveloped throughout Istanbul, and Üsküdar was the most critical part of this development (Bilsel,2015). In the 70s, the residential area expanded to the south axis of *Kandilli*. The sparse housing development continued to the east, beyond the *Nuhukuyusu* and *Icadiye-Baglarbaşi* roads to the *Yavuztürk*, *Ferah*, *Bahçelievler*, *Küçüksu* neighbourhoods surrounding the Bosna Boulevard between the years 1985-1990 (Şahin,2015).

One of the significant design competitions for transforming the image of *Üsküdar* took place in the 80s. Aldo Rossi had the opportunity to work on the *Üsküdar* Square project in 1987. His analytical view of the geographical value of the site made him understand it as an amphitheatre. The result was a scheme including two public parks near the mosque to connect the new commercial centres to ancient waterfront monuments representing the contemporary zeitgeist (Martinelli,2019:6).

Doruk Pamir's proposal gained attention with a pedestrianised plaza full of the symptoms manifesting classical Ottoman architecture, and the vehicle network was proposed underground (Gül,2017:170).

Usukudar's commercial face was recognisable in the last years of the century as Mutlu Clingirolu and Adnan Kazmaoğlu designed the Capitol shopping centre in Altunizade, transforming Üsküdar's dominant skyline. The vertical expansion has become more evident in the region, contrasting with the organic urban fabrics.



#### **Overall classification**

Given the interaction of humans and time, it is possible to recognise *Üsküdar* as a timid traditional district. The most critical factor for assuming a traditional character is the historical layers shaping the zone during the centuries, from Greek and Persian influence to the Roman and Ottoman eras. The dominant Ottoman effect is much more recognizable with mosques, baths, and schools such as *Mihrimah Sultan* Mosque, *Yeni Valide* Mosque, *Eski Valide* Mosque and *Gülfem Hatun* Mosque, *Karacaahmet* cemetery, *Mimar Sinan Bazaar*, *Beylerbeyi* Palace, *Selimiye barracks* and imperial medical school. Furthermore, the individual character of *Üsküdar* and Kadıköy as a separate entity until its integration with Istanbul in previous centuries was another factor representing a more dependent character as an Anatolian and Asian district on one side and the belated zone for urban development on the other.

Figure 4-69-The Recap for Üsküdar

*Üsküdar* mainly hosted residential spaces since the 18<sup>th</sup> and 19<sup>th</sup> centuries. They were primarily detached wooden houses with pitched roofs and overhanging eaves. These settlements remained the same or transformed slower than the other parts of Istanbul until the second half of the 20<sup>th</sup> century. Although *Üsküdar* was always the core of attention for Bouvard, *Prost and Piccantino's* master plan, its regularisation and modernisation were not feasible enough comparing the other zones. As mentioned, the historical peninsula appeared problematic for the state, and also the *Taksim-Beyoglu-Pera* axis was more attractive to represent the republican symbolism. Still, in the following decades, *Üsküdar* was among the significant priorities of regional plans for the Istanbul municipality. It was developing toward the south and East, and its countryside image affected the metropolitan planning mentality.

The inherent geographical reality of *Üsküdar* generated difficulties in identifying a possibility for modern construction. Despite a few modern buildings, such as the *Yapi Kredi* office by Doğan Tekeli and Sami Sisa, Üsküdar ferry pier and Zeynep Kamil Hospital, their influence was not firm enough to transform the character. Muslims were the dominant group residing in *Üsküdar*. As a result, the waterfront establishment followed Islamic *Mahalle* (neighbourhood) units with *Bazaars*, mosques, and hierarchised neighbourhoods toward houses. The influential roles of *Armenian* families and master builders are noticeable regarding the monuments, specifically from the *Tulip* period up to the *Tanzimat* era. Still, the whole character is not transformed considerably compared to *Galata* and *Şişli*.

The historical reality of *Üsküdar* enchanted foreign architects such as Le Corbusier and Aldo Rossi. Based on his notes, Le Corbusier's journey to *Üsküdar* seems impressive as he calls it a "*Sacred* place and the part of Trinity ", while Aldo Rossi's analytical notes materialised it as an amphitheatre with monumental wings. Inside this mental image, *Üsküdar* takes a traditional unignorable role.

Notwithstanding, the zone is combined with shanty towns on one side and commercial shopping malls and even high-rise apartments on the other, developed since the last years of the century. Overall, the mental image conveys a traditional space which could be the captivating point for the current state to represent its desired symbolic desire as a space of representation.

Inclusivity

**Factors** 

Inclusivity

Asymmetry Less Ornamentation Monotonous Single-Use Zoning repetition Clean Horizontal and The Separation Vertical Lines between pedestrians and Vehicles Flat Roof The Pilotis Overhang(Flat Cantilevered Roof) High-Rise buildings Prefabrication and vertical urbanism Rectilinear Identical Blocks Geometry and Shapes Zone 5 Industrial Buildings and Reinforced districts concrete Ribbon windows Terraced Roof Yes Simplification Single-No Coloured Fabrics Not a Dominant factor Thin External Free facades Walls (Also Curtain Walls)

**Factors** 

Transparency

Figure 4-70- Evaluation of the zone based on the factors indicating modernism

Wide and

Straight Streets



Yes
No
Not a Dominant factor

Figure 4-71- Evaluation of the zone based on the factors indicating traditionalism

# Zone 5

Factors imposing modernity	Factors imposing traditionalism
Implementation of Grid plans since 1873	Time as an imposing factor
Wooden houses substituted by concrete	The presence of Islamic neighbourhood unit
Increasing commercial spaces such as Capitol	Ottoman heritages such as mosques, bazaars and Caravanserais
Modernized residential complexes in Selamsiz by Seyfi Arkan	Hamams (Baths) and a few timber houses as strong centres of each neighbourhoods
-	Geographical constraints and buildings adaptation toward it

Figure 4-72- Overall Classification based on the imposing factors

# 4.4. General Synthesis

The analysis of the place in two cities generated critical points such as the urban development axis, the role of architects in the specific roles and the transformation process over time. The analysis of categorised zones helped the researchers to find the imposing factors besides the keywords identified in the previous chapters, which are even more crucial factors in presenting a modern or traditional character.



Now It is the time to synthesise the discussed points and formulate them into a methodological approach. In this chapter, the central discussion covers the findings from the T-P-H triangle in a comparative analysis. Also a theoretical model for each vertex is the next step for each vertex

# 5.1. The Recap: From methodology to synthesis

The Fundamentals of the thesis are grounded theory. Based on this methodology, most information is gathered from in-field observations and secondary research. To decrease the probable subjectivity, interviews with experts were crucial. In this regard, keywords for traditionalism and modernity in architecture and urbanism were evaluated by six experts specialised in architecture, architecture history and theory, urban design and urban sociology. In the beginning phase, 15 keywords from both sides were selected. The interviewer has to evaluate the keywords in a nine-point Likert scale. The average for all the words selected for traditionalism and modernity was above six out of nine, meaning they were accepted. The experts were asked to introduce more words during this evaluation if possible.

For traditionalism, the suggested keywords were vague or subjective for one specific region rather than being recognised in the global discourse. For modernism, seven more keywords were introduced as probable terms to be discussed as new codes in this thesis. The keywords were part of the initial coding, and other parts were introduced in the theoretical framework (see Appendix3.B).

After this process, arranging the structures of the thesis approach was challenging in the first phase. The open questions in the interview were designed to achieve a better image for the continuous parts. The questions began with defining the terms. The second objective for designing the open questions deals with the influences of the terms in urban spaces, and at last, the more one reaches the end, the questions approach the concluding points (see Appendix3.D).

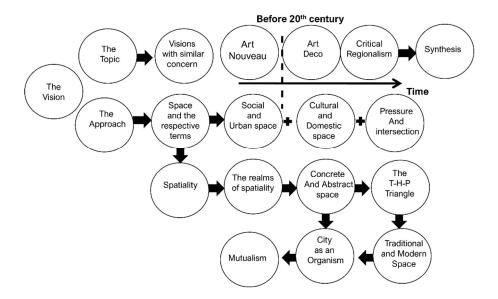


Figure 5-1- the theoretical framework except traditionalism and modernity in architecture and urbanism for initial coding

Phases	Steps	Tasks	Results
The Methodology Designation	<ul> <li>Research on         Secondary Data</li> <li>Organizing the         general realm of the         research</li> <li>Identifying the best         case studies based         on the primary         studies</li> </ul>	<ul> <li>The introduction of the thesis and research</li> <li>Presentation of the research methodology</li> </ul>	<ul> <li>Concentration on the data gathered from the references</li> <li>Schematizing the general view of the research</li> </ul>
Collecting data	<ul> <li>Selecting the experts and the areas concerning the subject</li> <li>Conducting an open interview</li> <li>Collecting the data after the interview</li> </ul>	<ul> <li>Generating the research database</li> <li>executing the interview methodology</li> <li>Screening the data based on the research importance</li> </ul>	<ul> <li>Acceleration of the data-gathering process</li> <li>Multi-dimensional vision toward the research problem</li> <li>Reinforcing the theoretical framework</li> <li>Verification of the data based on overlapping the interviews</li> </ul>
Sorting data	<ul> <li>Coding the data gathered from the interviews</li> <li>Categorizing the statements based on the research importance</li> </ul>	- Editing the propositions and sorting the information	- Increasing the data analysis
Analysis	<ul> <li>Analysing the data considering the keywords</li> <li>Deriving the research contents</li> <li>Categorizing the objectives and variations</li> </ul>	<ul> <li>Open coding</li> <li>Axial Coding</li> <li>Selective Coding</li> <li>Completing the process of deriving the data and objectives</li> </ul>	<ul> <li>Forming the concepts and ideas</li> <li>Synthesis of ideas to find theoretical frameworks</li> <li>Categorizing the necessary data for the research</li> </ul>
Verification	<ul> <li>Observing the objectives, contents of the experts</li> <li>Revising and completing the objectives</li> </ul>	<ul> <li>Consulting with the experts</li> <li>Providing the final report</li> </ul>	- Improving the structure and efficiency of the research

Figure 5-2- The Brief process of the research regarding the research methodology

Content	Open and axial code	Selective Code
	Asymmetrical compositions were constructed by modern architects as function and standard appeared to be a priority for them	Asymmetry
	Euclidean zoning tends to segregate uses and categorise them in a more functional perspective understanding the city as a "machine."	Single-use Zoning
	The horizontal and vertical lines generate sharp and precise edges for the rectangular form of plans, being primary for building the flat roofs	Clean Horizontal and Vertical Lines
	The flat cube produces a flat surface, and then the flat cantilevered roof is an outcome for several reasons, such as formal integration.	Flat roof Overhang
	High-rise buildings and vertical urbanism entered into European architectural discourses since scholars at the beginning of the 20th century bore concerns about land use, being influenced by zoning laws in the united states and the cities such as New York	High-Rise Buildings and Vertical Urbanism
	The primary representation of identical blocks in the 20th century was the residential blocks and monotonous office buildings	Identical Blocks
	The Industrial buildings became part of the culture that the modern movement interpolated into contemporary society	Industrial Buildings and Districts
Dofining	The ribbon windows are listed in Le Corbusier's five points of architecture, and like the other four principles, Villa Savoye represented that as the archetype.	Ribbon Windows
Defining Modernism for	The interwar and post-war periods introduced voluntary simplicity and "simplification".	Simplification
identifying modern spaces	Free Façade is an original element in modern architectural discourse is "Free Façade."	Free Facades
	Among the vanguard of modern architecture historians, Siegfried Giedion confirmed that glass in modern architecture marginalised the concept of central perspective as a renaissance spatiality product	Transparency
	The most straightforward reference to address ornamentation in modern architecture is Adolf Loos's statement entitled "ornament and crime" in 1908	Less Ornamentation
	Mass production manufactures a monotonous repetition	Monotonous repetition
_	The critical strategy in modern urban planning was to liberate and facilitate movement for the pedestrian and automobiles'; the priority was for the car	The separation between the pedestrian and Vehicles
	The <i>Pilotis</i> , or what can be called stilts in English literature, was among the essential list of 5 significant principles of Le Corbusier for the contemporary architecture	The Pilotis
	Prefabrication became one of the fundamental ideals of the modern movement in the 20th century when advancements surrounded the social context in technologies resulting in the transformation of the cities, specifically the metropolitans	Prefabrication
	The rectangular and cubic box and the cylindrical shape are inseparable elements of modern architecture, although the Greeks and Romans used them in residential and public spaces such as Forum Romanum	Rectilinear Geometry and Cylindrical shapes
	The Modern movement exhibited a new vision toward architecture through abstract forms with the assistance of new materials such as concrete and steel	Reinforced concrete
	The terraced roofs are listed in Le Corbusier's five points of architecture.	Terraced roof
	The white "modernism" signifies most of the era's architecture and never seized to perform	Single-coloured Fabric

The Modern movement accent walls as a resul	1 7 0 0	Thin External walls (Also Curtain walls)
In physical terms, concepts su and interaction between pedes the streets in s	trians and vehicles influenced	Wide and Straight Streets

Figure 5-3 Initial cod	ng based on	Identification (	of modernism
------------------------	-------------	------------------	--------------

Content	Open and Axial Code	Selective Code
	The compact cities are the consequences of restrictions such as topography, defence and also the importance of agriculture	Adaptation toward slope
	In primitive dwellings and huts of Eastern Asia and Latin America, the usage of the circle represented itself as the most fundamental form, being sensible for the first civilisations.	Circle and Circularity
	The first generations of courtyard houses in Chatal Huyuk and Jericho (Rapoport, 1969:14) were the starting point to formulate the hypothesis on the reasons for their existence and then continued and advanced in Egyptian, Greek, Persian and Roman civilisation	Courtyard houses
	The traditional cul-de-sacs are the product of organic planning and also without the concern for the existence of any roundabouts	Cul-De-Sacs
	The intersection of culture and traditionalism in architecture takes place on the residual and continuous dominant culture, being more complex than traditional notions of high culture	Culture
Defining Traditionalism for	The possibility of understanding the matter of hierarchy inside the context of traditionalism increases since both family life patterns and religious or symbolic attributes prioritise spatial transitions in the urban reality.	Hierarchical Organizing
identifying Place	The concept of boundaries is as critical as the buildings themselves, and subsequently, the traditional cities contain more densified and emphasised boundaries.	Intensified Boundaries
	For some scholars such as Amos Rapoport (1969:77), the horizontal and non-enclosing flat walls can reflect the traditional architecture, especially in rural vernacular houses regardless of a specific locale.	Horizontal walls linking houses
	The sense of place and climatic consideration produce the need for using materials derived from the local ground	Local Material
	In a greater picture, every part has its own identity, and now totally, the community-oriented societies accompanied by other spaces, perceived as vital centres, are the examples of local symmetries for the urban space as an organism	Local Symmetry
	The modern movement marginalised the (Collective) memory resulting in its crisis by international styles	Collective Memory
	Mixed-use development is among the most concrete and evident approaches for the critics denouncing modern urban planning as it is a traditional representative of architecture and urban design	Mixed Land use
	It is possible to label this element as traditional urban features since there are some signs indicating that the primary types appeared in <i>Anatolian</i> villages	Narrow and winding paths
	The diverse pattern of the path and the landmarks exhibits alternating repetition, which is not necessarily exact and monotonous.	Non-Monotonous repetition
	According to (Batty and Longley, 1994), organic cities tend to grow slowly and gradually, while in mechanically planned cities, the development rate is rapid.	Organic Organisation
	Regardless of identifying ornament as an anti-modern element from traditionalists' point of view or the role of	Ornaments and Decorations

	change of representation, it is a continuous universal tradition started from the ancient civilisations up to now	
	According to Mumford (1961), the ancient cities were organised according to the communication influenced by walking	Pedestrian Oriented Networks
_	Vital centres are the other critical principle introduced by Christopher Alexander (2002: 151), reflecting the feature of the traditional built environment	Strong Centres
_	Connotative symbols are the inherent qualities of traditional cities.	Connotative Symbols
	Jacobs (1961:380) identified a visual interruption as a typical example of visual reinforcement, being also an essential feature of traditional cities and claims that the "interruption of vistas" along with "the cutting of the indefinite distant view" were visible to note in old towns, giving the streets their deserved identity.	Visual Contradiction

Figure 5-4- Initial coding based on Identification of modernism

# 5.2. Synthesis on Time

The research aims at halting the time to understand its dynamics based on the interaction between humans (mainly concentrating on architects and urbanists) and the place.

## 5.2.1. Findings on time: Lisbon

Seven periods were considered for Lisbon. Since the second of the 19th century, the Portuguese capital approached the rational lexicon and later toward the initial phase of modernism in the 20<sup>th</sup> century. However, the zeitgeist imposed cultural values, reflected as a formal representation of the buildings and a part of the educational discipline. These manifestations were advocated by the French-oriented *l'École Nationale supérieure des Beaux-Arts* or *Escola de Belas Artes* in Portugal. Therefore, the technology and evolving grammatical construction principles appeared as voluntaristic and progressive factors. These elements opposed the reactivated reactionary images of traditional architecture. Indeed, eclecticism as a local paradigm was transmitted in a global atmosphere. This notion points out a dynamic of time reflecting a fluctuation between modernity and traditionalism with a more dominant toward modernity. This theme continued until the establishment of *Estado Novo*. The era exhibited a rupture toward the power of modernism increased over time with the presence of architects and planners influenced by the Eurocentric discourses. It can be inferred that modernity was advancing widely as determinism and free will converged.

The transitional political years between the republic revolution and the political coup on 28 May 1926 were passive moments oscillating between progressive and cultural models with a tendency toward ephemeral modernism. *Estado Novo* and its official announcement were a turning point with state-oriented traditionalism. The architects working before *Estado Novo* had to reconsider the new socio-political requirements and socio-economic neighbourhoods. Besides, crucial monumentalised works like *Instituto Superior Técnico and Praça do Areeiro* and controversial projects such as *Nossa Senhora de Fátima* were constructed. Indeed, such works generated a symbolic image of the regime. Therefore, the libertarianism of modernism decreases to a more independent role of progressive urbanists. As a matter

of fact, the deterministic force of modernity is the global evolution imposed by the time spirit. At the same time, traditionalism became the act of free will supported by the state and the portrayed images of the architects like *Raul Lino*.

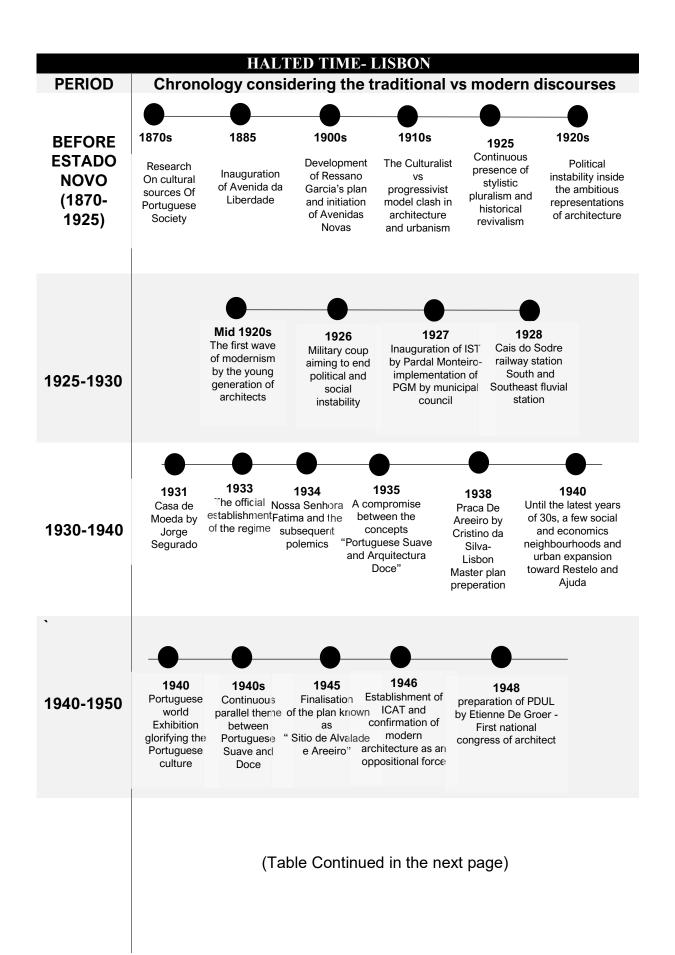
When the state publicised the dominant force of traditionalism, then the dialectic forces might appear as political. In Portugal, the powerful wave of modernism appeared as an oppositional paradigm. The interaction between "place" and "human" reflected a darker tonality in a modern sense. The young architects established the first national architecture congress in 1948 as well as the translation of the Athens charter. On the other side, the initiation of urban projects in expropriated lands, such as Alvalade, exemplified the libertarian force of modernism until the first half of the 50s.

Modernism was a presiding anti-deterministic factor in the country. However, the global critique of the modern movement, reinforced by authentic regional values, appeared to be a compromising factor inside a continuously appearing democracy in the *Primavera Marcelismo*. For this reason, the survey for the popular regional architecture in Portugal (IARP) and its publication in 1961 balanced radical attention respective to the modern movement.

Consequently, any contribution to balancing modernism and traditionalism was based on approaches following synthesis until that moment. In this regard, it seems that these poles were coexisting mutually beside each other, interwinding in some cases. Also, due to the evolution of time, it appeared that the difference between levels of modernism and traditionalism was not considerable enough that, in some cases, these two opposing points converged. *Olivais Norte, Olivais Sul* and *Chelas* are examples supporting this argument.

After the revolution in 1974, the global trend toward participation and the neo-liberal economy formed the architectural essence of the country. The temporary superiority of SAAL in the whole country resulted in a few projects inside the capital. The overall view was similar to the last decades of the 19<sup>th</sup> century. The identity crisis transformed into a need which had to be consumed through the diverse modes of representation.

The international influences of postmodernism were imported in subjective ways by Taveira, Vicente and Hestnes de Ferreira in an utterly short period. Also, diverse modes of representation were practised in the rehabilitation process of the neighbourhoods and the waterfront development. Still, the architectural lexicon of modernism was not entirely rejected. The contrasting points between the tangible and rhetorical illustration in architecture distanced from the usual debate between the progressive and cultural mindsets. The plurality of representations, perceptions and readings in Portugal and Lisbon resembles the last decades of the 19<sup>th</sup> century. However, this fluctuational model might address a few differences, such as the superiority of local context and the right to consider the inherent cultural models. Yet, it is predictable to claim that this period and the current moment might be transitionary to a revised form of modernism like the 19<sup>th</sup> century for the unknown future.



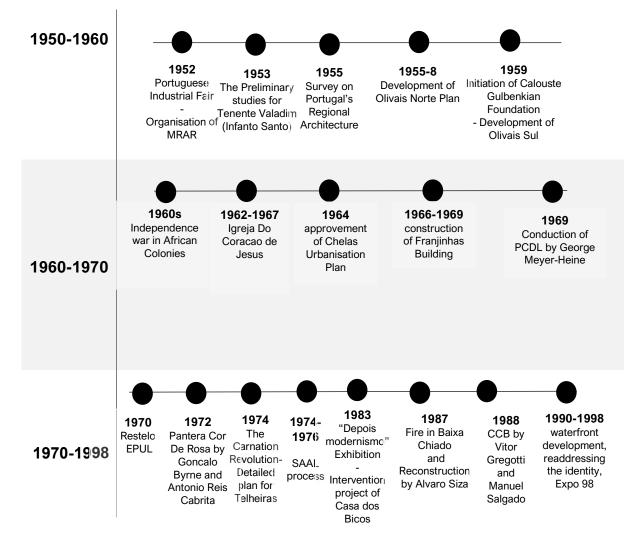


Figure 5-5-Time chronology in Lisbon

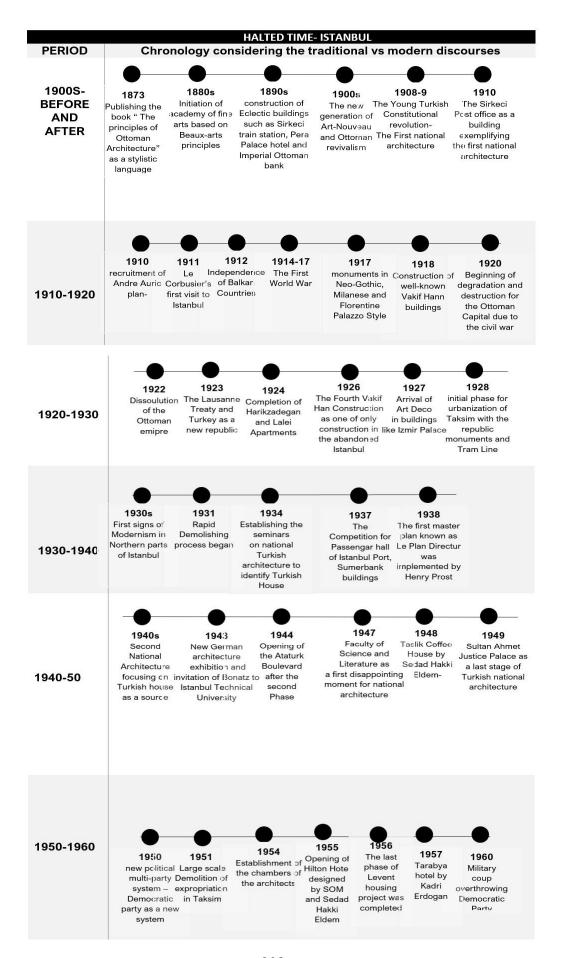
### 5.2.2. Findings on time: Istanbul

Eight periods were selected to study the interaction of human-place during the halted time for Istanbul. The traditional image of the Ottoman capital had been reproduced through centuries by the Ottoman empire itself. The continuous weakening status of the state westernised the cities of the empire. As a city with a cosmopolitan formation of people, Istanbul faced a more rapid modernisation. Like the other parts of the world, the eclectic face of Istanbul was represented in diverse monuments, mostly in neoclassic buildings either by the inviting architects or by European locals living mostly in *Pera*. This situation persisted until the objection raised by the Young Turks pursued the Turkish-Ottoman identity. For this reason, two approaches were followed. First, the *Pseudo-Moorish* facades covered the European iron-concrete construction was designed as an office building by foreign architects or the Turkish religious elevations combined with the same structures. This transitional period moved on until the adverse outcomes of the first world war and the civil war led to the establishment of the Turkish republic. Hence, the time spirit of oscillation between revivalism and progressive representation encountered the inherent political tradition, which was assumed as a controllable factor. The Ottoman capital's political turning point was a tight connection with traditionalism. Ankara was the new capital,

and the nationalist desire to build the new republic led to the temporary isolation of Istanbul since the objective was to negate and remove the Ottoman symbolic representations, which were reproduced through centuries. Subsequently, the lack of a concrete conceptualised image made the state face a hegemonic stance of modernism which could not be generated in Istanbul due to its specific status quo. However, a few Art-Deco apartments were built in areas like *Laleli*. Second? The state transformed the *Beaux-Arts* educational system into Bauhaus by inviting foreign professors and architects. These figures were the critical characters effective in building in the local context and training the native youngsters. The outcome was to approve modern architecture as the only evident approach. The first modern facilities were built in *Taksim* with the promenades surrounding it.

The second point was to respond to the nationalist expectations raised by Turkish critics. For this reason, the state provided a research opportunity for architects to identify non-Ottoman Turkish architecture, focusing mainly on the theme of the Turkish house. The formal or rhetorical representation of traditional spaces was not a state's political obligation. Nevertheless, since there were insufficient concrete examples of formal languages, architects such as Sedad Hakki Eldem were trying to implement rhetorical grammar. This scope synthesised the time necessity and contextual reality approved by foreign figures such as *Bruno Taut*. However, this vision did not end with any considerable consequences.

At last, the hegemony of international modernism was officially welcomed in the 50s in Istanbul, even though it was introduced decades ago in the whole country. The demolition of spaces with traditional values because of Henry Prost's introduced schemes and the buildings by the young generation of architects were examples of radical international modernism. They were derived from the imposed time necessity amplified by human voluntarism. The ruling role of international modernism influenced the state regardless of the various military coups. However, the migration of the people from rural spaces threatened its commanding role. The last two decades were the official point for approving global capitalism. Postmodernism and critical regionalism were two commanding concepts of the era. Notwithstanding, the modern and rational perspective was still the central theme targeting the historical peninsula. The traditional character was synthesised with the commercial manifestation of global The traditional principles imposed themselves in the few buildings and the gated economics. communities in the countryside. The unstable presence of diverse political parties did not amplify the traditional versus modern discourse in the city as it was limited to theoretical debates except for the initiation of a few Islamic spaces during the Islamicist well fare party. Traditionalism, in general, had been a deterministic restricting factor in most periods. However, modernity was the global essence of time amplified by humanistic noble libertarianism, which was against the inherent social dynamics of the former Ottoman capital.



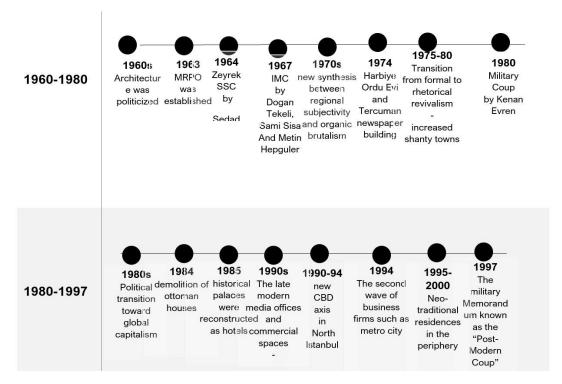


Figure 5-6-Time chronology in Istanbul

### 5.2.3. Comparative analysis and model

The comparative analysis of these two cities exhibits similar historical paths entangled with the eclectic dynamism of the 19<sup>th</sup> century, importation, and local translation of Art Nouveau and Art Deco, political nationalism, international modernism, vernacular architecture, endorsing neo-liberal economy, postmodernism, and critical regionalism. However, the historical chronology manifested a deviated discourse of nationalism and architecture regarding modernism and traditionalism. A continuous moderated sense of modern architecture continued until now in both cities

In Turkey, the central point of nation-building was to remove the previous identity and build a new one, and for this reason, modern architecture is inevitable by inviting Bauhaus-centred architects and European planners. However, the field for reviving an authentic identity was always open. Hence, nation-building was a process of transformation from synthesis to rhetorical vernacularism versus modernism and the endorsement of international modernism. Also, the conferences held by Albert Speer in Turkey could be read as a sign of dictating neo-classicism as a source used for centuries in Anatolian lands. This perspective could lead to reading different levels of modernism and traditionalism, sometimes ending in an East-West dichotomy. At least in theoretical discourses, Istanbul was also affected by the mentioned perspective.

In Lisbon, the situation tends to be different as the reading toward nationalism and architecture in the whole of Portugal illuminates the traditional ambition of a state. Following a rustic image, this political status tended to preserve the locality and echoed with monumental symbolic centres in the city. However, even the evolutionary process of Portuguese architecture in the 20<sup>th</sup> century portrays a clearer image of a tendency toward a converging form of modernism and traditionalism than Istanbul. The

reason is probably addressed in the geographical proximity of Istanbul and Turkey with the oriental traditionalism. However, In Lisbon, a correlation between the evolutionary path of Eurocentric architecture and local qualities occurred. Similar to Istanbul, one of the reasons for that paradigm is the geographical proximity as well. Also, traditionalism appears to show a more radical potential in Istanbul regarding literature review dealing with more interdisciplinary issues rather than Lisbon based on the possible cultural exchange due to geographical proximity.

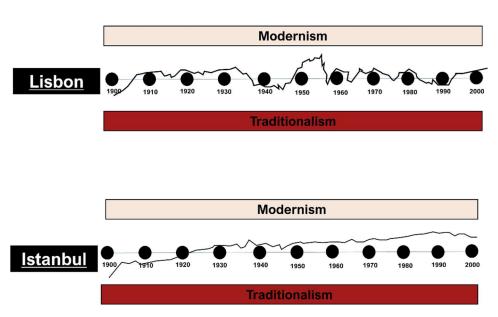


Figure 5-7- This cities orientation toward time based on traditionalism and modernity

Based on the chronological discourses on time in Lisbon and Istanbul during the 20<sup>th</sup> century, it is possible to conclude that architectural development fluctuated between traditional and modern, with different details and commodities generating a cyclic vision. Previously as was discussed in the literature review, linear mutualism is the probable approach to balance traditionalism and modernism. Nevertheless, the linear form of balance can be achieved in a cycle providing cyclic and linear forms of cities based on the spectrum model.

In global discourses, the most similar model for this scheme was the Garden Cities by Ebenezer Howard, approving the cyclic. Based on such a framework, one can also read of the linear notion of time to embrace the progressive-culturalist models and the determinism vs voluntarism in shaping cities. However, there is no similar central perspective between garden cities and the spectrum model as they have different standing points. The research methodology is grounded in the grounded theory, based on secondary research and expert interviews. Such methodology generates the possible codes as an outcome: the linear vs the cyclic concept of time, fluctuation, transition and synthesis for compromise.

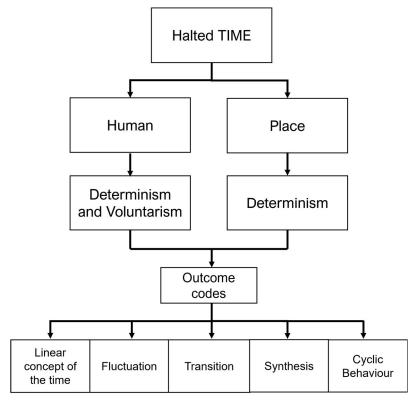


Figure 5-8- The matter of "Time" and derived keywords

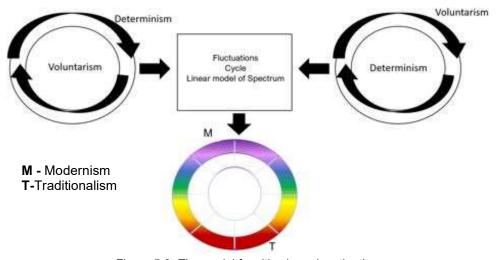


Figure 5-9- The model for cities based on the time

### 5.3. Synthesis on Human

The thesis in chapter 3 aimed at halting the human from understanding its dynamics based on the interaction between time (mainly concentrating on architects and urbanists) and place. As previously mentioned, the necessity for generational stratification was justified through deductive reasoning. This approach could facilitate knowing the generational evolution's dynamism based on the modus operandi. The theoretical considerations were taken in the first place. Hence, a few architects were prioritised through their theoretical impact rather than their influence in the case studies.

### 5.3.1. Findings on Human: Lisbon

19<sup>th</sup> century influenced the generation before *Estado Novo*. The amalgamations of principles such as the traditional conceptions of aesthetics using Manueline, Baroque and Art-Nouveau elements and improvised rationalism were manifested. The traces of Beaux-Arts are evident in almost all architects of the generation. Nevertheless, there are clear signs of transition as figures like Jose Luís Monteiro could be recognised as transitionary characters. Also, characters such as *Raul Lino* and *Miguel Ventura Terra* are on each side of the spectrum, prescribing culturalism and progressivism.

The first generation, mainly with the acknowledged works at the beginning of *Estado Novo*, could represent a general characteristic of ephemeral modernism with the active role of Porfirio Pardal Monteiro, Adelino Alves Nunes, Carlos Ramos, Cristino Da Silva, Cassiano Branco, Jorge Segurado and Cottinelli Telmo. The generation started to play an active role just at the moment that Art Deco imposed its influence all over Europe, and these architects grasped it and designed several well-known buildings in Portuguese society inside this vision.

The architects like Porfírio Pardal Monteiro and Cassiano Branco portrayed more loyalty toward the principles of modern architecture in a political atmosphere which is not necessarily in the same direction as theirs and sometimes was an imposing factor in building the nation considering the desired principles. Carlos Ramos could be labelled as a transitional character to find a mediation. Nevertheless, he was receptive toward a more liberal and modern character. This character is evident in his academic period, by raising the architects in the later generations. These architects were equally open to the vernacular questions with the pragmatic design principles. The other architects in the first generation provided a smooth character of modernism inside a dominant traditional image of the state.

When there is no way to prove the authenticity of each debating point, then those debating sides tend to look for a compromising state. The "third way" and "transition toward modernism" are the essence of the architects located inside the second-generation category. Francisco Keil do Amaral was finding a third way to balance popular architecture and the authenticity of modernism. Architects like Fernando Silva and João Faria da Costa embraced modernism. The generation made its mark by orchestrating the first national congress of Architecture to oppose the obtruded architecture by the state. Bairro de Alvalade was their most prominent materialised example. There is a slight similarity with the generation working before *Estado Novo* as it had transitionary characters like Keil do Amaral apart from the characters implementing modernism.

The third generation continued the centralised modern theme. However, the traditional mindset shifted from eclectic and rustic picturesque to concepts like the solidarity between landscape and time, conservation and rhetorical vernacularism. The shift was exhibited especially by architects from the Porto faculty of fine arts. Also, it is possible to observe the freedom of design and expression regardless of Modern and Traditional debate. *Fernando Tavora, Manuel Tainha* and *Nuno Teotónio Perreira* are clear evidence exhibiting this characteristic. As mentioned before, the dominant modern background is still apparent in works of the generation like Pedro Cid and Ruy Jervis D'Athouguia. The reason behind the general character of this generation might be the strong presence of Carlos Ramos as a modern

and in the same dependent personality supervising these young architects.

The last generation, preferably inside the 20<sup>th</sup> century and after the *Estado Novo*, is the compressed and amalgamated version of all discussed generations. Despite its short-term influence, the SAAL was the first framework to provide the platform for working with the generation. The diversity of perspectives and global influences made this generation similar to the architects working in the last decades of the 19<sup>th</sup> century.

Their popularity at the global level could illuminate the fact that the time and popular trends appeared as restrictive elements to the architects. Also, the influence of *Atelier de Rua da Alegria* and Nuno Teótonio Pereira is vital enough to introduce the young generation of architects focusing on the methodological and interdisciplinary perspectives on architecture and city in combination with inherent socio-political anxiety. In this regard, Nuno Portas could be the symbol of the generation as he provided a methodology considering the network of ideas between time, city and society and policy. His perspective is the most adaptive and comprehensive model of all architects to balance modernism and traditionalism, considering the dynamics of time, place and space. This vision is also flexible toward the roles appropriated for humans, architects, and politicians. It is responsive and provides linear and cyclic possibilities of time and determinism of place.

The global influences, mainly from Louis Kahn and Robert Venturi on architects such as Raul Hestnes Ferreira, Luiz Cunha, Troufa Real and Manuel Vicente, paved the way for them to introduce a more subjective way than official images of modernism and any absolute linguistic scope. Nevertheless, it never became a dominant theme. The architects, such as Alvaro Siza and Gonçalo Byrne, illuminated the overall characteristic of the generation more than the others as their architecture can be a fusion of primary standards of modernism, regional and organic.

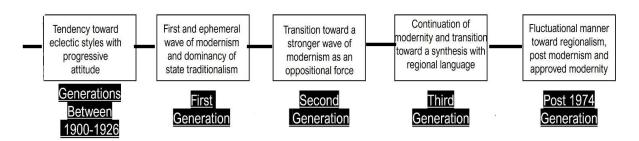


Figure 5-10-Overall views of the Portuguese architectural generations

### 5.3.2. Findings on Human: Istanbul

Istanbul and its cosmopolitan reality made the distinction between modernity and traditionalism much more realisable. The Ottoman politically formed the most enduring traditional space during the centuries of building the state reminiscent of Roman empire architecture. Religion as an utterly important factor raised the architects familiar with the concept of Islamic cities. However, the traditional power shaped by the state was degraded, and the empire had to be westernised. The global epidemic of eclecticism amplified this moment as the western principles of architecture were imported and the Beaux-Arts

educational system. Therefore, three forces formed the generation of the first national architecture. First, the locals were trying to revive the weakened Ottoman architecture, such as Arif Hikmet Koyunoğlu, Mimar Kemalettin and Vedat Tek, trying to use the elements present in Turkish houses and Ottoman religious buildings.

In contrast, the building techniques were absorbed step by step by European companies. The other group was the non-Turkish locals trying to use neo-classic architecture for their communities on the European side. They mostly had Italian-Levantine identity and went to their native lands or France and Germany to study and return to build in Istanbul based on the trained principles. Architects like Guilio Mongeri and Alexandre Vallaury were among these examples trying to respond to the needs of westernisation and Turkish revivalism.

The third category belonged to the planners and architects invited by the state to modernise the capital. They used non-Turkish Islamic styles such as pseudo-Moorish as they were unfamiliar with the domestic architectural principles taught based on the Book "*Usuli-Mimari Osmani*". Raimondo D'Aronco, August Jasmund and Joseph Antoine Bouvard were the architects and planners trying to construct modern public facilities.

The generation appeared as a transitional character from pure Ottoman architecture to primary keystones of modernism in the 20<sup>th</sup> century. However, their character practice, mainly in Istanbul, had to end as the capital changed to Ankara. Their activity in the new capital did not last long due to their death or outdated ideology from the republican state.

The second national architecture is the development of two parallel lines, which did not appear strongly in Istanbul primarily. Ankara was the tabula rasa for the new state of modernism. However, late 1940 was the time for the Austrian and German invited professors like Paul Bonatz, Ernst Egli, Bruno Taut and Clemens Holzmeister to consider Istanbul. On the other side, local architects like Emin Onat, Sedad Hakki Eldem and Seyfi Arkan and Vasfi Egeli found the opportunity to realise the projects based on their academic formation. The generation of second-national architecture appeared to have a spectrum-wise character with more tonality toward international modernism.

The most traditional character was Vasfi Egeli and his mastery of designing the mosques, while Sedad Eldem appeared as the most critical character of the generation investigating Turkish houses. His career oscillated between modernism and traditionalism. Emin Onat and Seyfi Arkan were the architects with more tendency to pure aspects of modernism grown by Le Corbusier and Gropius, even though they attempted to design a few noteworthy monuments inside the Turkish nationalist context.

Architects like Sedad Eldem participated in the following decades, overlapping the next generation. He was still in between regional and modern qualities. In the age recognised as global modernism, foreign companies such as SOM were active members in modernising Istanbul. However, modernism was not still the dominant context among the new generation. Nonetheless, the central policy was to modernise Istanbul in the 50s. The city faced radical modernism this decade by demolishing old mosques and neighbourhoods.

Turgut Cansever and Behruz Çinici could be the two architects with different perspectives. Behruz Çinici as an architect, used a more liberal approach ranging from international modernism to first stances of postmodernism, considering cultural references and sustainability. The more sold and traditional

character could be Turgut Cansever with projects recognised as aga khan prize-winning masterpieces. There was no hesitation for Cansever to praise the Ottoman architecture, the inherent sui generis of Istanbul, the qualities of the Islamic city, and the religious concepts such as totality of being and unity. The last three decades of architecture have been filled with complexity. There are no fixed categories of generations, so the ones with specific stances toward modernity and traditionalism were recognised. In the age of coups, the tendency was to westernise the country in its most radical way, and Istanbul was undoubtedly part of this plan.

Kemal Ahmet Arû as an architect and urbanist, played a considerable role in the last decades of the 20<sup>th</sup> century. His ideas are centralised based on his primary education under Taut, Holzmeister and Gustav Oelsner. For this reason, his works represented modern architecture with a soft tone of vernacularism and Garden cities. He is the symbol of the spectrum of this generation as he shifted from Corbusier-ian and Taut-ian vision to Alexander's pattern language with his desire to categorise Turkish houses and cities in separate investigations apart from the dominant preservatory scope in all architects.

On the other side, architects like Cengiz Bektaş and Doğan Tekeli were critical figures in finding the compromise between modernism and rhetorical tradition. That is why for *Bektaş*, the local influence with time continuity is as obligatory as modern authenticity in a generally similar attitude to what Sedad Eldem established. At the same time, for Doğan Tekeli, the traditional metabolism can be converged with the approved imposition of time inside the modern lexicon.

All in all, the last generation reflects the amalgamations of all periods. In a nutshell, It reflected a combination, transition, mutualism and rationalising the similarity between what is old and new depending on the realities of the global market.

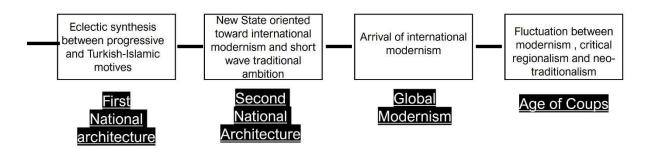


Figure 5-11-Overall view of The Turkish Architects working in Istanbul

### 5.3.3. Comparative Analysis and model

The architects in Lisbon and Istanbul followed a contemporary understanding of modernity and traditionalism in architecture. In Istanbul, modernity was not against the state's will. However, the situation was reversed in Lisbon since the state converged more with traditional architectural concepts. The fluctuational model in both cities is shown in generations of architecture and urbanism. Furthermore, each generation contained the representatives of dominant characteristics of the generation, transitionary characters, Flexible in-between and opposing characters. Therefore, it is possible to correspond to these different personalities with their orientation toward abstract and concrete layers. Hence, this connectivity can be implemented in pedagogical spaces. For instance, future architects and

students had to be observed and categorised based on their orientation toward modern and traditional architecture in courses such as design studios.

Flexible characters such as Carlos Ramos, Keil do Amaral, Nuno Teotónio Pereira, Sedad Hakki Eldem, Kemal Ahmet Arû and Cengiz Bektaş were the most suitable personalities for supervising these students placed in spectrum categories of traditional and modern tendencies.

The spectrum model can be used in the placement of the population. Similar studies by Nuno Portas, Turgut Cansever, Sedad Eldem and Kemal Ahmet Arû justified the necessity of state and municipal intervention. Their ideology covered diverse subjects ranging from etymology to sociology. Therefore, participation has to be redefined to provide the possibility of cooperation between the state and the public. It could address the most suitable place for them to live and revive the sense of collective community based on the population's modern and traditional orientation.

In this way, the state has to contribute qualitatively to all zones based on the spectrum model, regardless of their political opinions. Hence, the spectrum model is a way to depoliticise politics pragmatically.

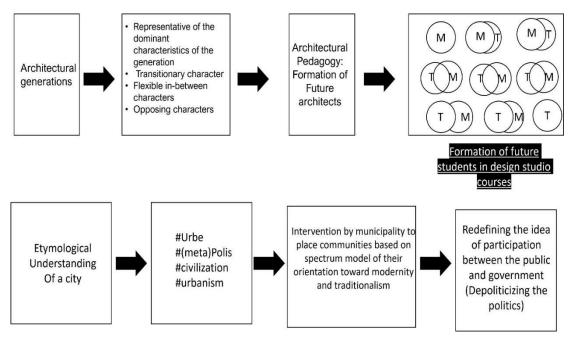


Figure 5-12-How should cities works based on the concepts derived from the Human section

### 5.4. Synthesis in place

The target of the thesis in chapter 4 was halting the place to understand the interaction between time and humans. Also, a justified consensus about the place justified the necessity for its generational stratification separated as zones covering neighbourhoods.

The selected zones were analysed based on the historical evolution of secondary resources. The zones were also evaluated based on the terms selected in chapter 1. Combining these two steps clarified the character of the zones regarding modernism and traditionalism.

### 5.4.1. Findings on Place: Lisbon

In Lisbon, the development axis was toward the north substantially and then the west in the second place. The most realisable fabric of the Portuguese capital took place after the earthquake in the 18<sup>th</sup> century. Subsequently, almost all the selected zones reflected a considerable percentage of logical conceptions. For instance, zone 1, covering the areas of *Baixa-Pombalina*, was recognised as a modern zones by architects from different periods, from Pardal Monteiro to Alvaro Siza and Gonçalo Byrne. However, despite bearing rational concepts like prefabrication and grid network, *Baixa-Pombalina* contains a more traditional character comparing the areas initiated in the 1950s. The time factor was an imposing force transforming the area toward a traditional zone.

Zone 2, covering the areas such as *Alfama*, *Mouraria*, *Castelo* and *Graça*, was the most traditional zones bearing the principles of traditional cities, narrow pathways, religious monuments and geographical constraints as imposing factors. Therefore, history as a dependent element of time and then the place dictates the total feature of the zone even though there might be a few instances of modern architecture.

Zone 3, with the areas like Intendente, *Anjos, Arroios* and *Alameda*, represented a transitional totality following an "in-between" or "spectrum" of modern and traditional elements. The geographical proximity to historical parts deterministically led to a traditional decreasing gradient. The development toward the north represents the presence of houses with Art-Nouveau facades. They were lined in the generation of new avenues built from the beginning of the 20<sup>th</sup> century. Even Alameda, an area located inside the *Estado-Novo* Period, reflects a more modern character than the others despite the monumental effect of the *IST*, Park, and *Fonte Luminosa* 

This imaginary gradient colour palette between modernism and traditionalism tends to be continuous in zone 4, with the overall modern urbanisation of *Areeiro* by Faria da Costa and the monumental effect of the *Areeiro* square by Cristino da Silva as a transitional zone approaching Alvalade.

Zone 5 covers *Alavade* as a place officially approved by the Athens Charter, apart from a few semi-detached villas. This positive wave toward modernism continued radically in *Olivais Norte* as a part of the study in zone 6. The only problematic rupture could be the presence of *Bairro de Encarnação*, with the villas depicting the utopia of *Casa Portuguesa*. *Olivais Sul* began to obtain a synthetic behaviour and *Chelas*, with the amalgamation of ideas evolving with time. The area reflected various examples of traditional and modern principles.

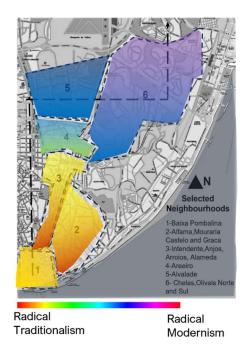


Figure 5-13-Lisbon and the spectrum of layers between modernity and traditionalism

### 5.4.2. Findings on Place :Istanbul

Five different zones were selected to study for the thesis. Among these five zones, the historical peninsula known as *Fatih* inside zone 1 showed the most traditional behaviour with the monuments from different periods, the Mese (Divanyolu) axis, the presence of Turkish houses in each neighbourhood and geographical determinism.

Zone 2 is a transitional area because the European families live in *Pera* with predominantly neoclassical, Art Nouveau and Art-Deco buildings. Taksim, inside this zone, could be recognised as the junction of the transition from traditional to modern. The first square was built there in the republican period removing the Ottoman-oriented identity. The same situation applies to zone 4, *Beşiktaş*, as the waterfront areas bear a continuous sense of place, with the palaces, mosques, and squares facilitating walkability. The more ones to the north, the more tendency toward modernism is evident.

Therefore, Zone 3 covering Şişli is recognised as an area with the most modern principles, such as its development as a vacant area in the republican period with several apartments, grid planning and commercial spaces. Uskudar in Zone 5 is recognised as the second area with the most traditional spaces since the waterfront areas completely preserved their Islamic urban layout. This scheme correlates with the units of mosques, Turkish baths, bazaars and houses. However, nowadays, modern apartments, as well as commercial shopping centres and towers, could interrupt the harmony of the zone.

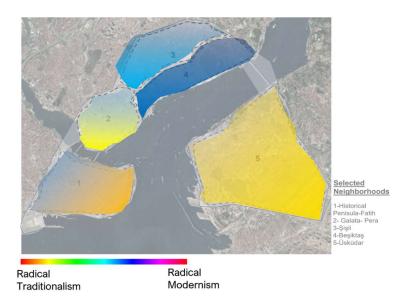


Figure 5-14-Istanbul and the spectrum of Layers between Modernism and traditionalism

### 5.4.3. Comparative Analysis and model

Bost cities followed the spectrum model from traditionalism to modernity based on the growth axis and not necessarily from the east-west direction, although in both cities, there are western development axes toward modernity.

The growth axis follows deterministically two points: *Zeitgeist* (what time imposes) and Tabula Rasa (the empty land). The interaction of these two factors creates a spectrum model.

There are imposing factors in both modern and traditional layers: Traditional layers have more imposing factors than modern ones. It is only possible to give overall character to each zone rather than to implement and observe the spectrum building by building or transitional urban layouts.

The only concept for executing this strategy (based on linear mutualism) seems to be adaptive reuse. That is why adaptive reuse should be redefined and extended from an architectural concept to urban discourse. Hence the buildings located in transitional zones or the zones border could be the subject of urban scale reuses.

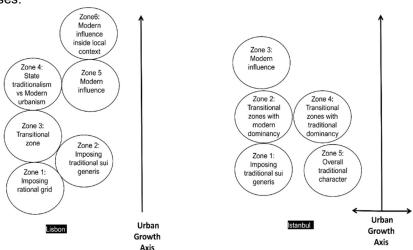


Figure 5-15-The selected zones and their orientation toward modernism and traditionalism





Now it is the time to synthesize the findings on Time, Human and place and try to answer the research questions. Also, the suggestions, roadmaps, restrictions and weakness of the research will

### Conclusion

### The Research Questions and Responses

This part aims to provide the final answer to the research questions and suggest the road map based on ideas discussed in the whole thesis, considering the research methodology as a combination of infield observation and grounded theory.

### Main questions

## Question I: What are the most significant socio-political readings and definitions of radical modernity and traditionalism in architecture theory and urbanism?

Based on the investigations of two case studies considering the research realms of the T-H-P triangle, the grounded theory in the research facilitated the data-gathering process with the evaluation of the experts in this field. While none of the zones in both cities is radically modern or traditional, they represent a hidden potential approach to these concepts. Radical modernism combines inherent modern qualities with controllable modern ideologies by the human factor regardless of public and noblemen dialectics. Time is a factor imposing modernism first by the binary between old and new. Then it imposes itself through the architectural and urban discourses advocating rationalism, modular and grid design, prefabrication, high-rise apartments and any other qualities of abstract spaces. If the place was a degraded rural space or the vacant one, the dominant experience of most decades in the 20<sup>th</sup> century was to build based on the necessities of the time. This perspective is a necessary form of modernity caused by the controllable human factor, such as demolishing traditional monuments and neighbourhoods. Accordingly, urban layouts possibly inherited through the centuries do not exist anymore.

Moreover, the theoretical and in-field review of the case studies, especially Istanbul, demonstrated populist political enthusiasm. It was sometimes echoed by the desire of the young population or the middle class to give specific privileges to conceived, perceived and lived layers of modern spaces. Therefore, the necessities of the time, the Tabula-Rasa vision toward the site, and the voluntarist humanistic vision illuminate an image recognised as modernity in its radical instance. Hence, radical modernism is reflected as a policy that demolishes traditional neighbourhoods rather than functioning as a zone, architect, or planner.

Radical traditionalism also bears the same perspective with a few differences. The dynamism and solidity of time play the most robust role. It is because the process of time made an area, neighbourhood, or even a traditional city. However, insisting on its periodical observations seemed to be a more repetitious way to generate it. Therefore, traditionalism can be understood as a process or a freezing attitude toward time. Although traditionalism as a philosophical school was a reaction toward the

increasing power of modernism, its identified elements in architecture are recognised mainly by the sense of place evolved through time.

The investigation of case studies, specifically Lisbon, exemplified the controllability of building a tradition by human factors such as the state, architects in service of the Ministry of public works and the domestic population. Therefore, the insistence of an institutional centre to conceive, perceive and live based on freezing the time and periodical privileges could portray the national and regional identity. This paradigm does not necessarily consider time imposition. The phenomenon is recognised as radical traditionalism. Also, studying the halting place brightens another scenario of radical traditionalism, which is the geographical quality of the place. A district with more imposed aspects of place evolved through time, such as topography, religious monuments, and a sense of neighbourhood, decreases the probability of a modern entity existing. Hence, radical traditionalism can generally be defined as imposing deterministic characters of tradition or regenerating their desired image by a central institution.

While it is impossible to negate the roles of any central institutions, whether public or private, their power can be limited by an upper-hand bureaucratic system to compromise for a more sustainable balance.

# Question II: Is it possible to perceive city as a spectrum with most traditional layer in one side and the most modern layer on the other? If so, how does the "Spectrum theory and model" physically balance and contribute to peaceful societies?

A model-like spectrum between the traditional and modern zones relied on the studies of the T-H-P triangle. Based on the studies on time, concepts like linearity, fluctuations, and transitions from one point to another were observed. Also, the announcement of new revivalist ideas such as new urbanism, neo traditionalism and neo-modernism reflected the possibilities of a cyclic aspect of time similar to eclectic and revivalism in the 19th century.

The observations on the human point reflected similar aspects of the time. Moreover, the political experiences promoted traditional and modern architecture and the chaotic moments of diversity in the last decades of the 20th century. It also necessitated the indispensable role of central institutions such as municipalities, the Ministry of public works and the state itself. However, the experiences in the 20th century showed that this central power could regulate the traditional and modern distribution by conducting surveys to become familiar with the formation of the society and its desire. This policy facilitates contextually understanding the traditional and modern desires and identifying the zones respective to each side of the poles. The place as a critical factor of the thesis clarifies that the areas might transform or oscillate between modern and traditional concepts. Additionally, the spaces of transition are the essential parts as central points of the spectrum, providing diversity and modern and traditional values in the same way.

For this reason, the spectrum model can generate the dynamicity of the city by establishing linear mutualism as a concept discussed in chapter 1 of the thesis. However, the critical question remained unanswered. What are the physical examples of linear mutualism in architecture and urbanism?

In the theoretical term, each neighbourhood's traditional or modern orientation might appear in a linear connection with the adjacent ones. In architectural scope, the similarity of this symbiosis is sensible as the chronological relationship between at least two or more entities as "living organisms" takes place. Mutualism in architecture considers the host (old) structure as the fundamental that the intervention dependent. Adaptive reuse is the most current approach justifying the balance between traditionalism and modernism in the cities since it considers the dynamism, linearity, transitory and cyclic behaviours of time, users (humans) and the contextuality of place.

Based on the taxonomic justification of the research toward the T-H-P triangle, the shift of perspective toward adaptive reuse from a microscopic scale of buildings to a larger scale such as neighbourhood or area seems necessary. Adaptive reuse of every building might change the character toward modernism and traditionalism over time in a posteriori process. Adaptive reuse on an urban scale will possibly deal with diverse factors such as intersections, centralities, transition zones, monuments inside the areas and the general character of each neighbourhood.

The main question might arise regarding the link between adaptive reuse and the spectrum model of a city. How does the adaptive reuse contribute the model from theory to practice?

In the literature review, still there is a remaining argument more feasible in the matter of place and yet relevant to time and human as well. As discussed before, if city must be perceived as a fragmented reality of concrete and abstract layers and also as a living organism, the only possible approach to balance for such an organism is mutualism. The only architectural recognized way is adaptive reuse regarding the state of art in this subject. However, the idea of adaptive reuse has to be reformulated.

If Adaptive reuse deals with purposes the new functions for the buildings that outlived, it inherently deals with the matter of time. Although, preservation, renovation and integration are among the critical factors considering the time as a continuous entity, the main objective of adaptive reuse is to consider the space inside the status-quo.

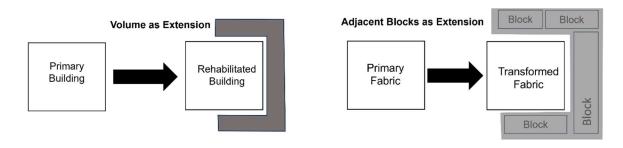
The functionalist approach toward the adaptive reuse might decentralize the importance of traditionalism in its' deterministic core. Also, it was considered that the city has to be dynamic enough for fragmented neighbourhoods to orientate themselves respective to spectrum of modernity and traditionalism. With all this combination, the central question needs to be answered. Can a project for adaptive reuse is responsive for possible numerous adaptive reuses in the future? Given the consideration of cyclic and linear aspect of the time, can an adaptively reused project take a specific orientation toward modernity and traditionalism?

Though difficult the question is to be answered, it seems that the connection between the project and the public space is vital. The increasing importance of place and context since the second half of 20<sup>th</sup> century along with the comprehensive studies on the matter of space and also the influence of the book "the right to the city" reflects that the projects have to serve the public space. As a matter of the fact, the projects themselves are the public space.

The building itself could act as a dynamic artifact, similar to a Lego but a little bit different with what Nuno Portas explained. Therefore, it is necessary to consider the urban fabric as an object for the adaptive reuse. In other words, one should consider the space as an object to be reused and the main objective for such reuse should not be mere functionality but the character it gets considering the extent

of traditional and modern feature of the neighbourhood. Unlike the adaptive reuse in building scale, the reuse in public space is influenced by time, human and place. Similar to the building scale and inside this grand ensemble, the other parts of fabric or even the adjacent neighbourhoods can take the role of an extension. These extensions in a greater scale can act as a transitional layer from one neighbourhood to another.

Therefore, the adaptive reuse of a lived-conceived and perceived space considering the T-H-P triangle contributes to a more balanced city toward traditionalism and modernism rather than the adaptive reuse of each building which might appear as a chaotic reality questioning the characters of the neighbourhoods. The presence of humanistic centralities such as academic architecture schools is a fundamental step to promoting the idea of peaceful societies. Based on this vision, it is possible to educate the spectrum of architects, planners, and political institutions to promote social equality based on the gradients of ideas depolarising and deradicalising traditionalism and modernism.



Adaptive Reuse in Building Scale

Adaptive Reuse in Urban Scale

Figure C-1- Revised understanding of adaptive reuse regarding the thesis

### Secondary questions

The secondary research questions deal with the following concepts:

- Possibility of addressing traditionalism and modernity geographically in architectural discourse.
- The zones in every two cities represent radical modernism and radical traditionalism
- Correlation between the architectural styles, ideologies, and social groups in societies

The thesis tried to identify radical traditionalism and modernity as described in the previous part. Two case studies were selected based on the literature review on delimiting the global concepts of traditionalism versus modernity. It was based on the reconceptualised philosophical sources of orient and occident. According to the literature review specifically on time and human, the eurocentric reflections of architecture was founded by western architects. Conversely, the Ottoman Empire's religious fundamentals imposed the traditional discourse of Istanbul.

In Lisbon, the oriental source of religion was not dominant enough to be generated in the 20<sup>th</sup> century. The introduction of modernism to Portuguese society is not addressed as a western paradigm as it follows a north-south dichotomy. For this reason, traditionalism is not a clear idea geographically inside the European context comparing Istanbul. It is a mere socio-politically reactionary act. Therefore, it seems much more probable to state that the more one moves from Istanbul to Lisbon, the less polarity between east and west becomes a critical factor.

Besides, the one moves from east to west, the geographical sources of traditionalism and modernism tend to converge more due to the not similar potential difference between these two poles in the case studies. The Mediterranean architecture aided in reflecting the rupture more because it was exemplified as a point of compromise as the traditional and modern concepts reached a consensus on vernacular authenticity since the second half of the 20<sup>th</sup> century.

Focusing microscopically on the place and case studies also portray that Istanbul and Lisbon possess a more powerful axis of South-North even though there is a weaker East-West axis respective to modern and traditional elements. Hence, it is impossible to address these two titles geographically in their radical approach.

While it is impossible to identify the radical modern and traditional areas in the case studies, others like Olivais Norte and Şişli in Lisbon and Istanbul are the areas moving close to radical modernism. Still, radical traditionalism is almost unreachable compared to its modern counterpart because of the inherent reality of the time and the transforming character of residential spaces. Nevertheless, new urbanism and new traditionalism aim to retain and materialise the most perceivable aspects of traditional neighbourhoods. In Istanbul, the historical peninsula Fatih represents the most traditional elements. The overlapped historical layers in Alfama and Mouraria are among the most traditional spaces in the Portuguese capital. Therefore, despite the almost impossible way to label any radical traditional and modern neighbourhood, a few converge them.

It is impossible to correlate the matter of style, ideologies, and social groups due to the vastness of each factor. However, a notion of style could be recognised as a more concrete factor in understanding the taxonomy of spatiality. As mentioned, spatiality rationalised the T-H-P triangle as the thesis variables. It also justified the fragmented time as linear periods, humans as architectural generations or place as categorised neighbourhoods. Still, it is marginalised in studying architectural history and theory. Therefore, The thesis did not achieve a strong correlation in this regard.

Based on the theoretical data observed in both cities, the political ideologies, mostly nationalism, tried either the singular attitude of style (in Turkey) or its multiple reflections contributing to national or regional identities. Still, there is no evident correlation between style and social groups due to their subjective and transitionary behaviour over time. Therefore, understanding the collective behaviour of society will not necessarily contribute to a precise understanding of their orientation toward modernity and traditionalism. The first reason for such a situation is the impossibility of predicting collective behaviour. The second reason addresses the style's transformation and decentralisation during the last centuries, whether in a signified or plural form.

Contents	Open and Axial code	Selective Code
	The instant influence of time on the evolution of modernism and traditionalism is chronological	Linearity
	The return to identity and inherent urban quality represents a cyclic model between traditionalism and modernism	Cyclicity
Time	The diverse modern and traditional architectural representation in the last decades of the 19 <sup>th</sup> and 20 <sup>th</sup> centuries represented fluctuation mode between traditional and modern concepts	Fluctuation
	Whenever a mindset is dominant, there is a transitionary process	Transition
	Synthesis is the most common point of compromise between modern and traditional architecture	Synthesis
	Every generation has a dominant character	Dominant characteristics
Human	Balancing modernism and traditionalism need institutional centrality	Institutional centrality
	A transitionary process needs a transitional architect	Transition
	In-between characters prefer more freedom design principles	In-between personality
	A few figures opposed the dominant feature of each generation	Opposing characters
Place	The imposing factors are more important than the identified critical words for traditionalism and modernism	Imposing factors of Time and Place
	Areas like <i>Taksim, Alameda</i> and <i>Areeiro</i> appeared as a transitional space	Transitional spaces
	Vacant spaces followed the necessities of time in the 20 <sup>th</sup> century, mostly modernism	Modernism- Tabula Rasa

Figure C-2- Research findings- coding based on Identification of modernism and traditionalism

### Final Synthesis – From The Triangle to the Spectrum-Oriented Cities

Based on studies on the T-H-P triangle, it is widely believed that a city tends to develop based on the spectrum model. Therefore, it is advised that to avoid the proximity of the two most traditional and modern existence in the future, the cities follow a gradient spectrum of modernity and traditionalism principles. It has to be noted that the positioning of the layers should not be imperative but self-regulatory in the long term. The framework has to be in a way that, due to cities' inherent tendency to represent a spectrum model, their positioning toward modernity and traditionalism has to be dynamic in the sense that in the long term, the neighbourhoods could find the most optimized pattern for the future development themselves. Regarding the matter of time, the linear impact might imply their tendency to modernity not in a modern architectural discourse but in a way to react to the state-of-art production of the time and the zeitgeist. However, it is strongly believed that a cyclic matter of time also plays a critical role in generating a new understanding of traditionalism, whether as a reaction to criticism of what is contemporary, a nostalgic sense of history toward stylistic perception embedded inside the neo-liberal political systems, the growing importance of historical preservation and new perceptions of

traditionalism. That is why a city can also transform in favour of specific traditionalism, not in its highest degree, because of the cyclic matter of time. Also, individualism is a catalyst to generate ample representations of traditional spaces. Therefore, it is impossible to filter any superficial artefact or anything considered stylistic, trend and historical fetishization since traditional space is a concrete space with all collective attributes filled with subjectivity, and any utopic purification will not function. On the brighter side, understanding the city as a fragmented zone inside this spectrum generates diverse centralities for various groups, empowering the residents when they experience their surrounding space as a representative space. When the residents feel that they have their own space of representation, they contribute more to the participatory activities. A more peaceful approach is predicted inside such a framework with a less discriminatory impression toward the space. Besides the preservative aspect of such a perspective, the different vital centres attract visitors with different interests.

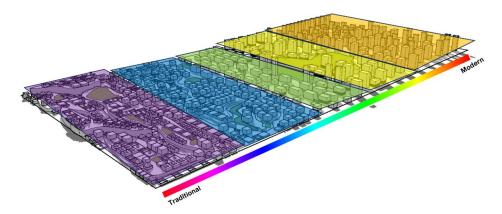


Figure C-3- A Dynamic city based on the Gradient Layers of a Spectrum

Nonetheless, any self-regulatory system needs to face at least a central institutional regulator in the first place, with probably political power. This is the time to introduce the role of the human vertex. These institutional regulators comprised architects, planners, municipalities and higher-level politicians depending on the political system. They are responsible for designing sustainable development for all types of residents.

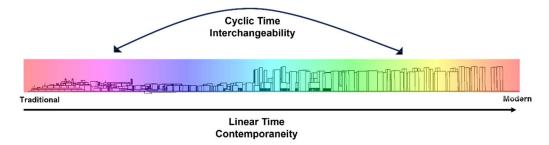


Figure C-4- A Section from a Spectrum Understanding a City

The universities are responsible for identifying a spectrum of ideas toward traditionalism and modernity, identifying the students with their orientation toward each side of the spectrum and training them based on their individualistic tendencies. Institutions like municipalities are responsible for a more sustainable appropriation of space for all neighbourhoods.

Their cooperation with real-state agencies could provide a better structure as the advising institutions for the individuals to suggest the most suitable neighbourhood based on their interest and orientation regarding traditional and modern spaces. The most crucial problem in this regard could be the subjective understanding of the public respective to modern and traditional elements in architecture and urbanism. The thesis contributed to creating a bridge between the public and the noblemen by making these notions feasible.

### The Future of Ruptures in the Model

Does the approach toward ruptures seem to be imperative? It was concluded that the cities tend to follow a spectrum model. However, there are ruptures inside this model. It is not supposed to investigate these ruptures in a normative way. Ruptures might have different characters in the neighbourhoods. They are either a historical heritage, strong centres, private residential settlements, office buildings, slums and so forth. Due to the determinism of time, it is almost impossible for them not have a character respective to traditionalism and modernity. For this reason, they obtain a character inside the spectrum of modernity and traditionalism. However, if their character are different from their surroundings, the ruptures might face several scenarios:

- If they are not listed inside the list of preserved monuments, they will face the influence of surroundings. In the long time, they will receive the impact of the surroundings buildings. They either will be demolished and replaced by a new project, or they will be reused based on the imposition of time, human and place. They are less likely to remain as they are.
- If the ruptures represent as a strong centre, public space and a monument, They will influence the surroundings. Two case scenarios can take place in this regard. First, depending on the affect of the ruptures, the neighbourhood's character might transform and adapt toward the them. Second, a microscopic spectrum model between them and surroundings could form.
- Ruptures can be located on the intersection or the border of neighbourhoods. In that case, they can function as transitional spaces.

Hence, there is no obligatory force to behave on the ruptures. A self-regulatory spectrum model can create different case scenarios for them based on their character and position inside the neighbourhoods.

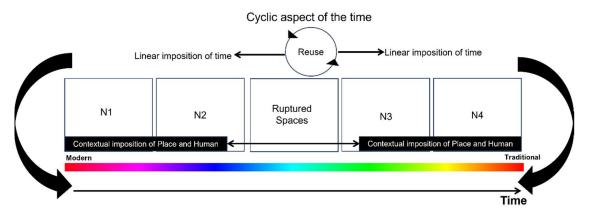


Figure C-5- The Future of Ruptures in the Spectrum model of the city

### Research constraints

The thesis attempted to synthesise the theoretical data with the in-field observation of both case studies respective to architectural history and theory. Nevertheless, future research is needed to fill the remaining gaps. For instance, the socio-economic factors were not the priority for observing traditionalism and modernity more precisely. The formation of social classes based on the economy could be a critical point for future studies to understand whether it is possible to identify a biunique correspondence between the classes and layers between traditional and modern zones.

Based on the derived keywords, the thesis provided a framework for creating a data analysis of the global understanding of traditional and modern architecture and urbanism. This abstract database can be used for further software development on analysing urban spaces, predicting their orientation through time, planning, and revising for more sustainable urban development. For instance, a plugin for predicting and designing the urban space could be the most feasible subject for intersecting emergent urbanism and software development. However, the globality of these terms can lose meaning in every case study as the cities might have their subjective terms defining traditional and even modern architecture. That is why database localisation needs to become a necessary factor.

The time to narrow down such a broad subject from designating the proposal to publishing the latest version could be considered a primary restriction. Moreover, the restriction of recent years due to the pandemic delayed the research process, such as in-field observations and conducting interviews. In the interview phase, only ten experts answered from three hundred and thirty-three invitation emails, generating a sampling bias. Also, face-to-face discussions were not possible during the pandemic period as the critical moment to form the theoretical framework. Nevertheless, putting all the problems aside, the thesis aimed at introducing a new approach to looking at the problematic encounter between traditionalism and modernity. The utilised contents were the tools to reduce all the possible restrictions and problems facing the thesis.

### **Epilogue**

The central aim of the thesis is to know whether it is possible to balance the clash between traditionalism and modernism. Since investigating the research problem was not probable globally due to its broad and subjective essence, two case studies were selected as a central focus for comparative analysis. Observation of traditional and modern spaces generated a possible research triangle such as Time, Place and Human, known as the triads of spatiality. Besides the historical evolution of cities, noblemen such as architects and planners must be vital to reach a precise notion of balancing modernism and traditionalism. For this reason, the 20<sup>th</sup> century is a time frame witnessing a more rigorous dichotomy between modern and traditional discourses in societies.

One can claim that there had been a possible oriental vs occidental direction of traditionalism and modernism based on the global literature review. However, no intense shreds of evidence supported that these directions would have been applied microscopically. In other words, cities do not necessarily follow a global spectrum of traditionalism and modernity. There is no clear evidence to explain the process of such application other than the formation of contiguous lands from the early civilisations in the middle east toward the west. Also, over time the voluntaristic mode of production disrupts any small proofs of such a claim. The ruptures are reproduced to interrupt this conceptualised spectrum between the modern and traditional layers throughout the cities. Nevertheless, the analysis of the thesis's time, human and place chapters indicates that the case studies inherently follow a spectrum model of traditionalism and modernism. At least, the situation occurred in the selected zones for the thesis.

The analysis of Istanbul and Lisbon as the research case studies in time exhibited the cyclic and linear manner of time respective to traditionalism and modernism. Consequently, transitional instances of modernism and traditionalism are perceived in fluctuation or synthesis. In contrast, the matter of humans illuminated the dominant, oppositional, mediator and transitional factors of generations, which approves and even amplifies the findings in a matter of time. Given the consideration of the Place, it is possible to conclude that districts are either the dominant representative of modernism, traditionalism or even the transitional character, which generates a model like a spectrum deterministically. The development toward the north empowers the vital link between modernism and the tabula-rasa vision toward Place.

A comparative investigation of both cities might indicate that instead of measuring the extent of modernism and traditionalism, understanding the scale of difference might sound more reasonable since, in Istanbul, the difference level between traditionalism and modernism is more than in Lisbon as there are more diverse subjective and objective notions reflecting the image of traditional spaces. Thus the convergence and divergence of modernism and traditionalism in different cities could be a vital subject for future studies based on this argument.

It is widely accepted that traditionalism and modernism reached diverse points of compromise over time. However, these short-term moments had to be converted into a continuous understanding of the city as a living organism. Hence, mutualism in architectural and urban discourse could be the roadmap for future cities through the adaptive reuse of the buildings and, in a broader image, the urban fabrics.

It is utterly believed that based on the studies, the observed placement of neighbourhoods fragmented as units or zones in this spectrum deradicalises the traditional and modern layers as much as possible. The deradicalised traditional and modern spaces will affect the city as a living organism. As mentioned in the beginning chapter, a link was made between the T-H-P triangle and Lefevbrian (social) space triads. Therefore, one can conclude that the spectrum theory facilitates the mutualism between the traditional and modern layers. As an outcome, such space contributes to deradicalised social spaces promoting the idea of peaceful societies. Since these units can function in a determinist and voluntarist cycle, the cities will be depoliticised.

The theoretical frameworks in this thesis could provide fundamentals to predict the dynamism of the cities based on the cyclic and fluctuational model of tradition and modern layers. It also contributes to sustainable architecture. To achieve this goal, humanistic centralities such as academic architecture schools seem necessary to educate the spectrum of architects and planners. Furthermore, the state's role must be critical to regulate urban dynamism. The political institutions could promote social equality based on the gradients of ideas depolarising and deradicalising traditionalism and modernism.

### **Notes**

- <sup>1</sup> Külliye literally means the complex and in Turkish Ottoman architecture is a complex consisting of a mosque, madrasa, soup kitchen, tomb, library, bath, soup kitchen, (da-rüşşifa) caravanserai, bazaar, school, hospital, lodge, and zawiya buildings. These spaces formed the urban units of Ottoman cities. For extended information see the definition in Britannica encyclopedia: https://www.britannica.com/art/kulliye
- <sup>2</sup> Mimar Sinan (1490-1588) is one of the greatest masters of Ottoman empire as a forefather of the Ottoman architecture building diverse mosques all over Istanbul. His works are well-known for identifying the principles of the Ottoman architecture later on in 19<sup>th</sup> century. For extended information see: *Kuran, A. (1986)*.
- <sup>3</sup> With an Arabic root of Waqf Vakif means literally the foundation. Ottoman vakifs were multi-purposed establishment serving social, economic and administration services, land administration was crucial to Ottoman state that state acquired most of the state revenue from land incomes. See: Gürbüz, M. V. (2012).
- <sup>4</sup> Tanzimat (Reorganisation) started in 1839 and ended in 1876 with the first constitutional era the aim was to modernisation, desiring to consolidate the social and political foundations of the Ottoman Empire
- <sup>5</sup> The treaty officially settled the conflict that had originally existed between the Ottoman Empire and the Allied French Republic, British Empire, Kingdom of Italy, Empire of Japan, Kingdom of Greece, and the Kingdom of Romania since the onset of World War I The treaty delimited the boundaries of Greece, Bulgaria, and Turkey
- <sup>6</sup> historical process along which the Christian kingdoms of the Iberian Peninsula sought to dominate the region during the Al-Andalus period. This process took place between 718 or 722 (probable date of the Battle of Covadonga, led by Pelagius of Asturias) and 1492, with the conquest of the Emirate of Granada by the Christian kingdoms. The progressive control of the peninsula made possible the foundation of new Christian kingdoms, such as the Kingdom of Portugal and the Kingdom of Castile, precursors of Portugal and Spain for Extended information see: https://www.britannica.com/event/Reconquista
- <sup>7</sup> Synthetic a priori is a synthetic judgment or proposition that is known to be true on a priori groundsspecifically: one that is factual but universally and necessarily true.
- <sup>8</sup> The etymology of the term "Human" could partially root in Latin and French with words *hūmānus* in Latin and *humain* in French. The general definition of the term belongs to the species *Homo sapiens* or other (extinct) species of the genus *Homo*. In the thesis, the term is commonly used to specify the city based on the social class of the Public and the presence of noblemen like architects, planners and politicians. Nevertheless, to avoid the broad context of this term, the thesis aims at only focusing on humans as the generations of architects and urbanists in a separate chapter as one of the three variable of the research.

- <sup>9</sup> Western scholarly discipline of the 18th and 19th centuries that encompassed the study of the languages, literatures, religions, philosophies, histories, art, and laws of Asian societies, especially ancient ones. Such scholarship also inspired broader intellectual and artistic circles in Europe and North America, and so Orientalism may also denote the general enthusiasm for things Asian or "Oriental." For extended definition see: https://www.britannica.com/science/Orientalism-cultural-field-of-study & Said,E (1978) Orientalism.
- <sup>10</sup> For detailed info on neo-traditionalism and neo urbanism see: Ellis, C. (2002).
- <sup>11</sup> The aim in this chapter was only to identify the modern architectural philosophy from different perspectives and not to write the historiography. For the complete historiography of the modernism specifically the developments in United States, United Kingdom and Japan, see: Benevolo, L. (1977),Frampton, K. (1985), Curtis, W. J. (1996),Collins, P. (1998). Tournikiotis, P. (2001). Lefaivre, L., & Tzonis, A. (2004).
- <sup>12</sup> Euclidean zoning is the separation of land uses by type—residential, commercial, retail, industrial, etc.—each into their own zones or areas within a given city for detailed info see: Hall, E. (2006).
- <sup>13</sup> Trialectics is a concept invented by Lefebvre (dialectics of triplicety) and further developed and applied to space by Edward Soja\_(trialectics). Henri Lefebvre distinguishes three types of spaces within the Trialectics of spatiality known as "The perceived, Conceived and Lived space" For detailed info see Lefevbre (1980).
- <sup>14</sup> Based on these criteria, there was a third case study with a history of intersections of modern and traditionalism. Sarajevo, known as the intersection of East and West, hosted diverse ethnicities such as Bosniak, Serbs and Croats. The city was under the rule of the Yugoslavian republic, and after the independence statement of Bosnia, this city went under civil war, indicating the shadow of urban fabric magnifying the clash between modernity and traditionalism. Although the city deserved enough to be the other case study, to avoid the broadness of the research, Sarajevo was omitted from the list, and at this moment, the research only involves two Eastern and Western sides of Europe.
- <sup>15</sup> To know more about the socio-political developments in that era see: Rosas, F. (2001).
- <sup>16</sup> The 28 May 1926 coup d'état, sometimes called 28 May Revolution or, during the period of the authoritarian Estado Novo (English: New State), the National Revolution (Portuguese: *Revolução Nacional*), was a military coup of a nationalist origin, that put an end to the unstable Portuguese First Republic and initiated 48 years of authoritarian rule in Portugal.. In 1925 there were three failed coup attempts: on 5 March (led by Filomeno da Câmara); 18 April (inspired by Sinel de Cordes and led by Raul Esteves and Filomeno da Câmara); and 19 July (led by Mendes Cabeçadas) see: Rosas, Fernando (2007).
- <sup>17</sup> For detailed info on Portuguese World Exhibition in 1940 See: Gori, A. (2018).
- <sup>18</sup> The Cultural Initiatives Art and Technique (ICAT) group was an organisation created by a collective of politically committed architects from Lisbon. The group was founded in 1946 and its activity continued into the 1950s. Counting on active elements of the opposition to the New State Regime, ICAT aimed to defend and disseminate professional points of view related to "the problems of the social and economic context of the production of architecture"... For extended details See: Portas, (1973), pp 733-736.
- <sup>19</sup> The Organisation of Modern Architects (ODAM) was an organisation created by a group of architects from Porto, which existed from 1947 to 1952.ODAM aimed to defend and disseminate the professional points of view of modern architecture. This organisation was responsible for the elaboration of an exhibition to the Municipal Chamber of Porto (1949) and for an Architecture Exhibition held at the Ateneu Comercial do Porto (1951).
- <sup>20</sup> The idea of a survey of Portuguese regional architecture was based on an idea by the architects José Huertas Lobo and Francisco Keil do Amaral published in 1947 in the magazine Arquitectura: Revista de Arte e Construção edited by the ICAT group. The first implementation initiative took place in 1949, on the initiative of the National Union of Architects, then under the presidency of the architect Francisco Keil do Amaral, and whose direction also included the architects Inácio Peres Fernandes, Dário Vieira and João Simões, together with the Instituto de Alta Cultura, without obtaining any results. For Detailed info see: Marat-Mendes, T., & Cabrita, M. A. (2016).

<sup>&</sup>lt;sup>21</sup> Concorso Internazionale di Scuole di Architettura", Casabella-Continuità, Milão, n. 201, 1954.

 $<sup>^{22}</sup>$  For more specific information on the socio-political developments of Portugal in 1960s, See: *Arenas, F. (2011).* 332

- <sup>23</sup> Marcelista Spring designates the initial period of Marcelo Caetano 's government , between 1968 and 1970 , in which a certain social modernisation and political liberalisation took place, the "Marcelista Spring", creating the expectation of a true reform of the regime in Portugal , which it didn't happen. Marcelo Caetano was chosen to succeed António de Oliveira Salazar in September 1968, after he suffered a stroke that made it impossible for him to continue to serve as president of the council of ministers. See: https://ensina.rtp.pt/explicador/o-periodo-do-marcelismo/
- <sup>24</sup> The area chosen to house the enclosure was the eastern edge of the city along the Tagus River. Several pavilions were built, some of which are still at the service of the inhabitants and visitors, integrated in the now designated Parque das Nações, highlighting the Oceanarium (the largest aquarium in the world with the reproduction of 5 different oceans and numerous species of mammals and fish, by the architect Peter Chermayeff) a multipurpose pavilion (the Atlantic Pavilion, by the architect Regino Cruz, later renamed Altice Arena) and a transport complex with metro and rail links (Estação do Oriente, by the architect Santiago Calatrava).
- <sup>25</sup> A Muslim school or house of Islamic studies. For the sources in the Ottoman architecture See: *İhsanoğlu, E.* (2020).pp. 118-163.
- <sup>26</sup> Turkish bath is a type of steam bath or a place of public bathing associated with the Islamic world. It is a prominent feature in the culture of the Muslim world and was inherited from the model of the Roman *thermae*. See: Pasin, B. (2014).
- <sup>27</sup> Balyans was a prominent Armenian<sup>[1]</sup> family in the Ottoman Empire consisting of court architects in the service of Ottoman sultans and other members of the Ottoman dynasty during the 18th and 19th centuries. For five generations, they designed and constructed numerous major buildings in the Ottoman Empire, including palaces, mansions, konaks, kiosks, yalis, mosques, churches, and various public buildings, mostly in Constantinople (present-day Istanbul). See: *Wharton, A. (2015)*.
- <sup>28</sup> Turkish Levantines, refers to the descendants of Europeans who settled in the coastal cities of the Ottoman Empire in order to be engaged in trade especially after the Tanzimat Era. Their estimated population is around 1.000.
- <sup>29</sup> The book "Usûl-i Mi'mari Osmani" (Ottoman Architecture), compiled in 1873 for the Vienna World Exhibition, played in the establishment of architectural theory, and focuses on the rhetorical traces of imperial discourse within the framework of nineteenth century Ottoman modernisation. In this context, it is clear that *Usûl-i Mi'mar -i Osmani* deserves attention in debates on contemporary architectural texts, as it is one of the first discourses to develop references to identity and establish a link between cultural identity and architecture
- <sup>30</sup> The Young Turk Revolution (July 1908) was a constitutionalist revolution in the Ottoman Empire. The Committee of Union and Progress (CUP), an organisation of the Young Turks movement, forced Sultan Abdul Hamid II to restore the Ottoman Constitution and recall the parliament, which ushered in multi-party politics within the Empire. From the Young Turk Revolution to the Empire's end marks the Second Constitutional Era of the Ottoman Empire's history. See: *Ahmad, F. (1968)*.
- <sup>31</sup> "Community and Society", are categories which were used by the German sociologist Ferdinand Tönnies in order to categorise social relationships into two dichotomous sociological types which define each other. Max Weber, a founding figure in sociology, also wrote extensively about the relationship between Gemeinschaft and Gesellschaft. See: Tönnies, F. (2012).
- <sup>32</sup> Alafranga and Alaturca are musical and cultural concepts specific to the Ottoman Empire and its people. The terms describe a distinction between Western culture and Eastern culture in the Balkans. They are also associated with the old-fashioned (alaturca) and the modern (alafranga). The labels are now considered outdated, but are useful in understanding Ottoman and Turkish cultural history
- <sup>33</sup> Shariah is the body of Islamic religious law . The term means "path to the source" or "route to the source [of water]", and is the legal framework within which the public and private aspects of the life of the adherent of Islam are regulated, for those who live under a system based on *fiqh* (Islamic principles of jurisprudence) and for Muslims living outside its domain. For more extended definition see: *Johnson, T., and Sergie, M. A.* (2014).
- <sup>34</sup> For Eldem, the main achievement of the seminars was the discovery that the Turkish house had a close affinity with modern architecture. It was established "that its characteristics were contained in a wide range of housing styles and architectural principles starting from those of the ancient Chinese and extending right down to those of such modern masters as Frank Lloyd Wright and Le Corbusier". See: Sedad H. Eldem, (1973).

- <sup>35</sup> The İnönü stadium is demolished and replaced by the Vodafone arena in 2017. Also, Taşlik Coffee House is demolished in 1980s and there are no traces of the work nowadays
- <sup>36</sup> The establishment of the opposition Liberal Republican Party (*Serbest Cumhuriyet Fırkası*) by Ali Fethi Okyar in 1930 after President Mustafa Kemal Atatürk asked Okyar to establish the party as part of an attempted transition to multi-party democracy in Turkey. However, the first official opposition party to be elected was the Democratic Party (DP) in 1950, 5 years after the party establishment.
- <sup>37</sup> Starting at 3:00 am on the 27th of May 1960, the Turkish armed forces have taken over administration throughout the entire country. See: Dilipak, A (1991)
- <sup>38</sup> By January 1971, Turkey appeared to be in a state of chaos. The universities had ceased to function. Students, emulating Latin American urban guerrillas, robbed banks and kidnapped US servicemen, also attacking American targets. The homes of university professors critical of the government were bombed by neo-fascist militants. Factories were on strike and more workdays were lost between 1 January and 12 March 1971 than during any prior year. The Islamist movement had become more aggressive and its party, the National Order Party, openly rejected Atatürk and Kemalism, infuriating the Turkish Armed Forces. Demirel's government, weakened by defections, seemed paralyzed in the face of the campus and street violence and unable to pass any serious legislation on social and financial reform. See: *Zürcher*, *E*, *J* (2004).
- <sup>39</sup> The nation learned of the coup at 4:30 AM on 12 September 1980 the state radio address announcing that the parliament had been dismissed and that the country was under the control of the Turkish Armed Forces. According to the Armed Forces broadcast, the coup was needed to save the Turkish Republic from political fragmentation, violence and the economic collapse that was created by political mismanagement. Kenan Evren was appointed head of the National Security Council: See : Gul.(2017). Pp.153.
- <sup>40</sup> The Welfare Party (Turkish: *Refah Partisi*, RP) was an Islamist political party in Turkey. It was founded by Ali Türkmen, Ahmet Tekdal, and Necmettin Erbakan in Ankara in 1983 as heir to two earlier parties, National Order Party (MNP) and National Salvation Party (MSP), which were banned from politics. The RP participated in mayoral elections at that time and won in three cities Konya, Şanlıurfa, and Van. Their vote percentage was approximately 5%. Their popular vote increased over the years until they became the largest party under Prime Minister Necmettin Erbakan in 1996. See: Karadjis, *M. (1997). pp.19.*
- <sup>41</sup> 1971 Turkish military memorandum on 12 March is known as the "coup by memorandum", which the military delivered in lieu of sending out tanks, as it had done previously. The event came amid worsening domestic strife, but ultimately did little to halt this phenomenon.
- <sup>42</sup> Tekke is the Turkish word for the local meeting and living centre of a Sufi fraternity. The Persian equivalent, *khangah*, is commonly used in most non-Turkic contexts, while *zawiya* (Arabic) functions as a distinctively North African synonym.
- <sup>43</sup> The Han or caravanseral included cells around a courtyard, providing all the facilities the traveller needed. It consisted of a mosque, shops, stables, barn, and rooms.
- <sup>44</sup> In Turkish, Tulip period is known as Lale Devri is a period in Ottoman history from the Treaty of Passarowitz on 21 July 1718 to the Patrona Halil Revolt on 28 September 1730. This was a relatively peaceful period, during which the Ottoman Empire began to orient itself outwards. During this period, Ottoman public buildings incorporated, for the first time, elements of western European designs, leading to the foundation of Ottoman Baroque architecture in the following decade
- 45 Masonry walls built by stone or bricks.
- <sup>46</sup> An Arabic word, adopted into Turkish which is variously translated as district, quarter, ward, or "neighbourhood." It is an official administrative unit in many Middle Eastern countries. In the Ottoman Empire the mahalle was the smallest administrative entity.

### References

### Α

- Abass, F., Ismail, L. H. and Solla, M. (2016) 'A review of courtyard house: History evolution forms, and functions', ARPN Journal of Engineering and Applied Sciences, 11(4), pp. 2557– 2563
- Abu-lughod, J,(1992) 'Disappearing dichotomies: first world-third-world; Traditional-modern', *Traditional Dwellings and Settlements Review*, 3(2), pp. 7–12.
- Abu-Lughod, J. (1980). 'Contemporary relevance of Islamic urban principles (extract)'. Ekistics, pp.6-10.
- Acciai, S. (2019) 'Sedad Hakki Eldem. L'ambasciatore in incognito dell'architettura turca [Sedad Hakki Eldem. The incognito ambassador of Turkish architecture ]', Festival dell'Architettura Magazine, 47(1), pp. 71–82. doi: 10.1283/fam/issn2039-0491/n47-2019/229.
- Adigüzel, H. (2019). 'On the trail of a design: The first Istanbul project of Raimondo D'Aronco in the light of new findings Istanbul agricultural and industrial exposition', *Metu Journal of the Faculty of Architecture*, 36(2), pp. 157–182. doi: 10.4305/METU.JFA.2019.1.4.
- Ågren, R. and Wing, R. D. (2014). 'Five moments in the history of industrialised building', Construction Management and Economics, 32(1–2), pp. 7–15. doi: 10.1080/01446193.2013.825374.
- Ahmad, F. (1991). The making of modern Turkey. London: Routledge
- Ahmadjian, V. and Paracer, S. (2000). Symbiosis: An Introduction to Biological Associations.
   Oxford: Oxford University Press
- Ahmadnia, H. and Rahbarianyazd, R. (2020). 'Aesthetics of modern architecture: A semiological survey on the aesthetic contribution of modern architecture', Civil Engineering and Architecture, 8(2), pp. 66–76. doi: 10.13189/cea.2020.080204.
- Ahmad, F. (1968). The Young Turk Revolution'. Journal of Contemporary History, 3(3), pp.19-36.
- Ahunbay, Z. (2013). 'Threats to the startification and the image of the historic city-Case study:Istanbul', in Avramidou, N. et al. (eds) 5th International conference on Hazards and Modern Heritage: Importance of place. Sarajevo: CICOPBH, pp. 21–25. doi: 10.13140/2.1.2860.0001.
- Akbayar, N. (1998). Beşiktaş Tarihi, Dünden Bugüne Beşiktaş [Beşiktaş History, From Past to Present Beşiktaş]. İstanbul: Beşiktaş Belediye Başkanlığı Yayınları.
- Akbulut, F. S. (2020). Turgut Cansever'in Şehirciliği Üstüne Dilbilimsel Değiniler[Linguistic Discussion on Turgut Cansever's Urbanism]', *Idealkent*, 11(31), pp. 1699–1721. doi: 10.31198/idealkent.795485.
- Akcan, E., (2005), 'Ambiguities of Transparency and Privacy in Syfi Arkan's Hauses for the new Turkish Republic', Journal of the Faculty of Architecture (Mimarlık fakültesi Dergisi), 22(2),pp .25-49
- Akcan, E. (2001) .'Americanisation and Anxiety: Istanbul Hilton Hotel by SOM and Eldem' In Bozdoğan, S and Ü. B. Copur (Eds.), Oriental Occidental: Geography, Identity, Space, ACSA International Conference Proceedings, pp. 38–44.
- Akpinar, I. (2014). 'The rebuilding of İstanbul revisited: Foreign planners in the early Republican years', *New Perspectives on Turkey*, 50(50), pp. 59–92. doi: 10.1017/s0896634600006580.
- Akpinar, I., Erkal, N. and Bilsel, C. (2010). Osmanli Baskentinden kursellesen istanbul'a:
   Mimarlik ve kent. Istanbul [From the Ottoman Capital to the globalizing Istanbul: Architecture and the city]. Istanbul: Osmanlı Bankası Müzesi Arşivi Yayınları
- Akpınar, I. Y. (2008). 'Past for Today: Urban design as a political tool since the Prost Plan', Mimarist,29(1), pp. 61–67.
- Aktemur, A. M. (2012). 'Alexandre vallaury'nin karaköy'deki eserleri [The Works of Alexander Vallaury in Karaköy]', *The Journal of Academic Social Science Studies*, 5(8), pp. 37–74.
- Aktemur, A. M., and Arslan, M. (2006).'I. Ulusal mimarlik Akimi ve Istanbul -Karaköy'dekiİ ornekler [National Architecture Movement and examples in Istanbul-Karaköy]', Güzel Sanatlar Enstitüsü Dergisi, 16, pp1-32.

- Atilla, A. (1993) 'Şişli İlçesi[Şişli district]', in Tekeli, I. (eds.) Dünden Bugüne İstanbul Ansiklopedisi [Istanbul Encyclopedia from Past to Today]. Istanbul: Tarih Vakfi.
- Alberti, L. B. (1452). On the Art of Building in Ten Books, Translated by. Rykwert. J, Leach. N and Tavernor. R. Cambridge: MIT Press, 1988
- Alcântara, A. (2020) .'The housing of the "working classes". Lisbon's residence spaces in the late nineteenth century', Cadernos do Arquivo Municipal de Lisboa, 2(13), pp. 41–61. Available at: http://arquivomunicipal.cm-lisboa.pt/ Periodicidade semestral.
- Alexander, G. N. D. (2017). 'Caught between Aspiration and Actuality', *Journal of the Society of Architectural Historians*, 76(3), pp. 349–366. doi: 10.1525/jsah.2017.76.3.349.
- Alexander, C. (2002). The Nature of Order: an Essay on the Art of Building and the Nature of the Universe. 10th edn. Berekely, California: The Center for Environmental Structure. doi: 10.1111/j.1467-8357.2005.00619 1.x.
- Alexander, C. (1979). *The timeless way of building*. New York, Oxford University Press. http://catalog.hathitrust.org/api/volumes/oclc/3016520.html.
- Alexander, C.; Ishikawa, S. and Silverstein, M. (1977), A Pattern Language: Towns, Buildings, Construction', NewYork: Oxford University Press
- Alexander, D. and Natrasony, S. M. (2007). 'The Rise of Modernism and the Decline of Place: The Case of Surre Canada', *Building Sustainable Communities*, 38, pp. 1–35.
- Al-Lahham, A. (2014). 'Traditionalism or Traditiona-lieism: Authentication or fabrication?', *Archnet-IJAR*, 8(3), pp. 64–73. doi: 10.26687/archnet-ijar.v8i3.508.
- Allen, N. and Davey, M. (2018) The Value of Constructivist Grounded Theory for Built Environment Researchers', *Journal of Planning Education and Research*, 38(2), pp. 222–232. doi: 10.1177/0739456X17695195.
- Almeida, P,V. (1998), 'Arquitectura e Poder: representação nacional[Architecture and Power: national representation]' in Tostões, A., Wang, W., Becker, A., (eds), *Portugal: Arquitectura do Século XX[Portugal: The Architecture of the 20<sup>th</sup> century]*, Munchen / New York / Frankfurt / Lisboa: Prestel / DAM / PF, pp. 40-53. ISBN: 3791319108.
- Almeida, P.V. (1993). 'Ventura Terra' In Almeida, P.V (ed), História da arte em Portugal: a arquitectura moderna, Lisboa: Alfa, SA. V. 14 pp.74-80.
- Almeida, P.V ,Fernandes, J.M and Maia, M.H (1986) *História da arte em Portugal: a arquitectura moderna* [The histroy of art in Portugal: The modern architecture]. Lisboa: Alfa. v. 14.
- Almeida, P. V. (1970). 'Raul Lino, arquitecto moderno in Raul Lino: exposição retrospectiva da sua obra', Lisboa: fundação calouste gulbenkian.
- Almeida, R. V(1998). 'De 1976 ao final de seculo: Convergencias, Divergencias e Cruzamentos de Nivel [From 1976 to the end of the century: Convergences, Divergences and Level Crossings].' in Tostões, A., Wang, W., Becker, A. (ed.). Portugal Arquitectura do Século XX[Portugal: The architecture of the 20th century], Munchen / New York / Frankfurt / Lisboa: Prestel / DAM / PF, p. 40-53. ISBN: 3791319108.
- Almssad, A. and Almusaed, A. (2014). 'Efficient daylighting approach by means of light-shelve device adequate for habitat program in Aarhus City', International Journal of Smart Grid and Clean Energy. Doi: 10.12720/sgce, 3(4), pp441-453.
- Altan Ergut, E., Akpinar, I. Y. and Akay, Z. (2015). 'Cumhuriyet Doneminde Istabul' da Mimarlik [Architecture in Istanbul in the Republican Era', In Aydin, M. A. and Yilmaz, C. (eds) Antik Çağ'dan XXI. yüzyıla büyük İstanbul tarihi: Siyaset, Yonetim ve demografi[From Antiquity to XXI. The great history of Istanbul in the century: Politics, Management and demography]. Istanbul: İstanbul Büyükşehir Belediyesi Kültür A. Ş, pp. 558–597.
- Altinkilic, E. and Bei, G. (2020). 'Raimondo D'Aronco and the Karaköy Camii: The Case of the Lost Mosque', *Occhiali-Revista Sul Meditterraneo Islamico*, 6, pp. 44–61.
- Al Sabouni, M. (2016). The Battle for Home. TED TALKS. Available at: https://www.youtube.com/watch?v=8yqAD0MX3Zk.
- Alsaç, Ü., (2005).İkinci Ulusal mimarlık Dönemi, Modern Türk Mimarlığı [Second National Architecture Period, Modern Turkish Architecture]. Ankara: TMMOB Mimarlar Odası Yayınları
- Alves, D., Barreira, A. P., Guimarães, M. H and Panagopoulos, T. (2016). 'Historical trajectories of currently shrinking Portuguese cities: A typology of urban shrinkage'. *Cities*, *52*, 20-29.

- Aman, F. (2018). 'Urban Relationship in Turgut Cansever's Thoughts', Insan ve Toplum Bilimleri Arastirmalari Dergisi, 7(2), pp. 1240–1250.
- Andre, I., Machado, A. and Barata Salgueiro, T. (2016). 'Inovação urbana, utopia e artes. O bairro de Alvalade em Lisboa [ The urban inovation, utopia and art. The Alvalade neighborhood in Lisbon]', In Benach,N, Zaar,M.H,and Junior.M.V (eds) XIV Coloquio Internacional de Geocrítica Las Utopías y la Construcción de la Sociedad del Futuro. Barcelona, pp. 1–21.
- André, P. (2015) 'As cidades da cidade: Lisboa na primeira metade do séc. XX: nova Lisboa (1936) e Lisboa nova (1948)[ A City made of cities: Lisbon in the first half of the XX century: new Lisbon (1936) and Lisbon new (1948)]', CIEC.UNICAMP, 7(10), pp. 89–111.
- Anıktar, S. (2013). '19. Yüzyıl Batılılaşma Hareketlerinin Osmanlı Mimari Biçimlenişine Etkisi: Vallaury Yapıları Örneğ [The Effect of 19th Century Westernisation Movements on Ottoman Architectural Formation: The Example of Vallaury Buildings]', in Atmaca,T et al (eds). II. Türkiye Lisanüstü Çalışmaları Kongresi - Bildiriler Kitabı. Bursa, pp. 1205–1220.
- Antoncic, R. (2014). 'Street and playground: the domestication of play in the modern project, in Playgrounds: Reinventing the square'. Madrid: Museo Nacional Centro de Arte Reina Sofía/Ediciones Siruela.
- Antunes da Silva, J. (1999). 'Keil do Amaral, o urbanista [Keil Do Amaral, The Urbanist]', In Moita,
   I. (ed.) Keil Do Amaral O arquitecto E O Humanista [Keil Do Amaral: the Architect and the Urbanist]. Lisboa: Câmara Municipal de Lisboa: Divisão de Museus e Palácios, pp. 70–78.
- Anderson, J.M., (2000). The history of Portugal. West Port: Greenwood Publishing Group
- Andrews, B. (2010) 'Ornament and Materiality in the Work of Adolf Loos', in Goodwin, B. and Kinnard, J. (eds) 98th ACSA Annual Meeting Proceedings, Rebuilding. New Orleans, pp. 438– 445.
- Aoki, K. (1993). 'Race, Space, and Place: The Relation Between Urban Planning, and Gentrification', Fordham Urban Law Journal, 20(4), pp. 699–829.
- Appleton, J. (2018). A Avenida Almirante Reis, uma história construída do Prédio de Rendimento em Lisboa[ The Almirante Reis Avenue, a constructed history of the income buildings]' {P.h.D Thesis}. Lisboa: Instituto Superior Técnico.
- Appleyard, D. (1981). Livable Streets, Berkeley: University of California.
- Apter, D. E. (1965). *Polititics of Modernisation*. Chicago: University of Chicago Press.
- Araújo, R. (2004). Inventário do Património Arquitetónico da Baixa Pombalina', DGEMN, 21, pp. 247–255.
- Ardalan, N., and Bakhtiar, L. (1973). The Sense of Unity: The Sufi Tradition in Persian Architecture, Chicago: University of Chicago Press.
- Arenas, F. (2011). Lusophone Africa: beyond independence. Minnesota: University of Minnesota
  Press.
- Arif, B.(1933), 'Istanbulun plânı' [The Plan of Istanbul]', Mimar 3(5), pp. 155-160.
- Köynogul, A.H, (1982), 'Arif Hikmet Köyunoğlu ve Yaşamı [The life of Arif Hikmet Köyunoglu]' Mimarlık, 7, pp. 5–7.
- Armstrong, P. J. (2008) 'From Bauhaus to m- [h] ouse: The Concept of the Ready-Made and the Kit-Built House', in Clouston, P., Schreiber, S., and Mann, R. K. (eds) Without a Hitch - New Directions in Prefabricated Architecture. New Orleans, pp. 72–80.
- Arnheim, R. (1977). The dynamics of architectural form. Berkeley: University of California Press
- Arseven, C.E. (1939). 'Eski Camilerimiz Nasıl Yapılırdı? [How were the former mosques built?'. Yedigun, 320 (1): pp.7–8.
- Arû, K. A. (2012). Prof. Kemal Ahmet ARÛ Biography, ITU A|Z.
- Asatekin, G. and Balamir, A. (1990). 'Varieties of Tradition and Traditionalism', TDSR, 1, pp. 61–
- Arû, K. A. (2001). Kemal Ahmet Arû-Bir Üniversite Hocasının Yaşamının 80 Yılı [Kemal Ahmet Arû-80 Years of a University professor's Life]. İstanbul: YEM.
- Arû, K.A. (1998). Türk Kenti [Turkish City]. Istanbul:YEM.
- Arû,K.A. (1963). 'Istanbul'un Planlanmasi Nasil Yapilmalidir? [ How to Plan Istanbul}'. *Arkitekt*, 1963(313).pp.147-148.

- Aslanoğlu, İ., (1992). 'Seyfettin Arkan ve Ankara'daki Yapıları [Seyfettin Arkan and His works in Ankara]', Mimarlık, 3, pp.84-99.
- Aslanoğlu, İ. (1980). Erken cumhuriyet Dönemi Mimarlığı[The Architecture of Early Republic],
   Ankara: ODTÜ Yayını.
- Aysel, N. (2016) 'Benim Gelenegi surdurebilmem icin, Once Cagdas Olmasi Lazim [In order to continue my tradition, it must be contemporary first.]', *Mimar*, 3, pp. 63–69. Available at: www.kgsii.com.tr.
- Ayvansarayi H. E. Ali S. E., Süleyman B. E. (2001). Hadikatü'l Cevami İstanbul Camileri ve Diğer Dini-Sivil Mimari Yapılar [Hadikatü'l Cevami Mosques in Istanbul and Other Religious-Civil Architectural Buildings] (Derleyen: Ahmet Nezih Galitekin), İstanbul: İşaret Yayınları.

### В

- Baía, P. (2011). 'Appropriating modernism: From the reception of team 10 in Portuguese architectural culture to the SAAL programme (1959-74)', *Footprint*, 5(9), pp. 49–70.
- Bala, H. A. and Nafa, H. (2008). 'Cul-De-Sac', On-Site Review Streets, 19, pp. 68–72.
- Baldwin, E. (2017). 'Why Islamic 'Traditionalists' and 'Rationalists' both ought to accept Rational Objectivism', Religious Studies. Cambridge University Press, 53(4), pp. 467–477. doi: 10.1017/S0034412516000263.
- Balik, D. (2017). 'Ephemeral Transparency: Glass as a Reflective Screen and Opaque Veil in the New National Gallery', *Dearg*, 21, pp. 146–153. doi: 10.18389/dearq21.2017.08.
- Bandeirinha, J.A. (2012). Fernando Távora Modernidade Permanente. Porto:Casa da Arquitectura.
- Bandeirinha, J. A. (2011). O processo SAAL e a arquitectura no 25 de Abril de 1974 [The SAAL process and the architecture in the April 25th 1974]. Coimbra: Editora da Universidade de Coimbra.
- Banham, R. (1967). Theory and Design in the First Machine Age. 2nd ed. New York: Praeger.
- Barillari, Diana. (2010). D'Aronco architetto Ottomano: progetti per Istanbul 1893-1909; restauri, progetti, libri' [ D'Aronco Ottoman architect: projects for Istanbul 1893-1909; restorations, projects, books]. Istanbul: Suna ve İnan Kirac Vakfı
- Barreiros, M. H. (2009). 'Urban landscapes: Houses, streets and squares of 18th century Lisbon', Cultural History of Early Modern European Streets, 12, pp. 11–38. doi: 10.1163/ej.9789004172517.i-176.5.
- Barroco, S. (2012) . 'Re-interpretation of modern urban models in Alvalade's Plan', in Leme, E,M(eds), 15th International Planning history society conference. Sao Paulo, pp. 1–11.
- Barnett, J. (1982). An introduction to urban design, New York: Harper & Row.
- Barthes, R. (1988). The Semiotic Challenge. Oxford: Basil Blackwell.
- Bartolo, J , (2011). Cassiano Branco. Lisboa: Quidnovi
- Basa, I. (2015) . From Praise to Condemnation: Ottoman Revivalism and the Production of Space in Early Republican Ankara', *Journal of Urban History*, 41(4), pp. 711–738. doi: 10.1177/0096144214566957.
- Bastea, E. (2000) 'Dimitris Pikionis and Sedad Eldem parallel interpretations of Modern Architecture in Greece and Turkey', in Wells-Bowie La Verne (ed.) 88th ACSA Annual Meeting. Los Angles, pp. 273–278.
- Batty, M., and Longley, P. (1994). Fractal cities: a geometry of form and function. London: Academic Press.
- Batur, A. (2010) . 'Dönemi Bağlamında Emin Onat ve Mimarlığı' 100 Yıl'da İki Mimar: Sedad Hakkı Eldem – Mehmet Emin Onat [Emin Onat and His Architecture in the Context of His Period, Two Architects in 100 Years: Sedad Hakkı Eldem – Mehmet Emin Onat]', İstanbul :TMMOB Mimarlar Odası Büyükkent Şubesi
- Batur, A. (2007). 'Galata and Pera 1 A short history, urban development architecture and today',
   ARI Bulletin of the Istanbul Technical University, 55(1), pp. 1–10.
- Batur, A. (2006). '2Türkiye Mimarlığında "Modernite" Kavramı Üzerine [On the Concept of "Modernity" in Turkish Architecture]'. Mimarlık, (329), pp.50-53.

- Batur, A. (2005). A Concise History: Architecture in Turkey during the 20th Century, Ankara: Chamber of Architects of Turkey.
- Batur, A. (2004). 'Geç Osmanlı Mimarlığında Betonarme Yapım Tekniği [Reinforced Concrete Construction Technique in Late Ottoman Architecture]', *Ulusal Yapı Malzemesi Kongresi ve* Sergisi (5-6 Ekim 2004),İstanbul,2(1), pp.14-28.
- Batur, A. (1994) 'D'Aronco, Raimondo Tommaso, Dünden Bugüne İstanbul Ansiklopedis i[D'Aronco, Raimondo Tommaso', In Tekeli, I (ed).,Istanbul Encyclopedia from Past to Present J.,Volume 2, Istanbul: Kültür Bakanlığı ve Tarih Vakfı, pp.550-551.
- Baudelaire, C. (1970[1859]). The Painter of Modern Life and Other Essays. Translated by Mayne, J, London: Phaidon.
- Baudrillard, J. (1987). 'Modernity', Canadian Journal of Political and Social Theory, 12, pp. 63–72.
- Bayer, H., Gropius, W., Gropius, I. and Barr Jr, A. H., (1984) Bauhaus, 1919 1928. London: Secker & Warburg.
- Bayindar, S. (2007), 'Atatürk Dönem İnde İstanbul'un İmarı Ve Henrİ Prost Planının Basındaki Yankıları (1936- 1939) [Reconstruction of Istanbul in the Atatürk Era and the Press Echoes of the Henri Prost Plan (1936-1939)], *Erdem*, 16(48), pp. 109–156.
- Baysun, M. (2011). 'Mustafa Reşîd Paşa'nın Siyasî Yazıları' . *Tarih Dergisi* , 13 (17-18) , 175-190 . Retrieved from https://dergipark.org.tr/tr/pub/iutarih/issue/9591/119683
- Beaujour, E. K. (1988). 'Zamiatin's We and Modernist Architecture'. The Russian Review, 47(1), pp.49-60.
- Behar, C. (2003). A neighborhood in ottoman Istanbul: Fruit vendors and civil servants in the Kasap Ilyas mahalle, Albany: SUNY Press.
- Bernstein, S. (1952). 'The First International and the Great Powers'. Science & Society, 16(3). pp.247-272.
- Bilsel, C. (2015) .'The idea of the modern city and the planning of Istanbul from the late Ottoman period to the republic', in Coskun, Y. (ed.) History of Istanbul from Antiquity to 21st. Istanbul: ISAM, pp. 496–634.
- Beja, A. (2009) .'Alvalade and Areeiro Neighbourhoods From Spatiality To Significance', in Qu,L, Yang,C, Hui,X and Sepulveda,D (eds). The 4th International Conference of the International Forum on Urbanism, Delft, IOFU, pp. 583–590.
- Bektaş, C. (1979), Mimarlık Çalışmaları [Architectural works], Ankara: Yaprak Kitabevi.
- Bektaş, C., (2001).'Mimarlıkta Elestiri [The critics on architecture]', Literatür Yayınları, 64, pp-18-20.
- Benevolo, L. (1971[1960]). History of modern architecture, Translated by Landry.H.j, Volume 2-, Cambride-Massachusetts: MIT press.
- Berkoz, L. (1996). Metropoliten degisim surecinde Istanbul kent merkezi[Istanbul city center in the process of metropolitan change]. In Akkal ,L (eds) Istanbul 2020 metropolun gelecegine yonelik oneriler sempozyumu. Istanbul:ITU.
- Berman, M. (1996). 'The Transportation Effects of Neo-Traditional Development'. *Journal of Planning Literature*, 10(4), pp.347-36.
- Berthier, S. (2015) .'Timber in the buildings of Jean Prouvé: An industrial material', *Construction History*, 30(2), pp. 87–106.
- Blasingame-Custer, J. (2007) 'New Urbanism and Euclidian Zoning: Can They Co-Exist?', *Land Use Clinic*, 17,pp. 1–6.
- Bletter, R. H. (1978), Expressionist Architecture by Wolfgang Pehnt', *Journal of the Society of Architectural Historians*, 37(2), pp. 131-133.
- Boake, T. (2019) .Arch 172: Developments in Concrete Construction. United states: University
  of Waterloo. Available at: https://www.youtube.com/watch?v=-BSDiLPu-gA.
- Bordeleau, A. (2009). 'Charles Robert Cockerell's architecture and the language of ornaments', *Journal of Architecture*, 14(4), pp. 465–491. DOI: 10.1080/13602360903119017.
- Borges, J. C. and Marat-Mendes, T. (2021) 'Conversa com Francisco Silva Dias Sobre o Plano de Urbanização de Chelas[Conversation with Francisco Silva Dias About the Urbanisation Plan of Chelas]', Cidades, 41, pp. 1–23. doi: 10.15847/CCT.20501.
- Bornovalı, S. (2016). 'An Italian Architect's First Visit to Ankara: Giulio Mongeri 1897', Journal of Ankara Studies, 4(2), pp. 131–157.
- Bourdon, V. (2019). 'Does the Homogeneous City Belong to the Past ?', 4(3), *Urban Planning*,pp. 315–325. DOI: 10.17645/up. v4i3.2009.

339

- Boyer, C. (1996). The city of collective memory. Its historical imagery and architectural entertainments, Cambridge Massachusetts:The MIT Press.
- Bozdoğan, S., (2013). 'Residential architecture and urban landscape in İstanbul since 1950'. In:
   P. Pyla, ed. Landscapes of development: The impact of modernisation discourses on the physical environment of the Eastern Mediterranean. Cambridge, MA: The Aga Khan Program, 118–141
- Bozdoğan, S., and Akcan, E. (2012). Turkey: Modern architectures in history. London:Reaktion Books.
- Bozdoğan, S., Özkan S.and Yenal, E., (2005) ,Sedad Eldem, İstanbul, Literatür Yayıncılık.
- Bozdoğan, S. (2002) *Modernism and nation building: Turkish architectural culture in the early republic*. Seattle and London: University of Washington Press. doi: 10.5860/choice.39-3781.
- Bozdoğan, S. and Kasaba, R. (1997) Rethinking modernity and national identity in Turkey.
   Washington: University of Washington Press.
- Bozdoğan, S. (1996). 'Vernacular Architecture and Identity Politics: The Case of the "Turkish House", Traditional Dwellings and Settlements Review, 7(2), pp. 7–18. doi: http://www.jstor.org/stable/41757194.
- Bozdoğan, S. (1987) .Sedad Eldem: Architect in Turkey. Singapore/New York: Concept Media/ Aperture.
- Bozkurt, T.(2012). 'German Architects in the Early Republican Period of Turkish Architecture', in Schönig,C, et al. (eds.), *Türkisch-deutsche Beziehungen: Perspektiven aus Vergangenheit und Gegenwart[Turkish-German Relations: Past and Present Perspectives]*, Berlin: De Gruyter, pp. 259-270.
- Bradely, B. H. (1995). 'Industrial modernism: Architecture and Ideology', *Journal of the Society of Architectural Historians*, 54(4), pp. 153–157.
- Braudel, F. (1983). On History, Chicago: University of Chicago Press.
- Breuer, M, (1934), 'Where Do We Stand?'. In Buildings and Projects, 1921–1961, translated by Jones, C (1962), New York: Praeger.
- Brites, J. (2017). 'Estado Novo, arquitetura e "Renascimento Nacional" [Estado Novo, architecture and the "National Renaissance"]'. Revista de Pesquisa em Arquitetura e Urbanismo, 15(1), pp. 100–113.
- Brzezicki, M. (2019). 'The architectural design of light-permeable facades—a summary of recent trends and observations'. *Czasopismo Techniczne*, 12, pp 5-30.
- Brown, R. and Maudlin, D. (2012). 'Concepts of vernacular architecture', in Crysler, G. C., Carins, S., and Heynen, H. (eds) *Architectural Theory*. California: SAGE, pp. 340–355.
- Bryson, J. (2008). 'Dominant, emergent, and residual culture: The dynamics of organisational change', Journal of Organisational Change Management, 21(6), pp. 743–757. doi: 10.1108/09534810810915754.
- Buck-Morss, S., (2002). Dreamworld and catastrophe: the passing of mass utopia in East and West. Cambridge Massachusetts, MIT Press.
- Burkhardt, T. (1967). Sacred art in East and West: its principles and methods. London: Perennial Books.
- Burnak, T. (2021). '1900'Da Doğu'nun Art Nouveau Üslubu: Istanbul Ve Bakü Mimarı Örnekleri Üzerinden İnceleme[Art Nouveau Style of the East in 1900: Examining the Architects of Istanbul and Baku]'. Karadeniz Uluslararası Bilimsel Dergi, 1 (49), 1-30. DOI: 10.17498/kdeniz.843447
- Buttimer A,(1993). Geography and the Human Spirit. Baltimore: Johns Hopkins University Press.
- Byrne, G., Nunes, E. É. N. and Luzio, L. F. (2007) .'Entrevista com o Arquitecto Gonçalo Byrne[ interveiw with the architects Goncalo Byrne]', *Revista de Historia de Arte*, 4, pp. 297–307.

### C

- Çağlayan, M. (2020). 'Beşiktaş'ın 19. Yüzyıldaki Kentsel Dönüşümüne Bir Bakış [A Look at Beşiktaş's Urban Transformation in the 19th Century]', Artuklu Human and Social Science Journal, 5(1), pp. 33–52.
- Calado, M. and Ferreira, V. M. (1992) Lisboa freguesia de Santo Estevão (Alfama). Lisboa: Contexto Editora.

- Calado, M. and Ferreira, V. M. (1991) Lisboa freguesia de Graça. Lisboa: Contexto Editora.
- Caldas, N. C. (2020) .'Olivais Norte Residential Tower from modern debate to the demands of housing', Estudo Previo, 2(17), pp. 1–6.
- Caldas, J. V. (1998). 'Cinco Entremeios sobre o Ambiguo Modernismo[Five Intermediates About Ambiguous Modernism]', in Tostões, A., Wang, W., Becker, A., (eds.), *Portugal: Arquitectura do Século XX[Portugal: The architecture of the 20th century]*, Munchen / New York / Frankfurt / Lisboa, Prestel / DAM / PF, pp. 40-53. ISBN: 3791319108, pp. 23–32.
- Caldas, J. V. (1997). Porfirio Pardal Monteiro-Arquitecto [Porfilio Pardal Monteiro: The Architect].
   Lisboa: Associação dos Arquitectos Portugueses.
- Calvo, D. M. (2015). 'A génese traumática do património em Lisboa: símbolos e representações urbanas nos bairros típicos depois do terremoto de 1755[The traumatic genesis of heritage in Lisbon: symbols and urban representations in typical neighborhoods after the 1755 earthquake]', Construction politique et sociale des Territoires, 4, pp. 13–30.
- Camarinhas, C. T. F. (2011) .'The construction of modern scientific urban planning: Lisbon under French urbanisme influence (1904-1967)', *Planning Theory and Practice*, 12(1), pp. 11–31. doi: 10.1080/14649357.2011.546667.
- Cambridge dictionary. (n.d.). *Culture*. In Cambridge dictionary. Retrieved September 19, 2020, from: https://dictionary.cambridge.org/dictionary/english/culture
- Campbell, M. (2005). 'What tuberculosis did for modernism: The influence of a curative environment on modernist design and architecture', *Medical History*, 49(4), pp. 463–488. DOI: 10.1017/S0025727300009169.
- Can, C. (1995). 'İstanbul'da Gayrimüslim Mimarlar: Levantenler, Ermeniler [Non-Muslim Architects in Istanbul: Levantines, Armenians]'. *Arredamento Dekorasyon*, 6, pp.92-97.
- Candan, A. B. and Kolluoglu, B. (2008). 'Emerging spaces of neoliberalism: A gated town and a public housing project in Istanbul', *New Perspectives on Turkey*, 39, pp. 5–46. doi: 10.1017/s0896634600005057.
- Cansever, T.(2012), Kubbeyi Yere Köymamak [Not Putting the Dome on the Ground]. Istanbul: Timaş.
- Cansever, T. (1997). İslam'da Şehir ve Mimari [City and Architecture in Islam], İstanbul: İz Yayınları.
- Cansever, T. (1992). Şehir ve mimari üzerine düşünceler [Reflections on the city and architecture]. İstanbul: Ağaç Yayıncılık.
- Cansever, T. (1960). *Modern mimarinin temel meseleleri* [Fundamental issues of modern architecture]. Istanbul: İstanbul Üniversitesi.
- Cardoso, A., and Maia, M. H. (2015). 'Tradition and modernity: The historiography of the survey on regional architecture'. In M. Maia & M. Simon (Eds.), *Approaches to Modernity*, Porto: CEAA Centro de Estudos Arnaldo Araújo da CESAP/ESAP. Retrieved from: http://hdl.handle.net/10400.26/19885,pp. 107-119.
- Carmichael, B. T. (2011) .'When Modern Becomes Historic: Preserving the Modernist Building Envelope', *Journal of architectural technology*, 28(3), pp. 1–8.
- Carrauters, D.B, K. (1986). 'Architecture is Space the Space-Positive Tradition', *Journal of Architectural Education*, 39(3), pp. 17–23. DOI: 10.1080/10464883.1986.10758396.
- Carvalheira, R. (1908). 'Tumulo Monumental do Visconde de Valmor: Projecto do arquitecto Alvaro Machado[Monumental Tomb of the Viscount of Valmor: Project by the architect Alvaro Machado]', A Arquitectura Portuguesa, 5(1), p. 17.
- Carvalho, R. (2016) 'Ruy Jervis d'Athouguia. A Modern Architect in the Garden-City', Docomomo-Modern Lisbon, (55), pp. 44–49. doi: 10.52200/55.a.nkyd6io5.
- Carvalho, R. A. (2018). 'Ideology and architecture in the Portuguese 'Estado Novo': Cultural innovation within a para-fascist state (1932-1945)', Fascism, 7(2), pp. 141–174. doi: 10.1163/22116257-00702002.
- Carvalho, R. A. (2015). 'Travelling modernisms: the tours and acquaintances of Portuguese architects'. In Leal, J, C. Maia, M.H and FarreTorras, B.F (eds.). Southern Modernisms: Critical Stances through Regional Appropriations, Porto: IHA/FCSH-UNL, CEAA/ESAP-CESAP, pp85-102.
- Casals Costa, V. (2009) 'Barcelona, Lisboa, Forestier: del parque urbano a la ciudadparque[Barcelona, Lisbon, Forestier: from the urban park to the city-park']', *Scripta Nova. Revista Electronica de Geografia y Ciencias Sociales*, 13(13), pp. 1–26. doi: 10.1344/sn2009.13.1583.

- Castilho ,J (1937) Lisboa Antiga. Bairros Orientais [Ancient Lisbon. Oriental Neighborhoods],
   Vol. IX. S. Lisboa: Industriais da C.M.L.
- Çelik, Z. (1996). Değişen İstanbul [Changing Istanbul]. Istanbul: Tarih Vakfı Yurt Yayınları
- Çelik, Z. (1986). The remaking of Istanbul: Portrait of an Ottoman city in the nineteenth century. Seattle: University of Washington Press.
- Cerasi,M.,Bugatti,E. and Agostino,S.(2004). The Istanbul Divanyolu: A Case Study in Ottoman Urbanity and Architecture,Wurzbur: Ergon
- Cerdá, I, (1867). Teoría general de la urbanización, y aplicación de sus principios y doctrinas a la reforma y ensanche de Barcelona [General theory of urbanisation, and application of the above principles and doctrines to the reform and extension of Barcelona] V 1. Madrid: Imprenta Española
- Çetin, S. (2012) 'Geç osmanlidan erken cumhuriyete iç bati anadolu'da kentsel yapinin değişimi:
   Manisa, Afyon, burdur ve isparta kentleri üzerine karsilastirmali bir inceleme (1)[ Change of urban
   structure in Central Western Anatolia from late Ottoman to early republic: A comparative study
   on the cities of Manisa, opium, burdur and isparta] ', Metu Journal of the Faculty of Architecture,
   29(2), pp. 89–126. doi: 10.4305/METU.JFA.2012.2.4.
- Cezar, M. (2002). Osmanlı Başkenti İstanbul [The Ottoman Capital: Istanbul], Istanbul, EKAKESS Vakfı
- Cezar, M., (1995). Sanatta Batı'ya açılış ve Osman Hamdi[Opening to the West in Art and Osman Hamdi], Istanbul: Erol Kerim Aksov Kültür Eğitim Spor ve Sağlık Vakfı.
- Charmaz, K. (2006). Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis. London: Sage.
- Charmaz, K. (2000). 'Grounded theory: Objectivist and constructivist methods'. In N. K. Denzin and Y. S. Lincoln (Eds.), Handbook of qualitative research. (2nd ed), pp. 509-536. Thousand Oaks: Sage.
- Chase, M. (2015) .'Revisiting Constant's New Babylon: City Surfaces and Saturation', *Urban Imaginaries*, 5, pp. 1–14.
- Choay, F., (1969). The Modern City: Planning in the 19th Century. Translated by Marguerite, H. And Collins, G.R. New York: George Braziller
- Chudoba, M. (2016). 'Function and Ornament: The modern of Louis Sullivan and Eliel Sararinen', in Toft, A. E. and Rönn, M. (eds) Aesthetics The uneasy dimension in architecture. Nordic Academic Press of Architectural Research, pp. 87–109.
- Ciceron, M. T. C., and Bouhier,R, J. (1812). *Tusculanes de Cicéron [Cicero's Tusculanes]*, translated by Bouhier M and Olivet,D. 3<sup>rd</sup> edn.Toulouse: Nismes, J. Gaude.
- Cierdad,I. (2006). At home: an anthropology of domestic space. 1st edn. Syracuse: Syracuse university press.
- Claval, P. (1984). 'The Concept of Social Space and the Nature of Social Geography', *New Zealand Geographer*, 40(2), pp. 105–109.
- Coelho, F (2010). Exposição Bibliográfica Arquitecto Nuno Teotónio Pereira, Biblioteca Keil do Amaral [Bibliographic Exhibition Architect Nuno Teotónio Pereira, Keil do Amaral Library].
   Available at: < URL: http://oasrs.org/documents/11013/18319/BIB\_BB\_NTP.pdf/aefc2189- 2f9f-4644-97ab-b9c1a13ef6ab >.
- Coelho, T. C. (2000). 'Poder e Política As operações de reabilitação urbana em Lisboa- o caso da Mouraria [Power and Politics - Urban rehabilitation operations in Lisbon (the case of Mouraria)]', Discursos: língua, cultura e sociedade, 2(3),pp253-270.
- Coffman, C. (2019). 'Curtain-as-wall', Interiors. *Routledge*, 9(1), pp. 100–110. doi: 10.1080/20419112.2018.1486087.
- Collins, P.(1965). Changing Ideals in Modern Architecture, 1750–1950. Montreal: McGill-Queen's University Press.
- Colquhoun, A. (2002). Modern Architecture. Oxford: Oxford University Press. Available at: https://www.amazon.com/Modern-Architecture-Oxford-History Art/dp/0192842269/ref=sr\_1\_1?ie=UTF8&qid=1486741403&sr=8-1&keywords=modern+architecture.
- Colquhoun, A. (1962). The Modern Movement in Architecture, *The British Journal of Aesthetics*, 2(1) 59–65, https://doi.org/10.1093/bjaesthetics/2.1.59.

- Como, A., Smeragliuolo Perrotta, L. and Forni, I. (2015). 'Le Corbusier Roof-Spaces', in Cueco, J.T and Vallejo. E.M (eds.) Le Corbusier, 50 years later. Valenica: UPV, pp. 1–20. doi: 10.4995/lc2015.2015.960.
- Cordeiro, F. and Maia, M. A. A. (1990). José Luiz Monteiro na arquitectura da transição do século: monografia[José Luiz Monteiro in the architecture of the transition of the century: monograph]. Lisboa: AAP-SRS.
- Correia, N. (2018). 'The disintegration of the urban limits of Lisbon in the early 1960's. Portuguese architectural debate about exclusion and the importance of the historic city', In Capano, F., Pascariello, M. I., and Visone, M. (eds) La Città Altra. Storia E Immagine Della Diversità Urbana: Luoghi E Paesaggi Dei Privilegi E Del Benessere, Dell'isolamento, Del Disagio, Della Multiculturalità Ediz. Italiana E Inglese. Naples: CIRICE-FeDOA University Pres, pp. 77–87. doi: http://hdl.handle.net/10400.26/28043.
- Correia, M. D. G. (2020,). 'Ruy d'Athouguia: um arquitecto moderno[Ruy d'Athouguia: A modern Architect]'. Anales del Instituto de Arte Americano e Investigaciones Estéticas, 50(2), pp. 195-208).
- Correia, M.G. (2008). Ruy d'Athouguia: Modernidade em Aberto [Ruy d'Athouguia: Open Modernity]. Casal de Cambra: Caleidoscópio.
- Costa, A.A (2007) A ordem do objecto único[The order of the single object ],Coimbra: e|d|arq, Edições do Departamento de Arquitectura da FCTUC.
- Costa, J. P. T. (2010). Bairro de Alvalade: um paradigma no urbanismo português [The Alvalade neighborhood: a paradigm in the Portuguese urbanism].Lisboa, Livros Horizonte.
- Costa, J. (2002). Bairro de Alvalade. Um Paradigma no Urbanismo Português [ The Alvalade Neighborhood: A Paradigm in the Portuguese urbanism]. Lisboa: Livros Horizonte. Faculdade de Arquitectura. ISBN: 972-24-1198-5).
- Costa, F. (1931), Por uma arquitectura própria. A arquitectura moderna [For an architecture of its own. Modern architecture], Arquitectura, 20, p. 8
- Countinho, B. (2004) 'Carlos Ramos, comunicador e professor contributo para a afirmação do moderno[Carlos Ramos, communicator and teacher - contribution to the affirmation of the modern]', in Tostoes, A. and Costa, S. V. (eds) *Arquitectural Moderna Portuguesa 1920-1970*. Lisbon: IPPAR, pp. 49–59.
- Cozens, P., and Hillier, D. (2008). 'The shape of things to come: New urbanism, the grid and the cul-de-sac'. *International Planning Studies*, *13*(1), pp.51-73.
- Crenshaw, K. (1989). 'Demarginalizing the intersection of race and sex: A Black feminist critique
  of antidiscrimination doctrine, feminist theory, and antiracist politics', *University of Chicago Legal*Forum, 14, pp. 538–584.
- Crysler, C. G (2003). Writing Spaces Discourses of Architecture, Urbanism and the Built Environment, 1960-2000, Routledge, New York and London.
- Cui, J., Allan, A. and Lin, D. (2013). 'The development of grade separation pedestrian system: A review', *Tunnelling and Underground Space Technology incorporating Trenchless Technology Research*. Elsevier Ltd, 38, pp. 151–160. DOI: 10.1016/j.tust.2013.06.004.
- Cunha, J.A (2012). 'Nuno Teotónio Pereira: vida e obra [Teotónio Pereira: Like and Work]' In Cunha, J.A (eds.)- Grupo de Arquitetura do Secretariado Nacional da Pastoral da Cultura [Architecture Group of the National Secretariat for the Pastoral of Culture]. Moscavide: SNPC Secretariado Nacional da Pastoral da Cultura. Available at: URL: http://www.snpcultura.org/nuno\_Teotónio\_pereira\_vida\_e\_obra.html.
- Curtis, W. J. R. (1983). Modern Architecture since 1900. (2nd ed). Englewood Cliffs, New Jersey: Prentice-Hall

#### D

- Dal Co, F. (2000) 'Alvaro Siza and the art of fusion', in Frampton, K. (ed.) *Alvaro Siza : complete works*. London: Phaidon Press, pp. 7–11.
- Das, N. (2006). Courtyards houses of Kolkata: Bioclimatic, typological and socio-cultural study.
   Kansas: Kansas State University.

343

- De Graaf, R. (2017). *The inevitable box: architecture's main achievement and its main trauma.* Available at: https://www.architectural-review.com/archive/notopia-archive/the-inevitable-boxarchitectures-main-achievement-and-its-main-trauma.
- Diepeveen, L. (2003). The Difficulties of Modernism. New York and London: Routledge.
- Dias, T. L. (2013). 'A critical Interpretation of the Portuguese survey in the early sixties: Nuno Portas and Pedro Vieria de Almeida', in Leal, J. C., Maia, M. H., and Cardoso, A. (eds) *To and* fro: modernism and vernacular architecture. Porto: CESAP/CEAA, pp. 51–68.
- Dias, F. S. and Portas, N. (1971). Tipologias de edifícios. Habitação Evolutiva: Princípios e critérios de projectos [Building Typologies- Evolutionary Habitation: principles, criterias of the projects]. Lisboa: LNEC.
- Dias, F. S. (1962). 'Corpo das Cidades[The body of cities]', Jornal de Letras e Artes, (54), pp. 5–12.
- Dias, F. S. (1964). 'Problemas da urban landscape[ The problem of urban landscape]', Arquitectura, 83, pp. 115–119.
- Diderot, D. (1751) Encyclopédie ou Dictionnaire Raisonné des Sciences, des Art et des Métiers [Encyclopedia or Reasoned Dictionary of Sciences, Arts and Trades]. Paris: Briasson.
- Di Salvatore, S (2016). 'Towards a Modern Lisbon through the Work of João Guilherme Faria da Costa for the Lisbon City Council (1938-1948)', *Docomomo-Modern Lisbon*,55, pp. 8–15. doi: 10.52200/55.a.f1er6cca.
- Dilipak, A (1991). Intilaller Donemi[Period of Revolutions]. Istanbul: Dogan Ofset.
- Dondis, D. A. (1973). A primer of visual literacy. Cambridge, Mass, MIT Press.
- Drozdz, M., Appert, M. and Harris, A. (2018) 'High-rise urbanism in contemporary Europe', *Built Environment*, 43(4), pp. 469–480. doi: 10.2148/benv.43.4.469.
- Duarte, C (1957). 'Blocos na Avenida dos Estados Unidos da América. [The blocks in the United States of America Avenue]', Arquitectura, 61, pp17-24, Available at : https://hemerotecadigital.cm.lisboa.pt/ExposicoesVirtuais/Alvalade/bairroConstrucao/Arquitectura N61 Dez1957 p017-024.pdf
- Dündar, B. (2011). Against Style: Re-Reading 'New Architecture' in Early Republican Period in Turkey (1931-1940). [PhD thesis],İzmir Institute of Technology Institute.
- Durkheim, E. (1961). The elementary forms of the religious life, New York: Collier Books.
- Düzenli, H.İ. (2010). 'Vefeyat: Turgut Cansever (1920-2009)'. İSAM Araştırmaları Dergisi, 22, pp160-181.
- Dzwierzynska, J. and Prokopska, A. (2017). 'Urban Planning by le Corbusier According to Praxeological Knowledge', *IOP Conference Series: Earth and Environmental Science*, 95(5). doi: 10.1088/1755-1315/95/5/052007.

#### Ε

- Eco, U. (1973) 'Function and sign: The semiotics of architecture'. In Broadbent,G. Bunt R and Jencks,C (eds.), Signs, Symbols and architecture .Chichester:Wiley ,pp55-66 ,1980
- Edwards, B. (2006). Courtyard housing: past, present, and future. Abingdon [England]: Taylor & Francis.
- Egeli, V. (1953). 'Sisli Camii', *Arkitekt*, 9(12),pp.169–177.
- Eggener, K. (2002) 'Placing Resistance: A Critique of Critical Regionalism', *Journal of Architectural Education*, 55(4), pp. 228–37.
- Ekinci, O. (1994). Istanbul'u sarsan on yıl. 1983–1993, Istanbul: Anahtar.
- Eldem, S.H. (1983) "Türk Evi", Sedad Hakkı Eldem: 50 Yıllık Meslek Jübilesi["Turkish House", Sedad Hakkı Eldem: 50 Years Vocational Jubilee], İstanbul: Mimar Sinan Üniversitesi,
- Eldem, S, H (1939). 'Milli Mimari Meselesi [The Question of national architecture]'. *Arkitekt*, S. 9(10), pp. 220-223.
- Eldem, S,H,(1931). Istanbul ve sehircilik [Istanbul and urbanism], *Mimar*, 1,pp 1-4.
- El Husseiny, A.M. and El Husseiny, A.A., (2018). 'Redefining static and dynamic spaces genius integration in historic Cairo'. Asian Journal of Environment-Behaviour Studies, 4(13), pp.133-146.
- Elmali Sen, D. et al. (2014). 1960-80 Cumhuriyet Donemi Turk Mimarligi', Turkish Studies, 9(10), pp. 541–556.

- Ellis, C. (2002). 'The new urbanism: Critiques and rebuttals'. *Journal of Urban Design*, 7(3), pp261-291.
- Erarslan, A. (2020a). 'A Historicist Approach in the Development Process of Modern Turkish Housing; Sedad Hakki Eldem'S Residential Structures', *The journal of International social research*, 13(71), pp. 378–89.
- Erarslan, A. (2020b). 'The concept of regionalism in architecture as interoreted in contemporary architecture. The element of the 'courtyard' in the architecture of Turgut Cansever and Cengiz Bektaş', in Efe, R. and Curebal, I. (eds) *Contemporary Studies in Sciences*. Cambridge: Cambridge Scholars Publishing, pp. 161–222.
- Eraydin, A. and Taşan-Kok, T. (2013), Resilience Thinking in Urban Planning. London: Springer. doi: 10.1007/978-94-007-5476-8.
- Erdoğan, Ü. and Eynallı, E. (2015) .'Mimar Vedat Tek [The Architect Vedat Tek]', *Restorasyon Yıllığı Dergisi*, 11, pp. 44–55.
- Ertaş Beşir, Ş., Bekar, İ. and Durukan, A. (2020). '100.yılda Erken Cumhuriyet Dönemi Mimarlığının 'iç'selleştirilmesi: Seyfi Arkan ve Florya Atatürk Köşkü[The 'internalisation of Early Republican Architecture in the 100th Anniversary: Seyfi Arkan and Florya Atatürk Mansion]'. Journal of Social and Humanities Sciences Research, 7(64), pp.4073- 4083.
- Esenwein, F. W. (2016). Simply American: Simplicity in Architectural Arrangement, Construction, and Standards, 1820-1920. Pennsylvania: University of Pennsylvania.
- Evans, I.(1960). 'Tradition and Traditionalism'. *Blackfriars*, 41(486), pp.409-416.

#### F

- Fardpour, T. (2018). Islamic Environmentalism in the Architectural Domain: Architectural Crisis in Islamic Countries Analysed Through the Lens of Seyyed Hossein Nasr's Traditionalism[P.h.D Thesis]. University of Newcastle Australia.
- Farinha, T. (2016). 'City Architecture. The Example of Infante Santo Avenue (1945–1955)', Docomomo: Modern Lisbon, 55, pp. 38–43. doi: 10.52200/55.a.mdkgbnw8.
- Fernandes, P. A. (2015) *Modernismo e Sustentabilidade na Grande Lisboa*. Lisboa: PAF. Available at: https://www.researchgate.net/publication/346277110.
- Fernandes, J. M. (2003). Portugues Suave: Arquitecturas do Estado Novo. Lisboa: IPPAR.
- Fernandes, J. M. and Conceição, J. P. (1999). 'Lisboa, os anos trinta, as suas "novas saídas" e Keil do Amaral[Lisbon, the thirties, its "new departures" and Keil do Amaral]', in Moita, I. (ed.) Keil do Amaral: o arquitecto e o humanista. Lisbon [Keil Do Amaral: The Architect and Urbanist]: Câmara Municipal de Lisboa: Divisão de Museus e Palácios, pp. 39–54.
- Fernandes, J.M, ed. [et al.] (1998). Luís Cristino da Silva, arquiteto[ Luís Cristino Da Silva: The Architect]. Lisboa: Fundação Calouste Gulbenkian. Centro de Arte Moderna José de Azeredo Perdigão.
- Fernandes, J. M. et al. (1991). *Arquitectura do princípio do século em Lisboa: 1900-1925[Early 20th century architecture in Lisbon: 1900-1925]*. Lisboa: Câmara Municipal de Lisboa -Pelouro da Cultura.
- Fernandes, J. M. and Teotónio Pereira, N. (1981)'A Arquitectura em Portugal', *Arquitectura*, 4(142), pp. 36–44.
- Fernandez, S. (1997). 'Arquitectura Portuguesa:1961-1975', in Becker, A., Tostões, A. and Wang, W. (eds.) Arquitectura do século XX: Portugal[Architecture of the 20th century:Portugal]. Munchen / New York / Frankfurt / Lisboa, Prestel / DAM / PF,ISBN: 3791319108, pp. 55–64.
- Ferreira, R. H. (2002). Raúl Hestnes Ferreira- projectos 1959- 2002[Raul Hestness Ferreira-Projectos 1959-2002]. Porto: Asa Editores II, S.A.
- Ferreira, R. H. (1999). 'Keil do Amaral e a arquitectura[Keil Do Amaral and the architecture]', in Moita, I. (ed.) *Keil do Amaral: o arquitecto e o humanista [Keil Do Amaral: The Architect and the humanist]*. Lisboa: Câmara Municipal de Lisboa: Divisão de Museus e Palácios, pp. 55–70.
- Ferro,A.(1949) Arte Moderna. Colecção "Politica do Espírito" [Modern Art. "Policy of the Spirit" Collection"]. Lisboa: Edições SNI.
- Fezer, J, et al (2004) Martin Pawley's Garbage Housing with Preconsumer Waste and the 2CV Fourgonette Construction System, Chile 1972, Berlin: Vice Versa Velag.
- Figueira, J. (2015). 'Arquitectura em Divulgacao: Manuel Vicente em Macau [Architecture in Disclosure: Manuel Vicente in Macau]', *Revista de Cultura*, 50, pp. 72–84.

- Figueira, J. (2010) .'Nuno Portas, Hestnes Ferreira, Conceição Silva: Sobressaltos em Lisboa, anos 1960[Nuno Portas, Hestnes Ferreira, Conceição Silva: Upheavals in Lisbon, 1960s]', Revista Crítica de Ciências Sociais, (91), pp. 77–89. doi: 10.4000/rccs.4166.
- Figueira, J. (2009). A Periferia Perfeita: Pós-Modernidade na Arquitectura Portuguesa, Anos 60-Anos 80 [A Periferia Perfeita: Pós-Modernidade na Arquitectura Portuguesa, Anos 60-Anos]. [P.h.D Thesis], Universidade de Coimbra.
- Fındıklı, E. B. (2016). 'Etkilenme Korkusundan Arzu Nesnesinin Tahribine: Mimar Turgut Cansever'de Ötekinin İnşası [From the Fear of Influence to the Destruction of the Object of Desire: The Construction of the Other in Architect Turgut Cansever]', *Akademik İncelemeler Dergisi*, 11(1), pp. 145–166. doi: 10.17550/aid.27701.
- Fletcher, B. (1985). A History of Architecture, 19th edn.. London: Butterworth's Publication, 1896
- Forty, A.(2013). Concrete and culture: a material history. London: Reaktion Books.
- Forty, A. (2000). Words and buildings: A vocabulary of modern architecture. London: Thames and Hudson.
- Foster, H (1983). 'Postmodernism: a preface'. In Foster, H (ed). *The Anti-Aesthetic: Essays on Postmodern Culture*. New York: The New Press. pp. 3-15.
- Fox Gotham, K., Shefner, J. and Brumley, K. (2001) 'Abstract space, social space, and the redevelopment of public housing', in Fox Gotham, K. (ed.) *Critical Perspectives on Urban Redevlopment*, Bradford: Emerald Publishing ,pp313-335
- Frampton, K., (2007). *Modern Architecture*. London:Thames and Hudson.
- Frampton, K. (2000). 'Architecture as critical transformation: the work of Alvaro Siza', In Frampton, K. (ed.) *Alvaro Siza: Complete works*. London: Phaidon Press, pp. 11–66.
- Frampton, K. (1983). 'Prospects for a Critical Regionalism', *Perspecta*, 20, pp. 147–182.
- França, J. A. (2012) .Estudo das zonas ou unidades urbanas de caracter historico-artistico em Lisboa [Study of historical-artistic urban areas or units in Lisbon]. Lisboa: Impresa Nacional Casa de Moeda.
- França, J. A. (1982). Lisboa: Lisboa: Urbanismo e Arquitectura[ Lisboa: Urbanism and Architecture]. Lisboa: Instituto de Cultura e Língua Portuguesa.
- França, J. A. (1966) .História de Arte em Portugal no século XIX [Art History in Portugal in the 19th Century].Lisboa:Bertrand.
- Francisco, J.P and André, P. (2018). 'Public art in the neighborhood unit: the case of the Bairro de Alvalade'. In André,P, Rodrigues,P.S and Alves,M.B. (Eds.), Laboratory collaborative: urban dynamics, heritage, arts. III Seminar on research, teaching and dissemination. Lisbon: DYNAMIA'CET-IUL. pp. 68-91.
- Frank, H., and Ciucci, G. (1985). Faschistische Architekturen: Planen und Bauen in Europa, 1930 bis 1945 [Fascist Architectures: Planning and Building in Europe, 1930 to 1945]. Hamburg: Christians.
- Frederick, M, (2007). 101 things I learned in architecture school, Cambridge, Cambridge-Massachusetts: The MIT press.
- Friedman, Y. (1970). Mobile architecture towards a city designed by its inhabitants [Mobile architecture towards a city designed by its inhabitants]. Tournai (BE): Casterman.
- Fukuyama, F. (2006). 'Identity, Immigration, and Liberal Democracy'. *Journal of Democracy*, 17(2), pp.5-20.
- Furtado, C. (2013). 'A construção do Conhecimento internacional sobre a Arquitetura Portuguesa, anos 80 do séc. XX [The construction of international knowledge about Portuguese architecture, 1980s]', in Costa,H (ed), *IV Colóquio Internacional de Doutorandos/as do CES*. Coimbra: Centro de Estudos Sociais, pp. 1–20.

### G

- Gabriel, A.L. (1949). 'Yeni Sisli Camii ve Ananevi Turk Mimarisi. [The New Sisli mosque and traditional Turkish architecture]', *Cumhuriyet*, July 24.
- Galvão, A. and Mendes, J. R. (2011) .'Filantropia e Arquitectura: Da 1ª Republica Ao Estado Novo (1880-1920)[ Philanthropy and Architecture: From the 1st Republic to the New State (1880-1920)]', Revista Arquitectura Lusíada, 2(1), pp. 19–32.

- Gangwar, G. and Kaur, P. (2017). Significance of geometric forms in architectural design, Civ. Eng. Environ. Technol, 4(3), pp. 171–176.
- Garnier, T. (1990[1917]) une cite industrielle. translated by Mariani,R in , New York, Rizzoli International Publications.
- Gaspar, A. et al. (2013).'O castelo de s. jorge de lisboa escavação, musealização e gestão de património [the castle of s. jorge de lisboa – excavation, musealisation and heritage management]', Revista da Associação dos Arqueólogos Portugueses, 64, pp. 203–215.
- Gebhard, D. (1983) 'About Style, Not Ideology', Architecture, 72(12), p. 35.
- George, J. P. (2023) ReMapping Memories Lisboa: Lugares de Memória (Pós)coloniais[Places of the post-colonial memory]. *Lisbon*, Goethe-Institute Portugal. Available at: https://www.remapping.eu/pt/lugares-de-memoria/penha-de-franca-bairro-das-novas-nacoes-olivais.
- Ghanadi, F. and Ormecioglu, H. (2020). 'A Study on Two Architects of Iran and Turkey at the Threshold of the 20th Century: Andre Godard and Mimar Kemalettin Farivash', *The Journal of Iranian Studies*, 4(2), pp. 255–281. doi: 10.33201/iranian.808318.
- Giedion, S. (1962). The Eternal Present: The Beginnings of Art. New York: Pantheon.
- Giedion, S. (1959). Space, time, and architecture the growth of a new tradition. Cambridge: Harvard University Press. 1962
- Giedion, S (1952). 'The Heart of the City: A Summing-Up.' In Tyrwhitt, Sert & Rogers (eds), CIAM 8, pp.159–163.
- Gifford, R. (2007). 'The consequences of living in high-rise buildings', *Architectural Science Review*, 50(1), pp. 2–17. doi: 10.3763/asre.2007.5002.
- Giray, K. (2009). Sanat Tarihi Cumhuriyet Dönemi Türk Mimarisi[Art History Republican Period Turkish Architecture], Ankara: Türkiye Kültür Portalı Projesi
- Glaser, B. G. and Strauss, A. (1967) *The Discovery of Grounded Theory: Strategies for Qualitative Research*. London: Aldine Transaction.
- Glorius, B. and Manz, K. (2018). 'Beyond the City of Modernism: a counter-narrative of industrial culture', *GeoScape*, 12(1), pp. 26–38. doi: 10.2478/geosc-2018-0004.
- Gomes, P,V. (1991). 'Quatre batailles en faveur d'une architecture Portugaise[Four battles for Portuguese architecture]' In Gomes,P.V and Dubois,M, Points de Repère: Architectures du Portugal[In Landmarks: Architectures of Portugal]. Brussels: Fondation pour l'Architecture. pp.21-62.
- Gonçalves, F (1972). A propósito do Plano de Chelas Urbanizar e Construir para quem?[
  About the Chelas Plan Urbanizing and Building for whom?]. Porto: Edições Afrontamento.
- Göncüoğlu, E. (2021). Şişli camii hatlari. Istanbul:Fatih Sultan Mehmet Vakif universitesi.
- Gori, A., and Carvalho, R. A. (2020). 'Italian Fascism and the Portuguese Estado Novo: international claims and national resistance', *Intellectual History Review*, 30(2), pp.295-319.
- Gori, A. (2018). 'Celebrate nation, commemorate history, embody the Estado Novo: the exhibition of the Portuguese World (1940)'. *Cultural and Social History*, 15(5), pp.699-722.
- Gold, J. R. (2019). 'Athens Charter (CIAM), 1933', In A. M. Orum(ed). *The Wiley Blackwell Encyclopedia of Urban and Regional Studies*, Chichester: Wiley-Blackwell, pp.1-3.
- Gökalp, Z. (1968). The principles of Turkism. Laiden: Brill Archive.
- Göyünç, N. (1948). Beşiktaş'ın Tarihi (Fetihten zamanımıza kadar) [Beşiktaş's History from the Conquest to Our Time.], İstanbul: İstanbul Üniversitesi Edebiyat Fakültesi Tarih Bölümü.
- Gropius, W. (1943). 'Houses, walk-ups, or high-rise apartment blocks'. In W. Gropius, *Scope of Total Architecture*. New York: Collier Books, pp. 103–115.
- Gottdiener, M (1995). Postmodern Semiotics. Oxford: Blackwell.
- Gudkova, T. V. and Gudkov, A. A. (2017). 'Spatial Modernist Architectural Artistic Concepts', in IOP Conference Series: Materials Science and Engineering, 262(1), pp. 1–7. Doi: 10.1088/1757-899X/262/1/012152.
- Guénon, R,(1970). *Traditional Forms and Cosmic Cycles*. Translated by. Hillsdale, H. Sophia Tehran: Perennis (Jāvīdān Khirad)- Iranian Institute of Philosophy. 2003
- Guillén, M.F.(2006). The Taylorised beauty of the mechanical: scientific management and the rise of modernist architecture, vol.28. New Jersey: Princeton University Press.
- Guillén, M.(1994). *Models of Management: Work, Authority, and Organisation in a Comparative Perspective*. Chicago, IL: University of Chicago Press.

- Gül, M. (2017). Architecture and the Turkish city: An urban history of Istanbul since the Ottomans. London.New York: I.B. TAURIS. 36.
- Gül, M., Dee, J. and Nur Cünük, C. (2014). 'Istanbul's Taksim Square and Gezi Park: The place of protest and the ideology of place', *Journal of Architecture and Urbanism*, 38(1), pp. 63–72. doi: 10.3846/20297955.2014.902185.
- Gül, M. (2010). The Emergence of Modern Istanbul: Transformation and Modernisation of a City. London.New York: I.B. TAURIS.
- Gül, M. and Lamb, R. (2004). 'Urban Planning in Istanbul in the Early Republican Period', *Architectural Theory Review*, 9(1), pp. 59–81. doi: 10.1080/13264820409478507.
- Gülersoy, N. Z. (2012). 'International arena of all arhitects and urban planners celebrates the 100th anniversary of the birth of professor, architect, urban planner Kemal Ahmet Arû', *ITU A*|*Z*, 9(1), pp. 1–15.
- Günenç, O. F. (2016). 'Ankara'nın İnşasında Bir Mimar: Arif Hikmet Köyunoğlu [An Architect in the Construction of Ankara: Arif Hikmet Köyunoğlu]', *Sosyoloji divani*, 7(4), pp. 137–155.
- Guner, H. (2018). 'Türk Ocaklari, Mimarisi ve Geleneksel Ö ğ eleri; Ankara ve İzmir Örneği[Turkish Hearths, Architecture and Traditional Elements; Ankara and Izmir Example]', *Online Journal of Art and Design*, 6(1), pp. 99–118.
- Gunnarsson, S. O. (2004). 'The pedestrian and the city a historical review, from the Hippodamian city to the modernistic city and the sustainable and walking-friendly city The pedestrian and the city a historical review, from the Hippodamian city to the modernistic city', In Walk21-V Cities for People, The Fifth International Conference on Walking in the 21st Century. Copenhagen, pp. 1–8.
- Gürbüz, M. V. (2012). 'Ottoman Vakifs: Their Impact on Ottoman Society and Ottoman Land Regime', *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 21(1), pp.201-211.
- Gürel, M, O, (2009). Defining and living out the interior: the 'modern' apartment and the 'urban' housewife in Turkey during the 1950s and 1960s', Gender, Place & Culture, 16(6), pp.703-722, DOI: 10.1080/09663690903279153.
- Gürel, Y. and Yücel, A. (2007). 'Bir erken Cumhuriyet modernist mimarı: Seyfi Arkan [An early Republican modernist architect: Seyfi Arkan]', *ITU Dergisi*, 6(2), pp. 47–55.

## Н

- Habermas, J. (1989). 'Modern and Postmodern Architecture', in Nicholsen, S. W. (eds.) *The New Conservatism: Cultural Criticism and the Historians' Debate*. Cambridge: MIT Press, pp. 3–21.
- Hacihasanoğlu, I. and Hacihasanoğlu, O. (2006). 'Cultural processes and physical change in Şişli-Istanbul', *Habitat International*, 30(4), pp. 902–915. doi: 10.1016/j.habitatint.2005.04.005.
- Halbwachs, M. (1992 [1950]). On collective memory, Translated by Coser, L.A, Chicago: University of Chicago Press.
- Hall, E. (2007). 'Divide and sprawl, decline and fall: A comparative critique of Euclidean zoning',
   University of Pittsburgh Law Review, 68(4), pp. 915–952. doi: 10.5195/LAWREVIEW.2007.77.
- Halpin, D., Power, S. and Fitz, J. (1997). 'In the grip of the past? Tradition, traditionalism and contemporary schooling', *International Studies in Sociology of Education*, 7(1), pp. 3–20. doi: 10.1080/09620219700200002.
- Hanna, R. and Simpson, P. (1996). 'The Climate and the Social Climate of a Design Stereotype: The Courtyard Paradigm'. *Traditional Dwellings and Settlements Review*, 8(1), pp.47-47.
- Hardarson, Æ. (2016). 'Modernist aesthetics and building defects: A study of how building defects are dealt with in architectural literature', in Rönn, A. E. and Magnus, T. (eds) Aesthetics

   The uneasy dimension in architecture. Nordic Academic Press of Architectural Research, pp. 41–59.
- Harvey, D. (2013). Rebel City. From the Right to the City to the Urban Revolution. Brooklyn-New York: Verso.
- Harvey, D. (1982). The limits to capital. Oxford:Blackwell

- Hasan, T., Ahmad, I. and Hadiuzzaman, M. (2014). 'Neo-traditional Neighborhood Design: Transit and Walking Friendly Land Development Approach', *Journal of Transport System Engineering*, 1(1), pp. 46–54.
- Hassanpour, N. and Soltanzadeh, H. (2016). 'Tradition and Modernity in Contemporary Architecture of Turkey (Comparative Study Referring to Traditional and International Architecture in 1940-1980)', The Turkish Online Journal of Design, Art and Communication, 6, pp. 1167– 1183. doi: 10.7456/1060agse/002.
- Hearn, M. F. (1990). The architectural theory of Viollet-le-Duc: readings and commentary.
   Cambridge: MIT Press.
- Hebbert, M. (2005).'The street as the locus of collective memory. Environment and Planning': *Society and Space*. 23, pp. 581-59.
- Hegel, G, W, F. (1874). The Logic. Encyclopaedia of the Philosophical Sciences. 2nd edn. London: Oxford University Press.
- Heidegger, M. (1971). 'Building, Dwelling, thinking', in Hofsdater, A. (eds.) *Poetry, language and Thought*. New York: Harper&Row, p. 154.
- Heitor, T. V. (2016). 'Revisiting Chelas. In Search of the Promised Urbanness', Docomomo-Modern Lisbon, (55), pp. 58–65. doi: 10.52200/55.a.qo6vhvzq.
- Heitor, T. V.(2004). 'Olivais e Chelas: Operações urbanísticas de grande escala [Olivais and Chelas: Large-scale urban operations]'. In J. M. B. de Brito, M. Heitor, & M. F. Rollo (Eds.), Momentos de inovação e engenharia em Portugal no século XX [Moments of innovation and engineering in 20th-century Portugal], 3, pp. 152–163.
- Heitor, T. (2001[1997]) A vulnerabilidade do espaço em Chelas: uma abordagem sintáctica [
  The vulnerability of space in Chelas: a syntactic approach]. Lisboa: Fundação Calouste
  Gulbenkian
- Hillier, B. and Hanson, J. (1989). *The social logic of space*. Cambridge: Cambridge university press.
- Hitchcock, H.R., and Johnson, P. (1932). The international style. New York: W.W. Norton.
- Hobsbawn, E. (1983). Inventing traditions" in E. Hobsbawn, E. and T. Ranger (Eds). The Invention of Tradition. Cambridge: Cambridge University Press.
- Hoffmann, H. (2017). 'Alvar Aalto' s associative geometries', in Alvar Aalto Researchers' Network Seminar – Why Aalto? Jyväskylä, Finland, pp. 1–15.
- Hojjat, I. (2015). Tradition of Traditionalists and traditionalism of architects', *Honarhaye Ziba-Me'mari va Shahrsaz*i, 20(1), pp. 5–16.
- Holland, N. J. (2012). 'Population Dynamics of Mutualism'. Nature Education Knowledge, 3(10), p.2
- Hourani, A. (1979). The road to Morroco', The New York review of books, 26, pp. 27–30.
- Howard, D, (2011). Being Human in Islam: The Impact of the Evolutionary Worldview. London: Routledge.
- Hwang Oh, S. (2020). 'Curtain wall facades on the new generation of supertall buildings present and future directions', *International Journal of High-Rise Buildings*, 9(2), pp. 113–155. doi: 10.21022/IJHRB.2020.9.2.113.
- Inalcik, H. (1978). *The Ottoman Empire: conquest, organisation and economy*. London: Variorum Reprints.
- Inalcik, H. (1969). 'Capital Formation in the Ottoman Empire'. The Journal of Economic History, 29(1), 97–140.
- Inwood, M.J. (1992). A Hegel Dictionary. Oxford: Blackwell.

I

• Iranfar, M. (2018). 'The Presence of Modernist Architecture in Government's educational Buildings at Lefkoşa, *Journal of Contemporary Urban Affairs*, 2(1), pp. 22–32. doi: 10.25034/ijcua.2018.3653.

- Ismail, A. S. and Zhaharin, E. N. (2017). 'Built Form Properties as Sign and Symbols of Patron Political Ideology', *Journal Kejuruteraan*, 29(2), pp. 87–96. doi: 10.17576/jkukm-2017-29(2)-04.
- Itten, J.(1970). "The Elements of Color: a treatise on the color system of Johannes Itten based on his book The Art of Color". Wokingham: Van Nostrand Reinhold. Köhler,
- 'Istanbul Reklam Sitesi; Proje Yarismasi [Istanbul commercial site: a competition project]' (1969), *Mimarlik*, 3, pp. 28–37.
- İhsanoğlu, E. (2020). 'Emergence of the Ottoman Medrese Tradition'. In Ihsanoğlu,E (ed),Studies on Ottoman Science and Culture, London: Routledge, p46

# J

- Jacobs, J. (1961). The Death and Life of Great American Cities: New York, Random House.
- Jaeggi, A. (2000) Fagus: industrial culture from Werkbund to Bauhaus. New York: Princeton Architectural Press.
- James-Chakraborty, K. (2014). 'Reinforced concrete in Louis Kahn's National Assembly, Dhaka: Modernity and modernism in Bangladeshi architecture', *Frontiers of Architectural Research*. 3(2), pp. 81–88. doi: 10.1016/j.foar.2014.01.003.
- Jameson, F. (1991). *Postmodernism, or, The cultural logic of late capitalism*. Durham:Duke University Press.
- Janin, R. (1964). Constantinople Byzantine. Paris: Institut français d'études Byzantine.
- Jencks, C. (2004). 'Toward an iconography of the present'. Log, 3, pp.101-108.
- Jodido, P. (2013). Alvaro Siza: Comple works 1952-2013. Cologne: Taschen.
- Johnson, P. (1953). Mies van der Rohe, New York: Museum of Modern Art.
- Johnson, T., and Vriens, L. (2011). 'Islam: governing under Sharia'. *Council on Foreign Relations*, 25.pp.1-5
- Jones, G. (2011). What is modern: characteristics of modern architecture? Retrieved from :http://a2modern.org/2011/04/characteristics -of-modern-architecture/.
- Jones, MI, and Alony, I. (2011). 'Guiding the Use of Ground Theory in Doctoral Studies—An Example from the Australian Film Industry.' *International Journal of Doctoral Studies*, 6:pp. 94–114.
- Jones, O. (1856), The Grammar of Ornament: London, Day.

### K

- Kaçel, E., (2010). 'Hiltonculuk and beyond: The dialectics of intellectualism in postwar Turkey', Candide journal for architectural knowledge. 3, pp. 9-36.
- Kandinsky, W. (1912) Uber Das Giestige in der Kunst[About the spiritual in art]. Munich: Piper.
- Kane, C. (2015) .'Broken colour in a modern world: chromatic failures in purist art and architecture The colour problem', *Journal of the International Colour Association*, 14(14), pp. 1–13. Available at: http://www.aic-colour-journal.org/.
- Kant, I. (1781). *Critique of Pure reason*. Edited by P. Guyer and A. W. Wood. Cambridge: Cambridge University Press.1998
- Karasözen, R. and Özer, F. (2006). 'Çağdaş İstanbul Mimarlığı'nda Post-Modernizm'in rasyonel temeli [The Rational base of Post-Modernism in contemporary Istanbul Architecture]', Itü Dergisi/a Mimarlık, Planlama, Tasarım, 5(2), pp. 107–114.
- Karadjis, M. (1997). Behind the Turkish military's soft coup. Syndey: Green Left Weekly.
- Kartal, A. N. (2021). 'Changes, losses and challenges on transformation of the urban place: a narrative on Istiklal Street, Istanbul from the 1900s until today'. *Urbe. Revista Brasileira de Gestão Urbana*, 13, pp,42-56.
- Katipoğlu, C. (2012). 'Two adjacent modern buildings: development of modern architecture from 1950 's to 1970 's', *IIB international refreed academic social sceiences journal*, 3(5), pp. 47–59.
- Kavaloski, J. (2014). *High Modernism: Aestheticism and Performativity in Literature of the* 1920s. Woodbridge: Boydell & Bewer- Camedan House

- Kayın, E. (2008), 'Türkiye Koruma Tarihindeki Kırılmalar [Türkiye Koruma Tarihindeki Kırılmalar].' *Mimarlık Dergisi*, 343, pp 98-105.
- Keil do Amaral, F. (1969). Lisboa, uma cidade em transformação[ Lisbon: a city in transformation], Lisboa: Europa-América .
- Keil do Amaral, F. (1947). 'Uma Iniciativa necessaria', Arquitectura, 14(2), pp. 12–13.
- Kerwin, R. W. (1950). 'The Turkish roads program'. The Middle East Journal, 4(1),pp196-208.
- Klinkhammer, B. (2004). 'Creation of the Myth: "White' Modernism", in Nepomechie, M.R and Gonzalez, R, 92nd ACSA Annual meeting MIAMI, pp. 429–434.
- Keyder, Ç. (2010). 'Capital city resurgent: Istanbul since the 1980s', *New Perspectives on Turkey*, 43, pp. 177–186. doi: 10.1017/S0896634600005811.
- Kınacı, M. Ö. and Gülersoy, N. Z. (2018) .'An Evaluation of the Urbanisation Process of Galata in the 19th Century Through the Maps of Huber, d'Ostoya and Goad ', In *The 18th International Planning History Society Conference Yokohama*, pp. 1–10.
- Kizildere, S. and Sozen, M. (2005). 'İstanbul' da Birinci Ulusal Mimarlık Dönemi Yapıları' nın kent bütünü içindeki yerinin değerlendirilmesi [Evaluation of the place of the First National Architectural Period Buildings in Istanbul in the whole city]', ITU derisigi: Sosyal Bilimler, 2(1), pp. 87–95.
- Kocabaş, A. (2006). 'Urban conservation in Istanbul: Evaluation and re-conceptualisation',
   Habitat International, 30(1), pp. 107–126. doi: 10.1016/j.habitatint.2004.08.001.
- Köyunoğlu, A.H. (1991). 'Arif Hikmet Köyunoğlu'nun Kendi Kaleminden [From Arif Hikmet Köyunoğlu's Perspective], *Arkitekt*, 4: 39-50.
- Konuk, G. (2012). 'Profesör Kemal Ahmet Arû; Mimarlık Eğitimi içinde şehircilik ve şehircilik Eğitiminde Geleceğe Bakış[Professor Kemal Ahmet Arû; Looking to the Future in Urbanism and Urbanism Education in Architectural Education]', *Tasarım + Kuram*, 8(14), pp. 1–5.
- Koolhaas, R. and Mau, B., (1995). SMLXL. New York: The Monacelli Press
- Korkmaz, P. (2008) 'Sedad Hakkı Eldem "Türk Evi" Ve Frank Lloyd Wright 'Prairie Evleri' Üzerinden Karşılaştırmalı Bir Analiz [A Comparative Analysis of Sedad Hakkı Eldem 'Turkish House' and Frank Lloyd Wright 'Prairie Houses']', İstanbul Ticaret Üniversitesi Fen Bilimleri Dergisi, 7(14), pp. 35-51–51.
- Kostof, S. (1991). The City Shaped Urban Pattern and Meanings Through History. London: Thames & Hudson.
- Krautheimer, R. (1983). Three Christian capitals: topography and politics. Berkeley:University
  of California Press
- Krier, L. (1998). Architecture: Choice or fate. Winterbourne: Papadakis Publisher.
- Krier, L (1984). Houses, Palaces, Cities. London: Architectural Design AD Editions.
- Krier, R. (1979) Urban Space. London: Academy ed
- Kuban, D. (2001). Türkiye'de kentsel koruma: kent tarihleri ve koruma yöntemleri [Urban conservation in Turkey: urban histories and conservation methods], Vol.116, Istanbul:Türkiye Ekonomik ve Toplumsal Tarih Vakfı.
- Kuban, D (1994). 'Eldem, Sedad Hakkı. Dünden Bugüne İstanbul Ansiklopedisi 3 [Eldem, Sedad Hakkı. Istanbul Encyclopedia from Past to Present 3]', *Mimar*, 5, pp 151-153.
- Kuban, D. (1978). 'Conservation of the historical environment for cultural survival'. *Conservation*,2, pp1-8.
- Kuban, D. (1970). 'The historical structure of Istanbul'. Architecture Magazine, 5, pp25-48.
- Kuban, D. (1954). Türk Barok Mimarisi Hakkında Bir Deneme [An attempt on Turkish Baroque Architecture]. İstanbul:Pulhan Matbaası.
- Kubat, A. S., and Kürkçüoğlu, E. (2014, July). 'Morphological evolution of urban form components in the historical peninsula of Istanbul'. In ISUF–21st International Seminar on Urban Form. pp. 3-6.
- Kuran, A. (1986). Architect Sinan . Istanbul: Hürriyet Foundation Publications.
- Kultermann, U. (2000).'Constituting a Turkish identity: The architecture of Behruz Cinici', Journal of Architecture, 5(3), pp. 315–326. doi: 10.1080/136023600419627.

L

- Lamas, J.M.R Garcia (1993). Morfologia Urbana e Desenho da Cidade[Urban Morphology and City Design.]. Lisboa: Fundação Calouste Gulbenkian / Junta Nacional de Investigação Científica e Tecnológica.
- Lamey, S,(1984), 'Islamic Identity in courtyard House Design', in Rashid,A and Marsousi,T (eds.),Symposium of Housing in the Islamic City, Organisation of Islamic Capitals, Jeddah,pp.72-85.
- Lawrence, R. J. (1983). 'The interpretation of vernacular architecture', *Vernacular Architecture*, 14(1), pp. 19–28. doi: 10.1179/vea.1983.14.1.19.
- Lawrence, R. J. (1982). 'Domestic space and society: A cross-cultural study', *Comparative Studies in Society and History*, 24(1), pp. 104–130.
- Leal, J. C. (2004). 'Legitimação artística e patrimonial da Baixa Pombalina[Artistic and patrimonial legitimacy of Baixa Pombalina]'. *Monumentos* ,21, pp.7-17.
- Le Corbusier (1929) The City of Tomorrow and its Planning. New York: Dover Publications, Inc. 1987
- Le Corbusier (1923). *Towards a new architecture*. Translated by Etchells, F. New York:Dover Publications.1986
- Le Corbusier. (1958). The modulor; a harmonious measure to the human scale universally applicable to architecture and mechanics, Translated by De Francia, P and Bostock, A, Cambridge: Harvard University Press.
- Le Corbusier, (1937), When the Cathedrals were White, New York: McGraw Hill, 1964
- Le Corbusier (1924), *The City of Tomorrow*, London: Architectural press.
- Lefaivre, L., and Tzonis, A. (2003). *Critical Regionalism: Architecture and Identity in a Globalised world*. Munich: Prestel.
- Lefaivre, L. and Tzonis, A., (1985). 'The Grid and the Pathway'. Atelier, 66, pp.14-25.
- Lefebvre, H. (1991) . The Production of Space. Translated by Nicolson-Smith, D. Oxford: Blackwell.
- Legenhausen, H. M. (2002). Why I am not a Traditionalist. Fribourg: Religioscope.
- Leite, P. (2014) Carta do Património instrumento de participação no urbanismo[Heritage Charter instrument for participation in urban planning]. Lisbon: Informal Museology Studies
- Levine, N. (1986). 'Representation and abstraction in Modern architecture: The international style and Frank Lloyd Wright', *Architectural Association School of Architecture*, 11, pp. 3–21.
- Lewicka, M. (2008). 'Place attachment, place identity, and place memory: Restoring the forgotten city past', *Journal of Environmental Psychology*, 28(3), pp. 209–231. doi: 10.1016/j.jenvp.2008.02.001.
- Lewis, B. (1961). *The emergence of modern Turkey*. London, Oxford University Press.
- Leyton, M. (2001). 'Group Theory and Architecture'. Nexus Network Journal, 3(2), pp.39-58.
- Licordari, M. (2017) 'The Difficult Affirmation of Modern Architecture in the Portugal of the Salazarist Regime', *Review of Arts and Humanities*, 6(2), pp. 7–17. doi: 10.1564.
- Liernur, J. (2010) 'Orientalism and modern architecture: The debate on the flat roof', *Ra Revista de Arquitectu*ra, 1(12), pp. 61–89.
- Lima, S. and Fonseca, T. P. Da (2013). 'Uma ideia de arquitectura de paisagem na obra de Fernando Távora[An idea of landscape architecture in the work of Fernando Távora]', III Encontro CITCEM: Paisagem. Materialidade e Imaterialidade, Porto: Centro de Investigação Transdisciplinar Cultura, Espaço e Memória, pp. 1–15.
- Lin, Z. (2017). 'Plan for Tokyo: Kenzo Tange'. In Malgrave, H.F (ed), *Companion to the History of Architecture*, Oxford:Blackwell, pp.1-15.
- Lino, R. (1929) .A Casa Portuguesa[A Portuguese House]. Lisbon: Impresa Nacional De Lisboa.
- Logan, S. (2015). Modernist Urbanism in the Age of Automobility: Producing Space in the Suburbs of Toronto and Prague. Toronto: York University.
- Long, C. (2009). 'The Origins and Context of Adolf Loos's "Ornament and Crime". *Journal of the Society of Architectural Historians*, 68(2), 200-223.
- Loos, A., (1908). Ornament and crime: in Whitside, S., & Masheck, J (eds). *Ornaments and Crime: Thoughts on Design and Materials*, London, Penguin Books, 2019

- Lopes Correia, A. (2017). Fabricating Architecture: From Modern to Global Space[PhD Thesis]. Coimbra: University of Coimbra.
- Lourenço, T. (2019). 'Entre o Desterro e Arroios. O desenvolvimento urbanístico dos bairros do primeiro troço da Avenida Almirante Reis (Avenida dos Anjos)[ Between Desterro and Arroios. The urban development of the neighborhoods of the first section of Avenida Almirante Reis (Avenida dos Anjos)]', Cadernos do Arquivo Municipal, 2(12), pp. 89–115. Available at: http://www.scielo.mec.pt/scielo.php?script=sci\_arttext&pid=S2183-31762019000200007&lng=pt&nrm=iso&tlng=pt.
- Löwith, Karl (1949). *Meaning in History: The Theological Implications of the Philosophy of History*. Chicago: University of Chicago Press.
- Lupalo, O. and Akosman, B. G. (2019). 'Finding the essential meanings in architecture: Martin Heidegger, Jørn Utzon, Turgut Cansever. Phenomenological Approach', *Academic Review of Humanities and Social Sciences*, 2(1), pp. 37–46.
- Lye, E. K. C. (2006). Manuel Vicente: Caressing Trivia. Hong Kong: MCCM Creations.
- Lynch, K. (1960). The image of the City. Cambridge: Mass:MIT Press.

#### M

- Machado, P. (2005). Alberto José Pessoa 1919/1985. Lisboa: Comissão Municipal de Toponímia da Câmara Municipal de Lisboa.
- Macke, L. (2011). Een zoektocht naar Modernisering: Art nouveau in Constantinopel door Raimondo D'Aronco [A Quest for Modernisation Art Nouveau in Constantinople by Raimondo D'Aronco], research seminar III report, Univeristiy of Utrecht.
- Madanipour, A. (1996). 'Urban design and dilemmas of space', Environment and Planning D: Society and Space, 14(3), pp. 331–355.
- Madeira da Silva, T., Matos, M. and Ferreira, A. C. (2016). 'Architectural Summer School: Projectar em tempos de escassez. Uma experiência de ensino num contexto de mudanças nas práticas profissionais de arquitetura [Architectural Summer School: Designing in times of scarcity. A teaching experience in a context of changes in professional architectural practices]', CIDADES, Comunidades e Territórios, 32(32), pp. 80–102.
- Maia, M. H. (2012) 'From the Portuguese House to "Popular Architecture in Portugal": Notes on the construction of Portuguese Architectural Identity', *National Identities*, 14(3), pp. 243–256. doi: 10.1080/14608944.2012.702746.
- Malich, K. (2018). 'The Collective Approach Does Not Abolish the Individual': Links between Soviet Avant-garde Experiments and Architectural Practice in the Netherlands during the Early Twentieth Century'. In Mikkonen, S, Scott-Smith.G and Parkinnen, J (eds.) Entangled East and West: Cultural Diplomacy and Artistic Interaction during the Cold War, Oldenburg: De Gruyter pp.39-65.
- Mangorrinha, J. (2007). 'Lisboa Republicana', Cadernos do Arquivo Municipal, 9, pp. 114-144.
- Mankus, M. (2014). 'Manifestations of Symbolism in architecture', *Journal of Architecture and Urbanism*,38(4), pp. 274–282. doi: 10.3846/20297955.2014.998853.
- Mann, D. A. (2014). 'Between Traditionalism and modernism: approaches to a vernacular architecture', *Journal of Architectural Education*, 39(2), pp. 10–16.
- Manvi, N. (2017). 'Impact of Industrialisation on the Building', *International Journal of Engineering Research and Technology*, 10(1), pp. 1–5.
- Manzo, L. C. (2003). 'Beyond house and haven: Toward a revisioning of emotional relationships with places'. *Journal of environmental psychology*, 23(1), 47-61.
- Marat-Mendes, T and Cabrita, M. A. (2016). 'O inquérito à Arquitectura Regional Portuguesa e a antropologia: Um caso de transversalidade metodológica[The Portuguese Regional Architecture survey and anthropology: A case of methodological transversality]', In Correia, J., Bandeira, M. (eds.) Os Espaços da Morfologia Urbana. Actas da 5ª Conferência Internacional da Rede Lusófona de Morfologia Urbana, PNUM 2016, Guimarães: Universidade do Minho, Faculdade de Arquitetura,pp 667-678

- Marat-Mendes, T. and Oliveira, V. (2013). 'Urban planners in Portugal in the middle of the twentieth century: Étienne de Groër and Antão Almeida Garrett', *Planning Perspectives*, 28(1), pp. 91–111. doi: 10.1080/02665433.2013.737719.
- Marat-Mendes, T. and Sampayo, M. T. de (2010). 'Étienne de groër: the different sclaes of the urban intervention in Lisbon territory', in Pereira, S, Costa, V, Proceedings of the First International Conference of the EAHN European Architectural History Network. Guimarăes, Portugal, pp. 32–43.
- Marcos, D. (2008) ' "Osmanlı Mimari": D'Aronco 1893-1909 İstanbul Projeleri [The Ottoman Architect: D'Aronco 1893-1909 – projects in Istanbul]'. *Journal für Kunstgeschichte*, 12(4), pp274-281.
- Marina, M. and André, P. (2017). 'Português Suave e Arquitectura Doce', in Andre, P. (eds.)
   Antologia de ensaios: Laboratório Colaborativo. Dinâmicas urbanas, património e artes,
   Investigação, ensino e difusão. Lisboa: DINÂMIA'CET-IUL, pp. 47–65. Available at:
   https://repositorio.iscteiul.pt/handle/10071/14737.
- Marinetti, F.T. (1909). 'The Foundation and Manifesto of Futurism.' In F.T. Marinetti: Critical Writings, Translated by Thompson, D, New York: Farrar, Straus and Giroux, pp.11-18, 2006
- Marmot, A. F. (1978). 'The Legacy of Le Corbusier and High-Rise Housing', Built Environment, 7(2), pp. 82–95.
- Marques, I. (2009). 'Espaço habitacional e o lugar da arte no Bairro dos Olivais Sul, Lisboa[Housing space and the place of art in Bairro dos Olivais Sul, Lisbon]', On the waterfront, 12, pp. 164–171.
- Martin, J. N. and Nakayama, T. K. (2013). Intercultural communication in contexts. New York: Mc Graw Hill.
- Martinelli, E. (2019). 'Aldo Rossi e il progetto per la piazza di Üsküdar an Istanbul [Aldo Rossi and the project for the Üsküdar square in Istanbul]', *Esempi di Architettura*.1,pp 1-10.
- Martinelli, E. (2019). 'Semantica del Tipo . La Sede della Società Storica Turca di Turgut Cansever [ Semantics of Type -The headquarters of the Turkish Historical Society by Turgut Cansever]', Firenze Architettura, 2, pp. 70–77. doi: 10.13128/FiA-11083.
- Martinelli, E. (2016). 'From Sedad Eldem to Turgut Cansever, the Legacy of a School of Architecture', *International Journal of Architecture and Urban Studies*, 2(1), pp. 20–31.
- Marshall, S. (2005). Streets and patterns. Oxford: Spon Press.
- Maudlin, D, (2009). 'Constructing Identity and Tradition', Journal of Architectural Education, 63(1), pp.51-63, DOI: 10.1111/j.1531-314X.2009.01028.x.
- Mc Quire, S. (2003). 'From glass Architecture to big brother: Scenes from a Cultural History of Transparency', *Cultural studies Review*, 9(1), pp. 103–123.
- Melia, K. M. (1996). 'Rediscovering Glaser'. Qualitative Health Research, 6, pp.368-378.
- Mehmetoğlu, F. (2021) 'Turk Mimarisinin Kult Isimlerinden Biri: Cengiz Bektaş[One of the Cult Names of Turkish Architecture: Cengiz Bektaş]'. Available at: https://www.gzt.com/arkitekt/turk-mimarisinin-kult-isimlerinden-biri-cengiz-bektas-3578957.
- Menezes, M. (2004). Mouraria, retalhos de um imaginário: significados urbanos de um bairro de Lisboa[Mouraria, remnants of an imaginary: urban meanings of a Lisbon neighborhood]. Oeiras: Celta Editora.
- Mendonça, J. J. M. (1758). Historia universal dos Terramotos[ The global history of the earthquakes], Oficina de Anto´nio Vicente Silva, Lisbon
- Merriam-Webster. (n.d.). Balance. In Merriam-Webster.com dictionary. Retrieved May20, 2019, from https://www.merriam-webster.com/dictionary/balance
- Mesquita, M. (2006). 'O Bairro do Arco do Cego: Paradigmas e Contradicoes[The Arco do Cego Neighborhood: Paradigms and Contradictions]', Artitextos, 2, pp. 93–100.
- Mihaila, M. (2014). 'City Architecture as Cultural Ingredient', *Procedia Social and Behavioral Sciences*, 149, pp. 565–569. doi: 10.1016/j.sbspro.2014.08.211.
- Mijovic, D. D., Milanovic, D. and Jelena, S. (2018). 'Curtain walls: history and a continuing chalenge', XVIII International Scientific Conference 'Construction and Architecture, VSU 2018, pp. 1–6.

- Milheiro, A. (2016). 'Manuel Vicente explicado... viragem a Sul[Manuel Vicente explained... turning to south]', Estudo Previo Revista do Centro de Estudos de Arquitectura, Cidade e Território da Universidade Autónoma de Lisboa, 9, pp. 1–16.
- Millais, M. (2015). 'A critical appraisal of the design, construction and influence of the unite d'habtiation, Marseilles, France', *Journal of Architecture and Urbanism*, 39(2), pp. 103–115. doi: 10.3846/20297955.2015.1062636.
- Miller, K. (2011). 'Organised Crime: The Role of Ornament in Contemporary Architecture', In Taron, J (ed), *Proceedings ACADIA Regional Conference*, Nebraska: University of Nebraska-Lincoln College of Architecture, pp 67-73.
- Moffett, M., Fazio, M.W. and Wodehouse, L., (2003). A world history of architecture. London:Laurence King Publishing.
- Moholy-Nagy, L. (1946). The new vision 1928; and Abstract of an artist. Translated by Hoffman, D.M, Vermont: Wittenbourn
- Moita, I. (1999). 'Para uma Biographia do Arquitecto Keil Do Amaral[For a Biography of the architect Keil Do Amaral]', in Moita, I. (eds.) Keil do Amaral: O Arquitecto e o Humanista[Keil Do Amaral: the Architect and the Humanist]. Lisboa: Câmara Municipal de Lisboa: Divisão de Museus e Palácios, pp. 27–37.
- Mortada, H. (2019). Cultural Diversity of an ancient urban element: The Cul-De-Sac. Baltimore, MD: Benton Heights LLC. DOI: 10.1002/sd.1634/abstract.
- Mortada, H. (2004). 'Traditional Islamic Principles of Built Environment;, Cities. DOI: 10.1016/j.cities.2003.10.002.
- Moten, A. R. (2011). 'Modernity, tradition and modernity in tradition in Muslim societies', *Intellectual Discourse*, 19(1), pp. 1–13.
- Moughtin, C. (2003). *Urban Design: Sreet and Square*. 3<sup>rd</sup> edn, Burlington: Architectural press. Available at:http://dx.doi.org/10.1016/j.cirp.2016.06.001%0A.
- Mullin, J. R. (1992). 'The reconstruction of Lisbon following the earthquake of 1755: A study in despotic planning', *Planning Perspectives*, 7(2), pp. 157–179.
- Mourao, C, (2006). 'A intervenção de Ventura Terra no Palácio das Cortes[Ventura Terra's intervention in the Palácio das Cortes]'. In Ribeiro, A and Rufino ,M,L, (eds). Miguel Ventura Terra A arquitectura enquanto projecto de vida [Miguel Ventura Terra Architecture as a life project]. Esponende: Câmara Municipal de Esposende. ISBN 978-972-95993-7-8. pp.136-137.
- Mumford, E.P. (2002). The CIAM discourse on urbanism, 1928-1960. Cambridge: MIT press.
- Mumford, L. (1961). The City in History: Its Origins, Transformations, and Prospects. New York
   : Harcourt, Brace and World. https://archive.org/details/cityinhistoryits0000mumf.
- Munz, L and Kunstler, G. (1966). Adolf Loos: pioneer of modern architecture. London, Thames and Hudson.
- Murphy, K. D. (2002). 'Savoye the Monument', Journal of the Society of Architectural Historians, 61(1), pp. 68–89.

#### N

- Nasr, S. H., and Jahanbegloo, R. (2010). In search of the sacred: A conversation with Seyyed Hossein Nasr on his life and thought/ Seyyed Hossein Nasr with Ramin Jahanbegloo; introduction by Moore, T. Santa Barbara, California: Praeger.
- Nasr, S. H. (1993). The need for a sacred science, NewYork: State University of New York Press.
- Nasr, S. H. (1985). 'The principles of Islamic architecture and contemporary urban problems'. Arts & the Islamic world, 3(2), 33.
- Necipoğlu, G., and Al-sad, M. (1995). The Topkapı scroll: geometry and ornament in Islamic architecture: Topkapı Palace Museum Library MS H. 1956. Santa Monica: Getty Center for the History of Art and the Humanities.
- Neves, J.R and Pinto, P. T. (2020). 'Espaços ajardinados do lado norte da Avenida dos Estados Unidos da América. Traços conceptuais na definica de um corredor verde no Bairro de Alvalade (1940-1960) [Garden spaces on the north side of Avenida dos Estados Unidos da América. Conceptual traces in the definition of a green corridor in Bairro de Alvalade (1940-1960)]', Cidades, (40), pp. 155–183. doi: 10.15847/cct.jun2020.040.art03.
- Neves, J. M. d. (2002). Raúl Hestnes Ferreira Projectos 1959- 2002 [Raul Hestness Ferreira: Projects 1959-2002]. Porto: ASA.

- Niebrzydowski, A., and Zelef, H. (2012). 'Brutalism and METU department of architecture building in Ankara'. *Architecture Civil Engineering Environment*, 5(2), pp 21-30.
- Nikolić, V., Radović, L. and Marković, B. (2015). 'Symmetry of "Twins', Symmetry, 7(1), pp. 164–181. DOI: 10.3390/sym7010164.
- Njoo, J. (2010). 'Free Façade'. Lecture made in Georgia Tech. Available at: https://smartech.gatech.edu/handle/1853/31999.
- Norberg-Schulz, C.(1979). *Genius Loci: Towards a Phe- nomenology of Architecture*. London: Academy Editions.
- Norberg-Schultz, C. (1971). Existence, space & architecture. New York, Praeger.
- Nunes, J. and João, M. (2016). 'Lisbon between resilience and change: from the 1755 earthquake to the 1988 Chiado fire', in Hein, C. (ed.) *International Planning History Society Proceedings, 17th IPHS Conference, History-Urbanism-Resilience*. Delft: Tu Delft Open, pp. 391–401. doi: http://dx.doi.org/10.7480/iphs.2016.3.1273.
- Nuri Ergin, O. (1938). İstanbul'da İmar ve İskân Hareketleri [Reconstruction and Settlement Movements in Istanbul]. Istanbul: Bürhaneddin Matbaası.

#### O

- Ochoa, R. (2022). 'The "Expo" and the Post- "Expo": The Role of Public Art in Urban Regeneration Processes in the Late 20th Century', Sustainability (Switzerland), 14(2), pp. 1–11. doi: 10.3390/su14020985.
- Ohm, B. W. and Sitkowski, R. J. (2003). 'The influence of New Urbanism on local ordinances: The twilight of zoning?', *The Urban Lawyer*, 35(4), pp. 783–794.
- Oliveira, V. and Pinho, P. (2008). 'Urban form and planning in Lisbon and Oporto', *Planning Perspectives*, 23(1), pp. 81–105. doi: 10.1080/02665430701738081.
- Oliver, P. (ed.). (1969). Shelter and society. London: Barrie and Rockliff: The Cresset Press.
- Orchowska, A. (2018). 'Prefabrication the expression of rationalism in architecture', in Kozłowski, T. (ed.) *Defining the architectural space: rationalistic or intuitive way to architecture*.
   7th edn. Cracow: PK Publishing House, pp. 23–31.
- Ordóñez-Castañón, D., Cunha-Ferreira, T., and Sánchez-Beitia, S. (2020). 'Intervention in vernacular architecture: The lesson of Fernando Tavora. International Archives of the Photogrammetry', Remote Sensing and Spatial Information Sciences - ISPRS Archives, 54(1), pp.123–130.
- Osayimwese, I., (2017). Colonialism and Modern Architecture in Germany. Pennsylvania: University of Pittsburgh Press.
- Oxford dictionary. (n.d.). *Balance*. In Oxford dictionary. Retrieved May21, 2019, from https://www.oxfordlearnersdictionaries.com/definition/american\_english/balance\_1
- Oxford dictionary. (n.d.). Cul-de-Sac. In Oxford dictionary. Retrieved September 9, 2020, from https://www.merriam-webster.com/dictionary/culture
- Ozaki, R. and Rees Lewis, J. (2006). 'Boundaries and the meaning of social space: a study of Japanese house plans', *Environment and Planning D: Society and Space*, 24(1), pp. 91–104.
- Ozaslan, N., Akalin, A. and Wilson, C. (2011). 'Postmodernism and consumer culture: Image-production via residential architecture in post-1980s Turkey', *African Journal of Business Management*, 5(7), pp. 2597–2606.
- Ozaslan, N. and Akalin, A. (2011). 'Architecture and Image: The Example of Turkey', Middle Eastern Studies, 47(6), pp. 911–922. doi: 10.1080/00263206.2011.621758.
- Özatay, F. (2000). 'The 1994 currency crisis in Turkey'. *The Journal of Policy Reform*, 3(4), pp.327-352.
- Özcan, Z. (2018). 'Art Deco a Frustrated Style and Reflections from Ankara Turkey', *GRID Architecture, Planning and Design Journal*, 1(1), pp. 77–100. doi: 10.37246/grid.362330.
- Özer, B. (1970). Rejyonalizm, Üniversalizm ve çağdaş mimarimiz üzerine bir deneme [An essay on Regionalism, Universalism and our contemporary architecture] ,[PhD Thesis]. İstanbul, İstanbul Teknik Üniversitesi Mimarlık Fakültesi.
- Özgen, E., (2016). 'Yirmisekiz Mehmed Celebinin Sefaretnamsisin Mimari Acidan Okunmasi ve Fransiz Mimarliginin Sadabad Sarayina Muhtemel Etkisi[The French architecture and its

- influence on 28th Mehmed Celebi's travelogue and SA'DÂBÂD palace]', *Kultur envanteri*, 9(9), pp221-237
- Özgüner, E. A. (2021). 'Public Reminiscence and Official Commemoration: The Paris Commune of 1871 and the Gezi Protests of 2013', *Design and Culture*, 13(2), pp. 209–232. doi: 10.1080/17547075.2021.1921991.
- Ozkan, S. (1973). 'Mimar Vedat Tek (1873-1942)', *Mimarlik*, 11(12), pp. 45–51.
- Özorhon, İ. F. and Uraz, T. (2009) 'The issue of originality in Turkish Architecture between 1950-60", (216), ITU Dergisi, pp. 89–100.
- Ozus, E., Turk, S. S. and Dokmeci, V. (2011) 'Urban restructuring of Istanbul', *European Planning Studies*, 19(2), pp. 331–356. doi: 10.1080/09654313.2010.515826.

#### Ρ

- Pallasma, J. (2012). 'Newness, Tradition and Identity: Existential content and meaning in architecture', *Architectural Design*, 82(6).pp.43-52.
- Pallasmaa, J. (2007). Architectural regionalism: Collected writings on place, identity, modernity, and tradition. New York: Princeton Architectural Press.
- Papadopoulou, D. and Patsavos, N. (2013) 'Journeys to the East: A comparative reading of Le Corbusier, S. H. Eldem and D. Pikionis', in Archist '13: Architecture\_Politics\_Art:Politics in the History of Architecture as Cause and Consequence, Istanbul: Mimar Sinan university, pp. 1–13.
- Pardal Monteiro, J. (2016). 'Porfírio Pardal Monteiro and the Global Design', Docomomo-Modern Lisbon, (55), pp. 24–29. doi: 10.52200/55.a.fmtvgmrc.
- Pardal Monteiro, J. (2012). Para o Projecto Global Nove décadas de Obra. Arte, Design e Técnica na Arquitetura do atelier Pardal Monteiro Para o projeto global nove décadas de obra Arte, Design e Técnica na Arquitetura do atelier Pardal Monteiro[For the Global Project Nine decades of work. Art, Design and Technique in the Architecture of the Pardal Monteiro studio For the global project nine decades of work Art, Design and Technique in the Architecture of the Pardal Monteiro studio] [PhD Thesis]. Universidade Tecnica de Lisboa.
- Pardal Monteiro, P (1935), Espírito Clássico [the Classic Spirit]. In Rodrigues, J. M, Teoria e crítica da arquitectura do século XX[Theory and Critic of the architecture in the 20th century]
   Lisboa: Caleidoscópio, 2010
- Parker, T. (2005). 'The review for the book 'Modern Color/Modern Architecture: Amedee Ozenfant and the Genealogy of color in Modern Architecture by Branham, W', Studies in the Decorative Arts, 12(1), pp. 145–147.
- Pasin, B. (2014). 'A critical reading of the Ottoman-Turkish hamam as a queered space', METU
  Journal of the Faculty of Architecture, 33(2), pp1-18
- Pavlides, E, (1991). 'Four Approaches to Regionalism in Architecture', in Amourgis,S (ed),
   *Critical Regionalism: The Promona Meeting Proceeding*, California: College of Environmental
   Design, California State Polytechnic University pp. 305–321.
- Pellitero, A. and Batista, D. (2017). 'Cidade, património e cartografia. O caso do bairro histórico da Mouraria, em Lisboa [City, heritage and cartography. The case of the historic district of Mouraria, in Lisbon]', In ACTAS ICONO14 – V Congreso Internacional de Ciudades Creativas. Madrid: Asociacion de communicacion y nuevas tecnologias, pp. 1–14.
- Perry, W, (1999). 'The Unanimous Tradition', in Ranjit, F (ed), Essays On The Essential Unity
  Of All Religions, Colombo: The SriLanka Institute of traditional studies press,p5.
- Pereira, P. M. (2020). 'Urbanistic Architecture' according to Raul Lino. Visions of the Portuguese
  City in the First Half of the 20th Century (1900-1948)', The ARCC journal for Architectural
  Research, 17(1), pp. 1–27. doi: 10.17831/enq.
- Pietrzak J.(2014). 'Development of high-rise buildings in Europe in the 20th and 21st centuries'. Challenges of Modern Technology, 5(4), pp.31-8.
- Piquard, B. and Swenarton, M. (2011) 'Learning from architecture and conflict', *Journal of Architecture*, 16(1), pp. 1–13. doi: 10.1080/13602365.2011.557897.

- Poeschel, E. (1928). 'Das Flache Dach im Davos' [The flat roof in Davos]', *Das Werk, Zurich*, 15, pp. 102–109.
- Pommer, R. (1983). 'The Flat Roof: A Modernist Controversy in Germany', Art Journal, 43(2), pp. 158–169. doi: 10.1080/00043249.1983.10792217.
- Popper, K.R., (1972). Conjectures and Refutations, London & Henley.
- Popescu, C (2006). 'Space, Time: Identity', National Identities, 8(3),189-206, Doi: 10.1080/14608940600842060.
- Portas, N. (1978). 'A evolução da arquitectura moderna em Portugal, uma interpretação[The evolution of modern architecture in Portugal, an interpretation]'. In B. Zevi, História da Arquitectura Moderna Lisbon [The history of modern architecture in Portugal]: Ed. Lisboa, Arcádia. pp. 687-746.
- Portas, N, (1969). A Cidade como Arquitectura [ The city as Architecture], Lisboa: Livros Horizonte.
- Portas, N, (1964). 'A arquitectura para hoje: finalidade, métodos, didácticas, Dissertação para Concurso de Professor de Arquitectura [Architecture for today: purpose, methods, didactics, Dissertation for the Competition of Professor of Architecture]', Lisboa, ESBAL, Lisboa
- Portas, N (1963) 'Tradição, progresso e reacção no urbanismo regional [Tradition, progress and reaction in regional urbanism]'. *O Tempo e o Modo*, 4, pp. 1-16.
- Prost, H. (1937). 'Mémoire descriptif du plan directeur de la rive européenne d'Istanbul.Les Transformations d'Istanbul[Descriptive memoir of the master plan of the European side of Istanbul. The Transformations of Istanbul]', Vol. 3, *Plans Directeurs*, unpublished report.
- Postalci, I. E. and Atay, G. F. (2019) .'Rethinking on cultural sustainability in architecture: Projects of Behruz Çinici', *Sustainability*, 11(1069), pp. 1–17. doi: 10.3390/su11041069.
- Pour Ahmadi, M. (2014). 'A Basic Method for Naming Persian Karbandis Using a Set of Numbers', Nexus Network Journal, 16(2), pp. 313–343. doi: 10.1007/s00004-014-0192-x.
- Prajawisastra, A, F. and Aryanti, T. (2017). 'Islamic Modernism and Architectural Modernism of Muhammadiyah' s Lio Mosque', In 1st Annual Applied Science and Engineering Conference. IOP Publishing, pp. 1–6. doi: 10.1088/1742-6596/755/1/011001.

### R

- Ramos, T.L.B, (2012). Bairros planeados e novos modos de vida Olivais e Telheiras: que contribuições para o desenho do habitar sustentável?[ Planned neighborhoods and new ways of life Olivais and Telheiras: what contributions to the design of sustainable living?], Lisboa:Caleidoscópio Edição e Artes Gráficas.
- Ramos, R. J. G. (2011). 'Modernity in the domestic architecture of Raul Lino and Ventura Terra at the beginning of the 20th century;, in Mesquita,M (ed.) Revistas de arquitectura: arquivo(s) da modernidade. Lisboa:Caleidoscópio, pp. 78–111.
- Rapoport, A. (2007). 'The Nature of the Courtyard House: A Conceptual Analysis'. Traditional Dwellings and Settlements Review, 18(2), 57–72. Doi: http://www.jstor.org/stable/41758328.
- Rapoport, A. (1980). 'Cross-Cultural Aspects of Environmental Design'. In I. Altman, A. Rapoport, and J.F. Wohlwill (eds.), *Environment and Culture*, New York: Springer. http://dx.doi.org/10.1007/978-1-4899-0451-5\_2, pp.7-46.
- Rapoport, A. (1969). House Form and Culture. Englewood Cliffs, New Jersey: Prentice-Hall
- Raposo, Celso Pimentel, Francisco Cristovam, Mauro Cabral, R. (2009) 'Edificios em Banda em Olivais Norte[Buildings in Olivais Norte]', in Milheiro, A. V. (ed.) Habitar em Colectivo: Arquitectura Portuguesa antes do SAAL [Living in Collective: Portuguese Architecture before SAAL]. Lisboa, Departamento de Arquitectura e Urbanismo do ISCTE Instituto Universitário de Lisboa Autoria, pp. 80–88.
- Rashid, M. (1998). 'Reconstituting Traditional Urban Values: The Role of the Boundary in the Contemporary City'. *TDSR Journal*, 9(11), pp.45-57.
- Reis Rodrigues, R. F. (2014). *Arquitectura ou Revolução:Learning from the Satellite*,Lisbon: ISCTE Instituto Universitário de Lisboa.
- Ribeiro, M (2000) 'As vésperas da modernidade: do Intendente à Rua dos Anjos (1898-1908) [The eve of modernity: from the Intendente to Rua dos Anjos (1898-1908)]'. Lisboa, Cadernos do Arquivo Municipal, 1(5), pp 105-134.
   358

- Ricoeur, P. (1965.) 'Universal Civilisation and National Cultures' in Kelbey, C (ed). *History and Truth*, 1st ed. Evanston: Northwestern University Press.
- Robbins, D. (1988) 'Abbreviated Histography of Cubism', Art Journal, 47, pp. 277-283.
- Rodeia, T. B., and Duarte, J. M. (2020). 'Seminário Internacional de Arquitectura e As fórmulas na arquitectura' In F. Silva, E. Negas, and R. Seco (eds.), Seminário Internacional de Arquitectura e Matematica: As fórmulas na arquitectura, Universidade Lusíada. pp. 87–111. https://doi.org/https://doi.org/10.34628/2e7f-jg07.
- Rodgers, D. T. (2000) . Atlantic crossings: Social politics in a progressive age. Cambridge: Harvard University Press.
- Ronael, M., and Oruç, G. D. (2019). 'Residents' experiences of a gentrified neighborhood in Istanbul: The case of Akaretler row houses'. *ITU A*| *Z*, (16), 17-36.
- Rosmaninho, N (2006). 'A Cidade Universitária de Coimbra e a Expressão Totalitária da Arte [The University City of Coimbra and the Totalitarian Expression of Art]'. Revista Latitudes – Esthétiques et Politique (26): pp.9-15.
- Rossa, W. (2008). 'No 1º Plano'. in A. Tostões; W. Rossa (eds). Lisboa 1758: o Plano da Baixa Hoje. Catálogo da exposição. pp.24-69. Lisboa: Câmara Municipal de Lisboa.
- Rossa, W., (2004). 'Do plano de 1755-1758 para a Baixa-Chiado[From the 1755-1758 plan for Baixa-Chiado]'. *Monumentos: Revista semestral de edificios e monumentos*, 21, pp.3.
- Rosas, F. (2001). 'O salazarismo eo homem novo: ensaio sobre o Estado Novo ea questão do totalitarismo[Salazarism and the new man: essay on the Estado Novo and the question of totalitarianism]'. Análise social, pp.1031-1054.
- Rossi, A. (1982) The Architecture of the City. Translation by Ghirardo, D & Ockman, J. New York: MIT Press. 1984
- Rowe, C., and Slutzky, R. (1963). 'Transparency: literal and phenomenal'. *Perspecta*, 6(2), pp. 160-183.

#### S

- Sadeghi, G., Sani, R. M., and Wang, Y. (2015) .'Symbolic Meaning of Transparency in Contemporary Architecture: An Evaluation of Recent Public Buildings in Famagusta'. Current Urban Studies, 3, pp.385-401. Doi:http://dx.doi.org/10.4236/cus.2015.34030.
- Sadıkoğlu, H. and Ozsoy, A. (2017). 'A study on examining the spatial quality of the modern period housing stock', Megaron / Yıldız Technical University, Faculty of Architecture E-Journal, 12(2), pp. 203–212. doi: 10.5505/megaron.2017.93823.
- Saglam, H. (2014) 'Re-thinking the Concept of "Ornament', Architectural Design, 122, pp. 126–133. doi: 10.1016/j.sbspro.2014.01.1314.
- Şahin, C. (2015). 'The urban development of Istanbul during the Turkish Republican Era', in Coskun, Y. (ed.) *History of Istanbul from Antiquity to 21st*. Istanbul: ISAM, pp. 456–477. Available at: https://istanbultarihi.ist/391-the-urban-development-of-istanbul-during-the-Turkish-republican-era.
- Said, E., (1978). Orientalism. London: Routledge and Kegan Paul
- Salingaros, N. A. (2016). 'Borders in Architecture and Urban Design: Science Explains How Life
  is Influenced by Physical Boundaries PART I. MATHEMATICS', In Architecture and Cities in
  Transition, Tampere Design and Architecture Week. Tampere, Finland.
- Salingaros, N. A. (2011). Why monotonous repetition is unsatisfying. *Meandering Through Mathematics*, pp1109.1461.
- Salingaros, N. A. (2008). *Algorithmic SustainableDesign: The Future of Architectural Theory*, Solingen: UmbauVerlag.
- Salingaros, N. A., and Mehaffy, M. W. (2006). A Theory of Architecture. Solingen: Umbau- Verlag Harald Püschel
- Tekeli,D, (2019) 'Doğan Tekeli ile 60 Yılı Aşan Mimarlığı Üzerine [On More than 60 Years of Architecture with Doğan Tekeli]',Interviewed by Salt research. Turkey. retrieved from: https://www.youtube.com/watch?v=ikMVvSlmWKw.
- Sanders, R. M. (2006) 'Curtain Walls: Not Just Another Pretty Façade', *Journal of Architectural Technology*, 23(1), pp. 1–8.

359

- Santos, G. (2012). 'The birth of physical anthropology in late imperial Portugal'. *Current Anthropology*, 53(S5), S33-S45.
- Santos,M. R. (2005). A Baixa Pombalina: Passado e Futuro [ The Baixa Pombalina: The past and future]. Lisboa: Livros Horizonte.
- Saraiva, A. (2020) 'Hestnes Ferreira's Proposal for Amsterdam City Hall Competition Analyzed in Continuity with Louis Kahn', *Journal of Architecture and Urbanism*, 44(2), pp. 138–144. doi: 10.3846/jau.2020.12713.
- Saraiva, A. and Pinto, P. T. (2018) 'The continuous process Social production of the architecture of Hestnes Ferreira', *Rita Revista Indexada de Textos Academicos*, 9, pp. 112–119. Available at: https://www.scopus.com/inward/record.uri?eid=2-s2.0-85046898141&doi=10.2419 2%2F2386-7027%282018%29%28v9%29%2806%29&partnerID=40&md5=08d6904faa5aee9cc4e30b6de5c2f836.
- Saraiva, A. (2016) 'Mergulhando no Sul de Raúl Hestnes[Diving in the South by Raúl Hestnes]',
   ESTUDO PRÉVIO Revista do Centro de Estudos de Arquitectura, Cidade e Território da Universidade Autónoma de Lisboa, 9, pp. 1–13.
- Sardica, J. M. (2011). 'The memory of the Portuguese first republic throughout the twentieth century'. *E-journal of Portuguese History*, 9(1), 4.
- Saussure, F. (1966). Course in general linguistics, New York: McGraw-Hill.
- Savaş, A. (2018) 'An Early Critique of International Modernism in The Anatolian context', in Pimentel, J. C., Trevisan, A., and Cardosa, A. (eds) *Regionalism, Nationalism & Modern Architecture Conference Proceedings*. Porto: CEAA, pp. 370–381. Available at: http://hdl.handle.net/10400.26/24574.
- Sayar, Z., (1992), Anılarda Seyfi Arkan ve Dünyası, Profil: Seyfi Arkan (1904-1966) Bir Trajik Kişilik[Seyfi Arkan and Her World in Memoirs, Profile: Seyfi Arkan (1904-1966) A Tragic Personality], Ankara: Arredamento Dekorasyon.
- Sayar,Z.(1956), 'İstanbul'un imârı münasebetiyle[On the occasion of urbanizing Istanbul]',
   Arkitekt,2, pp. 49–51.
- Sayar, Z.(1953), 'Yabancı teknik elemanlar meselesi [The issue of foreign technical elements]',
   Arkitekt, 7(8), pp. 119–20.
- Schick, I. C., and Tonak, E. A. (1987). Turkey in transition: new perspectives. New York: Oxford University Press.
- Schmarsow, A, (1893), 'The Essence of Architectural Creation', translated by Mallgrave, H.F and Ikonomou, E. Empathy, Form, and Space (A translation of the lecture 'Das Wesen der architektonischen Schöpfung' given in Leipzig, 8 November 1893), California: Getty Center for the History of Art and the Humanities, p287. 1994
- Schumacher, T. L. (2005) 'Horizontality: The modernist line', *Journal of Architectural Education*, 59(1), pp. 17–26. DOI: 10.1111/j.1531-314X.2005.00002.x.
- Schumacher, T. (1986). 'Buildings and streets: Notes on configuration and use'. In Anderson, S(eds.) *On Streets*, Cambridge, MIT Presspp. 133–149.
- Schumacher, T. L. (2002). 'The Outside an Is the Result of Inside "One of Modernism's dence between the interior', *Journal of Architectural Education*, 56(1), pp. 22–33.
- Schuon,F,(1982). From the Divine to the Human. Survey of Metaphysics and Epistemology. Translated. by Polit,G and Lambert,D. Bloomington: World Wisdom Book.
- Scott, J, (1998) Seeing Like a State. New Haven, CT: Yale Univ. Press.
- Seçkin, S. and Sönmezer, S. (2003). 'Mimar Vedat Tek ve Mimarligi [Vedeat Tek and his Architecture]', in Sak, O. (ed.) *Tarihi, kültürü ve sanatıyla Eyüpsultan sempozyumu VI*. Istanbul: Eyup Belediyesi, pp. 243–249.
- Sedad H. Eldem ,(1973). 'Elli Yıllık Cumhuriyet Mimarlığı [Fifty Yearly Republican Architecture]', *Mimarlık*, 121, pp. 5–11.
- Selzer, M., (2015). The Symmetry Norm and the Asymmetric Universe: Vol.3, California: CreateSpace Independent Publishing Platform.
- Semper, G. (2004). Style in the technical and tectonic arts, or practical aesthetics. 1st edn. Translated by H. F. Mallgrave and Robinson, M. Los Angles: Getty Research Institute.

360

- Semper, G. (1851). *The Four Elements of the Architecture*, Translated By Malgrave,H.F and Hermann,W. Cambridge: Cambridge University Press
- Serra, J. et al. (2012). 'Color composition features in modern architecture', *Color Research and Application*, 37(2), pp. 126–133. doi: 10.1002/col.20657.
- Setintaş S. (1944), 'Mimar Kemalettin Mesleği ve Sanat Ülküsü[Architect Kemalettin Profession and Art Ideal]', *Güzel Sanatlar Dergisi*, 5, p.379.
- Shils, E.A. (1981). Tradition. Chicago: The University of Chicago Press. Smith.
- Shin, B, (2009). 'A Study on the Organic Thought in the Works of Le Corbusier, Venturi, and Lynn', *Journal of Asian Architecture and Building Engineering*, 8(2), pp.315-322, Doi: 10.3130/jaabe.8.315
- Shojae, H.S (2016). 'Generalisation rate of Christopher Alexander's theory of living Structure Patterns in Persian gardens (case study: Esfahan gardens)', *Baghe-Nazar*,12,pp.12-26
- Šijaković, M. and Perić, A. (2018). 'Symbiotic architecture: Redefinition of recycling design principles', Frontiers of Architectural Research, 7(1), pp. 67–79. doi: 10.1016/j.foar.2017.12.002.
- Silva, M. F. et al. (2020).'Recyclable architecture: Prefabricated and recyclable typologies', *Sustainability (Switzerland)*, 12(4). doi: 10.3390/su12041342.
- Silva, S. D., and Ramos ,R. J. G. (2015). 'Housing, Nationalism and Social Control: The First Years of The Portuguese Estado Novo's Affordable Houses Programme'. In Leal, J,C. Maia, M.H and Farre Torras,B.F (eds.). Southern Modernisms. Critical Stances through Regional Appropriations, Porto: IHA/FCSH-UNL, CEAA/ESAP-CESAP pp. 255-274.
- Silva, R. H. (2006a) 'Das Avenidas Novas à Avenida Berna', Revista do Instituto de História da Arte, 2, pp. 126–141.
- Silva, R.H.(2006b). Ventura Terra em contexto. Miguel Ventura Terra. A arquitectura enquanto
  projecto de vida[Ventura Terra in context. Miguel Ventura Terra. Architecture as a life project].
   Esponende: Câmara Municipal de Esposende, (catálogo de exposição com coordenação
  científica de Ana Isabel Ribeiro),pp11-29.
- Silva, R,H (2000). 'Portugal 1900: Urbanismo e Arquitectura' in Pereira, J (ed), *Portugal 1900*. Lisboa: Fundação Calouste Gulbenkian, ISBN 972-8128-60-06 (catálogo de exposição), pp. 101-114
- Silva, R. H. (1997). 'A "Casa Portuguesa" e os Novos Programas, 1900-1920[The Portuguese house and the new programs]', in Becker, A., Tostões, A. and Wang, W. (ed.) Arquitectura do século XX: Portugal[Architecture of 20th century: Portugal]. Munchen / New York / Frankfurt / Lisboa, Prestel / DAM / PF,ISBN: 3791319108, pp. 15–22.
- Silva,R.H, (1985), Avenidas Novas- 1900-1930- Lisboa, [Thesis],FSCH-UNL.
- Silva, A.V.(1948) A Cerca Fernandina de Lisboa[Lisbon's Fernandina wall]. Lisboa: Câmara Municipal de Lisboa.
- Silva,L.C (1943). Memória descritiva da Praça do Areeiro [Descriptive report of Areeiro Square]
   [S.I.: s.n.]. Lisboa: Fundação Calouste Gulbenkian no Espolio Luís Cristino da Silva.
- Silva Dias, F. (1962). 'O corpo das cidades [the body of cities]', *Jornal de Letras e Artes*, 54, pp. 5-12.
- Simonson, C. (2001) .Terrace roof constructions. Department of Buildings Sciences, Div of Building and Technology, KTH, Stockholm.
- Singley, P. (2019) How to Read Architecture: An introduction to interpreting the built environment, How to Read Architecture. New York and London: Routledge. doi: 10.4324/9780429262388.
- Sitte, C. (1965) *City planning according to artistic principles*. Translated by G. R. Collins and C. Crasemann Collins. New York: Random House.
- Şİşman, M. E. (2021) 'The Issue of Theorizing Islamic Architecture: Turgut Cansever's Approach', *Bāb Journal of Architecture and Design*, 2(2), pp. 126–1140.
- Smith, R. E. (2010). *Prefab architecture: A guide to Modular design and Construction*. New York: John Wiley & Sons.
- Smith, M. (2001) 'Repetition and Difference: Lefebvre, Le Corbusier and Modernity's (Im)moral Landscape', *Ethics, Place and Environment*, 4, pp.31-44.
- Smith, T. (1994). *Making the modern: industry, art and design in America*. Chicago: University of Chicago Press.

- Snow,L,O S. (1986) Where Building Meets Sky: The Dialogue Between Horizontal and Vertical.
   Cambridge:MIT press .
- Soja, E. W., (1996) Third space Journeys to Los Angeles and Other Real-and-Imagined Places.
   Oxford: Blackwell Publishing.
- Soja, E. (1980) 'The socio-spatial dialectic', *Annuals of the Association of American Geographers*, 70(2), pp. 207–225.
- Sola-Morales, I. (1998) 'A Arquitectura de Goncalo Byrne', in Angelilo, A. (ed.) Goncalo Byrne:
   Obras e Projectos. Lisboa: Blau, pp. 19–27.
- Solomon, D.(2003). Global City Blues. Washington: Island Press
- Southworth, M. and Ben-Joseph, E. (2003) Streets and the shaping of the towns and cities. Washington: Island Press.
- Sözen, M. (1984) *Cumhuriyet Dönemi Türk Mimarligi [Turkish architecture in republican period]*, Ankara: Türkiye is Bankasi Kültür Yayinlari.
- Stackmann, S. (2019) 'Framing Bauhaus The Reception of the Housing Estate Dessau—Törten' in Melenhorst, M. et al. (eds) 100 years Bauhaus: What interest do we take in Modern Movement today? ,Berlin: Hochschule OWL (University of Applied Sciences) DOCOMOMO Deutschland, pp. 125–137.
- Stanek, L. (2008) 'Space as concrete abstraction: Hegel, Marx, and modern urbanism', in Goonewardena, K.Kipler,S. Milgrom,R and Schmid, C (eds). *Space, Difference, Everyday Life by Henri Lefebvre*. London: Routledge, pp. 76–93.
- Stavrides, S. (2016) Common space: The City as Commons, London: Zed Books. DOI: 10.1007/1-4020-0613-6\_3100.
- Steinmann, M. (1979). CIAM: Internationale kongresse für neues bauen. Dokumente 1928–1939 [CIAM: In- ternational congresses for modern architecture. Doc- uments 1928–1939]. Basel: Birkhäuser.
- Strauss, A., and Corbin, J. (1990) Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park: CA: Sage.
- Striener, R. (1990) 'Art Deco: Polemics and Synthesis', *Winterthur portfolio*, 25(1), pp. 21–34. Available at: http://no5boutiquearthotel.com/history-art-deco/.
- Sullivan, L, (1979[1918]). 'Ornament in Architecture', In Sullivan, L (eds.) *Kindergarten Chats and Other Writings*, New York: Dover.
- Sutton, F.A. (1963). 'Social Theory and Comparative Politics'. In H. Eckstein & D.E. Actor (Eds.), Comparative politics: A reader. New York: Free Press. pp. 67-81

## Т

- Talen, E. (2012) 'Zoning and diversity in historical perspective', *Journal of Planning History*, 11(4), pp. 330–347. doi: 10.1177/1538513212444566.
- Talen, E. and Ellis, C. (2004) 'Cities as art: Exploring the possibility of an aesthetic dimension in planning', *Planning Theory and Practice*, 5(1), pp. 11–32.
- Tankut, G. (1990) *Bir Başkentin İmarı / Ankara [Reconstruction of a Capital / Ankara] (1929-1939)*. Istanbul: Anahtar Kitablar.
- Tanyeli, U. (2007) Mimarlığın Aktörleri Türkiye 1900-2000 [the Architectural actors in 1900-2000]. İstanbul: Garanti Galeri.
- Tanyeli, U, (2004) *Istanbul 1900-2000: Reading Housing and Modernisation from the Metropolis*, Istanbul:IBB.
- Tanyeli, U. (2001) Sedad Hakkı Eldem. Istanbul : Boyut Kitapları.
- Tanyeli, U (1999)'Bireyselliği Vareden Doğaçlama, Improvisation Mimarlıkta Doğaçlama ve Behruz Çinici [Improvisation that Creates Individuality, Improvisation Improvisation in Architecture and Behruz Çinici]', İstanbul, Boyut Yayıncılık,5, pp.14-21.

- Tanyeli, U, (1998) 1950'lerden Bu Yana Mimari Paradigmaların Degisimi ve Reel Mimarlık, 75
  Yılda Degisen Kent ve Mimarlık [The Change of Architectural Paradigms Since 1950s and Real
  Architecture, City and Architecture Changing in 75 Years], İstanbul: Tarih Vakfı Yayınları.
- Taşan-Kok, T., Stead, D. and Lu, P., (2013). 'A conceptual overview of resilience: history and context'. In Eraydin, A and Taşan-Kok, T(eds.) Resilience Thinking In Urban Planning, Dordrecht: Springer, pp. 39-51.
- Tavares, M. A. (2003). Além da Geometria (1º ed.). Lisboa: Editorial Estampa.
- Távora, F. (1986). 'De há muito que nos conhecíamos[We've known each other for a long time]'. Casa e Jardim, 94, pp.22-25.
- Távora, F (1971) 'Entrevista a Fernando Távora [Interview with Fernando Tavora]'. Arquitectura, 4(123). pp 150-154.
- Teixeira, A., Fragoso, Í. and Medeiros, L. (2020). 'Arqueologia, recuperação da memória e afirmação da identidade: o caso do Bairro da Mouraria, Lisboa [Archaeology, memory recovery and identity affirmation: the case of Bairro da Mouraria, Lisbon]', *Revista memória em rede*, 12(23), pp. 19–48. Available at: https://doi.org/10.15210/rmr.v12i23.19212.
- Tekeli, D. and Sayin, N. (2020).*MiM-2inci Bolum*. Ankara: TRT2. Available at: https://www.youtube.com/watch?v=38VfR-oveDM&t=148s.
- Tekeli, D. (2019) *Doğan Hızlan ile Karalama Defteri [Scrapbook with Doğan Hızlan]*. Istanbul: TRT. Available at: https://www.youtube.com/watch?v=Ypu6c40Cj9E.
- Tekeli, I. (2015) "Modernizing Istanbul", in Coskun, Y. and Erkmen, B. (eds) History of Istanbul from Antiquity to 21st. Istanbul: ISAM, pp. 182–215.
- Tekeli, İ. (2008) 'Kentleşme [urbanisation]', Eczacıbaşı Sanat Ansiklopedisi, 2(1), pp857-859.
- Tekeli, İ. (2007) 'Türkiye'de Mimarlığın Gelişiminin Toplumsal Bağlamı [The Social Context of the Development of Architecture in Turkey]' in Holod, R. Evin, A. and Özkan, S. (ed.), *Modern Türk Mimarlığı* 1900-1980, pp.15-36, Ankara:TMMOB Mimarlar Odası Publication.
- Tekeli, D. (2006) 'İMÇ. Mühendislik ve Mimarlık Öyküleri-2. [IMC. Engineering and Architecture Stories-2]'. Istanbul: TMMOB Yayınları
- Tekeli, D. (2005). Türkiye'de Mimarlığın Gelişiminin Toplumsal Bağlamı, Modern Türk Mimarlığı' [Second National Architecture Period", Modern Turkish Architecture], Ankara: TMMOB Mimarlar Odası Yayınları
- Tekeli, D. (2002). 'Dialog: Sorular & Cevaplar [Conversation: Questions and answers]', *Arkitera Online Dialog*. Available at: https://v3.arkitera.com/v1/diyalog/dogantekeli/sc1.htm.
- Telmo, C,J. A. (1939). 'Nacional, A Exposicao do Mundo Portugues sera uma Afirmacao de Tecnica', *Centenarios, Revista Dos*, 1(6), pp. 11–19.
- Telmo, C,J,A. (1939). 'Exposição Histórica do Mundo Português. Revista Oficial do Sindicato Nacional dos Arquitectos', Sindicato Nacional dos Arquitectos, 9, p. 250.
- Teotónio Pereira, N. (1998). 'Arquitetura de Regime, 1938-' In Tostões, A., Wang, W., Becker, A., (ed.), Arquitectura do século XX: Portugal[Architecture of 20th century: Portugal], Munchen / New York / Frankfurt / Lisboa, Prestel / DAM / PF, pp. 33–39. ISBN: 3791319108.
- The American Heritage Dictionary of the English Language (n.d.). *Balance*. In The American Heritage Dictionary of the English Language. Retrieved April 29, 2019, from https://www.merriam-webster.com/dictionary/balance
  - Thompson-Fawcett, M. (1998). 'Leon Krier and the organic revival within urban policy and practice'. *Planning Perspectives*, 13(2), pp 167-194.
- T Lewis, C. and Short, C. (1879) Spatium, A Latin dictionary. Oxford: Clarendon Press
- Tönnies, F. (2012). Gemeinschaft und Gesellschaft. In Studien zu Gemeinschaft und Gesellschaft[Community and society. In Studies on Community and Society]. Wiesbaden: Springer Vs.
- Topcu, U. (2011). 'The Significance of Neighborhood in Istanbul', In 51st Congress of the European Regional Science Association: New Challenges for European Regions and Urban Areas in a Globalised World. Barcelona, pp. 1–12.

- Tostões, A. (2022) 'In Praise of Urban Continuity: Siza's Re-creation of the Chiado', in Wang, W. (eds.) On the Duty and Power of Architectural Criticism. 1st edn. Zurich: Park Books, pp. 68–77.
- Tostões, A. (2021). Lisboa Moderna. Lisboa: Docomomo International-Circo De Ideas.
- Tostões, A. and Ferreira, Z. (2021). 'Large-scale housing projects in Lisbon: Olivais and Telheiras', *Docomomo-Housing for All*, (65), pp. 56–69. doi: 10.52200/65.a.cah2r2x9.
- Tostões, A. and Byrne, G. (2016) 'Gonçalo Byrne interviewed by Ana Tostões docomomo', Docomomo-Modern Lisbon, (55), pp. 78–82.
- Tostões,A. (2014) A Idade Maior, Cultura e Tecnologia na Arquitectura Moderna Portuguesa.
   Porto: FAUP Publicações.
- Tostões, A. (2009). Pardal Monteiro. Fotobiografias Século XX[Pardal Monteiro:20th Century Photobiographies] . Lisbon: Círculo de Leitores.
- Tostões, A. and Rossa, W. (2008). Lisboa 1758: o plano da baixa hoje[Lisbon,1758: the plan of Baixa today]. Lisboa: Câmara Municipal de Lisboa/ Pelouro do Licenciamento Urbanístico e Reabilitação Urbana.
- Tostões, A. (2006a). 'Lisbon and Tagus and all that', in Salgado, M. and Lourenco, N. (eds)
   Atlas urbanístico de Lisboa[Lisbon Urban Atlas]. 1st edn. Lisboa: Argumentum, pp. 20–30.
- Tostões, A (2006b). Sede e Museu Gulbenkian, Fundação Calouste Gulbenkian ed.
- Tostões, A. (2005). 'Under the sign of the survey', in Afonso, J. (ed.) *IAPXX-20th Century Architecture in Portugal*. Lisboa: Ordem dos Arquitectos Travessa de Carvalho, pp. 17–36.
- Tostões,(2005b). 'A. Um composto e uma mistura: Homenagem a Fernando Távora '[A compound and a mixture: Homage to Fernando Távora]'. *Jornal de Arquitectos*, 220-221 .pp 48-51.Available at: http://arquitectos.pt/documentos/1226343565N8qQG2ho2Ki52YE8.pdf.
- Tostões, A. (2004a). Arquitectura Moderna Portuguesa 1920–1970 [Portuguese modern architecture 1920–1970]. Lisbon: IPPAR.
- Tostões, A. (2004b). Arquitectura e cidadania: atelier Nuno Teotónio Pereira [Architecture and city: Nuno Teotónio Pereira Atelier]. Lisboa: Quimera.
- Tostões, A. (2003). 'The architecture and Town planning of Lisbon: From the Public Garden to the Gulbenkian Garden', in Andersen, T. (ed.) From the National Stadium to the Gulbenkian Garden: Francisco Caldeira Cabral and the First Generation of Portuguese Landscape Architects. Lisboa: Calouste Gulbenkian Foundation Fine Arts Departent, pp. 98–113. DOI: 10.3368/lj.23.2.172.
- Tostões, A. (1999) .'Keil, arquitecto dos jardins e parques de Lisboa. A História de um trabalhador humanista[Keil, architect of Lisbon's gardens and parks. The Story of a Humanist Worker]', in Moita, I. (eds.) Keil do Amaral: o arquitecto e o humanista [Keil Do Amaral: The Architect and Humanist]. Lisboa: Câmara Municipal de Lisboa: Divisão de Museus e Palácios, pp. 78–89.
- Tostões, A. (1998). 'Modernização e Regionalismo, 1948-1961', in Tostões, A., Wang, W., Becker, A., (ed.), Portugal: Arquitectura do Século XX[ Portugal:Architecture of the 20th Century], Munchen / New York / Frankfurt / Lisboa: Prestel / DAM / PF, pp.40-53. ISBN: 3791319108.
- Tostões,A (1997). Os Verdes Anos na Arq. Portuguesa dos Anos 50 [The Green Years in Arch. Portuguese from the 50's]. Porto: FAUP.
- Tostões, A. (1995). 'Arquitectura portuguesa do seculo XX', in Pereira, P. (ed.) *História da arte Portuguesa*. Lisboa: Temas e Debates, pp. 507–517.
- Toussaint, M. (2009). Da arquitectura à teoria e o universo da teoria da arquitectura em portugal na primeira metade do século xx. {PhD Thesis}Universidade Tecnica De Lisboa.
- Toussaint, M. (2002). 'A Primeira Fase do Arquitecto [The Primary phase of architecture]'. In Neves, J(ed.) Manuel Taínha: Projectos 1954-2002, Santa Iria da Azóia. Edições Asa. pp. 9-25.
- Tracada, E. and Caperna, A. (2012). 'Complexity and Biourbanism: Thermodynamical Architectural and Urban Models integrated Modern Geographic Mapping' in the Theoretical

Currents II Architecture and its Geographic Horizons Conference in Lincoln, University of Lincoln.

- Trancik, R. (1986). Finding lost space: theories of urban design, New York: John Wiley & Sons.
- Trigueiros, L. (2004). Jose Luís Monteiro:1848-1942. Lisboa: Blau.
- Trisno, R. et al. (2019). 'The meaning of means: Semiology in architecture case study: Villa Savoye', *International Journal of Civil Engineering and Technology*, 10(2), pp. 653–660.
- Türkün Dostoğlu, N. and Erdoglu Erkarslan, Ö. (2013). Mimar Leman Tomsu: Türk Mimarlığında Bir Öncü 1913-1988. Ankara: TMMOB Mimarlar Odası.

### U

- Uras, B. (2013). 'Edoardo De Nari: İmparatorluk Başkentinden Cumhuriyet İstanbulu'na Özgün Bir İtalyan Mimar[Edoardo De Nari: An Original Italian Architect from the Imperial Capital to the Istanbul of the Republic]', İstanbul Araştırmaları Yıllığı ,2,pp. 243-51.
- Urban, F. (2013). Tower and Slab, Tower and Slab. New York: Routledge. doi: 10.4324/9780203804131.
- Urbanik, J. and Tomaszewicz, A. (2014). 'Flat Roof Advantage or Disadvantage of Modern', in Peña, F. and Chavez, M. (eds) 9th International Conference on Structural Analysis of Historical Constructions. Mexico City, pp. 1–12.
- Urbano, L. (2013). 'Between Here and There. Rural and Urban Space as National Identity in 1960s Portugal', in leal, C.J., Maia, M. H., and Cardoso, A. (eds) *To and Fro: Modernism and Verncualar Architecture*. 1st edn. Porto: Centro de Estudos Arnaldo Araújo da CESAP/ESAP, pp. 207–220.
- Urry, J (2007). *Mobilities. Malden*, Cambridge: Polity Press.
- Uyar, E. (2021) .'Modern Mimarlık Meselelerine Romantik Bakışlar: Turgut Cansever [Romantic Views on Modern Architecture Issues: Turgut Cansever]', Bāb Journal of Architecture and Design, 2(2), pp. 141–167.
- Uysal, Z. C. (2016). 'Cultural identity as a constructed reality and its reflection in Architectural Praxis: Sedat Hakki Eldem in Early Republican Turkey', in Donur, Z. et al. (eds) *Is it Real?* Structuring Reality by Means of Signs. Newcastle upon Tyne: Cambridge Scholars Publishing, pp. 189–197.

#### V

- Valverde, M. (2011). 'Premodern Ways of Seeing in Urban Governance', Law & Society Review, 45(2), pp. 277–312
- Van den Heuvel, D. (2008) 'Another Sensibility. The discovery of context. Specificity', OASE, 76, pp. 21–34.
- Van Dijk, H. (1999). Twentieth-century architecture in the Netherlands. Rotterdam: 010 Publishers.
- Van Leusen, M. (1996). 'A typology of dwelling arrangements', Environment and Planning B: Planning and Design, 23(2), pp. 143–164. Doi: 10.1068/b230143.
- Ventura Terra, M. (1903).'A cidade. Palestra com Ventura Terra [The city. Lecture with Ventura Terra- Newspaper interview]', *O dia*, 5 March, p. 1.
- Venturi, R. and Scott Brown, D., S. (1972). Learning from Las Vegas, Cambridge: MIT Press.
- Verducci, S. (2000). 'A conceptual history of empathy and a question it raises for moral education', *Educational Theory*, 50(1), pp. 63–80.

- Verheij, G. (2015). 'Ventura Terra: Modern Town Planner?', In Leal, J, C. Maia, M.H and FarreTorras, B.F (eds.). Southern Modernisms. Critical Stances through Regional Appropriations, Porto: IHA/FCSH-UNL, CEAA/ESAP-CESAP, pp. 459–475.
- Vicente, M (2011). Arquitetura Falada: O Exercício da Palavra[Spoken Architecture: the exercise of the word], Casal de Cambra: Caleidoscópio.
- Vidler, A. (2003). 'Transparency and Architecture', *Journal of Architectural Education*, 56, pp.3-39.
- Viollet-le-Duc, E.-E. (1875). Histoire de l'habitation humaine depuis les temps pre'historiques jusqu'a` nos jours [History of human habitation from prehistoric times to the present day].
   Brussels: Pierre Mardaga, 1986
- Viollet Le duc, E. E. (1869) Dictionnaire Raisonné de l'architecture Française du XIe au XVIe siècle. Paris: Morel
- Von Meiss, P. (1990). *Elements of Architecture. From Form to Place*. London: E & FN Spon.
- Von Moos, S. (2021). 'CIAM's Ghosts: Le Corbusier, art, and World war II', in Rabaca, A. (ed.) Le Corbusier: History and Tradition. Coimbra: Imprensa da Universidade de Coimbra, pp. 222–275. doi: 10.14195/978-989-26-1338-3\_8.
- Von Moss, S. (1979), Le Corbusier: Elements of a Synthesis, Cambridge, MIT Press.

### W

- Walker, T. D. (2015). 'Enlightened absolutism and the Lisbon earthquake: Asserting state dominance over religious sites and the church in Eighteenth-century Portugal', *Eighteenth-Century Studies*, 48(3), pp. 307–328. doi: 10.1353/ecs.2015.0016.
- Walker, D. and Myrick, F. (2006) 'Grounded theory: An exploration of process and procedure', Qualitative Health Research, 16(4), pp. 547–559. doi: 10.1177/1049732305285972.
- Walker, L. (2002). 'Home making: An architectural perspective', Signs: Journal of Women in Culture and Society, 27(3), pp. 823–835.
- Wansborough, M. and Mageean, A. (2000) 'The role of urban design in cultural regeneration', Journal of Urban Design, 5(2), pp181–197. doi: 10.1080/713683962.
- Wharton, A. (2015). The architects of Ottoman Constantinople: The Balyan family and the history of Ottoman architecture. London: Bloomsbury Publishing.
- Whiteley, N. (2003) 'Intensity of Scrutiny and a Good Eyeful: Architecture and Transparency'. *Journal of Architectural Education*, 56, pp8-16.
- Whyte, I. B. (2004). 'Modernity and architecture', In Hvattum, M & Hermansen.C (Eds.), Tracing Modernity: Manifestations of the Modern in Architecture and the City.. London, NewYork: Routledge, pp42-55
- Widrich, M. (2015) .'I'll be your mirror: Transparency, voyeurism and glass architecture', *Invisibility Studies: Surveillance, Transparency and the Hidden in Contemporary Culture*, 23, pp. 43–59. doi: 10.3726/978-3-0353-0671-2
- Wiebenson, D. (1960). 'Utopian Aspects of Tony Garnier's Cité Industrielle', *Journal of the Society of Architectural Historians*, 19(1), pp16–24
- Wigely,M (1998). Constant's New Babylon: The Hyper-Architecture of Desire. Rotterdam:Center for Contemporary Art
- Williams, R. (1980) Problems in Materialism and Culture. London: Verso
- Williams, R. (1977) Marxism and Literature. Oxford: Oxford University Press.
- Wlinterhalter, S. M. (2017) *Building a new Nation: The Modern Architecture of Ghana*. The Georgia, University of Georgia.
- Wojtkun, G. (2019). 'The Origin of Modern Movement in Architecture Ideal and Utility Premises', IOP Conference Series: Materials Science and Engineering, 471(8). doi: 10.1088/1757-899X/471/8/082068.
- Wright, F.L. (1953). The Future of Architecture. New York: Horizon Press Inc

## Y

- Yarnal, B., and Aman, D. (2009). *An Examination of Mobile Homes in Rural Pennsylvania*. Pennsylvania: Center for Rural Pennsylvania.
- Yavuz, Y. (1981). 'Mimar Kemalettin Bey (1870-1927) [The Architect Kemalettin Bey (1870-1927)]', OTDU Mimarlik Fakultesi Dergisi, 7(1), pp. 53–76.
- Yavuz, Y. (1976). 'Ikinci Mesrutiyet Doneminde Uluusal Mimari Uzerindeki Bati Etkileri (1908-1918) [ Western Effects on National Architecture in the Second Constitutional Period (1908-1918)]', O.D.T.U mimarlik fakultesi Dergisi, 2(1), pp. 9–34.
- Yegenoğlu, H. (2004). 'The power of informality or rethinking modernism', in Adequate and Affordable Housing for All: Resaerch, Policy and Practice". Toronto: CUCS Press, pp. 1–13.
- Yeomans, D. (2001) 'The Origins of the Modern Curtain Wall', *APT Bulletin*, 32(1), pp. 13–18. Available at: https://www.jstor.org/stable/1493439.
- Yerasimos, S. (2014). 'Le Discours sur la Protection du patrimoine en Turquie des Tanzimat
  à nos jours[The Discourse on the Protection of Heritage in Turkey from the Tanzimat to the
  present day]', European Journal of Turkish Studies, 19, pp. 1–18.
- Yerasimos, S. (1999). 'Tanzimat'ın Kent Reformları Üzerine [On the Urban Reforms of the Tanzimat]', in, Dumont, P., ve Georgeon, F., (eds.) Modernleşme Sürecinde Osmanlı Kentleri[Ottoman Cities in the Process of Modernisation], Istanbul:Tarih Vakfı Yurt Yayınları, ikinci baskı.
- Yeung, Y. (1977). 'High-rise, high-density housing: Myths and reality'. *Habitat International*, 2, PP 587-594.
- Yücel, A. (2007) .'Çoğulculuk İş Başında: Türkiye'nin Bugünkü Mimarlık Manzarası[Pluralism at Work: The Architecture Landscape of Turkey Today ]',In R. Holod, A. Evin, S., Özkan (eds) *Modern Türk Mimarlığı 1900-1980*,Ankara: TMMOB Mimarlar Odası, pp125-156.
- Yücel, E. (2015). 'Vasfi Egeli: Experienced in Restoration of the Buildings of Foundations', *Restorasyon*, 11(1), pp. 74–78.
- Yücel, A. (1983). 'Contemporary Turkish architecture: A thematic overview through the work of Eldem, Cansever and Çinici', *Mimar*, 10, pp58-68
- Yücel, A. (1973).'Mimar Sinan'ın Türbesi', Arkitekt, İstanbul, 352, pp189-190.

### Ζ

- Zbasnik-Senegacnik, M. and Kuzman, M. K. (2014) 'Interpretations of Organic Architecture', Prostor, 22(2), pp. 291–302.
- Zevi, B. (1978) The Modem Language of Architecture. Canberra: ANU Press.
- Zevi, B. (1974). Architecture as space: how to look at architecture, Translated by Gendel, N, New York, Horizon Press.
- Zevi, B. (1950) Towards an organic architecture, London: Faber&Faber Limited,
- Zurcher, E, J. (2004). Turkey: A Modern History. London: I.B. Tauris & Co Lt.

## **IMAGE CREDITS**

# Introduction

## The Hierarchies of the Objectives

Author

### Questions and objective

Author

#### Vavassore's plan for Istanbul in 1520

In Çelik, Z. (1986). The remaking of Istanbul: Portrait of an Ottoman city in the nineteenth century. Seattle, University of Washington Press.

#### Istanbul in 1871

**In** Çelik, Z. (1986). The remaking of Istanbul: Portrait of an Ottoman city in the nineteenth century. Seattle, University of Washington Press.

#### Henry Prost's proposal for Istanbul in 1937

In Akpinar, I. (2014) 'The rebuilding of İstanbul revisited: Foreign planners in the early Republican years', New Perspectives on Turkey, 50(50), pp. 59–92. Doi: 10.1017/s0896634600006580

#### Lisbon masterplan in 1650

CML archive

#### Baixa Pombalina Plan 1758

CML archive

### Masterplan of Lisbon in 1871

CML archive

### **Coding in the Grounded Theory**

Author

### Categorisation of coding stages for the grounded theory

Author

#### Coding in the Ground Theory specified for the thesis

Author

# Chapter I

#### Figure 1-1- to 1-17

Author

# Figure 1-18- Piazza Del Campo in Sienna

In Spadoni, F. (2018) Piazza Del Campo in Sienna, Piazza del Campo de Siena. Available at: https://www.itinari.com/pt/siena-s-piazza-del-campo-6r6e.

#### Figure 1-19- The Symbol and semiotics

Author

# Figure 1-20- Alternating repetition between path and landmarks based on Alexander's work

Author

### Figure 1-21- The Forum of Pompeii as an example for local entity

*In* Dobbins, J. J. (1994) The Forum of Pompeii as an example for local entity, The Forum at Pompeii. Available at: http://pompeii.virginia.edu/forummap.html (Accessed: 8 November 2020).

#### Figure 1-22-Mixed use development of a mosque, bazaar and centre of Fez

In Mortada, H.(2004) Traditional Islamic Principles of Built Environment, Cities. DOI: 10.1016/j.cities.2003.10.002

#### Figure 1-23- Forms of Growth in organic and mechanic cities

**In** Thompson-Fawcett, M. (1998). 'Leon Krier and the organic revival within urban policy and practice'. Planning Perspectives, 13(2), pp 167-194.

## Figure 1-24- Cordoba in 1811- Organically shaped city

In Mortada, H.(2004) Traditional Islamic Principles of Built Environment, Cities. DOI: 10.1016/j.cities.2003.10.002

#### Figure 1-25- The visual interruption example as a convex map in City G France

**In** Hillier, B., Hanson, J. and Peponis, J. (1987) 'The visual interruption example as a convex map in City G France', in Syntactic Analysis of Settlements. Arch & Comport/Arch, Behav.

#### Figure 1-26- Sketches of Courtyard houses on a hill on the right side in Latin America

In Rapoport, A. (1969) House Form and Culture, Prentice-Hall, Inc. Englewood Cliffs, New Jersey

#### Figure 1-27-The Samoan Dwellings

In Rapoport, A. (1969) House Form and Culture, Prentice-Hall, Inc. Englewood Cliffs, New Jersey

#### Figure 1-28-Practical example for the symbolic role of circle

In Pour Ahmadi, M. (2014), A *Basic Method for Naming Persian Karbandis Using a Set of Number*, Nexus Network Journal, 16(2), pp. 313–343. doi: 10.1007/s00004-014-0192-x

#### Figure 1-29-A typical Mandala

In A typical Mandala-. Available at: https://www.todamateria.com.br/mandala/ (Accessed: 13 October 2020).

#### Figure 1-30- A typical Cul-De-Sac in Medina

In Mortada, H. (2004) Traditional Islamic Principles of Built Environment, Cities. DOI: 10.1016/j.cities.2003.10.002

#### Figure 1-31- Cul-De-Sacs in a typical Traditional Anatolian city

In Bala, H. A. and Nafa, H. (2008) Cul-De-Sacs in a typical Traditional Anatolian city', in Cul-De-Sac. 19th edn. On-Site Review Streets

# Figure 1-32- The practice for stages of hierarchy in a contemporary project in Shanghai

In Yuan, P. (2015) The practice for stages of hierarchy in a contemporary project in Shanghai- Tongi Option Studio, Recreation apartments clusters. Available at: https://www.yankedesign.com/zhujiajiao (Accessed: 10 November 2020).

### Figure 1-33- Mecca Plan- Hiarchial streets and alleys organised traditionally

In Jabal, O. (2019) Mecca Plan- Hiarchial streets and alleys organised traditionally-Source. Available at: https://ekconcept.com/ux-portfolio-cat/urban-planning (Accessed: 9 November 2020).

#### Figure 1-34- A typical boundary in Venice

https://weburbanist.com/2015/12/21/car-free-cities-12-pedestrian-only-places-from-venice-to-nyc/

#### Figure 1-35-Narrow and winding street example in Alfama Lisbon

@Google map

#### Figure 1-36- Pedestrian friendly zone in Istanbul- Constantine Hippodrome

Pedestrian friendly zone in Istanbul- Constantine Hippodrome (2018). Available at: https://nomadicniko.com/2018/11/01/hippodrome/ (Accessed: 14 November 2020).

### Figure 1-37- San Marco Square as a strong center

San Marco Square as a strong center- MHS collection. Massachusetts: Massachusetts Historical Society. Available at: https://www.masshist.org/database/5107?ft=Collection Guides&from=/collection-guides/view/fap053.

#### Figure 1-38-Courtyard houses and central patios in Cordoba, Spain

In https://archeyes.com/the-courtyards-of-cordoba/#jp-carousel-6545.

#### Figure 1-39- Courtyard house in Riyadh and the role in micro and macro system

In Mortada, H. (2004) Traditional Islamic Principles of Built Environment, Cities. DOI: 10.1016/j.cities.2003.10.002

# Figure 1-40- Horizontal walls linking the houses

Author

#### Figure 1-41- Local Material in Mardin Turkey

In Torus, B. (2011) 'Local Material in Mardin Turkey', in Learning from vernacular Turkish house: designing masscustomised houses in Mardin. Intercultural Understanding, pp. 105–112.

# Figure 1-42-The ornaments in traditional space

Author

#### Figure 1-43- Sirkeci Post office in Istanbul

Sirkeci Post office in Istanbul. Available at: https://foursquare.com/v/sirkeci-adliyesi/4c58562e15a39c745aaf3eb9.

# Figure 1-44-Modern, Modernity and Modernism: Definition and Characteristics Author

#### Figure 1-45- The Global discourses on Architecture and Urbanism

Author

# Figure 1-46– free façade among the five points of architecture in a 3d modelling of Villa Savoye

Villa Savoye progettata con un software BIM (2017). Available at: https://bim.acca.it/villa-savoye-progettata-con-un-software-bim/.

#### Figure 1-47- Seskin District in Vilnius a typical example for identical blocks

Available at: https://www.dreamstime.com/editorial-stock-image-vilnius-city-seskine-district-autumn-time-lithuania-october-october-lithuania-image47420039 (Accessed: 21 January 2021).

#### Figure 1-48- The modern buildings with less ornaments in Istanbul

Author

#### Figure 1-49- A typical example of monotonous repetition and the pattern for that

Alexander, C. (2002) the Nature of Order: an Essay on the Art of Building and the Nature of the Universe. 10th edn. Berekely, California: The Center for Environmental Structure. doi: 10.1111/j.1467-8357.2005.00619\_1.x

#### Figure 1-50- Prefabrication in America

Available at: https://www.prefabmuseum.uk/content/history/short-history-prefabrication (Accessed: 17 February 2021).

#### Figure 1-51- A building with maximum simplification

Author

#### Figure 1-52- Transparency in a shopping mall in Sişli Istanbul

Author

# Figure 1-53- A bank with a single colored composition

Author

#### Figure 1-54-AEG Turbine Factory by Peter Behrens

Jaeggi, A. (2000) 'AEG Turbine Factory by Peter Behrens', in Fagus: industrial culture from Werkbund to Bauhaus. Princton Architectural Press

#### Figure 1-55- Industrial city by Tony Garnier

Garnier, T. (1917) 'Industrial City By Tony Garnier', in une cite industrielle. translated by Mariani,R in ,Rizzoli International Publications. New York: Rizzoli International Publications.

#### Figure 1-56- Farnsworth House by Mies Van Der Rohe

In Baratto, R. (2018) Repetitious horizontal and vertical lines in Farnsworth house, Tutorial de Revit ensina a desenhar a Casa Farnsworth de Mies van der Rohe. Available at: https://www.archdaily.com.br/br/898304/tutorial-de-revit-ensina-a-desenhar-a-casa-farnsworth-de-mies-van-derrohe.

#### Figure 1-57 James Stirling Design for Siemens Computer center in Munich

In Curtis, W. J. (1978) 'Munich, James Stirling Design for Siemens Computer center in Munich', in Modern Architecture since 1900. Englewood Cliffs: Prentice-Hall, Inc.

#### Figure 1-58-Single-use zoning example for Somerville Massachusetts

In Witsky,2018- Available at : http://sites.bu.edu/dome/2018/07/19/the-problems-with-euclidean-zoning/

# Figure 1-59-Mondrian's Composition with Red, Yellow and Blue 1921: The typical example of asymmetry

Rothschild Collection (2015) The Charnel-House:FROM BAUHAUS TO BEINHAUS. Available at: https://thecharnelhouse.org/2015/09/04/mondrian-order-and-randomness-in-abstract-painting-1978/composition-1922-oil-on-canvas-rothschild-collection-new-york/ (Accessed: 21 January 2021).

#### Figure 1-60- Taşlık kir Kahvesi as an Overhanging flat roof example

Erarslan, A. (2020) 'Taşlık kir Kahvesi as an Overhanging flat roof example-', in a Historicist Approach in the Development Process of Modern Turkish Housing; Sedad Hakki Eldem's Residential Structures. The journal of International social research.

# Figure 1-61- Roof terrace and social gathering in unite d'habitation derived from von Moos, 2021:261)

In Von Moos, S. (2021) 'Roof terrace and social gathering in unite d'habitation', in «Déphasages». Traduction de l'article «Phasenverschiebungen», archithèse, 16, 1975. Les Cahiers de la recherche architecturale urbaine et paysagère., p. 261.

### Figure 1-62- Pilotis in Villa Savoye bu Le Corbusier

Available at: https://www.archdaily.com.br/br/927555/o-processo-criativo-de-quatro-pioneiros-da-arquitetura-moderna/5d8bd5c8284dd1becc00012a-the-creative-process-of-the-four-pioneers-of-modern-architecture-photo

#### Figure 1-63- A building with a thin external wall

Author

# Figure 1-64-Unite d'habitation by Le Corbusier, a typical example for the reinforced concrete

Available at: Foundationlecorbusier.fr

#### Figure 1-65- Ribbon Windows in Bauhaus in Dessau

Available at: https://www.bauhausdessau.de/content/images/6ef2d16463db1225e81942e43004c8a9.jpg.

#### Figure 1-66- repetitious horizontal and vertical lines in Calouste Gulbenkian Museum

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#### Figure 1-67-High-rise metropolis introduced by Hilberseimer

Hilberseimer, L. K. (1927) 'High-rise metropolis introduced by Hilberseimer', in Metropolisarchitecture and select essays. New York: Columbia University

#### Figure 1-68- A separation between the pedestrian and vehicles

Available at https://www.nycstreetdesign.info/geometry/grade-separated-bike-lane

#### Figure 1-69- Areal view by the Radburn plan by Clarence Perry in 1927

In Southworth, M. and Ben-joseph, E. (2003) 'Areal view by the Radburn plan by Clarence Perry in 1927', in Streets and the shaping of the towns and cities. Washington: Island Press.

### Figure 1-70 to 1-74

Author

# Chapter II

#### Figure 2-1- Freezing time diagram

Author

# Figure 2-2- The visual image for status quo regarding spatial triangle

Author

# Figure 2-3- Culturalist and Progressivist Queuing in architects

Autho

# Figure 2-4- The Intersection between Berna and Republic Avenue

CML archive

#### Figure 2-5- The model for Cinema Capitolo based on its initial design

In Rodolfo, J. D. S. (2002) 'The model for Cinema Capitolo based on its initial design', in Luís Cristino da Silva e a arquitectura moderna em Portugal. Lisboa: DOm Quixote.

# Figure 2-6-Forestier's project for Lisbon in 1928 based on his sketches

In Morais, J. D. S. and Roseta, F. (2005) 'Forestier's project for Lisbon in 1928 based on his sketches', in Os planos da Avenida da Liberdade eo seu prolongamento. Lisboa: Livros Horizonte, pp. 23–27.

#### Figure 2-7-Initial detailed scheme for Parque Eduardo VII

In Montez, P. (1935) 'Initial detailed scheme for Parque Eduardo VII', in A estética de Lisboa, p. 52.

#### Figure 2-8- Casa de Moeda by Jorge Segurado

CML archive

# Figure 2-9- The Front page for one of the first issues of the magazine "Arquitectura Portuguesa"

FAUP archive-Documentation centre, faculty of architecture, university of Porto, Porto

#### Figure 2-10- 1940Portuguese world Exhibition

CML archive

# Figure 2-11- Lisbon Master plan in 1948

CML archive

### Figure 2-12-Infanto Santo Avenue

CML archive

#### Figure 2-13- A residential complex in Bairro das Estacas

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Available at: http://www.aefaup.com/nwsl/2016/5/17/3lsckw8sol8xdp2li4epgsq9wbkwz1 (Accessed: 22 June 2021).

#### Figure 2-14- Calouste Gulbenkian Museum and Foundation

FCG archive

#### Figure 2-15- Chelas comprehensive plan

In Heitor, T. V. (2016) 'Revisiting Chelas. In Search of the Promised Urbanness', Modern Lisbon, (55), pp. 58–65. doi: 10.52200/55.a.go6vhvzg.

## Figure 2-16- The Amoreiras shopping center by Tomas Taveira

Author

#### Figure 2-17-Centro Cultural de Belem

Author

#### Figure 2-18- Portuguese Pavilion at expo 98 by Alvaro Siza

Author

# Figure 2-19- Ministry of Defense Gatehouse in Islamic Eclecticism and Moorish Revivalism

In Gül, M. (2017) 'Architecture and the Turkish city: An urban history of Istanbul since the Ottomans. London. New York': I.B.TAURIS.

#### Figure 2-20- Sirkeci Train Station by August Jasmund

Available at: https://www.fikriyat.com/galeri/tarih/gorulmesi-gereken-tarihi-garlar/2.

# Figure 2-21- Haydarpasa railway station as a gift by Kaiser Wilhelm II to Sultan Abdul Hamit II

In Gül, M. (2017) 'Architecture and the Turkish city: An urban history of Istanbul since the Ottomans. London.New York': I.B.TAURIS.

## Figure 2-22- Istanbul Sirkeci Post Office

Istanbul PTT archive

### Figure 4 - 4<sup>th</sup> Vakif Hans as the the crucial buildings began to be built in 1910s

Author

#### Figure 2-24- Harikzadegan Apartments in Laleli by Kemalettin Bey in 1920s

In Gül, M. (2017) 'Architecture and the Turkish city: An urban history of Istanbul since the Ottomans. London. New York': I.B.TAURIS.

#### Figure 2-25- Ataturk Sea Pavilion in Florya was designed in 1937

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# Figure 2-26- Faculty of Science and Letters by Sedad Eldem and Emin Onat Author

#### Figure 2-27- Prost analytic plan for Istanbul

Istanbul Metropolitan Municipality archive

#### Figure 2-28- Taşlik Coffee House By Sedad Eldem in 1948

#### Figure 2-29 -Hilton Hotel in Istanbul

Hilton Hotel in Istanbul' (1952) in Hilton Hotel projesi. Arkitekt magazine.

# **Figure 2-30-Levent Housing Project**

In Gül, M. (2017) 'Architecture and the Turkish city: An urban history of Istanbul since the Ottomans. London.New York': I.B.TAURIS.

# Figure 2-31- Social Security complex In Zeyrek by Sedad Eldem- (Source: Agha Khan Archive)

©Agha Khan Archive

Available at: https://www.akdn.org/architecture/project/social-security-complex

#### Figure 2-32- Intercontinental Hotel perspective and Site plan

In Intercontinental Hotel perspective and Site plan (1972) in. Istanbul: Arkitekt magazine,p287

### **CHAPTER III – HUMAN**

#### Figure 3-1- Freezing "Human"

Author

#### Figure 3-2- Rossio Train station designed by Jose Luís Monteiro

The archive of Sipa Fonte De Sacavem

available at: http://www.monumentos.gov.pt/site/app pagesuser/sipa.aspx?id=4979

## Figure 3-3- Froebel Kindergarten by Jose Luís Monteiro

CML archive

#### Figure 3-4- Hotel Avenida Palace by Jose Luís Monteiro

The archive of Sipa-Fonte De Sacavem

available at : http://www.monumentos.gov.pt/Site/APP\_PagesUser/SIPA.aspx?id=3125

#### Figure 3-5- Rafael Bordalo Pinheiro Museum

Author

#### Figure 3-6- Tivoli Theatre centre designed by Raul Lino

Author

# Figure 3-7- Palacete Mendonca-Premio Valmor de 1909 by Ventura Terra

CML archive

# Figure 3-8- The principles of the architects in the generation based on the traditional-modern spectrum

Author

## Figure 3-9- Cais Do Sodre Train Station by Porfirio Pardal Monteiro

CML archive

# Figure 3-10- Nossa Senhora de Fátima Church by Porfirio Pardal Monteiro

Author

#### Figure 3-11- Instituto Superior Técnico by Porfirio Pardal Monteiro

CML archive

#### Figure 3-12- Terminal Fluival Sul e Suleste by Cottinelli Telmo

The archive of Sipa Fonte De Sacavem- Available at: http://www.monumentos.gov.pt/Site/APP\_PagesUser/SIPA.aspx?id=5049

# Figure 3-13- The principles of the architects in the generation based on the traditional-modern spectrum

Author

#### Figure 3-14- Monsanto Tennis Club

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### Figure 3-15- Alvalade urbanisation plan

CML archive

#### Figure 3-16- Sheraton hotel and Imaviz

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# Figure 3-17- The principles of the architects in the generation based on the traditional-modern spectrum

Author

#### Figure 3-18- Portuguese Pavilion at Expo 58

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# Figure 3-19- Ruy Jervis d'Athouguia and Sebastião Formosinho Sanches Estacas neighbourhood Bird Eye view

CML archive

# Figure 3-20- Ruy Jervis d'Athouguia and Sebastião Formosinho Sanches, Estacas Neighbourhood

CML archive

### Figure 3-21- Franjinhas

DGPC photographic documentation archive

# Figure 3-22- Sketch of Igreja do Sagrado Coração

**In** Tostões, A. (2004b) Arquitectura e cidadania: atelier Nuno Teotónio Pereira [Architecture and city: Nuno Teotónio Pereira Atelier]. Lisboa: Quimera.

# Figure 3-23- The principles of the architects in the generation based on the traditional-modern spectrum

Author

## Figure 3-24- Chiado Fire before reconstruction by Siza

Chiado Fire before reconstruction by Siza (2007). Lisbon: Revista Municipal n25.

#### Figure 3-25- Portuguese Pavilion in Expo 98

Author

#### Figure 3-26- Bonjour Tristesse Sketches by Siza

In Jodido, P. (2013) 'Bonjour Tristesse Sketches by Siza', in Alvaro Siza: Comple works 1952-2013. Cologne: Taschen

# Figure 3-27 -A Cidade como Arquitectura [The architecture of city] written by Nuno Portas

In Portas, N, (1969); A Cidade como Arquitectura [ The city as Architecture]; Lisboa: Livros Horizonte

#### Figure 3-28- Pantera-Cor-de-Rosa(Pink Panther) social housing

Author

#### Figure 3-29- Casa Dos Bicos

DGPC photographic documentation archive

# Figure 3-30- The principles of the architects in the generation based on the traditional-modern spectrum

Author

# Figure 3-31- The overall principles of the four generations in Portuguese architecture considering traditional and modern architecture

Author

#### Figure 3-32- Pera Palace

In Anıktar, S. (2013) '19. Yüzyıl Batılılaşma Hareketlerinin Osmanlı Mimari Biçimlenişine Etkisi: Vallaury Yapıları Örneğ[The Effect of 19th Century Westernisation Movements on Ottoman Architectural Formation: The Example of Vallaury Buildings']i', in II. Türkiye Lisanüstü Çalışmaları Kongresi - Bildiriler Kitabı V. Bursa, pp. 1205–1220.

#### Figure 3-33- Botter Building by D'Aronco

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#### Figure 3-34-Sheikh Zafir Tomb built in 1905 by D'Aronco

Author

#### Figure 3-35-Saint Antony Church in Pera by Mongeri

Author

#### Figure 3-36- Istanbul 4th Vakif Han

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#### Figure 3-37- Defteri Hakani building by Vedat Tek

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# Figure 3-38-The first generation of Turkish architects during the Ottoman empire and the Turkish republic and their principles toward traditional and modern architecture

Author

#### Figure 3-39- Istanbul Palace of Justice perspective

**In** Bozdoğan, S. (2002) Modernism and nation building: Turkish architectural culture in the early republic. Seattle and London: University of Washington Press. doi: 10.5860/choice.39-3781

#### Figure 3-40- Florya Ataturk Sea Mansion

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#### Figure 3-41- Ceylan Apartments

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### Figure 3-42- Yalova Thermal Hotel

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#### Figure 3-43 Taşlik Coffee House

Available at: https://archive.archnet.org/authorities/338/sites/9203

#### Figure 3-44- Zeyrek Social Security Complex

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Available at: https://www.akdn.org/architecture/project/social-security-complex

#### Figure 3-45- Şişli Mosque: The first religious building in republican era

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# Figure 3-46-The second generation's overall orientation toward traditional and modern architecture

Author

#### Figure 3-47- Understanding Istanbul by Turgut Cansever

In Cansever, T. (2015) İstanbulu anlamak[Understanding Istanbul]. Istanbul: Tımaş.

#### Figure 3-48-The generation's orientation toward traditionalism and modernity

Author

#### Figure 3-49- Intercontinental Hotel

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#### Figure 3-50- The Levent project

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#### Figure 3-51- Istanbul Textile Traders Market

Aga Khan Trust for Culture. Available at: https://www.archnet.org/sites/20 (Accessed: 16 January 2022). &©Salt research centre archive

#### Figure 3-52- Metro City By Doğan Tekeli

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#### Figure 3-53- Bakirköy Industrial International Bank

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# Figure 3-54- Etimesgut Mosque By Cengiz Bektaş

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# Figure 3-55-The Generation's overall principle toward traditional and modern architecture

Author

# Figure 3-56- The Turkish architects' modus operandi toward traditionalism and modernity

Author

# Chapter IV

# Figure 4-1- halting place to Figure 4-3

Author

# Figure 4-4- Status Quo of Baixa Pombalina

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#### Figure 4-5- Lojas das Meias by Raul Lino

In Pereira, P. M. (2020) "Urbanistic Architecture" according to Raul Lino. Visions of the Portuguese City in the First Half of the 20th Century (1900-1948)', The ARCC journal for Architectural Research, 17(1), pp. 1–27. doi: 10.17831/eng.

# Figure 4-6- Santander Bank, previously known as Banco Totta e Açores

# Figure 4-7- Buildings in the Praça de munidcio, Praca D.Pedro Iv, Prca de S.Paulo and Rua João Perreira da Rosa

In França, J. A. (2012) 'Estudo das zonas ou unidades urbanas de caracter historico-artistico em Lisboa [Study of historical-artistic urban areas or units in Lisbon]'. Lisboa: Impresa Nacional Casa de Moeda.

#### Figure 4-8- Building Typologies frequently used in the façades of Baxia Pombalina

In França, J. A. (2012) 'Estudo das zonas ou unidades urbanas de caracter historico-artistico em Lisboa [Study of historical-artistic urban areas or units in Lisbon]'. Lisboa: Impresa Nacional Casa de Moeda.

# Figure 4-9- reconstruction plan fort he Baixa Pombalina by Eugenio Dos Santos and Carlos Mardel

CML archive

#### Figure 4-10 to Figure 4-17

Author

# Figure 4-18- The Valmor prize winner building in Intendente by Adães Bermudes CML archive

#### Figure 4-19 to Figure 4-22

Author

#### Figure 4-23 to Figure 4-25

FCG archive

#### Figure 4-26- Figure 4-29

Author

#### Figure 4-30- The aerial View of Alvalade

CML archive

#### Figure 4-31-Urbanisation plan for the Southern zones of Alferes Malheiro

AML archive

#### Figure 4-32- Bairro das Estacas

CML archive

#### Figure 4-33-Alvalade and its main networks

Author

#### Figure 4-34 to 4-36

Author

#### Figure 4-37- The zone 6 -Oliavis Norte, Olivais Sul and Chelas

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#### Figure 4-38-Olivais Norte Master plan

GEO – Gabinete de Estudos Olissiponenses, DP 1272 CMLEO — Olivais Norte

#### Figure 4-39- Olivais Norte Areal view

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#### Figure 4-40- Olivais Norte

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#### Figure 4-41- Olivais Sul Master plan

GEO - Gabinete de Estudos Olissiponenses, DP 1272 CMLEO- Oliavis Sul

#### Figure 4-42-Olivais Sul in a nutshell

Author

# Figure 4-43- The Comprehensive master plan for Chelas based on cells and parallel axis

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#### Figure 4-44- to Figure 4-54

Author

#### Figure 4-55- Grand Plan for Galata

In Çelik, Z. (1986). The remaking of Istanbul: Portrait of an Ottoman city in the nineteenth century. Seattle, University of Washington Press.

#### Figure 4-55 to 4-75

Author

# **Chapter V & Conclusion**

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# Appendix 1:Extended information on the human chapter Human- Porguese

# Porguese Architects brief bigraphy

# 1. Adães Bermudes (1864-1948)

Adães Bermudes is another significant architect who made his mark on Lisbon's urban development in a period when the Parisian Beaux-art significance in public buildings and urban planning had been a dominant formula. The trace of Beaux-Arts great masters, Paul Blondel, Gaston Maspero and (Hippolyte) Taine, is evident in Bermudes's work since he continued teaching disciplines such as construction and strength of materials, descriptive geometry and Perspective, shaping his professional character.

Adães Bermudes was part of the transition process in that architectural generation. He learned the Beaux-Arts ideal in architecture with eclectic taste using Manueline, Baroque and Art Nouveau decorative elements. Having put it all together, the skills he practised during the time illuminate the fact that his architectural works were the product of time rather than the place, precisely when two characteristics of time were discussed: the trend itself and the behaviour that the period manifests. It was inevitable that the 19th-century trend of eclecticism was coined by the revival of attitudes changing toward the progressive manifestation of industry and, on the other side, the uncertainty of time both in problematic stylistic dilemmas in architecture and the socio-political crisis of class consciousness. His involvement in public projects such as official schools and conservation of national monuments and then his influential role in more slightly private sectors such as designing houses and neighbourhoods, exhibit and reflects the character of time in both manners. In public projects, by the promotion of the state for initiation of projects in education, Adães Bermudes and Arnaldo Ferreira were recruited to design numerous schools. Among them, the Primary Normal school of Lisbon in Quinta de Morocco in Benfica (Galvão & Mendes, 2011:29) could be addressed as a critical example. His contribution to materialising the working city and economic neighbourhood model (Bairro Economico) was successfully implemented in the Social Quarter of Arco de Cego with different housing categories: independent, collective and particular. Each contained multiply isolated, grouped, adjoining, detached and cottage types, reflecting a complex of diversified spatial solutions (Mesquita, 2006:96).

Arco de Cego, with its socialistic utopian character, can even imply the socio-political production of time with its hierarchical entity rather than periodic stylistic problems or a combination of both with multiple modes of representation for classes. Even in the stylistic approach, he appeared to have a taxonomical view of the subject, context and style. For instance, he designed housing and banking projects in a flexible eclecticism, neo-Romanesque for religious structures, and Gothic and Manueline styles for other

public buildings such as funerary (Damasio, 2013:41).

Bermudes' projects were awarded or chosen as winning designs, although his architectural scope in a

non-unified manner could be addressed as an individual choice due to his formation in Beaux-Arts and his journey in Europe. He received the first prize public for a proposal designed for economic neighbourhoods in Lisbon, Porto and Covilha in 1896 (Almeida et al., 1986:48), the Valmor prize for cylindrical building in Largo de Intendente and the winning prize monument for Marques de Pombal in 1917 being completed later on in the 1930s (Tostões,1995:512). All together with Beaux-Art oriented eclectic expression of Beaux-Arts with the tomb of Benefitores da Misericodria (1905) designed in a historicist way and slight progressive schools like the higher institute of Agronomy (Instituto Superior da Agronomia) once again confirms the possible hypothesis that among the generation, he is a transitional character following a triangular effect of training history between the eclectic-progressive Paul Blondel, the positivist influence of the Hippolyte Taine as a philosopher and at last the art historian and historicist approach of Gaston Maspero

# 2. Alvaro Augusto Machado (1874-1944)

Alvaro Augusto Machado was also the architect manifesting the reflection of the time his vocation took place. The styles were reproduced in a revivalist form due to the opposition between artistic aesthetics and engineering technique.

Machado presented his concern toward cultural nationalism in an eclectic approach, slightly different from the romantic Ruralism that architects like Raul Lino exhibited.

Like the other architects, his training was inside the realm of Beaux-Artian formation; however, his nationalistic concerns directed him toward Neo-Romanesque, being suitable to Portuguese architectural culture and, at the same time, the modern principles in future. The most significant work that characterises Machado's personality was, without doubt, the Valmor Tomb in 1900 with the use of limestone mortars, stone arches and columns supporting the columns structurally (Carvalheira, 1908:17) and his dedication to taking Romanesque architecture in a more contemporary level, being significant enough for him to participate in reconstruction, restoration and designing programs for churches.

Alvaro Machado was promoted over time, and predictably, like other architects with cultural concerns, he concentrated on housing. However, his projects were moving closer to modern construction due to the constructive and technological formation and personal concern he had. In this regard, he published an article entitled "The Type of modern housing project" in Construcção Moderna (The modern construction) magazine and advocated the idea of free composition.

Jose Luís Monteiro more or less influenced the house Machado designed in Portuguese architecture. The houses he designed for General Oliveira Gomes, Julio Cesar de Moura e Vasconcelhos, Manuel d'Almeida represented this influence the most with roofs resembling the Chalets the Monteiro designed and also a more complex façades in eclectic taste. In Neo-Romanesque, Machado continued to design numerous works by the beginning of the 20th century. College of Ana Roussel (1904), National Society of Fine Arts (1906) and Casa do Campo Grande (1916-now it is called Rafael Bordalo Pinheiro Museum) were the most significant examples characterizing Machado's neo-Romanesque design language (Tostões, 1995:513). However, he moved forward with numerous designs in different styles such as Pre-

Modern, neo-Traditionalist and eclectic in various subjects like houses, pavilions, schools, monuments and neighbourhoods. To sum up, Alvaro Machado inherited the essence of the transitional time with the valorised national identity in a neo-Romanesque approach extending to the 20th century and "The Portuguese House" problematic (França, 1966:335). He distanced from revivalist pastiches and moved closer to inherent qualities of architecture like structure and volume, oscillating from more traditionalist styles toward Art-Nouveau. He was in fact recognised as the "most Portuguese and modern of all" for the volumetric clarity based on the dry and geometric lines (Tostões, 1995:508).

### 3. Jose Luís Monteiro (1848-1942)

Since urban development in the age of industrialisation had to be cosmopolitan, almost all the architects living in the second half of the 20th century decided to continue their architectural training in Paris. However, in the transition from pluralistic revivalism to industrial progressivism, every generation needs a transmitter, and that person would be Jose Luís Monteiro. The master of masters was probably the founder of the path to formalizing modern Portuguese architecture with the cosmopolitan influence he brought to the country and capital with his authorship of buildings and teaching the two later architectural generations.

The courses he passed throughout his training in Ecole Nationale et Speciale des Beaux-Artes, such as descriptive Geometry, Perspective and later working with Jean-Louis Pascal, framed his design philosophy (Trigueiros, 2004:10) based on rationalism. He had the opportunity to participate in projects like the Paris Hotel De Ville (Cordeiro & Maia, 1990:41) and to travel to Italy to continue his studies and investigate the architecture of the countries in-between the path he had visited during the journey.

The most crucial point that was reflected throughout his working career could be seen in the final works of his educational career since he had to prepare a package of projects containing a Swiss chalet, a small Neo-Baroque Italian palace, a Neo-Gothic English farmhouse and Neo-Arab Spanish house (Trigueiros, 2004:9). Eventually, Monteiro received the Degree from Beaux-Art. His career was begun in Portugal and Lisbon starting 80s in the 19th century. His first recorded project inside the Lisbon central area was Frobel Kindergarten in 1882 beside Central Liceu as other educational facilities.

Monteiro was involved in more municipal projects since there was harmony between him, Federico Ressano Garcia as the chief engineer of the city council and José Gregório da Rosa Araújo as the mayor. This cooperation allowed for the more critical projects that later on were discussed by architectural historians, such as Rossio Train stations (1886-1887) and Hotel Avenida Palace (1890-1892). The importance of these projects can be rooted in two contexts. First, they symbolised the paradigmatic architecture of the iron application, romantic Manueline revivals and Beaux-Artian luxurious taste (Tostões, 1995: 508). The second issue would address the probable connection between these projects and the monument designed in Restauradores square, which might prepare the framework for the designation of Avenidas Novas in the incoming years, starting from Avenida Liberdade up to the North.

Monteiro continued to be the municipal architect until 1909. He continued to design lots of work in different subjects such as chalets, schools, tombs, houses, institutions and clubs ranging in diverse

styles from eclectic revivalisms to Art Nouveau. Portuguese later architectural generations followed his design philosophy, confirming modernity in terms of construction technology, materials and functionality based on the plan's importance (Cordeira & Maia, 1990). In the age of transition, he was the transmitter of the stream toward progressive ideas and modernity in the next century.

# 4. Raul Lino (1879-1974)

When a cosmopolitan model of modern urbanisation and architecture was about to dominate its mark on the time, city and generation of designers, the reactionary characters raised to condemn the unfavourable circumstances that effect can bring about based on the status quo or the anticipation of the future. Raul Lino represents the reactionary image of the 19th and even 20th centuries. Unlike other architects, Lino was trained in an Anglo-Germanic atmosphere different from Beaux-Art norms. His primary studies took place in 1890 in Windsor for three years, being influenced by the Arts and Crafts movement. Later, he decided to continue in Hannover in Germany between 1893 and 1897. The architectural and urban outline taken in those years was identifiable in his training. The Catholic school near Windsor was affected utterly by Morris and Ruskin's neo-Romantic and cultural identity being materialised in different forms such as" British Cottage" (Lino,1929:68). Also, his ideas in urbanism were formed by the picturesque urbanism of Raymond and Barry Parker (Pereira,2020:4).

Besides the theoretical influence that his travel to the United Kingdom had, his stay in Hanover provided the framework of the synthesis between historical and contextual issues in his work. He worked with Albrecht Haupt, a deep admirer and researcher of Portuguese architecture (Tostões, 1995:55).

For architectural historians putting together the influence of industrialisation and classifying the architectural stream of the period starting from the second half of the 19th century until 1920 into two confrontations of Choay's Progressive and cultural models, Raul Lino is located on the culturalist side. There are multiple convergent points in the similarity of the cultural and traditional mindsets. First, his training process in Germany and the United Kingdom provided national craftsmanship influenced by historical eclecticism. Second, it was turned to practical scope based on his return to Lisbon to revalorise the traditions and search for an identity to save the country from foreign fashion (Gomes,1991:32) spreading worldwide and in Portugal. Besides the collective image he could have had of the Portuguese life embedded in styles, he recognised that travelling might facilitate the identification of domestic architecture as a catalyst, probably raised by the question of identity locus.

His travel to Morocco in 1902 could appear as a significant turning point for two reasons. First, the importance of time continuity reveals that he studied the diverse cultural significance of different periods in the country. In the second place, his travel might seem crucial for the traditionalist philosophers addressing the centrality of the Middle Eastern culture in the concept of traditional mindset. Nevertheless, his side had a definite taste for southern architecture (Tostões, 1995:515). This approach could transform from the architect to the reactionary force to the architects like Ventura Terra on the progressive side. His influence in Lisbon's public buildings and urban development started to decline when he lost the competition for the Portuguese Pavilion in the Universal Expo of 1899 in Paris to Miguel Ventura Terra. Also, his focus on the concept of the "Portuguese house" (Casa Portuguesa) as a cultural

intuition in a romantic form being fixed in the scenography of Neo-Manueline (França,1974) boosted the distance between his ideas and the influence it might had on Lisbon's architecture despite of his works in Lisbon like Jardim-Escola João de Deus (1914), Gardenia store(1918), Tivoli Cinema in (1924) and Loja das Meijas (1931). This image remained almost fixed even though Estado-Novo, with a convergent mentality, took power, and Lino tended to publish numerous theoretical works on Portuguese houses, urbanisation, criticism of modernism in architecture and also his responsibility as Directorate General for National Buildings and Monuments (DGNBM) (Pereira, 2020:24).

# 5. Miguel Ventura Terra (1866-1919)

In the age of uncertainty covering all specialities, even between modernity and traditionalism, Miguel Ventura Terra seemed to be the most certain personality. He was a pioneer in shifting from stylistic diversities to structural university. Like most architects of the period, Ventura Terra received scholarships to study at Ecole Nationale et Speciale des Beaux-Arts, having stayed there for almost ten years. The importance of his training in the French capital belongs to the period of the acceptance between what could be called "architecture by engineers" and "architecture by architects" (Silva,2006b)since he studied and worked under the supervision of Louis-Jules Andre (1819-1890) and Victor Laloux (1850-1937), just right in the timeline that projects like Eiffel Tower, Galerie Des Machines and Gare D'Orsay (Designed by Laloux Studio) appeared to be noteworthy (Ramos,2011:31) not only in practical engineering scopes but also in artistic rhetorical discourses. The overlapping ideas of hygienic improved life qualities, novelty regarding the qualities of representation by new materials and Viollet-Le Duc's progressive structure were evident in his interview with the newspaper O Dia (Ventura Terra,1903:1).

His insistence on the necessity of modern science and construction, on the one hand, criticizing the movements on Portuguese houses and also questioning the inherent Portuguese-ness of decorative features on the other side, manifests his logical and rational view on an authentic language of architecture evolving through time rather than following the cultural traces that might not bear the purity embedded in the required identity.

Ventura Terra was the paradigmatic centrality of progressive attitude linked to contemporary production in class and urban fabric. His architecture was in line with Bourgeoisie, so most of his works in Lisbon were concentrated in Avenidas Novas, although from a historical perspective, he valorised the conservation and reuse of old materials (Mourão, 2006: 136). In the primary phase of his return to Lisbon, he seemed motivated enough to participate in the remodelling of São Bento palace (Tostões, 1995:513). Also, this progressive image provided sufficient continuity for him to consider urban aesthetics after his presidency of the Portuguese architecture Society (SAP) as a newly elected town councillor by studying the general improvement plan, initiating a park located in the Eduardo VII Park, and enlargement of Rua do Arsenal by facilitating the movement for the pedestrians (Verheij, 2015:464). Ventura Terra was influenced by time rather than a place when his progressive formation in Paris coincided with Proudhonian attitude not in a mutualism but in an approach affected by the necessities of time imposing a dominant class (Almeida, 1993:74).

### 6. Adelino Nunes (1903-1948)

Adelino Nunes is a reasonable example of being involved in identity concerns, and the acceptance of modern architecture and the nation-state role of Fascism can amplify this effect that found the vital link between what Raul Lino tended to pursue a cultural model based on the continuity of domestic house through the matter of time. Moreover, the inherent support of nationalism for rural life gave the ground for the stream avoiding global modernity.

Nunes, as one of the youngest of "Generation 27" cited by Pedro Vieira Almeida, shared the influence of Lino in his work for Palácio das Telecomunicações building in Praça D.Luís as the most crucial latest works that he designed for the Post, Telegraph and Telephone ministry among the numerous works he did for CTT. In this project, he tried to distance himself from the forces jeopardizing the clear and logical solution proposed (Toussaint, 2009:277).

A problem-solution attitude toward design could avoid specific prejudice toward style, whether in singular or plural form and the function-form polarity. Adelino Nunes can be located inside this model since he proposed both modern and local models altogether his efforts to develop through time with the books like Gli Elementi dell'Architettura Funzionale by Alberto Sartoris in 1935, Nuova Architettura Nel Mondo written by Agnoldomenico Pica and Triennale di Milano in 1939 with an introductory text by Giuseppe Pagano , Urbanistica by Pietro Bottoni (Ibid,2009:282-283) providing the possibility to conclude that he aimed at finding the possible synthesis through theoretical readings in 1930s contemporary Italian architecture.

# 7. Cottinelli Telmo (1897-1948)

Cottinelli Telmo could also represent similar features of smooth modernity regarding the socio-political conditions in Portugal. Like the other architects who graduated around 1920, he appreciated the primary waves of modernity through his journey to European countries. The most crucial point could be his possible presence in Paris and visiting the international exposition of modern industrial and decorative arts in 1925 altogether with other colleagues such as Luiz Cunha, Pardal Monteiro, Cassiano Branco and Luís Cristino Da Silva, seeing Le Corbusier's Esprit Nouveau and Konstantin Melnikov.

The similarity began with a worldwide enthusiasm for Art-Deco. Later on, the international style made had to decline at a turning point as the Estado Novo systematised rooting in all disciplines, specifically architecture, when the golden decade of public works made these architects the public servant of the state. Consequently, Cottinelli Telmo would first suit this position as an interdisciplinary figure in Cinema, writing, poetry and music. If his works for the projects respective CP, also Terminal Fluvial Sul and Sueste and even before 1926 the Motor Palace FIAT manifested the pursuit of modern architectonic elements, his film "A Canção de Lisboa" in 1993 (Fernandes and Pereira,1981:44) reflected the attempt for finding national specific Portuguese lifestyle as an image, convertible to all majors, especially architecture. Moreover, other architects such as Pardal Monteiro and his work might influence 1930s

developments. However, the most crucial event was "The Portuguese World Exhibition "in 1940.

Cottinelli Telmo was recruited as the chief architect for this grand project a year before by the government in a committee including general commissioner Dr Augusto De Castro and Deputy Commissioner Engineer Sa e Melo (Telmo,1939:250). He was in charge of the projects that were built for the expo, such as "The Colonisation Pavilion" by Carlos Ramos, Pavilion of Honor by Luís Cristino da Silva apart from the Padrão dos Descobrimentos (Fernandes and Periera,1981:44).

His standing point toward nationalism and internationalism as an ongoing product of traditionalism and modernity images two different views. The first image is on the hostility toward slightly picturesque views of Raul Lino in a lecture conducted by Telmo himself in 1934 (Pereira, 2000) and the other image belong to his interview on Portuguese World Expo in 1940 confirming on" being the representative of Portuguese exhibition, independent of preconceived architectural formulas", "having courage to be different for an international critic who would never understand sentimental reasons and domestic aesthetics (Telmo,1939:10).

Cottinelli Telmo criticised Le Corbusier's term "machine for Living" as "a funny term for that time but boring and equivalent to ignoble romanticism" (Carvalho, 2015:92). These statements reflect the fact either his perspective on modernity transformed to be an authenticity reverberating from local discourses or the state architect role, being more illuminated in 1938 since he replaced Porfirio Pardal Monteiro as the state architect cooperating with ministry of public works after the misunderstanding between him and Duarte Pacheco.

# 8. Porfirio Pardal Monteiro (1897-1957)

Porfirio Pardal Monteiro appeared to be the architect with low pulsation regarding modernism and the state-demanded traditional spirit, causing direct non-political ideas unlike the other architects of this generation. Nevertheless, his philosophy never reflected a monotonous image as he used different languages respective to each type and context (Pardal Monteiro,2016:25), and this frame of mind had been limited to design and construction and his teaching career.

Compared with the architects, the depicted image of the relative intellectual stability of Pardal Monteiro could provide humanistic clues based on his design philosophy and individual experiences and the architectural education characterizing him. Pardal Monteiro's architectural path reflected a network of parts such as classical perspective, geometric ornamentation, rational consideration, functional orders, monumental tendency and later on, cosmopolitan modernity.

Pardal Monteiro began to shine in the 1920s with the Rau building in the Avenida Republic, winning his first Valmor prize and facilitating to become involved in more projects like Caixa Geral de Depósitos (The bank with state ownership) in 1923 with a neo-classical Beaux-Art standard (Tostões,2004). Cais do Sodre Train station could be one of his first projects designed in Art-Deco with still a nationalist tonality, and the project, together with Instituto Superior Técnico as the first public building in Estado Novo characterised the primary manner of Pardal Monteiro in 1920s with the experience of new materials such as reinforced concrete based on João Vieira Caldas' (1997) classification. According to Caldas, the second manner is superimposed on the first one when he designed public works with private

projects, justifying formal simplicity and decorative rarefaction while their sense of monumentality is in order. Partial refurbishment of Café Chave d'Ouro, Ford Luís tano building and the most critical project, *Nossa Senhora de Fátima* church (Ibid,1997b:52) and the third way, as the last stage, consists of experienced projects on spatial solutions. However, it was neither the reproduction of the 20s and 30 nor the reflection of the "state of the art" in architecture. The Mundial and Sorel buildings, Hotel Ritz and Tivoli were among the most popular buildings in Lisbon in his last years of life (Ibid,1997b:91-93).

His passion for classic architecture originated from the school he graduated from and the influences of masters such as Ventura Terra and Jose Luís Monteiro (Pardal Monteiro, 2016:.25). This primary ambition was shaped possibly by the intersection Beaux-Artian stylistic plurality, progressive vision of the masters and the mutual point between rationality and neo-classicism. In this regard, classicism can be a breaking point for the architects of the Portuguese architectural generation born between 1898-1900 from other revivalist styles in a sense that led the architects to logical aspects of global design.

For Pardal Monteiro, the French structural classicism with the central figure like August Perret founded a universal origin for an authentic language (Toussaint, 2009:306), continuing to be an original discourse for him to identify and support in diverse lectures like the "Espirito Classical" in 1935 at the National Society of Fine Arts as an essence of the composition in the fundamental balance in a rationalist taste between the elements. (Pardal Monteiro, 1935). Moreover, Classicism was the typical image being sought out by the Italian theorists and architects such as Piacentini, functioned as a catalyst to build a desire for Pardal Monteiro to combine this stylistically formed education with monumentality which was a communal image between him, the state and the mediatory character, Duarte Pacheco to form the idealised situation of Salazarism in the country (Carvalho, 2018:154).

Although Pardal Monteiro's architectural responses toward each project differed from neo-classicism to Art-Deco and international modernism, he obtained a Vitruvian logic to consider every design composition inside an urban complex all together with a central axis and symmetrical dominancy beginning from IST and INE to the works in his life such as University City (Pardal Monteiro, 2016:26). Pardal Monteiro did not cease his interaction with the global discourse because of numerous travels apart from visiting Italian cities in 1923 (Tostões, 2009:73) to Spain, France, Belgium, The Netherlands and The Soviet Union to study maritime stations (Silva and Ramos,2015:266). Nevertheless, the global network had not been limited to objectives assigned by the state. In 1930, he took the responsibility of hosting the popular magazine of L'Architecture d'Aujourd'hui (AA) in Portugal to avoid the possible closure due to political anxieties (Pardal Monteiro, 2016:26) in addition to the special contacts with French architectural figures like Eugene Buaduoin, Marcel Lods, Pierre Vago, Rouz Spitz and Andre Block (Carvalho,2018:154).

If Praca de Areeiro, designed by Cristino Da Silva, was the turning point for transforming the primary

acceptance of modernity toward a pursuit of the official state architecture, Igreja de Nossa Senhora de Fátima was the complimentary beginning step, materializing the polemic between modernism and nationalism (Caldas, 1997:30), rising to the occasion since the first half of the 1930s and also it was late enough for possible intervention in order to revise the project. This could be his first departure from what can be regarded as the state ideals apart from his letters to Salazar, even though he remained one of

the critical characters until the late 50s. Furthermore, this dominance diminished as the proposal for affordable houses was not what the regime imagined compared to Lino's ambitious effort for "Casa Portuguesa" (Pardal Monteiro, 1932:28-30).

### 9. Francisco Keil Do Amaral (1910-1975)

If the previous generation encountered a more firm structure by Estado Novo, resulting in a slightly moderate reaction by the architects, the generation who graduated in the 1930s began to take a more clear gesture toward the state's desire. Francisco Keil Do Amaral was the shining star among the other architects forming this generation and looking over a more crystalised view of national architecture and criticised the ephemeral manner of modernism. Whenever the pros and cons for two opposing scopes start to clarify themselves more than ever, either reproduction occurs or the time for the "third way" arrives. The architects being introduced and evolved professionally in the 30s-40s shining until the beginning of the 70s, were acquainted with the principles of modern architecture by their masters and restricted by the official state propaganda. In a general overview, a similar approach took place in almost all post-war discourses.

Notwithstanding, the inherent character of the "third-way" approach must be discussed first. This approach as a reconciliation way is either a vision in-between as a selective manner or a synthesis. Moreover, rejecting the identified cons can be another possible definition of the "Third Way".

The influence of Willem Dudock and Dutch Modernism is evident in Keil Do Amaral's book in 1947 entitled "Uma Iniciativa Necessaria" (a necessary initiative), advocating the intersection between popular architecture and authenticity by removing the eclectism and styles and focusing on the identity and roots (Tostões, 2014:189-190). This argument can reflect the neither and nor perspective for the third way, and the impact presented itself the most in 1946 with the establishment of ICAT group, the initiation of Arquitectura: Revista de Arte e Construção in 1947, The general exhibition of plastic arts between the years 1946-1956, the first national congress of architecture in 1948 and finally the Survey project during the years 1955-1961.

The third way suggested by Keil Do Amaral and his generation witnessed the combinatory approach as well since the purism modernity of Northern Europe synthesised with specific climatic and construction needs (Tostões, 2014). Furthermore, selective mutualism could appear when there is an abstraction between cubism in the modern sense and the Mediterranean manner taking place in an environment considering the locality. The process starts with the official confirmation of modernism in the first national congress and then leads to a more regional ambience, being convergent with a global wave toward post-modernism and, later on, the discourse on the appearance of critical regionalism. Keil Do Amaral's perspective toward contextual authenticity addressed a rural rediscovery even from 1948 (Urbano, 2013:214), bearing the similarity with Lino's approach in the first place. However, these two contributions and the others in the 19th century were not confluent. Although the state required a neo-romantic agrarian image advocating Lino's approach to looking for a reference on reviving Portuguese national architecture based on the notion of house, Keil Do Amaral's vision manifested a decentralised and contextualised regionalism as a complex study being classified in 6 zones.

The Third way of Keil Do Amaral can be investigated upon his works from the beginning of his career and designing the 1937 Portuguese Pavilion in Paris until the regime's last days and a year later.

His career life provides an adventure in pursuit of a balance of modernity and traditionalism. Indeed, his devotion to national architecture in Paris Pavilion with the pure geometries and the ornaments designated to portray the glorious and symbolic Portugal was clear enough as a separation between the political desideratum of the regime and a primary phase of popularity. Henceforth, he did not ignore the need to resort the symbolic representations (Hestness Ferriera, 1999:49). However, he distanced himself from the ideals following the Second World War circumstances, showing the transformation in his professional chronology both as an architect and even the central figure on Lisbon urban design. This project played a critical role in his entrance to Lisbon Municipal chamber as a board member and architect, accepting the responsibility for designing the Lisbon airport, Belem railway station and the general plan for Park Florestal de Monsanto a year later.

Keil's role in monumental Public projects persisted in the Portuguese world Exhibition in 1940 as he was in charge of designing diverse facilities for the exhibition theme park besides his travels to Amsterdam, Paris, London and Stuttgart for preparing Monsanto Park. His different position, unlike his modern formation in Carlos Ramos's atelier, was revealed in the social housing project in Santa Cruz as his conception of social housing differed from what was previously perceived and practised as economic housing in Portugal. The result was not satisfactory for Keil himself (Moita, 1999:31).

The divergence for Keil Do Amaral was also evident in urban projects and his cooperation with João Faria Da Costa. The most critical intersection between his architectural and urban visions occurred in the invisible borders marking the transition toward rural areas or 5 points Jose Manuel Fernandes and João Paulo Conceição (1999:41-42) in their published work "Lisboa, os Anos Trinta, As Suas Novas Saidas E Keil Do Amaral". The first departure point, as mentioned, refers to the northeast being located around the airport and articulating the Areeiro- Airport axis. Their second addressed point is the north-interior exit, drawn in length by the restructuring of Campo Grande and passing in different decades by the projects of the lake, the terrace and the restaurant, the Children's Pool and the arrangement of the future Museum of the City. Moreover, the northwest exit, which begins at Parque Eduardo VII, extends along its heart with the "city palace", through the many facilities of the park itself (esplanades, metro stations, Cold greenhouse) and even further on through the new "Benfica economic district".

The fourth belongs to the exit to the west, through the "forest park" of Monsanto, with its several cores of equipment and the fifth element is the marginal exit from the Junqueira Industry Fair to the amusement park of Expo do Mundo Portugues in Belem and the subsequent award-winning houses on the slope of Restelo (1952 and 1962). The central elements in the four out of five points characterised by Jose Manuel Fernandes and Paulo Conceição are the existence of green spaces. Regardless of some

physical entities designed inside those parks, specifically in Campo Grande and Parque Monsanto, that bore the modern codes of modern movement (Tostões,1999:83), such as Tennis Club, Montes Claros Restaurant and the transformation in Casa de Cha in Monsanto along with the traditional-romantic part of the puzzle, the parks themselves functioned as balance forces to reduce the artificiality of urban life (Antunes Da Silva,1999:73).

390

Almost all the possible case scenarios for the existence of the "Third Way" were possible to take place derived from his designed works in architectural and urban ambience, the municipal and syndicate roles, his travels from France to the United States and the most critical one, his ideas and books attempting at a non-biased mindset, though with socio-political considerations. However, accumulating all the instances might lead to the term "Symbiosis" used by Raul Hestnes Ferreira (1999:59) to exhibit rationalism and regionalism as two living paradigms in coexistence. A Dudock-Lloyd Wright network framed not only Keil do Amaral's philosophy toward the urban space and architecture but also generated a cosmopolitan discourse later on parallel with Finnish architecture.

# 10. João Guilerme Faria Da Costa (1906-1971)

Another crucial figure among this generation is João Guilherme Faria da Costa, who made his mark as an urbanist in modern Lisbon, unlike the others as architects. Investigating Faria da Costa's vision of planning might address the so-called binary on if the isolated views on architecture and urbanism appear to be fundamental since it was much more straightforward for architects to deal with traditional-modern dichotomy than for planners facing urbanism as a modern paradigm. The dichotomy rises to the peak when political ideology is the central discourse imposing limits on urbanism.

The road for the professional career of João Guilherme Faria da Costa began in 1933 with the enrolment in Institut d'Urbanisme de l'Université de Paris, providing the chance to meet great masters such as Marcel Poëte, Étienne de Gröer (1882–1974) and later on the internship at the studio of Donat Alfred-Agache (1875-1959). He obtained his degree in urban planning in 1937.

Afterwards, De Groer recognised him as a critical element in Lisbon's future developments, resulting in his first professional experience in the Department of Urban Planning and Public Works of Lisbon's city council in 1938 (Di Salvatore, 2016:9).

Faria Da Costa was the first Portuguese to enrol at IUP, establishing an educational structure for upcoming Portuguese town planners as a dominant approach until 1970, simultaneously with his mission in city hall to collaborate with Etienne de Gröer for preparation of Lisbon Master plan (Camarinhas, 2011:7).

In general, theoretical overview Faria da Costa confirmed modernity. Besides the French global influence on modern urbanism and architecture, his drawings and sketches on Bairro de Alvalade, residential districts for the North Zone in 1938, the layout of the area compromised between Avenidas do Aeroporto (Now called Gaga Countinho), Infante D.Henrique, Avenidas dos Estados Unidos and 1<sup>a</sup> Circular are the testimonies to manifest the transition from the notions of the traditional cities to the urbanism organised by modern principles along with other factors such understanding city as a living organism, land use division to lots and demolishing the traditional fabrics such as Mouraria and Rua de Palma (Ibid,2016:67-69). Furthermore, his study on "historical centres of Lisbon", "renovation of Baixa", "traffic at city centre", and "sanitation of Rossio and Socorro", including a ring road around a historical centre through a system of tunnels could be another example of Gröer's vision and Faria da Costa's proposal (Di Salvatore,2016:12) for exhibiting a modern nucleus that contained non-modern experiences. The ten-year campaign for preparing the master plan started in 1938 and highlighted three

major urban plans: Restelo, Areeiro and the most cited project, the urbanisation plan for the south of Av. Alferes Malheiro, known as The Alvalade neighbourhood, is a combined system of private and state sectors consisting of plans for economic rent houses designed by the architect Miguel Simões Jacobetty Rosa (1901-1970) (Andre,2015:103-105) with the collaboration of other architects like Keil Do Amaral and Inacio Peres Fernandes.

The Alvalade Plan manifests the primarily residential area for 45000 inhabitants housing the residents of the demolished zone of the historical capital centre and integrating the dwellings, facilities and services with the centrality of a primary school prioritised by the distance for walking (Di Salvatore,2016:11). Despite the modern principles characterizing the plan, Alvalade is the testimony of morphological entities, garden-city movement principles, traditional cities and also the concept of neighbourhood units(Costa,2002) introduced by the American sociologist and urban planner Clarence Arthur Perry (Francisco &Andre,2018:3).

In an accumulated general theoretical overview, a confirmation of modernity was evident in Faria Da Costa's work, and Bairro da Alvalade is a typical example of the transformation of a predominantly rural area to an urban complex in line with the urban development of New Lisbon. A plan responding to the latest principles of modernism has to approve the regime's demand to reconceive the Portuguese rural spaces taking advantage of the community spirit and quality of life (Camarinhas, 2011:15).

# 11. Fernando Silva (1914-1983)

Fernando Silva's position among the other representatives of this generation could exhibit a character much more receptive to the contemporary developments in architecture, specifically with the principles imposed by modern architecture discourses on a global level. As a graduated architect of Belas Arts in the same path as the others, the Athens charter influenced Fernando Silva's architecture.

Its principles, such as the demarcation of large green areas for community use in a hierarchical separation from the urban circulation scheme, the implantation of buildings perpendicular to the street tending to be separated from the land and following the principles of clarity and typological repetition, functioning critically to generate a unitary urban image (Fereira,2010:38). He collaborated with several architects such as Rodrigues Lima in a residential building in Avenida Sidonio Pais (1943 Valmor Prize), Ruy D'Athougia (1917-2006) in the group of buildings in Alvalade square and Faria Da Costa in the residential space in Avenida do Restelo as a winning project in Municipal architecture prize in 1952 (Reis Rodrigues,2014:241).

It is noteworthy to illuminate Silva's role in projects with private owners for the Middle/High class in Lisbon, such as Cinema Sao Jorge (1946-1950), Imaviz complex, Hotel Sheraton, Philips building and even the projects on a large scale such the Portela neighbourhood aimed at the rising middle classes as an experiment with the use of prefabricated elements (Tostões,2005:32).

Portela Plan reflected the architect's influence of the Athens charter most by concentrating on three central point's sun, vegetation and space and the zoning logic for urbanisation considering circulation, dwelling and leisure (Rodrigues, 2014:53).

The other critical aspect to reflect his enthusiasm for modern principles is the separation of pedestrian lanes from the road characterizing the hierarchy into four levels of primary, secondary traffic lanes, residential streets and pedestrian walks, magnifying the priority of vehicle networks due to the great use of automobiles .Fernando Silva and his works manifest the transition of architectural projects from state-oriented to the private sector, serving more rapid urbanisation in a capitalist structure as the framework for forming the new phase of modernity in Portugal.

# 12. Alberto Pessoa (1919-1985)

The third architectural generation in Portugal amplified the approval of modernity and opposed to regime's monumentality and traditional desire. Notwithstanding, it is inevitable to find transitionary characteristics regarding the shift from policies imposed by the state public projects to more modern experiences, even though the extent of transition starts to decrease compared with the previous generations.

Alberto Pessoa is the character with an active role among the architects of this generation (Tostões, 1997:68). As a graduate of Escola de Belas-Artes, he started to work in Lucino Guia da Cruz's office for the work plan of Praça do Império and Marginal Zone of Belém (Rosmaninho, 2006: 356). This work as a public project might indicate his initial bond with the state's official standard for architecture.

One possible reason for the transition in his professional approach might be rooted in his practical training with Francisco Keil Do Amaral and the development of various projects with him, regardless of institutional activities or architectural practices.

According to Nuno Rosmaninho (2006:35), this change was notified in 1948, the national congress of architects and the buildings of the faculty of arts and general library of Cidade da Universiade in Coimbra, being the clear testimonies for abandoning the monumentality toward harmonisation and simplicity. The physical evidence for this transition includes the semi-open blocks, landscaped backyards and collective facilities in Lisbon, taking distance with Estado Novo's principle (Machado, 2005:3).

His participation in the most crucial projects like the urbanisation studies for Avenida Infante Santo, Avenida Paris, Praça Pasteur, and affordable housing projects for Restelo and Calouste Gulbenkian Foundation manifested his critical role in the modernisation of the capital.

In the same year, after the establishment of ICAT a year later, the Arquitectura magazine was republished, and Alberto Pessoa was among the critical characters as a director during the years 1949 and 1957 besides his recognised role in General exhibitions of Plastic Arts, national congress of architects and the national association of architects

### 13. Fernando Távora (1923-2005)

The "Third way" in the second generation's architecture might indicate the either and or notion considering the role of ICAT and the first national page generation in 1948 as oppositional movements to the

regime's traditionalist view and affirmation of modernism while the survey project clarifies the architects' plural desire to identify the vernacular architecture. This type of contextuality, combined with an authentic way of building and problem-solving, was shaped in European post-war discourses and continued in Portugal by the next generation, and one of the exemplary figures for that was undoubtedly Fernando Távora. Although Tavora's works and education were centralised in Northern Portugal and not in Lisbon as the selected case study for the thesis, his design philosophy marked the essence of the third generation of Portuguese architecture.

There are two central attitudes in Távora's works. First, the place of the project aims at a return to the circumstances of each place or region being obtained from the geographical condition of culture and the second attitude is to create and reformulate the space (Lima &Fonseca, 2013:2). The synthesis between these two approaches creates a design based on the intimate solidarity between landscape and the time based on the conservation, construction and innovation (Távora,1986). These design principles discussed by Tavora make him one of the architects involved in the problem of modernity versus traditionalism. His training in Escola Superior de Belas Artes Do Porto began in 1945 as a beginning point for becoming acquainted with modern and Portuguese architectural principles. Carlos Ramos' role in framing Távora's ideas toward modernity was crucial; However, there was a freedom to use any design language and not even modern teaching, but it was a method to a certain extent; modernity was seen from the point of stylistic views including classical models, Italian and German architecture, rationalist models of Le Corbusier and the influence on Brazilian architecture (Tavora, 1971:152)

As a member of CIAM, Távora attended the congresses in Hoddesdon, Aix-en-Provence, Dubrovnik and Otterlo between 1951 and 1959, playing the crucial role for Tavora meeting influential architects time.

The latest congresses of CIAM were affected by the possibility of the integration of a regional and modern language with issues related to contemporary creation in a historical context and the continuity between personal creation and tradition in the writings of the scholars such as E.N.Rogers. and subsequently, these influences made their mark on Portuguese architecture (Ordóñez-Castañón et al., 2020:124). Tavora and his colleagues in a "CIAM PORTO" team presented a plan in Dubrovnik in 1956 for a settlement for a region of Bragança with a regionalised and rural theme. However, this was not the earliest attitude toward the vernacular approach of architecture when he wrote the text "O Problem da Casa Portuguesa" (The problem of Portuguese house) in response to the historians calling for the stylisation of traditional architecture and its adjustment to modern conditions (Bandeirinha,2012:13).

"House" was the central theme for those involved in the problem of modernity and traditionalism, and that is why Tavora was not the first person concentrating on the house theme despite his vision being critically different from previous movements.

Tavora, in his text, starts with contextualizing the Portuguese architectural reality in time and circumstances as an attempt to clarify the problem itself. At the same time, the second part, known as "Falsa Arquitectura" (The False Architecture), manifests the created problem through a process of stylisation with decorative characterisation. In the last part, Tavora points out that studying the current condition, popular houses, foreign architecture and new materials is vital.

Indeed, the majority of the text is critical of what had taken place in the circumstances since the 19th century in a sad development "without logic" and "applied therapy to cure evil" by the Casa A Antiga Portuguesa (Tavora,1947:6). He also rejected the notion of international style as an alternative to present a third way in the third and final part of the text.

Tavora deepened his relationship with vernacular architecture by becoming the coordinator of the Minho region team in the Survey project in 1961 aimed at classifying the popular architecture in Portugal. His arguments centred on the link between various Portuguese traditions and economical logic and site (Delecave, 2011:5).

The similarity between the third way of Keil Do Amaral and Tavora is evident enough due to the tight connection between the two generations. Nevertheless, it seems that Tavora's third way relies more on the Neither - Nor approach by criticizing, rejecting and revising the previous attempts, whether in international modernism or domestic efforts to materialise Casa Portuguesa. In a nutshell, Tavora's design ideology is the hybrid between the protagonist in contemporary architecture and the process of integration in Portuguese pop culture (Tostões, 2005b:48).

### 14. Manuel Tainha (1922-2012)

The global influence of Modern architecture was transmitted to the Portuguese architectural environment by the discourses in CIAM in the first place. However, it was not the only source and direction to guide the architectural schools and generations. The written works by the architectural theorist, specifically the Nordic and the Finnish, were straightforward in the effect of a new language respecting subjectivity.

One of the architects of the third generation contributed to recognizing the new readings toward architecture not just as an architect but as an essential intellectual figure regarding the way to face modernity and tradition. He entered EBAL in 1939, but it was a difficult passage for him to abandon the school first because of his dedication to Cello (Rodeia &Duarte, 2020:91-92) and later also the difficult time he had with Luís Cristino Da Silva during the second and the fifth year.

Although he opened his Atelier in 1949, he completed the internship in 1954 at Lisbon City council under the guidance of Guilherme Faria da Costa (Rodeia& Duarte, 2020:93). Tainha also worked with Carlos Ramos as one of the pioneers of modern architecture in Portugal until 1954. However, their project accompanied Bartolomeu Costa Cabral, for the university city's superior fine arts school was not built (Pereira, 2010).

As a student, he participated in the first national architecture congress in 1948 third and fourth UIA congress in Lisbon and Hauge in 1953 and 1955. Tainha was introduced officially to the theoretical world through his writings in Arquitectura magazine in 1953 with the publication of two texts in collaboration with Rafael Botelho and Francisco Keil Do Amaral advocating the way to revise the path previously taken by the modern architects (Tainha, 1953:9).

He also translated a text by Alvar Alto in the same issue of the magazine entitled "The Fish's Egg and the Salmon", indicating his enthusiasm for foreign theoretical discourses (Rodeia & Duarte, 2020:93)

The influence of Frank Lloyd Wright was another complimentary background in shaping his ideas toward the necessity of revising the radical position of modern movement between the wars and possibly considering various paths of realism (Toussant,2002:20).

Like other significant figures like Tavora, the particularity of Tainha's works belongs to the priority of surroundings and environment. His famous statements, such as "every case generates its theory", addressed the sense of subjectivity and contextuality. Also, his famous quotes confirmed the plural paths for authenticity, such as not having an idea does not mean working without ideas and not having a theory does not mean working without theories.

He also used the words like "Common and Economic sense" as a critical characteristic for each design, but different from the minimalist aesthetics and neo-realist ideology (Vieira de Almeida: 2000:28). These design lines for Tainha stayed halted even in his works in Lisbon such as Coelho Dourado Restaurant, Torres Olivais, Fabricas Barros, Olivais secondary school, Centro de Saude in Sete Rios and faculty of psychology for university of Lisbon.

### 15. Nuno Teotónio Pereira (1922-2016)

Nuno Teotónio Pereira is, for sure, an undeniable character regarding the history of Portuguese contemporary architecture history. He was one of the successful students of Belas Artes in Lisbon, graduating in 1949. Carlos Ramos influenced his Architectural philosophy since he worked in his office between 1940 and 1943.

Besides this possible and initial modern mindset on a practical level, he got the opportunity to start a collaboration with Revista de Engenharia dos Alunos do IST, translating crucial written documents such as a chapter of La Maison Des Hommes and also the Athen Charters collaborating with Manuel Costa Martins (Coelho,2010:4).

Teotónio Pereira participated in the first national architecture congress in 1948, representing economic housing and social readjustment, urging to solve the housing problems, precisely the psychophysiological requirements of humans (Cunha, 2012).

Apart from the existence inside a newly amplified modernity affecting second and third-generation architects, his contribution to a theme inherently distanced by modernity was not ignorable. In 1953, he founded the Movement for the Renewal of Religious Art, known as MRAR. However, the proposal itself was a religious art with a modern nature and in contrast to traditional models resulting in numerous works like Chorão Ramalho's cemetery chapel in the Cemeterio das Angusticas, Moscavide church by João de Almeida and Freitas Leal and, the most significant of them, Igreja de Aguas designed by Nuno Teotonio Pereira (Tostões, 2005:28).

Like other central characters of the generation, he participated in the Survey of Portuguese Regional Architecture, and he formed a team with Antonio Pinto Freitas and Francisco Silva Dias, taking the responsibility of Zone 4, including the regions such as Estremadura, Ribatejo and Beira Litoral (Coelho,2010:5). What is evident in Teotónio Pereira's approach is the similarity of approaches he chose, like the other architects, to realise the priority of context and the relationship established with the urban environment. One of his most popular projects, the "Franjinhas" building, represents the typical example

of the dialogue between outside and inside or the way around, between the building and the built environment. At the same time, in the Aguas Livres Blocks, the architect clarifies the potential of new materials precisely to help reinforce the ways to enter the buildings despite the artistic specifics each material might have and his other project.

In an atmosphere filled with the influences of significant characters like Bruno Zevi, Frank Lloyd Wright and E.N. Rogers, the third generation's architects, specifically Teotónio Pereira, contributed to reconciling traditionalism and modernity not only in a political network but also in an authentic way of looking toward architecture and the projects such as Aguas Livres Block was an encountered situation between the questioning of International styles with a vernacular view materialised in the projected balconies creating light contrasts and for specific the use of various textures to represent the way that colours are changed (Tostões, 2005:29).

# 16. Pedro Cid (1925-1983)

Since the generation's crucial moment for coming of age and their introduction to the professional world was almost between the first national congress in architecture in 1948 and the publication of the first edition of the book Arquitectura Popular em Portugal, it was possible to find the architects to be recognised as the reference of modernism either in the sense of international principles of CIAM or the soft modernity inside the Portuguese environment. However, for some scholars, the first signs of regional manifestations in architecture or even the "Third way" could justify the necessity of modernism. Even between this short period and a harmonious generation of architects, a spectrum of transition could be identified.

The works of Pedro Cid clarify a typical reference for welcoming the second wave of modernity in Portugal. As a graduate student from the school of fine arts in 1952, soon he was recognised for the most effective projects in Portuguese architectural discourse, such as housing blocks on Avenida Estados Unidos da America, Pavilion of Portugal at the Universal Exhibition in Brussels (1956-1958), the headquarters and museum of the Calouste Gulbenkian Foundation (1959-1969), the multifamily housing in Olivais Norte (1963) and Jean Monnet Building (1974), glazing as a reference for the modern language of architecture practised in numerous previous examples.

For instance, one of the first moments among his several works on housing, the project in Avenida Estado Unidos da America with Manuel Lajinha and João Vasconcelos Esteves was evidence of applying the CIAM theories. Furthermore, another clear symptom of modernity in this project is lightness and transparency attracting the people passing through the avenue (Duarte, 1957:17). The Olivais Norte project, a collaboration with Fernando Torres, was among the pioneers regarding the collective housing projects based on Athens charter principles and the use of terraces in reinforced concrete structures (Raposo et al., 2009:80-82).

In 1958, Cid won the competition to design the Portugal pavilion at the Brussels universal exhibition. He proposed a light structure imposing its transparent volume without cutting the park's perspective in a short general route.

Above all the mentioned projects, his collaboration with Alberto Pessoa and Ruy Jervis'd' Authoguia in

designing the headquarters and museum of Calouste Gulbenkian foundations as a contribution to modernity confirming the prestige of the foundation and also a space organised as an urban landscape or either cultural landscape (Tostões, 2006b:22-24).

Like the other works that Cid participated in, Gulbenkian was a manifestation of three points: the use of reinforced concrete and structural truth on one side and the respect for nature on the other), illuminating once more his role in confirming the modern principles in line with the urban plans despite the twilight of regional ambitions.

# 17. Ruy Jervis d'Athouguia (1917-2006)

One of the most crucial references to modernity is Ruy Jervis d'Athouguia. His education was first in Lisbon and then in the school of fine arts in Porto, and for this reason, he had the opportunity to be the student of Carlos Ramos, allowing the young Athouguia to evolve and explore his language of architecture.

Athouguia's professional era is classifiable into three periods, according to Graça Correia (2008). The first phase is when a young architect is aware of the adhesion to modernity in general. However, he knew that it was impossible to limit himself to repetitive and imitative issues and to abstract modernity (even as abstraction itself) into a uniform style is not the solution. Thus, in his primary professional years, he attempted to discover the authentic language (Ibid,2008:63) instead of repeating what was taught. It is also possible to discover the overlapped thoughts between the critical characters such as Le Corbusier, Peter Behrens and the most critical of all, August Perret leading the young Athouguia to be obsessed with the specific way of understanding between art and reality to form a new constructive system or even broader scope as a language regardless of repetitively used factors like the autonomy of the openings or the other principles he used such as functionalism as a necessity, free façade, free plan and the free roof (Ibid,2008:63).

For sure, besides the acceptance of contemporaneity, He was looking for individual creativity as well. Escola do Bairo de Miguel and a residential project in cell number 8 Bairro Alvade, in collaboration with Formosinho Sanches, were examples of his primary contribution to capital's architecture with volumes indicating horizontality, standardised modules, reinforced concrete and pilotis.

His entrance to the professional scope of architecture occurred around the years of transformation for Lisbon. In 1945 the urbanisation plan for the Alvalade neighbourhood (previously known as the south zone of Avenida Alfredo Malheiro) was designed by João Guilherme Faria da Costa, identifying the most significant turning point of the capital in terms of transformation toward a more modern environment.

The second phase of Athouguia's works, according to Correia (2008:125), is recognised as the form's precision in the 1950s. Athouguia's first effort was to avoid functionalism's limitations since his priority was establishing a relevant language leading to a radical change in understanding form construction. In this sense, it seems that he was more influenced by Mies's legacy when he emphasised the precision of the form as a purely visual characteristic represented through simple geometric rules (Ibid,2008:186).

Escola de Teixeira de Pascoaes, Casa Frederico Costa and Liceu Padre Antonio Vieira are typical examples of Athouguia's works in 1950s. In the third phase, called by Correia "the update", Athouguia seeks out a way to update his previous linguistic pursuit.

It seems he followed the works Mies was developing in the United States. Subsequently, the foundations were laid to achieve a culture where technological and spiritual values meet each other to respond to the humanistic approaches (Ibid,2008:194) in an era when international modernism faced severe criticism, and regional discourses were introduced globally. The Gulbenkian Headquarters and Museum (1959-1969) and Alvalade square (1960-1966) is the critical examples of Athouguia's desire to update his principles as well as other works such as the collective housing project in Alges (1954-1961) and Gomes Da Costa building (1954-1959). Besides Mies' effect in his work, Louis Kahn's detachment regarding the choice of materials and Frank Lloyd Wright's Organicism and horizontality are evident in these works.

Athouguia's works continued for decades, and as they moved forward through time, the more maturity they represented. His works are in a dichotomy, meaning that although they were modern, they did not reject the counterpart discourses since he distanced himself from any biased restrictions created; unlike the existence of talks on confirming modernity, rejecting the regime's traditionalism, the debate on modernity and traditionalism itself and criticism of international modernism. Henceforth his approach could be different from other colleagues in the generation both politically and architecturally.

His works were never integrated into various readings as they began with a formative period in which the architect learned and established his preferences, then it went through a crystallisation point in the 50s and finally, in the 60s, represented a mature character where forms take on a life of their own (Correia,2008:1999).

#### 18. Alvaro Siza Vieira (1933-)

Portuguese architecture, after the revolution, stepped into a new era. The architectural realm faced a necessity for user participation. Social housing entered a different phase with the establishment of SAAL (Local Ambulatory Support Service) in the years of revolution (1975-1976) by the participation of the architects like Fernando Tavora, Sergio Fernandez, Alexandre Alves Costa, Manuel Vicente, Raul Hestness Ferreira, Gonçalo Byrne, Duarte Cabral de Melo, Maria Manuel Godinho, Pitum Keil Do Amaral and Silva Dias (Tostões,2005:35).

Portuguese architecture became the centre of international interest as it appeared to be popular in issues of magazines, expositions, prizes and competitions. Architects received recognition globally; for sure, Alvaro Siza is among the most critical figures of the post-revolution generation.

He started his academic life in ESBAP in 1949 for six years. Siza's professional environment occurred in his collaboration with Fernando Tavora between 1955-1958. His academic career began in 1966 in the same school.

Siza's generation got the opportunity to travel without any restrictions to other countries, and this situation paved the way for Siza and his colleagues to visit Northern Europe countries like the

Netherlands, Sweden, and above all, Finland as a turning point to be influenced by Alvar Alto's philosophy which is evident in his early works between 1957-1970 (Frampton, 2000:12).

These travels also allowed him to oversee significant projects in Spain, Germany, the Netherlands and Italy. Besides the projects in Portugal like the Faculty of Architecture, Serralves Foundation Museum in Porto, the library of Aveiro university, the church of Marco Do Canavezes and the Portuguese pavilion in Lisbon, he designed some critical works such as Bonjour Triste residential complex in Berlin, Vitra factory in Weil am Rhein, residential settlements in The Hague, the rectory of Alicante University and Museum of contemporary art in Santiago de Compostela (Dal Co,2000:8).

Siza's role regarding traditionalism and modernity in architecture is not evident enough, while the architectural scope at the global level was taking a more concrete position with discourses like post-Modernism and, later, critical regionalism in parallel with the other significant contributions in Sociology, Geographical science and philosophy. Nevertheless, it is possible to track some mutual points in Siza's ideas and post-war intellectuals such as Martin Heidegger. For instance, they reached a similar notion of boundary being not the point of stopping an entity but a place of beginning for occurrence (Frampton, 2000:16).

There could be three possible approaches to looking into Siza's design philosophy. The first way could be recognised as a synthetic way of influence in terms of place and humans, shaped in time. Siza's work differs from previous versions of modernity continuously and metaphorically, including the codes of Frank Lloyd Wright, Loos, Oud, Alto and Barragan while also a fusion of diverse models such as unconstrained vernacular architecture, white Mediterranean settlements and the square stones of rural architecture in the Iberian Peninsula reflecting the exact influence of the abstemious rationality (Dal Co,2000:8).

The Second approach could be fragmentised in an individual evolutionary process of Alvaro Siza. Kenneth Frampton (2000) looked upon Siza's design philosophy not as a fixed and stable form product but as a process of relations. Subsequently, he categorised Siza's development process into four periods: Towards Organic architecture, Existenzminimum, Spoken into the void and the new monumentality.

Siza's organic approach is an accumulated process of rediscovering the works of different architects, such as Marcel Duchamp's Stoppages etalons, as well as organic principles by Alvaro Alto or Hans Scharoun in the projects such as an office building in Porto (1968), housing scheme projected for Vila do Conde (1970-2) and so forth all in Northern Portugal (Frampton, 2000:20).

Existenzminimum, as a term reflecting minimal rationalism, refers a controversial Siza's role between typology and context inside SAAL as a revolutionary organisation with critical projects such as Bouça housing quarter in Porto (1973-77) and the Malagueira housing project in Evora as a breaking point from the Zeilenbau principals in the pre-war modern movement representing both patio types of Mediterranean tradition and Loos's critical points in architecture (Ibid,2000:23-26).

In the next point, known as "Spoken into the Void", Frampton attempts to illuminate the role of Loos architecture language in parallel with Organic principles in the projects like IBA Frankfurter, Dom headquarters in Cologne in 1980, Avelino Duarte House in Ovar, Bonjour Triste residential settlement

in Berlin and also the residential project in Hague (Ibid,2000:28-32).

Frampton frames the New Monumentality of Alvaro Siza in a pre-defined period starting from the mideighties with public facilities like the faculty of architecture at the University of Porto, teacher training college in Setubal, the library of Aveiro university, Galician centre of contemporary art and marking the end of the century with Portuguese pavilion in expo 98, swinging between the tectonic and tectonic and dependant on materials and tone of light based on spatial nature (Ibid,2000:34-55). Assuming these categorised features by Frampton, it is possible to address synthesis, continuity, transition, liberalisation, and pluralism reflected in entire architectural history, especially the modern architects Adolf Loos, Alvar Alto and Frank Lloyd Wright, the most.

The third approach to looking at Siza's design philosophy is reflected in neither the synthesis of placehuman nor the influence of architectural design and construction during history. It concentrates on Siza's internal and individual principles toward design; among them, the place of traditional vs modern elements is the most ambiguous.

Besides all the contributions that post-war architecture made toward context, environment and place, the works of Siza do not necessarily prioritise them. "Knowledge" and "Situation" are two terms identifying the Siza has encountered in the design itself. That is why Siza neither relies on a preestablished language nor a target of establishing a new one.

In this case, either traditionalism and modernism are not a case to be reconciled, or they are not reproduced explicitly, whether on theoretical framework or the design outcome itself, since Siza's presence in dominant discourses such as post-modernism and critical regionalism does not necessarily conclude he is the official reference for them. Furthermore, there is no continuous process of Tavora's synthetic perspective nor the clear footsteps of traditional architecture. His insistence on knowledge and solution generates a neutral image of himself toward place and context as both a subject restriction or a necessity. The Pluralism in Siza's work is embedded in pre-existence and transformational existence, providing the way for a more liberalised individual empiricism.

Although the majority of Siza's works took place in Northern Portugal and European countries, a few projects were realised by himself in Lisbon after the revolution. Reconstruction of Baixa Chiado after the fires in August 1988, a subway station with an exit toward Chiado, and restoration of Camara Chaves and Castro & Melo buildings were the primary phase of his works in the Portuguese capital. If there were in his previous projects a few codes providing assumptions and hypotheses on Siza's synthetic way of modernity and traditionalism, the tonality for this discourse faded away. None of these projects reflected Siza's principles as the political order was to retain surviving facades as a great prefabricated building (Jodido,2013:11). As a result of this approach, the Pombaline facades and spatial fabric were conserved and restored besides infrastructural favouring the easy accessibility.

The Portuguese Pavilion for Expo 98 was the conclusion of what Siza had done in the second half of the 20th century. The Pavilion had to function first as a space for temporary exhibition and then as a recognised place on a universal level. This monumental triumph resulted in a fusion between the space resembling a Roman forum and the oriental canopy of the Mughal empire and Jorn Utzon Kuwait Parliament of 1982 and Le Corbusier's assembly building of Chandigarh, according to Frampton (Frampton, 2000:52).

401

Siza's work generally reflected a synthesis between individual and collective approaches due to pluralism in a more liberal world. In Individual terms, his principles concentrate on the subject and solution amplified by knowledge and situation. In this regard, they can be evaluated if a traditional and modern realm could be located inside them. His collective approaches result from the influence of educational, professional and international processes mainly addressed by modern architects. Surroundings and environment are critical factors but not as a prioritised or stylised perspective imposing themselves as a new language.

# 19. Francisco Silva Dias (1930-)

Francisco Silva Dias is a significant figure in contemporary Portuguese architecture in the second half of the 20th century. He graduated from the ESBAL in 1957, and his practical career started right after graduation with membership in the cabinet of Urbanisation of the city council of Almada and collaborating on "Popular Architecture Survey Portuguese" in Zone 4. In 1960, he joined Housing Technical Office (GTH) as a responsible member of the" Urbanisation plan of Chelas", and in the years leading to the revolution, he was appointed as a respective member for the urbanisation of Vale Escuro-Alta de Eira (Borges & Marat-Mendes, 2021). Silva Dias was also involved in theoretical works as he began to collaborate in 1956 in the "Arquitectura" magazine with other new editorial generations such as Carlos Duarte, Raul Hestness Ferreira and Nuno Portas and later in Jornal de Letras. Critical writing toward architectural projects in Portugal and solutions on housing and habitat were the central themes of Silva Dias' theoretical framework. There was also a combination between his practical research and theoretical frame. For instance, "Colloquium on Housing Policy" in 1969 as research conducted in LNEC and then "Habitaçao Evolutiva" (Evolutionary housing), as an article published in Arquitectura in 1970 cooperating with Nuno Portas functioned as a bridge between housing research in practice and theory. This notion was to explain the program's characteristics and indicate suitability for its realisation (Dias & Portas, 1971:1), conveying the possibilities of the evolutionary formula based on diverse phases of installation respective to the socio-cultural evolution of inhabitants

Addressing the individual orientation of Silva Dias toward modernity and traditionalism is not possible, while it seems that both were valorised as fragmented pieces independently either imposed by time or personal transition from academy to practice throughout the lifetime.

One of the significant writings of Francisco Silva Dias belongs to his article on "Elements for the history of modern Portugal" in the 82nd edition of Jornal de Letras e Artes in 1964, recognizing the need to study modern Portuguese architecture as a collective project based on the historiographical model to understand the Portuguese reality concerning the international debate. Silva Dias also identifies two pre-modernist works, a house in Alto Estoril by Alvaro Machado and a concrete bridge in Vale de Meões in 1906, that helped explain the importance of the cultural transformations that preceded the pioneers of the first generation (Correia, 2015:136). Furthermore, Silva Dias published "O Corpo das Cidades" in the 54th issue of Jornal de Letras e Artes in 1962, identifying two decisive moments for the modern growth of the cities, such as the industrial revolution and the generalisation of car traffic. These moments illuminate that Silva Dias aimed to characterise modern architecture domestically and globally.

A few implications in the practical works of Silva Dias identified as a rationalist approach. Jose Manuel Fernandes recognised his proposal on the renovation of Martim Moniz in the 80s (1989) as a rationalist, dry, de-densifier of the occupation and the rationalist work on a place with the adjacent neighbourhood being developed organically.

His involvement in modern critique was even in higher contrast. Also, the influences of post-modern urbanism are vital to note along with Inquerito as the moments and instances that the architects had to practice inside a space distanced from modern international norms. The most typical effect is, without doubt, the impact of the book "The Image of the City" and its examples by Kevin Lynch on Zone I of the Chelas Project, besides the informality of the zone being affected by the survey project and also the contested vision of English cities experienced in Olivais Sul (Borges and Marat-Mendes, 2021:13).

The other critical instance between modernity and traditionalism could be addressed in a period he collaborated with Nuno Portas to materialise the idea of evolutionary housing, which later on was intersected and reflected the SAAL process with the projects designated for Bairro Alto do Minho, Zambujal and Vale Escuro. In contrast, they did not seem to have a convergent set of ideas in this project. As mentioned before, the evolutionary habitat concentrated on a typological-spatial process evolving through time and prioritizing adaptability. Silva Dias' main objective was to "introduce the time factor in architecture" .The "Lego-time" framework was not completely in line with what Portas considered for it as he believed the house evolutionary process had to rely on people because they might present different solutions to what they have now .While Nuno Portas relied on a people-oriented view, Silva Dias' vision was to shine on the influence of time, specifically present and future, rather than the past, despite the approval of all territorial reality of the sites, height and density.

Besides all traces of modern principles, Silva Dias necessitates the existence of tradition even though he criticised the specific way of traditionalism introduced by Raul Lino (Borges & Marat-Mendes,2021:9). There are numerous critical writings by Portas advocating the necessity of traditional writings. The chronicle "O Corpo das Cidades" obligates preventing the contemporary city's growth from destroying the historic city's integrity.

Four examples of urban structures represented different city development moments in Silva Dias' argument: Alfama before the industrial revolution, Avenidas Novas at the end of the 19th century, Olivais Norte in the late 50s, and Alto do Pina in the 60s. He criticised the project for Olivais Norte, indicating the points such as autonomous, isolated blocks and rationalised ignorance of the traditional street system. On the other side, the strong southern tradition with the revival of streets and squares is reflected as an important affirming of the value of collective life. (Silva Dias,1962:5-12 & Correia 2015:159-161). Silva Dias, in another article entitled "problems of Lisbon's urban landscape", addressed the sudden encounter between the city's territory and the country's territory resulting in a clash between urban and rural and global culture and for this reason, the need to study traditional culture seemed to be vital according to him (Silva Dias,1964:115-119).

As mentioned before, Silva Dias' target was to identify the sustainable elements of modernity and tradition embedded in the notion of time and authenticity, and the best approach for him was through urbanisation. Like Portas, he affirms the spontaneous form of traditional entities, precisely urban spaces,

as he noted in the Southern cities generating the principles like collective spaces, spatial wealth and compact volumes (Silva Dias, 1962:11).

# 20. **Gonçalo Byrne (1941-)**

Another central figure in a post-revolutionary generation is, without doubt, Gonçalo Byrne. Like most of the popular architects, he graduated from ESBAL in 1968; then started an internship with Raul Chorão Ramalho and later continued in the most influential office headed by two significant figures in architecture and politics, Nuno Teotonio Pereira and Nuno Portas. This was before 1975 that he set up his studio and then the firm GB Arquitectos in 1991.

He made his mark with his participation in numerous projects from the years of revolution in Portugal and also Lisbon with the projects like Pantera Cor- de -Rosa (Pink Panther) residential complex, Instituto Superior de Economia e Gestao (ISEG), Intervention in the interior space of Dona Maria Theatre, Instituto de Ciencias Sociais e Politicas de Lisboa and a block reconversion project in Chiado together with all projects making a solid impact in contemporary Portuguese architecture but not realised ever. The Atelier da Rua da Alegria was a reference space for the introduction of architects like Byrne and other young Portuguese architects. One of the famous works of this atelier was Sagrado Coração church, playing a significant role in shaping the design mindset of young Byrne. However, he was never part of it because the project reflected the role of the urban project in Portuguese architecture, and it can be concluded that the upcoming projects of Byrne in Collaboration with Reis Cabrita could be framed by this project (Angelilo, 1998:11).

The influence of the Restelo project could not be ignorable since the integration of the elements of traditional and modern cities was represented in the Pantera-Cor-de-Rosa project in Chelas (Figueira,2009:253 &Tostões, 2004:206). Apart from the influence of the Atelier da Rua da Alegria, the humanistic role of Nuno Portas was central in order to organise lectures and meetings on architectural language and methodology with the influence of theorists such as Thorney, Jones, Alexander, Archer and Broadbent.

The collaboration between Byrne and Portas entered another level deriving from an internship report at the National Civil Engineering Laboratory (LNEC) on modular dimensional coordination with the supervision of Portas focusing on the importance of creating standard elements in prefabrication from a dimensional point of view (Ibid,2016:125). Byrne's reaction to modernism and traditionalism is not considered a direct position. However, He had some views on the elements that dealt with both. For instance, his position toward the past and, precisely, history is an obligatory source allowing to transpose by linking the time with architecture and archaeology. For him, architecture could be the design of archaeology since architecture acts as a temporal stratum (Costa,2007:298). The role of time generated a tendency for him to study periods based on features of permanence in the first place and then transition as the inevitable factors of time. However, Byrne considers the continuity of time in a relationship with the place when he considers the city as a historical paradigm. However, a dynamic one and the role of architects in this dynamic entity is to deal with the matter of designs and "containers of life" regarding the historical stratification (Costa,2007:299).

Byrne perceives Lisbon as a modern city built on an existing city as a response to an emergent situation in a grand ensemble output and pragmatic view (2016:78). Besides recognizing history as a fundamental part of forming architectural knowledge, the (mutual) dialectic between a self-referential whole or a contextual-territorial interrelation of buildings raising the notion of permanence, monumentality believing that a self-referential building should consist of a void as a space of practice and the generation of a meaning (Costa, 2007:305).

For Byrne, time and history can be problematic using Alberti's terms Inovatio (innovation), Restauration (restoration) (Costa,2007:299) since they are the product of time perceived by social and public desire and a third way for Byrne as Alberti used Institutio (Institution) to generate life in cities.

Ignasi de Sola-Morales (1998:21) characterise Byrne's design philosophy in three parts: urban priority, project analysis, and monumentality. Byrne's primary lines in the first notion derive from the analysis of territory and urban space being influenced by Heidegger and then Greggoti as they share extreme attention to the physical and material condition of life (Ibid,1998:21). However, the last-mentioned name won the competition for the Centro Cultural de Belem in Lisbon (1988). Sola-Morales then magnifies the methodologic approach of Byrne for reaching the design product. Byrne's approach toward design manifested that the visual condition and stylistic selections are secondary, and it could be recognised as a complex synthesis between functional requirements and a multitude of diverse spatial structures without any trace of formalism, for this reason; a minimalist grammar is possibly shared by the contemporary Portuguese architects (Ibid,1998:26).

Monumentality is the last phase that Sola Morales argues on Byrne's works. Byrne's works exhibit rationalism, and his buildings are closed with less interest in generating a boundary between interior and exterior in a complex sensibility of languages composed of the realism of functions and urban roots respective to both individual and collective values (Ibid, 1998:27).

It could be concluded based on these categorisations by Sola-Morales that Byrne looks synthetic view toward the monumentality from two previous notions being influenced by the ideas of the scholars such as Rossi, Aymonino, Grassi and Gregotti in an autonomous morphology and typology in the first place and the scientific methodologic effect headed by Broadbent, March, Archer and Alexander.It is challenging to identify Byrne's perspective toward traditionalism and modernity. However, given the analytic view toward the elements characterizing them, Byrne's architecture is interpretive, allowing

multiple responses to growing inside a systematic matrix imposed by the urban space and specifics of place. His architecture might advocate minimalism, not on an internationalist level, while his works can respect the space between objects rather than the determinism of shapes. The process started with Nuno Portas and Nuno Teotonio Perreira at the Atelier da Rua da Alegria continuing with subjective analysis.

### 21. Manuel Vicente (1934-2013)

Portuguese contemporary architecture began to be the core of global curiosity and discourses in the 1970s. If Siza's influence illuminated the curiosity and dispersing on European discourse with numerous works, another character made its mark connectings the Occident to Orient, and that architect was no

one else but Manuel Vicente. Vicente, a Lisbon local, graduated in 1962 from ESBAL and decided to experience a new environment. The experience began in East Asia with Goa, Hong Kong and most importantly, Macau as a country where Vicente made its widespread impact. Vicente was among the first Portuguese architects beginning his severe professional career outside the country. However, before graduation, he designed a private house with Freitas leal and Diogo Pimentel in Parede and remodelled his parents' house between 1959 and 1961 (Lye,2006).

His short stay in Goa led to the city office and Radio headquarters between 1961-1962. Vicente's critical path was framed in Macau since his four-year stage concluded numerous projects such as Helen Liang Orphanage, urban development plans and apartments for Post office staff before the continuation of studies in the United States at the University of Pennsylvania under the supervision of Louis Kahn (Vicente,2011:67).

The last years of the 60s were the time for Vicente to return home. Lisbon witnessed some popular works by Vicente, some of which appeared to be controversial. For Instance, the Social Housing block in the Chelas Urbanisation Plan Zone N2, Lot 232 (1973-75) was among the works that characterised a transition in Vicente's design philosophy since it was the beginning of an investigation around the lexicon of the Modern Movement as an experience without limit of de-contextualisation and a stage for entering into post-modernism (Milheiro,2016:8). Moreover, other critical projects like a house designed for Weinstein family in Cascais along with Bairro Portugal Novo embedded inside the SAAL program echoed this transition (Ibid,2016:8).

His works were widespread between Portugal and Macau as he moved back and forth to these countries during these years. Before starting the second stage of Vicente's works in Macau, he was part of the team in charge of a master plan for the renewal of Lisbon Historic waterfront between Formosinho Sanches and Jose Luís Zuquete in 1970 and also a new urban area U.N.O.R with Antonio Miguel for the urban Council (1972-73), Interior Architecture for Metro e Meio Bar in Av.5 De Outubro (1973-74), Medium cost public housing in Chelas with Chorão Ramalho and Vicente Bravo (1973-1975), a housing development for urban squatters in Bacalhau/Monte Coxo for the SAAL project collaborated with Jose Caldeira and Nuno Matos Silva(Lye,2006).

The initial years after April 1974 and subsequently, the post-colonial impact generated an individual desire to be in pursuit of practising universally- influenced principles being embodied inside a liberal space, and Macau was the place suited for Vicente to take distance from local restrictions of his own country in a process from theory to design. Besides, his most popular projects continued until the next century in Macau, such as Fai Chi Kei social housing(1979-82), Macau TDM renewal (1985-88), World Trade Center (1985-1988), Bank of China (1987), Nam Van development plan for Praia Grande( 1988-90) and various residential projects ranging from social to private level, Vicente designed a few popular projects in Portugal and Lisbon such as the reconstruction of Casa dos Bicos, preliminary study for the maritime industries pavilion for EXPO 98 as well as his participation in International for the master plan of the exposition.

The 1970s was also the beginning of the teaching activities in ESBAL and Hong Kong as a period for developing the theoretical principles he was taught, whether in the Academic period or the practical process.

406

Like other architects of this generation, it is almost impossible to characterise Vicente inside the traditional-modern pole. However, a few scholars categorise his design principles inside post-Modernism as he dissolved the obligatory choice between object and space.

The break with social science conditioning a more plastic knowledge, the approval of pop culture and vulgar values as poetic principles with adoption to the real estate market were other evidence of approaching post-modernity (Figueira,2015:169). The post-modern network consisted of three critical figures: Louis Kahn as a Professor, Vicente met him in the second half of the 1960s along with Dennis Scott Brown and Robert Venturi advocating a revisited history combined with complexity, contradiction and in between nostalgia and irony. Furthermore, Vicente's design perspective reflects a universal third way enriched by organicist and revisionist views of scholars like Bruno Zevi and Frank Lloyd Wright (Milheiro,2016:6).

Kahn's influence on Vicente appeared to be theoretical in the first place as he implied architectural thinking rather than formalism in a framework ordering the anxieties caused by multiple approaches such as Anglo-Saxon brutalism and Milanese neo-historicism (Ibid,2016:6).

The theoretical influences of Kahn were profound enough for Vicente that he centralised them in his teaching career, questioning the dogmatic principles derived from the modern movements to other realms of social sciences

In practical terms, Kahn's argument on the articulation between material and space was compelling for Vicente as for intimidating spaces with small gaps; he would use brick, concrete for larger spaces, steel for the more intricate environment and finally, a new choice for a new situation (Milheiro,2016:7 &Vicente,2011).

There is an ideological connection between Vicente and Venturi-Scott Brown's arguments on post-modernism since he defends the notions of "Both-and" instead of "Or .. or" with a more symbolic gesture Vicente's architectural philosophy bears the individuality of other architects in his generation toward the time since he valued the present and future tense as well as the nostalgic past. Moreover, the priority of place and vernacularism never led to neo-vernacularism (Figueira,2015: 79) or regional considerations as a design dilemma for Portuguese architecture. In geographical considerations, he was practising and exchanging between occident and orient.

Given the geographic, temporal and humanistic realms, all accumulated concepts as the architectural signifiers of Vicente's design philosophy are centralised in the Casa do Bicos project. It was the pluralistic synthesis between "pragmatism" and "self-assertion", "site" and "communication", "empiricism" and "rhetoric", and the confrontation between "reaction" and "resistance", or between "regionalism" and "universalism as a sign of revisiting history (Milheiro, 2016) and geographical exchange between East and West in a reverse path of colonialisation (Figueira, 2015:77).

### 22. Nuno Portas (1934-)

It is probable to conclude that the architectural generations witnessed a revolutionary character which is not necessarily in a political sense but also in a way to influence the architectural theory, architects and even the next generations. Nuno Portas is a critical character marking how Portuguese architecture

had to move, face problems and look for solutions. Portas began his educational career at the universities of Lisbon and Porto. However, his most crucial period began before completing his studies in collaboration with Nuno Teotonio Pereira, another vital character in the previous generation's political and architectural sphere. Indeed, Teotonio Pereira's studio functioned as a new source in the 1960s for a new methodology. Nuno Portas' role was recognisable either as a young character growing inside a new methodological system or a leading figure as a complementary peer to Teotonio Pereira. His career in this studio led to diverse, successful contributions, such as the Igreja do Sagrado Coração de Jesus winning the Valmor prize in 1975.

Portas was involved in diverse local and international projects such as the inter-municipal plan of Madrid, the central zone for Rio de Janeiro, Torres de Habitação dos Olivais Norte, and also in charge of the first general plan for Expo 98. He authored numerous writings such as "The urban policy" and "The city as architecture" and wrote articles in Revista Arquitectura, O Tempo e o Modo and O Jornal de Letras e Artes.

For identifying a possible traditional-modern direction by Portas, it is necessary to track the role of Rua da Alegria's studio since it was a reference developing a methodology based on problematics relations and artisanal practice inside an urban scale of the architectural reality to develop a personal language (Tostões,2014:33).

The studio led by Teotonio Pereira with the leadership of Antonio Freitas and presence of famous young figures such as Pedro Vieira Almeida, appeared to be the parallel force to academic institutions influenced by Beaux-arts such as ESBAL and was concerned with the real possibilities of a modern architecture in Portugal (Dias,2013:52). In this Atelier he had the chance to get acquainted with housing notion, led to collaborate in Olivais Norte Towers (1957-1968) as well as house Bras de Oliveira (1959-1964), bearing the admitted influence of Frank Lloyd Wright and the Hanna house and exploring the alternative means as a response to the concepts raised by the modern movement (Caldas,2020:2).

The 1960s was the primary era for the theoretical development of Portas, who, besides Atelier's environment, began to produce numerous articles as a coordinator with Carlos Duarte, including critical texts, projects and authors (Nordic and Italians in a more highlighted manner. Moreover, the magazine concentrated on newly initiated concepts such as neo-realism and neo-empiricism while criticizing the widespread theme of international style and advocating a stronger relationship between the place and traditions.

In an atmosphere filled with modern movement critique and appraisal for the actual regeneration of tradition, the precise features of such tradition ought to be central in the first place. Choay's polarised way was not sufficient in this regard. Hence, Portas had to find a more complex method and Charles Jencks instructions on various kinds of traditions such as overvaluation of community and semi-public spaces in collective housing and urban equipment programs, the activist defending self-construction and self-management, self-conscious approach using the sedimented solutions of types. Portas believed in a multiplicity of tradition as an approach rather than formal representations. Like the other architects who belonged to the post-1974 generation, he was highly influenced by Italian influences. In 1958, Portas and Teotonio Pereira took a trip to Italy and visited economic districts produced by the

INA-Casa Program, focusing on the parts of the country where a more significant amount of migration took place, and as a global principle, Portugal was facing this situation as well. The Neo-Realism appeared to be fundamental for Portas to continue his investigation on social housing in 1962 at LNEC to proper solutions (Caldas,2020:39). Portas moved from Zevi's anti-rationalism to Rogers' culturalism and later toward the proposals of Christopher Alexander (Figueira,2010:79).

The fluctuation between the detailed elements of modernism and traditional architecture out of curiosity toward the authenticity in design made Portas more involved in interdisciplinary from architecture to urbanism, philosophy and politics or from anthropology to phenomenology and structuralism. All interdisciplinary efforts could be identified inside an integrated space network, leading to a conceptualised connection inside the matter of place. The consequences of this vision by Portas are the importance of public and social space and the subsequent connection between the city and architecture. The outcome is the book "A Cidade Como Arquitectura" (The city as architecture) with a title similar to Aldo Rossi's book "The Architecture of the City". In this book, the conception of city distances itself from the belief of a city-of-one-piece and instead the city ought to be understood as a collective process instead an individual object (Portas,1969:33). This approach could be accounted as a transition from architecture and city in a process he calls it "the meta project" as a hypothesis capable of overcoming the impasse arising from the ruin of rationalism and the emergence of new formalisms or stylistic discussion (Figueira,2010:77).

Furthermore, politics arose as another vertex in trialectics with city and architecture even before in A Arqutectura Para Hoje (1964) where Portas establishes a link between architecture and politics from the etymological basis of "Politicos" referring to affair of the cities and "Civitas" meaning a group of citizens united in standard codes as a Latin basis for word city (Brazão,2018:66). The institutionalised space in Portas' argument was reflected in his political life and he was appointed as Secretary of State for Housing and urbanism encouraging the creation of Local Support Offices (GAT) and the Local Ambulatory Support Service (SAAL) right after April 1974. The political necessities in an intersection with contemporary sociological discussions of that time led to an approach centralised with participation, although the SAAL process did not last too long due to the failures in the primary phase.

Regardless of the practical or theoretical context, Nuno Portas is neither an architect-urbanist-politician-theorist with a traditional taste nor an advocate of modernism. Portas appears as a critic magnifying the side effects. Having admitted an exhausted ambience of international modernism, he illuminates the problematic relations between traditional culture and changing demands of progress (Dias,2013:53). That is why Portas considers stability a vulnerable principle for traditional culture as the tradition itself is not immutable. Hence, it is advisable to trust in the continuity of local architecture. (Portas: 1963:4). In this regard, Portas' vision toward any attempts such as inquerito was sceptical as they might lead to superficial formalism and in this sense, Portas valorised spontaneous formation of traditional elements in architecture (Portas:1963:17).

Similar but different in details, Portas seeks out a third way willing to understand and absorb the content of tradition into a methodology facing social and technical widespread progress for modern society (Portas:1963:2 &Dias,2017:53-54). However, like other third ways, the elements are absorbed inside

spontaneous design moments. Portas' third way follows a hierarchical theory from Lloyd Wright to Alvar Alto, Zevi, Rogers, Scarpa, Aldo Rossi and Alexander in architectural and urbanistic fields. In sociology and Philosophy, it includes the notions such as etymology, anthropology, phenomenology and structuralism influenced by Henry Lefebvre and Chombart de Leuwe.

# 23. Raul Hestnes Ferreira (1931-2018)

One of the significant influences inherited from the post-1974 generation is those who studied and worked in the United States. Like Tomas Taveira and Manuel Vicente, Raul Hestnes Ferreira is another noteworthy character who pursued his academic career outside Europe and in America besides his stay in Scandinavia.

Hestnes Ferreira's artistic training began in 1950 when he pursued a career as a sculptor at the School of Fine Arts in Lisbon. His interest in architecture was formalised with the change of profession the following year. His political activities within the Lisbon School eventually led to his expulsion from him, which led him to go to Porto to continue his studies. There he met Carlos Ramos (1897-1969), then director of the school, and was a student of Fernando Távora (1923-2003), whom he remembers as an influential teacher in his training as an architect. During his stay in Porto he worked with Arménio Losa (1908-1988) and Cassiano Barbosa (1911-1998), as well as with João Andersen (1920-1967) (Saravria & Pinto,2018:113).

Shortly after his education at the School of Fine Arts in Porto, Hestnes Ferreira continued his education in an international context in search of a discourse that allowed him to approach the disciplinary structures of architecture. The influence of Alvar Aalto (1898-1976), who in 1950 had influenced young Portuguese architects through the pages of L'Architecture d'Aujourd'hui, motivated his move to Scandinavia in 1957, determined to visit the works of the Finnish master. He ended up staying for a year in Finland, where he studied urban planning with Otto Meurmam (18901994) and architecture with Heikki Siren (1918-2013), as an external student, at the Finnish Institute of Technology in Helsinki. The teachings of these two architects strongly influence the formation of Hestnes Ferreira, revealing, in particular, the importance of the constructive system and structure as integral factors of the conceptual process. In 1958 he collaborated with the workshop of Woldemar Baeckman (1911-1994) in Helsinki, and also during this period, he developed his ideas by collaborating with Osmo Rissanen in a competition aiming at a church design (Ibid,2018:113).

Between 1963 and 1965, he began working in the Louis Kahn studio in Philadelphia and was involved in the plans for the Pakistani government centres in Dhaka and Islamabad, including the projects for the National Assembly buildings and the Main Hospital in Dhaka. His collaboration extends to the Ahmedabad College of Management, the Indian Union project and the Philadelphia School of Art.

Hestnes Ferreira was responsible for diverse works in Lisbon and other Portuguese cities. In Lisbon, he designed several projects such as Jose Gomes Ferreira secondary school, the social science institution of Lisbon University, Torres Nos Olivais Sul, Fonsecas e Calcada neighbourhood as a SAAL project and the municipal library of Marvila. Furthermore, Hestnes Ferreira had the opportunity to be involved in urban projects like the UNOR 15 plan for Campolide as an integral part of the Lisbon Master plan,

developing the main road scheme for Lisbon between Sete Rios, Santa Maria hospital and Benfica and the plan for the new administrative and institutional centre UNOR 40 (not built). All these projects had to happen before the initiation of SAAL, and for sure, Fonsecas e Calçada neighbourhoods that Hestness Ferreira was its central responsible person.

Hestnes appeared as a leading character in critical writings since the second half of the 20th century, apart from practical works. He was involved in the third phase of Arquitectura magazine with the popular figure of the time, Nuno Portas divulging the roots of modern architecture in cultural and historical context, questioning the central theme of national architecture imposed by the regime and also criticizing the impasse generated by international modernism (Saravria,2020:140) along with the articles in Boletim do GTH, Arte e Opiniao and Arquitectura Portuguesa, extending to subjects from American and Finnish experience to revolution and SAAL.

Hestnes Ferreira's architecture, like Manuel Vicente or even Tomas Taveira, reflects Americaninfluenced postmodernity with a taste of cultural exchange between Oriente and Occident. Nonetheless, the difficulty of individual orientation toward traditionalism and modernity persists.

Using geometries, scale, recognizing construction and materials, shape along with context, historical dimensions and central nucleus composed Hestnes Ferreira's design network (Tavares,2003:93). While geometry is the central principle in his design philosophy, it fluctuates between the articulation of simplicity and complex designs. His design principles considering the relation between the building and the surroundings continue to be more pluralistic when this dialogue between the building and surroundings is not necessarily affirmative as sometimes the building has to take an opposition role with the disorganised environment being exemplified in the projects such as a house in Queijas and the secondary school in Benfica (Saravria,2020:10).

Any implications on approaching modern critique and practised concepts of traditional cities ought to be traced in a process taken by Hestnes Ferreira influenced by Louis Kahn besides the interdisciplinary roles that Norman Rice, Le Ricolais, Ea Gutkind, Holmes Perkins, August E. Komendant, Georges Erwin Patton ranged from the city's history, landscape, urban sociology and concrete structures (Saravria & Pinto, 2018).

During his presence at Yale and Pennsylvania, diverse factors influenced him. For instance, the

importance of the central nucleus mentioned by Kahn at XI CIAM in Otterlo and also a critical element in Dacca Parliament not only affected Hestnes Ferreira in a cultural way but also in a way to hierarchize space, implying the perception of form through harmony in the sense of order (Saravria,2020:141). Moreover, these hierarchised spaces became materialised when they are related to the matter of light through glazed materials as a point to be exemplified inside traditional spaces; apart from this notion, place and the matter of pre-existence of the city derived from the sense of order and its limitless realm penetrating from urban to architectural space and approving the fact that place is perceivable through the pre-existence of the city (Ferreira,2002:65).

Hestnes Ferreira's experience in the United States comprises accumulative forces practised as well-known traditional themes. For instance, other than the materialistic and tectonic image of the brick, the

use of arches and domestic images, spans, and roofs regenerate the inherited idea of a house referring to different themes of Mediterranean cultures ranging from Roman construction to Islamic traditions, and Casa Quiejas is a clear example as practising Kahn's principles (Figueira, 2010:83-84).

Apart from his stay in the United States, the Finnish experience between 1957-1958 had to be discussed. His initial intention was to visit the works of Alvar Alto. He later studied urban design with Otto Meurmann (1890-1994) and Heikki Siren as an external student at the Finnish Institute of Technology in Helsinki (Saravria,2016:4). The importance of construction system and the structure as integral factors of the conceptual process were two influential notions shaping Hestnes Ferreira's design principles later to collaborate with Osmo Rissanen for a church project in an architectural competition (Saravria and Pinto, 2018:112). This Scandinavian impact was a resonant occurrence when the neo-realistic approach in Finnish literature was materialised in a house he designed for his father as a neo-realist intellectual in Albarraque (Saravria, 2020:140).

Hestnes Ferreira did not solely accredit the concept of the house to seek out the sense of domesticity but also the individuality in a relationship with the public sphere. Consequently, he accredits participation as an approach to respect territorial adaptability and subjective principles (Saraiva & Pinto, 2018:118). Hestnes Ferreira's path in architecture started in his home country, nourished by Keil Do Amaral and Fernando Tavora, introducing affirmative modernity. Then the effect of Inquerito made him familiar with the desire for regional architecture. In addition, his trip to Finland and got acquainted with Nordic principles. Like other architects, stylistic approaches were rejected (Costa, 2007:125).

The most critical process took place in the United States, where he worked and studied under the supervision of Louis Kahn, where the realistic notions of the present connected the discovery of the past as a bridge, sometimes leading to sterile and historicist visions (Ferreira,1973:5) and his final arrival according to Alexandre Alves Costa (2007:125) was the Mediterranean culture. Although Louis Kahn and Alvar Alto's principles could be divergent in some points, they shared a few common ones, such as symmetries in a monumental contrast, the use of pure geometrics broken by irregular hexagons and obsessive sharp angles, rhythms of spans and structure and stereotomy use of brick, all of them included in Hestnes Ferreira's designs (Neves,2002:7-8) in a humanised scale (Oliveria, 2015:9).

He represented the necessities of times imposed by the theorists and critics, understood the preexistence of city and traditional territorial elements due to his broad experience and synthesised an individual approach to each design problem.

### **Appendix 2:**

## **Extended information on the human chapter**

#### Human-Istanbul

#### **Architects brief biography**

#### 1. Alexandre Vallaury (1850-1921)

The role of Levantine architects in the construction of the late Ottoman capital and the other cities is indispensable since they were born and raised as Istanbul locals. Alexandre Vallaury is another crucial figure in the latest 19th century in designing the public and private works in Istanbul and made his mark as a founding professor of the Imperial school of fine arts, teaching the crucial architects as the representatives of the later generations in national architecture. He is among the few architects studying at Ecole des Beaux-Arts in Paris between 1968-1979 (Kizildere & Sozen,2005:53), while the Levantine-origin architects used to study in Italy and Germany. Vallaury worked in Georges Coquart Atelier during his stay in Paris and was well-known for restoration works. A year later, he returned to Istanbul, participating in the Elifba Art group in 1880 for two consecutive years, presenting architectural projects, surveys, and models (Cezar,1995). These exhibitions, along with the mansion designed for the Egyptian khedive, were impressive enough for the director of the imperial museum, Osman Hamdi Bey and under his authority, Vallaury began to design numerous works in Istanbul, such as the Imperial school of fine arts, and later on, he was appointed as founding staff.

Under his direction, the school's architects were educated based on Vallaury's educational path, including the historical, academic classicism of the Beaux-Arts tradition taught as a common approach in various places throughout the world at the time (Çelik,1996:123-124)

Vallaury designed around fifty significant buildings ranging from works for the non-Muslim communities to governmental monuments and from monuments to mansions. It is pretty perceivable and clear for him to design in neighbourhoods being much more familiar with western design in the first place. There are several marks of what Vallaury designed for Levantine communities living in Galata and Pera, such as Cercle d'Orient Club, Tepebaşi Pera Palace, Tarabya summer palace hotels, Banque de Change, Union Française building, Headquarters of Public Debt Administration ("Düyun-u Umumiye Idaresi"), Tokatlıyan Hotel in Pera and Dégucis house alongside the public works like the Hidayet mosque, Cibali Tobacco Factory, Osmanli Bank, archaeology museum, Karaköy bank and imperial medical college of Haydarpasa.

Vallaury's working career shifted toward private projects in the last decade of the 19th century and also the beginning years of the 1900s since numerous foreign and Turkish architects were involved in public works either with restoration purposes or new buildings and hence he designed several private mansions and houses such as Cemal Reşit Rey house and Vişnecizade mansions. The constitutional

revolution in 1908 was a critical event for Vallaury since he decided to leave Turkey a year after to Grasse in France when a custom house project in Eminönü was finished. He resigned after 25 years of teaching at the imperial school of fine arts and was replaced by Guilio Mongeri and Vedat Tek, another well-known master in Turkish national architecture.

Vallaury's works manifested similarity with other architects, specifically the Levantine masters of the time, such D'Aronco and Guilio Mongeri, since he used an artistic form of a synthesis between western and Eastern styles regardless of the subjects (Aktemur, 2012:69).

The design setting of the facades in Vallaury's designs was composed of a combination of the forms borrowed from Renaissance and Baroque architecture, being in line with Beaux-Arts principles, and these syntheses are clearly shown in the projects such as Osmanli Bank, Tobacco Regiment, Karaköy Han, and Decugis house, all built in a time frame of 1892- 1896 (Aniktar,2013:1210). Like the other architects, he was open to new building technologies such as Iron, Steel and glass, along with reinforced concrete that might have been used in the imperial medical school of Heydarpasa.

Given the consideration of stylistic orientations, Vallaury preferred western eclecticism (Aniktar,2013:1205) rather than the Islamic or national styles as he was trained in Beaux-arts and had a different family background. Nonetheless, the influence of Ottoman architecture is evident in his later works on residential projects since 1895 (Aktemur,2012:69).

According to Sedad Eldem, he was the first architect to study Turkish residential architecture fundamentally aiming at presenting contemporary Turkish architecture (Aniktar,2013:1205) because of his primary research on Ottoman architecture and monuments in various cities of Istanbul. Vallaury has witnessed a few Islamic revivalist styles outside Anatolia such as Hidayet mosque with Pseudo Moorish style (Aktemur,2012:69) and Egyptian motifs in Khedivs Mansion.

To generate a general mage of his works, it is possible to conclude that his design philosophy is rooted in eclecticism derived from France and Beaux-Arts, aiming at reaching a balanced composition through a set of historical and geographical sources. His perspective on styles and their composition is evident in the younger architects forming the first national architecture and its respective discourse (Kizildere & Sozen, 2005:88). The non-Muslim Europeans and even petit-Bourgeoise Ottomans valorised his widely used neo-classical buildings in Istanbul which are still a centre of discussions.

#### 2. Arif Hikmet Köyunoğlu (1888-1982)

Another architect shined in the first national architecture and designed both in Istanbul and Ankara was Arif Hikmet Köyunoğlu. He studied architecture at the Istanbul school of fine arts under the guidance of Guilio Mongeri, another well-known architect. Köyunoğlu worked in Beyoğlu Saint Antoine Church, designed by Mongeri as one of his primary projects in his hometown.

There is a considerable gap between his graduation from the school of fine arts and a professional career in western Turkey since he had to serve as an officer in the first world war on the Caucasian front and then returned to occupied Istanbul right before the establishment of the republic, he was not allowed to pursue any architectural project due to the political decisions leading him to continue as a photographer until the war of independence and moving to Ankara (Mimarlik,1982:5).

During his stay in Ankara, he designed some noteworthy works such as Türkocağı Central Building (Now as Ankara State Painting and Sculpture Museum) as a modernised Turkish classical architecture and foreign ministry building, along with private projects such as Celal Bayar house, Mithat Alam and Falih Rifki Alay residences. Köyunoğlu returned to Istanbul in 1935 and was involved with numerous projects in the restoration of Sadabad Pavilion Mosque and Buildings in Kagithane; Kanlıca Amcazade Hüseyin Paşa Mansion. Apart from the restoration works, he designed numerous works in republican era Istanbul, such as Recep Peker's house, Maçka "Bizegöre" apartment, Eczacı Hasan Bey mansion in Florya and Zia Gokalp's Mausoleum (Mimarlik,1982: 7).

Köyunoğlu appeared as a writer and journalist during his days in Ankara and Istanbul, writing in Hakimiyeti Milliye newspaper, Türk Yurdu, and Architecture and Art magazines.

Köyunoğlu represented the generation's dilemma regarding their design orientation toward modernity and traditionalism embedded inside the national architecture. There are both signs of locality and modernity in his eclectic design, aiming at a synthesis including traditional patterns, forms and elements with the reinforced concrete system or the current technology of the time (Güner,2018:108). One of the most significant references to the use of traditional forms by the architects of the first national movement was the book "The Ottoman Architecture (Usuli- Osmani-i- Mimari), and the forms and motifs used in the book were the primary sources of Köyunoğlu as he mentioned its importance for several times in his writings.

His academic education under the guidance of Mongeri led to the mastery of Ancient Greek, Roman, Renaissance and Ottoman architecture as a revivalist (Ibid,2018:96). The role of history for him is reflected in a linear notion of time and continuity. At the same time, the appraisal of the past is evident in his writings, believing that the nation's architecture in the past was original. He intends to produce an architecture which is given, fixed, unchanging, socially accepted or dictated by social memory (Günenç,2016:139-142).

Köyunoğlu showed a transitionary figure like the others in a time when nationalism fed by Ottoman principles shifted toward new nation-building affected by distance from the former modes of representation. In this sense, the nation-building process faced new principles of modernity and original aspects of Turkishness in the past; he uses the national still as revitalizing, selective and traditional façade practices in his buildings (Giray,2009:5).

In general, Köyunoğlu followed a hybrid model accepting the fact that the secularised everyday life should be regarded as a necessity while challenging the ideas of any fixity, immutability, monocentric, uniforms, and generally accepted social memory (Günenç,2016:144) believing that:

"We also need modern architecture that will respond to all the thoughts and needs of the century and caress our souls. However, this modern architecture should not be an imitation of other nations but an architecture specific to our country, Turkish. We need original modern Turkish architecture. I am sure that young Turkish architects will reach positive creativity" (Köyunoğlu, 1991:46).

#### 3. Giuilio Mongeri (1875-1953)

Due to the multi-ethnic population of Istanbul in the 20th century, the roles of non-Muslim and non-Turkish architects in the first national architecture are noteworthy. Guilio Mongeri, a Levantine local of Istanbul, was among the foreign architects and planners who shaped the contemporary city. Being born in Istanbul in 1873, Mongeri spent his education life in Milan and completed his architectural courses at Brera Academy (Bornovali,2016:131-132). He returned to Istanbul in 1898 and started to work as a freelance architect for a while (Can,1995:96) with Italian engineer Eduardo de Nari.

He had a close relationship with Italians and other foreign communities in a foreign part of the Istanbul making him be the member of Italian works assistance association in the city as a famous person. He was in Istanbul until the Tripoli war in 1911-1913 as an architect and the Istanbul school of fine arts, conducting two project workshops there. After the war, he returned to the university for a short period before the Ottoman capital experienced a difficult time due to the first World War. That was a tough time for Mongeri since Turkish nationalism was fortified, and he was countered by the students claiming that "Turkish architecture receives its inspirations from Süleymaniye and Selimiye mosques, not St. Peters!" (Bozdoğan,2002:60). Another break from academic activities happened for Mongeri, and the living situation for Istanbul deteriorated.

A new republic and new capital were other particular environments for him to continue his career. In Ankara, he was involved in many works such as the Turkish Hearth project, Ottoman, Iş (work), Ziraat Banks and Monopoly directorate. His academic career as a teacher did not last long since modern architecture, and international style emerged in the capital. For this reason, his workshop was closed simultaneously with the rejection of Gazi Mansion. He was criticised for his emphasis on placing ornaments in his designs at the end of the 1920s (Bozdoğan,2002:56), not accepting the imposed methodology by the modern architects, he decided to quit.

Mongeri Published several articles in Turkish and Italian magazines; the only evident ones are in the journal La Rassegna Italiana. Based on the brief bio, it is possible to track a few crucial points in Mongeri's design philosophy. Due to his educational career and family background, it is predictable to find traces of eclectic western styles in his works influenced by the first national architecture movement, Although the influence is not evident enough in Istanbul. Mongeri designed many private mansions in neo-classical styles in Şişli and Teşvikiye (Can,1995:97) as well as the Italian embassy and Generali Han buildings, Majik cinema, Karaköy and Macka Palas. His deep historicist interest was clear to understand as the time factor and revivalist approaches, along with his education in Milan, were the critical factor to frame this philosophy and the Islamic tones in his works are less or used in a universal and non-local way, being similar to pseudo-Moorish works done before in the Ottoman capital.

Camillo Boito's role in shaping this mentality was vital since Mongeri followed every aspect of his mindset, from the unity of structure, material, functional organisation and decoration aesthetics (Tanyeli,2007:374-376). Although he tended to use much more western eclectic styles, Boito's restoration-oriented theory generated interest in Seljuk-Ottoman heritage.

Mongeri's contribution to the national architecture principles was realised in several residential buildings

in Istanbul, such as Bulgur Palas, Nurettin Bey Pavillion and Bozlu holding, all containing the synthesis between Islamic motifs and western materials. The importance of the façade is for Mongeri is something special as well as a site since he used to tell, "let us see the façade first, not plans" that Mongeri perceived the architecture as a façade art (Sözen,1984:31).

As a non-Turkish architect, Mongeri made his mark, as well as the locals, to put the foundations of national architecture, although he was criticised for the appearance of the modern movement and its acceptance by the state in the 1930s. His importance could be realised more when he was the professor for the architects of the first and second national styles, such as Arif Hikmet Köyunoğlu and Sedad Hakki Eldem. The traditional traces were more evident in his works, influencing the other architects of this generation to look forward the Turkish traditions, history and identity.

#### 4. Mimar Kemalettin (1870-1920)

It is impossible to talk about the first national architectural movement but not to mention it is one of the most distinguished architects. Born and raised in Istanbul, Ahmet Kemalettin was trained to be a civil engineer at Hendese-I Muliye Mektebi (Imperial school of engineering) in 1891 (Yavuz,1981:74). There was an utterly strong connection between Kemalettin Bey and his professor August Jasmund, another famous architect working in Istanbul. He was sent to Berlin by the state in 1895 to continue his architectural education at Charlottenburg Technische Hochschule for two years. Having returned from Germany, he was recruited to work at Ebniye-i-Askariye (Architecture of military buildings) and teach architectural theory at Sanayi-i-Nefise (School of fine arts). His working career could be categorised into three stages: The latest years of the Ottoman empire, his career in Jerusalem and working in the Capital City, Ankara.

The 20th century, precisely its second decade, was the most significant period for Kemalettin regarding the number of works he designed, even though political inconsistencies such as the constitutional revolution and First World War took place. In 1909, he was appointed the chief architect for the ministry of foundations, office of construction and restoration (Evkaf Nezareti Tamirat Ve Insaat Heyet-I-Fenniyesi). Besides his role in the Society of Ottoman engineers and architects (Ghanadi & Ormencioglu,2020:261-262). He designed various mosques such as Bebek, Bostanci and Bakirköy mosques, along with numerous schools like Bostançı, Ayazma, and Reşadiye primary schools in Istanbul (Yavuz,1981:62). However, his most critical projects belong to Vakif building series since among them since only Fourth Vakif inn was realised which was not finished in Ottoman era and finished with the establishment of republican government.

Political anxieties led Kemalettin to leave Istanbul for Jerusalem as he was invited to restore the Dome of the Rock and the Mosque of Aqsa, resulting in an honorary membership award from the British Chamber of Architects (Ibid,1981:74). His return to Turkey coincided with a new government and capital. Ankara performed as a tabula rasa by the new government to practice national architecture. Before his sudden death, Mimar Kemalettin's short period in Ankara witnessed a few noteworthy works, such as the Turkish Hearth building, a residential building for the General Directorate of Railways and Gazi Educational institute in 1927.

Furthermore, He was appointed to the General Directorate of Foundations, Constructions and Repairs, an institution he was familiar with during his career in Istanbul.

Turkish architecture historians describe Kemalettin Bey as an architect with national and traditional tendencies, although his works indicate a few indications of western education. In an era influenced by the imposed principles of eclecticism and stylistic revivalism, Kemalettin Bey internalised a neo-classic style in Turkey (Ghanadi & Ormecioglu,2020:258) with either personally perceived Ottoman motives or eclectic effects Jasmund taught him. There are also a few marks of Art-Nouveau like Ahmet Ratip Mansion in Camlica, other than the ones he designed for the German Ambassador in Rumelihisar, Nisantasi and Ortaköy(Yavuz,1981:60).

Since the first national movement in architecture covers the development both in Ottoman and Republican eras, it is possible to identify a combined vision of national and religious elements besides the synthesis on the poles of West versus East or traditionalism and modernity. Kemalettin Bey, without doubt, bore this principle. Kemalettin Bey developed his desire for nationalism and, specifically, Turkism both in his academic career and his works since the beginning of the 20th century, parallel with political pressure toward national principles after the constitutional revolution in 1908 toward the independent war and formation of the Turkish republic.

The difference on each occasion of nationalism in connection to setting apart religion was compelling enough after his stay in Jerusalem. The Harikzadegan apartment was a low-income housing project for the fire victims of 1918. However, there are still signs of Ottoman and Islamic motifs as a central argument in the first national movement to identify a Turkish identity (Ozaslan and Akalin,2011:912) and a transitional approach to a more secularised state.

Still considering the overall view toward his works, most of Kemalettin Bey's architectural life are witnesses of synthesised layers of Ottoman and Islamic forms embedded inside nationalism. Furthermore, his ambition and concerns for preservation and restoration might reflect the traditional state of mind. His articles in 1908 and 1913 in "Turk Yurdu" magazine indicated the importance of Islamic and Turkish antiquity, sharing his deep concern for the demolition of historic sites and, in general, the historical essence of Islambul(Yerasmios, 2014:2).

Kemalettin Bey also criticises the famous Baron Haussman plans during the reign of Napoleon III, claiming that these plans wrecked Paris with other plans for cities like Berlin with rectilinear, vast and monotonous buildings (Ibid,2014:4). His responsibilities in the ministry of foundation amplified his vision toward the preservation of historic and Islamic sites (Yavuz,1981:62) in since second the constitutional revolution continued in the 1910s.

Without a doubt, style, forms and motifs were still on the agenda of both Beaux-Arts or traditional masterpupil interaction before the dominancy of a more positivist language and Kemalettin, for sure, sought traditional forms regardless of the themes he was responsible for. That is why the use of elements arches, eaves, domes, Cumbas, towers and geometric ornamentations are evident in his works besides

western building techniques and reinforced concrete (Ghanadi & Ormecioglu, 2020:272-277).

His approval of western imported materials such as reinforced concrete did not appear to be part of solving a structural problem, and as a consequence, according to Arseven (1939:189), arches and

418

domes were used by reinforced concrete, not integrated with the whole building system leading to a superficial entity.

Kemalettin Bey took a hybrid path in architecture with the eclectic influence of August Jasmund, the effect of Turkish intellectuals on modernizing and nationalizing Turkey at the time, technological advancement and his adherence to religious values. He was not receptive to contemporary European principles of planning and architecture while accepting the western comprehensive proposed language. The outcome could not be anything other than combining popular poles of culturalist vs progressivism, western vs Eastern and Traditionalism vs Modernity, even though he did evaluate them in a polarised way.

#### 5. Raimondo D'Aronco (1857-1932)

Foreign architects were involved in designing and restoring buildings in Istanbul in Fin de Siècle and the beginning of the 20th century. Due to the Tanzimat period and westernizing the country, several non-Turkish architects, either locals or the ones living abroad, were requested to design public and private buildings in the Ottoman capital, and Raimondo Tommaso D'Aronco was amid the Italian architects taking their part in the ending stages of the empire. In line with the family business, he was sent to Graz, Austria, to be familiar with the construction business in 1871 (Barillari,2010:328), and after six years, he went to Venice to study architecture as a student of Giacomo Franco.

In his primary years of designing, he won lots of national prizes, such as Venice Fine arts in 1887, the Palermo national architecture exhibition in 1891 and Turin Architecture exhibitions in 1892 and 1893 (Altikiliç and Bei,2020:45), being practical enough to attract the Ottoman Sultan Abdul Hamid II to invite D'Aronco in 1893 to Istanbul. He was a member of the Ottoman national exhibition team in the same year. However, the exhibition did not occur due to the earthquake on July 10, 1894 (Adigüzel,2020). On the other side, due to the destructive consequence, he was involved in numerous restorations and designs such as Hagia Sofia, Grand Bazar, Buyuk and Kucuk Mabeyn (Barillari, 2010: 332) as well as the Old City walls, historic Saray buildings and other mosques (Marcos,2008:277). Apart from restoration, Imperial medicine college as a project designed together with Alexandre Vallaury, the complex of Yildiz Palace, Casa Botter, Sheikh Zafir's mausoleum and the summer residence for the Italian Embassy in Tarabya is among the significant works he designed for Istanbul (Altinkilic and Bei, 2020:45).

During his stay in Istanbul, he had the chance to collaborate with Sarkis Balyan and Vedat Tek, besides Vallaury. D'Aronco left Istanbul a year after the constitutional revolution in 1908 because of the political anxieties due to the dethrone of King Abdul Hamid II. He was offered a job as a technical committee member organizing the 1911 International exhibition, and he declined (Macke,2011:8).

D'Aronco's work philosophy relies on European eclecticism and revivalism (Batur,1992:147). The restoration projects were considered a turning point for him to investigate crucial mosques in Istanbul, opening his views on the East and his admiration (Marcos,2008:277) and structuring his interpretation of Islamic-Ottoman architecture combined and developed with Art-Noveau since Fin de Siècle (Altinkilic and Bei, 2020:45).

Another trace of enthusiasm from Aronco's side to the traditional ambience in Istanbul was evident in his studies on Turkish houses. This influence was more connected to internal space and interest in Sofa (central hall) as the main element making him design sofa-centred plans in numerous houses, from Fahri bey and the Italian embassy summer house to Botter residence and facades followed more an eclectic order consisting of balconies, Ottoman overhangs, towers as well as the possible similarity to English Cottage based on Norman Shaw's architectural sketch (Adigüzel,2020:22).

Given the eclectic language of his designs, it is pretty essential to address the influence of Viollet-Le Duc as his role model in terms of using the materials such as Iron and glass, wood and stone and decorations recognizing the innovations of the age (Barillari,2010:32 & Adiguzel,2019:163). The new roofs in the restoration of Grand Bazaar as a neo-baroque ensemble (Barillari,2010:36) indicate this influence the most (Marcos,2008:277). The traditional approaches from D'Aronco are distant from the rigorous forms of nationalist architecture, although the combinatory approaches between traditional forms and modern materials were transformed to a later generation.

D'Aronco showed his passion for progressive representations since he was among the first architects to apply concrete mortar in the Imperial medical school, collaborating with Alexandre Vallaury in 1895 (Batur,2004:17), facilitating the way for the architects such as Mongeri and De Nari to continue buildings by reinforced concrete (Uras,2013:245).

In general, D'Aronco's works represent the mastery of the styles since he could switch between three main styles: Art-Nouveau, Secession and Ottoman revival. Furthermore, they were traces of Neo-Greek, Neo-Gothic, Italian and French Renaissance besides the Late Victorian spirit felt on some facades (Macke,2011:26). Giacomo Franco, Camilo Boito, and Viollet Le Duc were three role models forming the design philosophy of D'Aronco. Although he did not stay in Istanbul for a long time and was travelling between Turkey and Italy, his architecture affected the national architecture and the next generations.

#### 6. Vedat Tek (1873-1942)

It is impossible to look briefly at the first national architecture without considering the role of the great architect Vedat Tek. In a society where the Turkish locals rarely became architects, Vedat was the pioneer to break this tabu, even though his father objected to his decision believing that it is not usual for Turks to work as an architect. Vedat Tek was among the first Turks studying in France as he completed his education at Ecole Monge, Academie Julien, Ecole Centrale and Ecole Beaux Arts in Paris. His nine years in Paris were successful; he won the Legion D'Honeur medal (Ozkan,1973:47). Vedat Tek returned to Istanbul in 1898, deciding to open his own architectural office in Sirkeci and compete with the other foreign offices dominating the capital.

A year later, he was appointed as a prominent architect and a member of the technical committee of Istanbul municipality, transforming into an influential figure in other roles as the principal architect of the Ministry of Post and Telegraph and the ministry of public works, both in the years turning to 20th century and 1900s (Erdogan & Eynali,2015:47).

Vedat Tek was appointed as a lecturer first at "Sanayi-i-Nefise Alisi" and then fine arts academy for 27 years in both Ottoman and republican governments, contributing to the training of hundreds of future architects (Ozkan,1973:48).

During the first world war, he worked as the chief architect of the ministry of war for three years, having constructed Enver Pafla's mansion and Veliefendi hippodrome (Seckin & Sönmezer, 2003:247).

Political anxieties in 1908 did not change the situation for him as he continued to work as the palace architect of Emlak-i-Hakani (the registry of revenues for the ottoman empire) in the next decade (Erdogan & Eynali,2015:48). Istanbul lost its essential after the fall of Ottoman empire, and Vedat bey had to move to the new capital, Ankara in 1924 upon Ataturk's call. His stay in the new capital was not extended, and he returned three years later with the apartments designed in the Maçka-Teşvikiye-Nişantaşı region.

The architects in the first national architecture reflect a similar characteristic: their less duration of stay in Ankara due to the criticism of their health problems. Vedat Tek and Mongeri's ateliers were closed because of disagreement with foreign architects and teachers, marking the end of the first national architecture for Turkey (Seçkin &Sönmezer, 2003:248).

Vedat Tek designed numerous buildings in Istanbul ranging from public offices to mansions and apartments, such as the Sultan Ahmet land registry, Sirkeci Post office, Halit Bey and Yayla apartments, aeroplane martyrs' memorial monument, Liman, Muradiye and Mesaret inn, The Embassy of Hungary and his own house in Nişantaşi.

Vedat Tek's design principles follow a similar pattern taken by almost all architects in the first national movement bearing the evidence of domes, ogive arches, eaves, and tile panels as the latest efforts for reviving Turkish architecture (Ozkan,1973:46).

He avoided imitating what was precisely trained in France and reflected a concern for architecture inside the Turkish environment; consequently, his works were the evidence of pursuing historical traces of Arabesque, Ottoman, and Seljuk architecture (Erdogan and Eynalli, 2015:47).

All these formal elements are brought from Islamic religious buildings used repetitively in Anatolian monuments. These elements had to be combined with European forms and technology. For instance, the Sirkeci Post office contains semi-circular plasters as well as Corinthian caps on the upper floor beside the pointed arches and Turkish tiles between the arches bearing the testimony of the European training that the architect had (Aktemur& Arslan,2006:4).

Vedat Bey's architecture, like his counterpart, Kemalettin Bey, illuminates a subjective and interpretive experience toward traditional and national architecture (Erdogan & Eynali, 2015:49) with a selective approach to history (Aktemur & Arsalan, 2006:7). All these selective approaches were practised only in facades as the most critical factor for the architect.

Vedat Tek also commented on Urbanism and its future for Istanbul. While considering urban intervention as a necessity, he criticised the lack of public services in the city for ensuring healthy life, prioritizing the pedestrians and hoping that the growth toward the East would be the best solution for Istanbul (Ozkan,1973:50). His concern was the removal of traditions and customs like the transition of life from mansion to apartment as an outcome of urban growth leading to lack of quality (Ibid,1973:51).

Vedat Tek's different views could be discovered when competition on a building for Turkish-German friendship and the proposals from German architects such as Peter Behrens, Hans Poelzig, Bruno Taut and Ludwig Hoffman were criticised by Vedat Tek as a jury for being over-expressionist (lbid,1973:48). Other than stylistic efforts for reviving the traditions, Vedat Tek considers a renaissance character for architects believing that the architect is a Homo Universale using all possible disciplines of Arts (lbid,1973:50).

Although he questioned the changing lifestyle in Istanbul, he designed two critical apartments such as Gunes and Halit Bey, valorizing the functionalism in these buildings believing that expression in form ought to appear as a natural result of the interior setting (Erdogan & Eynali, 2015:51).

No one can deny the role of Vedat Tek in the transitional environment of Anatolia with the appearance of materials such as reinforced concrete, steel, iron, and glass replacing the masonry technics.

The architecture historian Afife Batur (2006:42) concludes the design philosophy of Vedat Tek as an architect following a revivalist style confirming that his absolute dream was to reach the modern by generating historical continuity and opening one of the most challenging and closed ways to reach it in different examples specifically housing designs after 1920 where early modernism used plastic masses that were close to Art Deco and his approach was simple to remodel, learn and transform.

#### 7. Emin Halid Onat (1910-1961)

The second national architecture movement witnessed successful architects, and Emin Onat was the of the reference characters for the generation marking this movement. Onat entered engineering graduate school in 1927, and two years later, he was chosen to continue and complete his studies at ETH in Switzerland and was later sent to Zurich's higher technical school (Türkün Dostoğlu & Erdoglu,2013:75).

His architectural studies at ETH encountered the principles of Bauhaus, like simplicity, functionalism, and plasticity, under the supervision of Otto Rudolf Salvisberg (Batur,2010:273). In 1934, he returned to Istanbul and started his career as an assistant professor in the civil engineering department of engineering graduate school, embracing the Bauhaus principles (Ibid,2010:274). Furthermore, he continued teaching at Nafia science school until 1951 and later took the responsibility of a significant academic role as Department Dean and Rector at Istanbul Technical University (ITU).

Emin Onat's short life is not summarised in his academic life as coincidently with his teaching career as a professor; he decided to participate in several architectural competitions such as the municipalities bank project in 1933, the Istanbul Theatre and conservatory competition, Yuruk Ali beach project and Istanbul Port Passenger Hall with the collaboration of Ahmet Sabri in most of the projects. The most critical project that Onat participated in was not in Istanbul but Ankara, as he won the Anitkabir international competition to design a mausoleum for Ataturk with Orhan Arda, another significant character of the national architecture movement (Tekeli,2008). These successful contributions made Onat the second Turk honorary member of RIBA in 1946 after Kemalettin and the international union of architects (UIA) member.

In Istanbul, he designed several works diversified from monuments and public projects to residential buildings for private sectors, such as Hazik Zia Villa, Sultan Ahmet Palace of Justice, Istanbul University faculty of science and Arts, Moda Deniz club, Sanayi Kalkinma Banks, Yukesel and Sporel apartments along with the houses he designed for himself and his mother.

The second national architecture movement distanced itself from the eclectic motifs of Islamic and Ottoman architecture. Initially, the entrance of architects like Paul Bonatz and Bruno Taut in Turkey boosted the dominance of primary waves of modernity. However, the second national architecture movement took place inside the notion of nation-building, and the matter of the generation of a Turkish identity for a new country seemed vital in the first place. Also, it was critical for a state not to produce a superficial entity practised before by the previous architects. Emin Onat's role in finding the roadmaps for this socio-political objective appeared to be fundamental.

Salvisberg's role was not ignorable for Emin Onat since he was trained in ETH with the avant-garde principles of Bauhaus. However, historical themes other than the Islamic era had to be the central principles as his desired designs fluctuated between rationalism and locality in his works until the last years of the 1940s (Türkün Dostoğlu and Erdoglu, 2013:55-62). Onat's design aims at a model being divergent from synthesis (Tekeli,2008) since he tried to look for functional and rational principles converging the western modernism, avant-garde movements, and national Anatolian architecture. This approach was followed previously in Kemalist political discourses led by the intellectuals like Zia Gokalp (Bozdoğan,2002). The only theme joining the local consistency and rationalism was the notion of "houses" in Anatolia and central Asia gaining Onat's notice.

Onat was not the only figure regarding the idea of Turkish houses since Sedad Eldem, another critical architect of the movement, investigated this idea even more precisely. Both of them cooperated in projects like the faculty of science and letters for the university of Istanbul, the faculty of science for the university of Istanbul and the Istanbul palace of justice, all of them being discussed by the majority of Turkish art historians as the role models of second national architectural movement (Tekeli,2008).

The difficult economic circumstances led by World War II paved the way for Onat and the other pioneers to insist on using local materials as an outcome of studies on Hitte and Mesopotamian legacy in Anatolia (Alsaç, 2005: 107; Tekeli 2005: 25). Still there are stylistic signs of Neo-classicism either as a translated form in Turkish architecture or a universal sense following the German influences and the figures like Albert Speer.

The design philosophy of Emin Onat transformed into international modernism entirely in the 1950s when the work of Istanbul Justice palace was constructed, and it was recognised as a symbol of the decay of the second national movement and the transition to international style and also American Influence on Turkey with the projects such as Hilton Hotels.

He designed a few buildings in Istanbul in the 1950s as he participated in political activities through his membership in the Democratic party and later his consultancy on Istanbul's urban master plan. Yuksel apartment, Deniz Moda club and Devres İşhanı were his latest works in Istanbul, all designed and built in the International style.

Emin Onat did not live long to produce a considerable amount of works to simplify the analysis of his

architectural life since, due to political reasons, he was expelled from the university a year after he died of a heart attack. A brief view of his works clarifies that he was trained in line with the modernist principles of ETH. He accepted the rationalist principles advocated by the Foreign professors of the republic such as Bruno Taut, Clemens Holzmeister and Bruno Taut.

At the same time, national consciousness was still performed as a predisposed necessity, and then his efforts with Eldem on nationalizing the modern as an act of nation-building did not end fruitful, and his last stages of work were the complete approval of international modernism.

#### 8. Sedad Hakki Eldem (1908-1988)

Turkish architecture encountered ups and downs during the 20th century after the announcement of the republic. If it were possible to aggregate and symbolise the last century architecture in an architect, for sure, that architect would be Sedad Hakki Eldem since he was born right in the middle of the first national architectural movement and, unlike the other counterparts, lived and worked longer, covering the majority of periods. The influence of international style was dominant since the beginning of the 1930s, and cubic buildings were the connotations of modern Turkey. Specifically, Ankara was realised by mainly inviting foreign architects (Acciai,2019:73). In this image, Eldem was the most critical architect pursuing another approach.

Eldem was born in Istanbul in 1908, and due to the political roles of his father as a diplomat, he spent most of his educational path outside Turkey in Geneva and Munich (Erarslan,2020a:381). However, his academic career in architecture began in Istanbul in 1924 at the academy of fine arts. His 4-year primary education was successful enough to continue his study on a scholarship to meet and work with architects such as August Perret and Le Corbusier in France and Hans Poelzig in Germany (Kuban,1994:151).

His return to Turkey in 1931 coincided with the last years of Vedat Tek and Mongeri's workshop in the Faculty of the academy of fine arts and the presence of foreign architects and professors such as Ernst Egli. Even in this short period, Eldem found the opportunity to work with Mongeri in Ankara and immediately entered the academy of fine arts as an assistant a year later, working there for 46 years until 1978 (Erarslan,2020a:381).

The other important point to remind in this regard is that Istanbul was neglected after the occupation by the foreign armies in the 1910s and political turbulences concluded with announcing Ankara as a capital. Eldem's role was crucial to reviving Istanbul since he was invited by the Istanbul academy of fine arts director, Namık Ismail, to participate in the establishment of the academy (Korkmaz,2008:40). This was the turning point in what is recognised as Sedad Eldem's specific style and method on Turkish architecture regardless of metamorphosis and cycles during his career.

Due to Eldem's long architectural campaign, there are numerous works bearing his mark, and for this reason, historians categorised his works into four items. His first working period covers the first two years he spent in Berlin and Paris until 1930 and the next four years as his formation years (Bozdoğan et al.,2005). It was the beginning phase of implementing his design philosophy regarding the idea of

Turkish houses, even though there are traces of International style and Art-Deco in the projects such as Ceylan Apartment, Bayan Firdevs, Satie Electric Company.

The next chapter of his life faces the consequences of a national architecture seminar established in 1932. This period is recognised as the most crucial period of Eldem since his central target was to materialise the Turkish House utopia symbolizing the second national architectural movement (Tanyeli,2001).

Agaoglu house, Ayasli mansion, Sayfurlu Vila, Yalova Thermal hotel, Taslik Kahvesi, Istanbul faculty of science and letters (1942-1947) and Istanbul courthouse. Furthermore, this period manifests the monumentality of Eldem's work using stone. Istanbul courthouse is a symbol of the end of seeking out the national architecture being recognised as a transitional epoch for modern international style (Bozdoğan,1987:77).

The next stage for Eldem comprised the works covering ten years between 1952 to 1962 with less influence of Turkish elements as for most architectural historians, his cooperation with SOM led to the Hilton Hotel in Istanbul.

The heavy usage of steel and glass besides reinforced concrete and modular façades are evident in Eldem's other works such as Sayfurtlu Mansion II, Riza Dervis House and Florya Costal facilities (Kanaltar, 2012:45).

The last stage of Eldem's works reflects his primary efforts for 26 years until his latest years in 1988 on establishing a national framework for architecture. His design mindset is simple, while traditional examples include the horizontal roof line, wide eaves, vertical windows, and overhangs (Tanyeli,2001), besides the previous efforts on traditional spatial arrangement. Zeyrek Social Insurance building, Dutch and Indian embassy building, Kiraç and Sirer Mansion, Akbank headquarters and Ayazaga Alarko holding offices are manifested as the fusion of modernism and regional vocabularies.

Diverse critical architects and professors influence Eldem's architecture. In his academic career, he worked with Guilio Mongeri and Vedat Tek. His internship period was the time to distance himself from Beaux-Art eclectic standards working with August Perret being inspired by his windows modules and use of concrete (Yucel,1983:60). A few sources witnessed the short period Eldem worked with Le Corbusier. According to Eldem, his encounter with horizontal rows of windows and the modular design approach in Villa Savoye considered that Le Corbusier appreciated how Turkish houses were designed (Papadopoulou & Patsavos,2013:4).

The German influence in modern Turkish architecture was also evident in Eldem's approach. In Berlin, Eldem had the chance to study with Poelzig leading to the further collaboration with Ernst Egli in Turkey and the Academy of Fine Arts as well as the urbanist Herman Jansen who was planning Ankara in that period (Ibid,2012:53).

In Practical Terms, Eldem was even more plural and receptive as various examples from Japanese architecture (Acciai,2017:126) to Frank Lloyd Wright's Prairie house (Bozdoğan,1987:33). Indeed, the way that the materials were used, horizontal lines and wide eaves along with the role of nature and simplicity impressed Eldem the most to implement his ideas on Turkish house and to monumentalise it .Even after the second national movement, in the 1960s, Eldem aimed at cooperating with international

scholars such as Rudofsky to receive his books like Architecture without architects or The Kimono Mind to get acquainted with the latest ideas besides application to France to visit Le Harve and other French cities most damaged after the second world war (Acciai,2019:77).

It is not a simple task to differentiate Eldem's tendency toward modern and traditional architects since his works are recognised as an emphasis on cultural continuity, while several historians approved him as a critical modernist. His most crucial contribution, the Turkish house, covered a reinterpretation of both modern and traditional. Turkish houses were an accumulative effort based on the studies of Turkish-Ottoman houses with a contemporary language using modern materials on a reinforced concrete frame system (Acciai, 2019:72).

His vision of time is another critical factor considering modernity. While the state aimed at removing the Ottoman legacy, Eldem proved how impossible would the process of nation-building through removing certain stages of history. At the same time, he believed the notion of the Past is not the only approach to building identity but a necessity for innovation to be integrated with the present and future (Eldem, 1983:35). Moreover, it is also possible to realise Eldem as the product of time who understood the socio-political needs of national architecture, vernacularism and monumentality (Acciai, 2019:72). For Eldem, there is no divergence between modernity and nationality, believing that the new architecture has to be modern and national (Bozdoğan,2002). However, there are various works by him, such as Ceylan apartments, SATIEe building, Iclal Sadi and Riza Derviş house, Hilton hotel and Pakistan Embassy, turning out to be without any vernacular elements bearing modern architecture denotations like horizontal windows, plastered facades, reinforced concrete construction system, cubic mass, Pilotis and free plan (Aslanoğlu,1980:136). Nevertheless, Eldem is the symbol of cultural duality between East and West due to his different academic formation (Bozdoğan, 1987:56). Hence, his cultural and regional consciousness made him regenerate tradition through the idea of Turkish house (Tanyeli,1998:252) despite the fact his effort on this agenda concentrated on Spatial organisation of Anatolian houses based on the central space called "Sofa" and the similarity with modern language on the way the residential projects should be treated.

To sum up, Eldem, the most influential architect of the second national movement, was recognised as the one with a fusional character combining modernity and Traditionalism. However, unlike the first national movement, his approach was not to synthesise the religious Ottoman elements like Arch and Domes with contemporary techniques or European materials. His target was to integrate modernity and traditionalism in a language focusing on spatial organisation; hence, His work on "Turkish houses" contributed to converging modernism with nationalism through vernacular architecture and cultural continuity.

#### 9. Seyfi Arkan (1903-1966)

The 1930s witnessed a list of significant architects with novel attitudes; among them, the most eminent character is Seyfi Arkan. After receiving an architectural education in Sanayi-Nefise and becoming a student of Vedat Tek, Arkan participated in the Çanakkale Martyrs monument competition. As a selected winner, he was sent to Germany on a scholarship in 1929 (Sayar,1992:96). He studied under the

supervision of Hans Poelzig at the Charlottenburg technical university and Prussian academy of arts apart from participation in Poelzig's exhibition and worked in his office.

This educational experience was a transitional period for Arkan himself since he entered from a student with Beaux-Arts dominancy with a more stylistic approach to a different pedagogical place (Akcan,2005:28).

Arkan returned to Turkey three years later and, similar to other architects in this era, began his career in the Capital, Ankara, by building the foreign minister's residence in 1933 as a fortunate work encouraging the state to trust him more in state projects marking the golden years of Arkan in the mid-30s besides his academic work as an urban design lecturer (Akcan,2005:31).

He became known as the "architect of Ataturk" due to his recognition in various national projects. However, his state role after the death of Ataturk in 1938 due to the changing political circumstances and even more critical reason, transforming architecture discourses toward locality and vernacularism (Gürel and Yücel,2007:50) and he got more involved in private projects. Other than the projects Arkan designed in Ankara and other cities, Arkan was loyal to Istanbul since the old capital was experiencing a recovery and rebirth period in the republican period with the works such as Gunduz Villa, Ayhan apartment, Ihsan Sami mansion, Üçler Apartment, Istanbul Theater and Conservatory International competition project, Istanbul Port Passenger Hall and his most popular project, the Florya Marine Mansion designed as Ataturk Residence in Istanbul in his last days of life.

To be precise, Arkan's design philosophy was labelled as modern based on the arguments raised by most Turkish historians. In the primary stage, there are a few marks of Art Deco in a stylistic sense and even Bauhaus in educational level (Ahunbay,2013:22), and Iller banks could use the most obvious example (Ozcan,2018:87). He is known as the architect is in line with foreign architects working in Turkey by insisting on breaking with traditions and Seyfi Arkan was among a few locals who were given the responsibility to fabricate the new based on principles of the republic (Ertaş Beşir et al.,2020:4077). His educational period in Berlin and working with Poelzig was a fundamental step for Arkan to remove the footsteps of historicism taught by Mongeri and Vedat Tek (Aslanoğlu,1992:95) and consequently, his preference was to value the universal over local inscribing the status quo and contemporary (Gürel and Yücel:52-53).

Florya mansion, as a project designed for Ataturk, represented a clear Modern architectural language being approved as a "cubic whole" with whitewashed walls and a ship-shaped form reminding the idea of the machine as mentioned by Le Corbusier in Vers une Architecture (Akcan, 2005:44).

Besides the effect of Poelzig, it is possible to find the influence of Mendelsohn's curvilinear and biomorphic shapes (Sayi,2006:81). Other than formal principles, the commitment to Total design concept is evident in Arkan's works in a holistic level paying attention from the minor scale to largest (Gürel and Yücel,2007:49)

Despite Arkan's modern image drawn by the historians, he showed his climatic concern and inspiration for designing the residential buildings when he encountered the wide extending eaves of old Anatolian houses apart from the attention, he made for women in interior spaces of houses manifesting his traditional approach (Akcan,2005:39). Also, his symmetrical and classical proposal for Kamutay

competition with monumental stairs and gigantic statue (Dündar,2011:15 &Bozdoğan,2002:281-282). This vernacularity took place in an era marked by the national seminar in 1934, and the appearance of local architecture vanguards such as Sedad Hakki Eldem and Arkan's studies and works on Anatolian vernacular houses tended to be a combined view of modernity and traditionalism. Regardless of the few efforts to establish the arguments on the culturalist concerns of Arkan, it is possible to remind that the idea of the Turkish house was reflected as a point where progressive and local poles converged, being mentioned not only by the Turkish architects but also the architects such as Taut, Holzmeister, Egli and Le Corbusier.

Arkan is the product of a new republic's socio-political circumstances, advocating the novel architectural principles magnified by the German and Austrian architects. He was trained in different circumstances led by the First and second national architectural movements, shifting from revivalism and eclectics to global Avant-garde, expressionism, and modernism. Poelzig's influence, although it seemed to be the dominant instance, his free and liberal teaching method clarifies the individuality of Arkan's approach to be recognised as a transitionary character in the second national movement.

#### 10. Vasfi Egeli (1890-1962)

The architects in the second national architectural movement were foreigners invited by the state or the locals educated in Europe, except for Vasfi Egeli, whose architectural education was in Turkey.

Vasfi Egeli, like the other local architects, began his studies in Istanbul's Sanayi-Nefise Mektebi (school of fine arts) and started to work in the scientific committee affiliated with the Ministry of foundations under the supervision of Mimar Kemalettin and Nihat Nigizberk. The first world war interrupted his activities there as he had to serve in the map department of the war ministry before returning to the general directorate of foundations again. After the retirement of Nigizberk, he was appointed as the chief architect of the department.

During his presence in the general directorate of architects, the duty was to renovate and restore the historical and religious buildings such as the Süleymaniye Mosque, Şehzadebaşı Mosque, Edirnekapı Mihrimah Mosque, Yeni Mosque, Yeni Mosque Hünkar Pavilion, Hırka-i Şerif Mosque and the Tomb of Sinan, the famous architect of classical Ottoman architecture (Yücel,2015:75).

The significance of the works was felt in a period when finding and importing the proper material was not straightforward in interwar years (Yücel,1973:189-190). Apart from the restoration works, Egeli designed two significant mosques in Istanbul, Feneryolu station mosques and Şişli Camii, displaying his architectural character the most.

The Şişli Camii is the first mosque built by public donations in the republican era (Özgüner,2021:6), manifesting the traditionalist view of the architect since the work was executed in a masonry-based approach and disapproving of modern aesthetic approaches (Gabriel,1949 & Egeli,1953). Egeli's works on restoration and studying classical styles in Sanayi-Nefise made him an enthusiast of Ottoman architecture (Göncüoğlu,2021:65). Egeli kept up with the same approach in Feneryolu station mosque with traditional materials insisting on interior ornaments.

Egeli's popularity in Şişli Camii reverberated in the Muslim world, and the Pakistan government invited him to design the mausoleum of Muhammad Ali Jinnah, the founder of the Pakistani state, making him travel to the country to investigate the local elements. However, the state did not realise his proposal (Yücel,2015:77).

In an atmosphere filled with modern architecture on one side and non-Ottoman national architecture on the other, Vasfi Egeli stayed on the line of first national architecture being influenced by the architects such as Kemalettin, Vedat Tek, Ali Talat Bey altogether with Turkish civilisation movement led by Zia Gokalp (Göncüoğlu,2021:65). There are no records of Egeli's work on the themes other than religious. He was not active enough since all his works were located in Istanbul, and the state focus was still on the capital's development. Notwithstanding, the years toward 1950 witnessed the failure of the second national movement, and in a political sense, the single-party system was dissolved, and Turkish society experienced a plural space, specifically for Islamic representations. It is certain that inside these depicted circumstances, a limited work of Egeli appeared, and it is significant to note his work even though they are a few traces because he was among the few traditionalists in a modern ambience limiting innovation, insisting on local materials and masonry approaches with a pure connection to the past.

#### 11. Behruz Çinici (1932-2011)

After the second national movement in the 1950s, Turkey experienced a more liberalised atmosphere with the entrance of private corporates. Turkish architects received more freedom without any governmental limitations or regulations. Among these architects, Behruz Çinici was one of the most typical examples symbolizing the zeitgeist. Çinici was a graduate student at Istanbul Technical University in 1954, taught by popular figures like Emin Onat, Paul Bonatz, Orhan Arda, Clemens Holzmeister, Sedad Eldem and Gustav Oelsner.

Like other Turkish architects, he was recruited as an assistant professor at ITU and parallel with an academic career. He began his practical period with participation in architectural competitions. Most competitions were outside Istanbul. However, the success gained in projects such as Ankara Yildrim Beyazit Bazaar in 1956 and Erzurum Ataturk university campus planning in 1957 marked his success later in the 60s with the establishment of his architectural firm in Ankara.

The most critical stage of his work relates to the architectural firm "Cinici architects" he organised with his newly married wife, Altug Çinici, another architect who graduated from ITU. This bureau was shaped simultaneously with their winning project for METU in Ankara, giving him the nickname "The architect of Campuses".

Besides faculties and campuses, his 40-year career until the last years of the century witnessed the realisation of several projects concentrating on urban and residential projects. Naciye Sultan and Soyuk estate, Eminönü Çarsi, the urban project for Taksim square, Mercan and platin housing projects are the projects designed in Istanbul besides most of his works outside, specifically Ankara (Kultermann, 2000:325).

The beginning phase of Cinici's works were representations of international modernism with a little reinterpretation of Anatolia's regional principles in the 1960s, and the METU campus is the most significant evidence (Savaş,2018:370). His campus projects often followed a rational and functional layout prioritizing the vehicle traffic (Elmali Sen et al.,2014:548-549). Moreover, the more one moves further over time, the more induvial aspects of Cinici's works become apparent, especially in the 60s when the individualistic representation was not that common (Tanyeli,1999). Also, it is possible to notice a transitional approach like others toward a regional perspective since there are symptoms of Anatolian timber houses brought into the construction structure (Kultermann,2000:316). Cinici's studies and enthusiasm for urbanism made him not differentiate between architecture and city, supposing the urban space as a living organism where terms such as inside-outside and house-courtyard are deeply interconnected (Özer,2016:110).

The modern or traditional orientation of Cinici is reliant on the matter of time. He certainly approves of the existence of cultural sustainability inspired by the cultural references of Turkish and Aegean houses (Postalci and Atay,2019:3). Cinici's vision possibly was influenced by the critique of modernism and the appearance of post-Modernism based on the variety of colours and materials used in his works besides the subjective elements inside the houses such as staircases and doors introducing his works as a Gesamtkunstwerk according to Turkish scholars (Kulturmann,2000:325). However, historical references are not the only products of the Post-Modern effects of Cinici's works since the most noticed criteria in his desired design language are individualism and freedom of choice, believing that "form follows institution" (Niebrzydowski & Zelef, 2012, 23).

It is possible to conclude that his vernacular vision bears the mark of his teacher Sedad Hakki Eldem as the most popular symbol of the second national architecture by using the load-bearing bricks and Courtyard-oriented central Anatolian scheme (Erdogan,2018:18). At the same time, on the other side, his independent will to design from the 70s to 2000 is deeply influenced by Aalto, Aalto, Bakema, Rudolph, Gowan and Stirling (Kulturmann,2000:315).

#### 12. Turgut Cansever (1929-2009)

If there was an architect representing the actual image of the country in the second half of the 20th century, the figure was, without a doubt, Turgut Cansever as a transparent image not only framing his architectural philosophy individually but also criticizing the realised and practised image of modernity in Europe and America. He is among a few architects born outside Istanbul and Ankara in Antalya. Cansever's architectural training began in the Istanbul academy of fine arts in 1940, meeting with Sedad Hakki Eldem as his inspirational character.

During the civil architectural seminar held by Eldem, he had the opportunity to draw sketches from historical buildings as a survey project. After graduation, Cansever began to work as an assistant to Eldem in the academy of fine arts, working with him on his books such as "structure", "Turkish house", and "Turkish Gardens" (Düzenli,2010:161).

He also had the opportunity to visit Europe and the lectures of European Art historians such as Ernst Diez, who published numerous articles on Islamic architecture. These moments were Cansever's

primary motivations to continue his Doctorate studies under the supervision of Diez with the thesis entitled "The development of style in Selcuk and Ottoman Architecture: Turkish column heads". Cansever finished his doctoral thesis in 1949 and became the principal academic member at the academy of fine arts at the beginning of the 50s. The era was also the commencing moment for a working career in the restoration project of Sadullah Pasa mansion in 1949 and organizing the architectural office with Abdurrahman Hanci in 1951(Ibid,2019:109).

Cansever worked for nearly five decades until the latest 90s as an architect, writer, and professor. He is a three-time Agha khan prize winner for projects like the Turkish historical society building, Ahmet Ertgun house restoration and Demir holiday village. However, none of these projects is in Istanbul as the case study of this thesis. Nevertheless, he was in charge of several projects such as the Anadolu club hotel (1951-57), the Beyazit square pedestrianisation and arrangement project (1958-61), the Çukursulu mansion restoration and Aysin Atac house. Furthermore, he received a role in the government being involved as Marmara Region Planning Chair and Istanbul municipal planning as well as publishing the works such as "monumental works of Mimar Sinan", "City and Architecture in Islam", "Understanding Istanbul"," Thinker and Architect" and "Ottoman City" (Ibid,2019:119). Cansever's design principles are centralised on the tradition itself rather than what is accepted as modern since he shapes a different and metaphysical understanding of culture, history and religion around the previously realised discourse, such as Islamic and Ottoman architecture (Findikil,2016:133-134).

Cansever's design philosophy is based on the principles derived from readings on the Quran and other religious books such as Unity (Tawhid), the greatness of individuality, totality of being, infinite time and space, movement in tranquillity and beautification of architecture (Cansever, 1992). These principles are not taken from the traditional forms but the morality, essence, and virtue inside them being accompanied by these elements as Cansever's design ideology (Şİşman,2021:129). The reinterpreted ideas of history, philosophy, aesthetics, architecture and urbanism made Cansever find his solutions in the past when it is possible to find them in the present (Martineli,2016:26), just right at the moment he believed that cities are culturally contaminated even though in his vision, time and space are infinite confirming Islamic notions. Furthermore, similar to the contemporary literature in architecture, Cansever concluded on the necessity of participation according to what he perceived through Islamic reading, believing participation is a crucial element for a more beautiful environment (Martineli,2019:39).

There are both modern and traditional influences in the formation of Cansever's design mindset. In the first place, the effects of the academic period by the figures such as Sedad Eldem and Ernst Diez are realizable. The experience he had during the seminars on national architecture organised by Eldem facilitated the understanding of Turkish Ottoman houses to structure his ideology (Martineli,2016:20). Also, Ernst Diez as Cansever's professor during his post-graduate period, was influential enough for him to develop his ideas on the "genetic aesthetic" justifying the presence of ornaments in Islamic architecture. In philosophical terms, the traditionalist impacts on Cansever illuminate the role of philosophers such as Titus Burckhardt and Seyed Hosein Naser as well as his counterparts like Hasan Fathi and Jamel Akbar in glorifying religion as a central core by concentrating on the factors like an architect as a dependant character, ornamentations, importance of metonymy and preserving the

inherent structure of Islamic or Ottoman cities (Akbulut, 2020:1707).

The western architectural discourse profoundly influenced Cansever's project for obtaining an associate professor role entitled "Basic issues of modern Architecture" in 1960. Popular figures include Mies Van Der Rohe, Le Corbusier, Frank Lloyd Wright, and Walter Gropius. Understanding space as a continuum being insinuated by walls and pillars, reflecting truth on structures and windows arrangement and specifying the human role as solving the issues were the points by Mies affecting Cansever the most (Cansever, 1960:128 & Martineli, 2016:29).

For almost all architects, the footsteps of Frank Lloyd Wright are clear, and Cansever, without doubt, absorbed a few principles, such as the idea of "standards" and continuity of inside and outside being influential on his design and studies on Anatolian vernacular houses (Cansever, 2012:21). Unlike the others, the link between Cansever and Le Corbusier was reverse. Cansever believed that Le Corbusier's trip to Istanbul in 1925 and the principles he found in Turkish cities, like the "independence of house and streets" along with the "corridor-street" solution, were the fundamental principles motivating him to present in CIAM (Findikli,2016:157). Furthermore, there were similar principles between Cansever and his contemporary scholars and architect like Heidegger, Utzon and Alvar Alto (Lupalo & Aksoman, 2019). Cansever is recognised as a traditionalist urbanist, architect and theorist among Turkish historians advocating the idea of Islamic-Ottoman cities. He articulated a dialectic between urban mentality and city. According to Cansever, an Islamic city is a united and dynamic organic system built by accumulative social forces being reversed to modern cities as static, monolithic, monocentric, symmetric, and large entities (Aman,2018:1247). Hence, Cansever seriously criticises Istanbul's status quo regarding planning. As claimed by Cansever, vast modification in Istanbul's urban fabric since the Tanzimat period was against the urban mentality, generating cultural pollution. Later on, after the establishment of the republic, the rapid changes occurred by demolishing the Beyazit-Divanyolu axis and subsequently, Henry Prost's plan resulted in the destruction of historical buildings such as Vatan and Millet along with the zoning plans paving the way for side-by-side apartments (Cansever, 1997:57 & Aman, 2018:1247). For Cansever, the classical Ottoman cities are dependent on process and relation, unlike the modern cities, which a centralist and frozen (Akbulut, 2020: 1712).

The buildings in the last and first two decades of the 19th and 20th centuries were built and recognized as revivalist approaches. Even so, Cansever criticises the eclectic principles stating that any fetishism and eclecticism in art questions the idea of "putting everything in its proper place" and the Islamic concept of Tawhid (Lupalo & Aksoman, 2019:43).

Cansever was criticised for being too traditional by Turkish architectural critics for being lost in historical influences (Deniz,2020:140). Supporting traditional architecture by him was not at all framed in a polarised way as there are symptoms of Le Corbusier, Mies Van Der Rohe and Frank Lloyd Wright in his works such as underwater archaeology institute, Karatepe Aslantas Open Air and Demir Holiday village (Uyar,2021:163).

In general, Cansever is among the architects directly supporting the classical Ottoman architecture in a republic, neglecting it or trying to restrict it with military coups. Cansever's architecture is shaped by the consideration of a truth being raised by an ontological approach (and the reference for truth is religion

for sure (Lupalo & Aksoman,2019:133). Like his counterparts, Cansever relies on regional representations with a specific focus on harmonising the building and surrounding environment, leading to his winning three Agha Khan awards. The modus operandi of the architects like Kemal Ahmet Arû, Cengiz Bektaş and Doğan Tekeli.

#### 13. Kemal Ahmet Arû (1912-2005)

It is crucial to identify the role of characters in architectural scope and their influence as an urbanist. If it is possible to find this profile, Kemal Ahmet Arû is the most significant example as an architect, urban planner, professor and intellectual. Arû graduated from the academy of fine arts in Istanbul in 1937. After two-year military service, Arû was immediately recruited as an assistant at the engineering graduate school for the French professor Debb (Gülersoy,2012:5).

Between 1942 and 1946, he participated as a studio teacher, collaborating with Clemens Holzmeister and the urbanism courses with Gustav Oelsner (Arû,2012:23).

Working with Oelsner, who himself an architectural background had also, was a turning point in Arû's academic life leading him to shift from architectural projects to urban development; for this reason, Arû taught the course respective to urbanism as well as prepared the detailed plan for Turkish cities such as Kayseri and Isparta in his first decade of working (Gülersoy, 2012:8).

Arû's involvement in urbanism entered a more severe phase since he was specifically responsible for working as an administrator and consultant in urbanisation projects of different cities besides his academic responsibilities as a professor and Dean in the Faculty of architecture and urbanism of ITU until his retirement in 1982. However, he lectured as a visiting alumnus until 2005 (Konuk,2012:1).

During these years, Arû was involved in the realisation of projects in Istanbul such as the ITU Ayazaga campus, Sheraton Hotel, Ceylan intercontinental hotel, Emlak credit bank headquarters, Ataköy hotel and Levent urbanisation project, besides many urbanisation tasks in other Turkish cities, Also, Arû, as an intellectual, published a lot of numerous works like Turkish baths (1941), housing problems in western Europe after the second world war (1950), Development plan drawing techniques (1955), Pedestrians and vehicles (1965) and Turkish city (1998) as the most crucial written work of his lifetime (Arû,2012:24). Identifying the modern or traditional orientation of Kemal Ahmet Arû's design mentality is difficult. Undoubtedly, his educational period marked its importance in the first place. In this regard, Gustav Oelsner's effect is noticeable since, primarily, it was recognised as a turning point for Arû to concentrate on urbanism more than an architectural project. Moreover, under the supervision of Oelsner, Arû learned the detailed principles of planning, such as Zeilenbau (Alexander, 2017:357) and Garden Cities. Notwithstanding, the most critical influence of Oelsner was in the second half of the 1940s when he motivated and requested Arû to prepare development plans for Anatolian cities, making him understand the reality of Turkish towns in the republic era (Akbulut, 2012:9-10). Bruno Taut's teachings manifested their' influence on Arû's mentality with his speciality on social housing programs based on the previous experiences in Berlin, and that is why according to Arû, Taut's effect on the preparation of maps in

Anatolian cities was crucial and later, the realisation of Levent project (Arû,2001:33). In contrary, Turkish figures like Sedad Hakki Eldem made their mark on Arû's design philosophy with the "Turkish House" concepts (Alexander,2017:358).

The necessity of zoning in Arû's works is evident. For instance, Arû's plan for Manisa exhibits the city's division based on ten zones such as administrative, commercial, former residence area, new residence area, vineyards, small craftsmen, markets, markets and animal markets, sports fields and green fields, large industrial zone, military zone and prison. Also, neighbourhoods are divided based on income groups being differentiated for high-income, low-density farmer quarters and workers' houses next to industrial zones with green areas as limiting borders between functional entities (Çetin, 2012:111). Arû is recognised as a pioneer urbanist following analytical and scientific approaches, unlike the aesthetic-oriented models established in Turkish cities, specifically Istanbul (Akbulut, 2012:10).

Siedlung was a central theme in the formation of contemporary discourses and cities in the republican era, becoming an exciting concept for Arû to use as an experimental case in Levent I and IV with other international modernists considering functionalism in collaboration with Rebii Gorbon in 1948 (2012:16-17). Levent housing project was recognised as one of the first modernisation projects in Istanbul, being realised in four phases between the years 1947-1957, consisting of 391 houses with 36 types of plans. While the first three phases included low-rise and detached houses, the high-rise mixed-use apartments were constructed along with social areas, shopping centre, cinema and sports facilities (Sadıkoğlu & Ozsoy,2017:207).

Despite realising the first modern neighbourhood in Istanbul, Arû's urban design has other significant features. For instance, preserving traditional fabrics, even those belonging to the Ottoman in the republic era, was a priority for Arû (Çetin,2012:118). He preserved the existing road and topography in most projects, such as Eitler, unlike Levent's linear design (Alexander,2017:357). Furthermore, his argument on the Levent project and urban growth toward the north, unlike the west-east axis, illuminates Arû's conservative principle as he believed this approach would harm Istanbul forests as the city's lunges (Akpinar,2008:64).

Until the 60s, Istanbul experienced two planning approaches by Henry Prost and Luigi Piccinato. Arû criticised both visions as in the case of Prost; he believed that the central objective was beautification, and consequently, the realities of Istanbul were not considered since there were no signs of scientific data, analytical reports, and numeric status. Arû also pointed out Piccinato's scope as a superficial method because his plans lack enough regional, economical and industrial data to offer large residential areas around the city (Akbulut,2012:11 &Arû,1963:147). All these concerns, together with giving the rights and priorities to the neighbourhood, pedestrian network and existing fabric, manifested a synthetic character out of Arû toward both traditional and modern concepts.

The essence of Arû's mentality is the book published in his latest periods of life. "Turkish City", his most critical published work, is a summary of his research collections since the 1940s (Akbulut,2012:17) and concretely was the outcome of the conference and exhibitions he presented as a guest lecturer in 1960s in European cities, such as Berlin, Stuttgart, and Vienna (Arû,1998:57). Arû in this book identifies Anatolian cities as a free organic texture in a rhythmic order derived from the inhabitant needs as well

as the climatic situations causing different and unique urban form in all Turkish cities (Ibid,1998:56).

Turkish cities are compared to the book "Turkish house" written by Sedad Eldem in diverse manners, and it is noteworthy to discuss briefly here as it might address a few subjective points on the modern and traditional approaches of Kemal Ahmet Arû. Both books contained a central theme insisting on preserving cultural values, regional classification, and climatic considerations with the general target of traditional identification, while on the other side, there are a few considerable differences (Akbulut,2012:17-18). In the first place, Arû's book investigates the cities inside the republican border, unlike the Ottoman geography of Eldem's publication. Also, Arû, unlike Sedad Eldem, believed that it is pretty impossible to regenerate the traditional ottoman urban fabric; although their preservation is a necessity, they could still be the source of inspiration, such as a sense of the neighbourhood (Ibid,2012:17-18). Additionally, Arû's work consists of numerical, analytical, and scientific data such as demography and economical and cultural information besides the traditional unique models of all the cities obtained throughout history. The book views a general modern scope of Arû centralizing rational approaches while approving a post-modern perspective of preservation and spontaneous forms of traditional cities.

#### 14. Cengiz Bektaş (1934-2020)

If there is an architect who experienced and sensed all the possible theoretical discourse, that person would be Cengiz Bektas, without a doubt as a poet, architect, professor and intellectual.

According to historian Dogan Kuban, Bektas is the most rational architect. They tried and tested spatial effects in places as a target for reaching a distinguishable level in aesthetics without shining the light on the formal aspects of a mental network intersected by volume and lifestyle (Kuban, 2001:31).

Istanbul academy of fine arts was where he graduated before starting a new career in Munich between 1959-1962 as a freelance architect, besides studying at Munich Technical university and collaborating with Alexander Baron Von Branca and Fred Angerer (Mehmetoglu, 2021).

After winning two architectural awards, Bektas received an invitation letter from Ankara Middle East university to work as a lecturer, coinciding with the establishment of an architectural firm with Oral Vural there (Erarslan,2020b:161). He lectured at Mimar Sinan fine arts, Anadolu, Marmara and Istanbul universities, apart from Macedonia, Germany and the United States. Between 1963 and 69, Bektas won 25 awards in architectural and urban competitions before deciding not to participate again in the Lisbon embassy project (Mehmetolgu,2021). His architectural career continued for decades, winning several prizes, such as National Architectural Award in 1978 for the Turkish Language Society building and Aga Khan Award for the Olbia Social Centre project in 2001 (Erarslan,2020b:161).

Bektaş designed diverse projects in Turkish cities. In Istanbul, among his numerous works, a few projects like Kecioren rest houses, Hakic library and Bakirköy international industrial bank received deserved popularity in the architectural magazines. Furthermore, as a critic and intellectual, he published several noteworthy books like "Folk artwork", "Criticism in architecture" (1967), "cultural contamination" (1995), "City" (1995), "Turkish house" (1996), "City for Every Body "(2009), City-Culture-Democracy" (2011).

It is not simple to identify Bektaş's design philosophy as it consists of numerous intertwined principles. The truth is that Bektaş centralised function, ergonomics, volume and economy, dimensions and rituals. Like modern architects, tangible spaces are synthesised with materiality. At the same time, he ignored any interpretation of his work as being closed to vernacularism, post-modern, late modern, and neo-brutalist (Katipoğlu,2012:53). Indeed, his design mindset is conceptual rather than formal, beginning to shape from inside to outside (Tanyeli,2001 &Kuban,2001) believing that form is similar to the tree as its roots from the ground. Still, it is possible to find a likelihood with regional narratives in Bektaş's principles focusing on local and cultural contexts along with human and self-consciousness.

Like other architects, Bektaş is influenced by works and ideas of contemporary global architects such as Sedad Hakki Eldem, Le Corbusier, Bruno Taut, Juhani Pallasmaa, Rudofsky and Kennet Frampton. Bektaş's approach to designing mosques is recognised as a new era in Turkish architecture both spatially and formally. For instance, Etimesqut mosque could reflect an influence of Le Corbusier's Ronchamp with a functionalist playing with natural light. As time progressed, Bektaş's regional and local influence became more evident. In the first place, the similarity between his design mentality and Sedad Hakki Eldem is apparent as in his architecture, the courtyard or central space played precisely the same role as Eldem's sofa, as a space structuring the other units and Kecrioern rest house could be the best example representing this principle along with equal sharing of spaces in a clear way, apart from the book he wrote with the same title "The Turkish house" (Erarslan, 2020b: 163). This vision could be the foundation for promoting folkloric art and architecture by Bektas being embedded in a more rationalised way. In this regard, a similar perspective to Bruno Taut could be identified since he stated that the architect has to reveal their talent with locational varieties in architecture. Nevertheless, in the meantime, the most likely effect with contemporary discourses could be labelled to Kenneth Frampton since Bektaş insisted on cultural consciousness and accumulation as the fundamental principles to generate cultural continuity in a cause-and-effect interaction (Ibid, 2016:64).

Moreover, using a similar theme to the concept of "Tectonic" discussed by Frampton, Bektaş aims at looking for material components and artistic forms in the same time causing to a synthesis between technology and place with equal priorities (Ibid,2016:62-74). Altogether the outcome is folk-building art considering not only the matter of locality and humanity but also the continuity between past, present and future in a similar approach to Pallasmaa's ideas.

It is not a simple task to identify a clear orientation of Bektaş toward modernity and tradition, even though there are footsteps of both. Bektaş confessed that he did not aim to find any patterns from anywhere other than Anatolia (Aysel,2016:65). As mentioned before, the locality is fundamental for him in a traditional sense by prioritizing the use of traditional materials like adobe and marble. Bektaş also believes that if tradition is necessary, the architect must be contemporary to continue the tradition (Aysel,2016:65). It is essential to consider that Bektaş is sensitive not to follow a formal reference but to illuminate the fundamental needs. Bektaş believed that there is a strong link between people, their real needs, and vernacular architecture working as a program has to be recognised as the project obligation besides the diverse and subjective needs in the contemporary era. For this reason, the real needs must be identified inside the traditional architectural scope. Bektaş also addressed these needs

as his impression of Seljuk caravanserai, and Ottoman schools and complexes were quoted several times believing that the works of great architects like Sinan were based on the total structure to continue cultural values (Bektaş,1979:67).

Even though the link between tradition and past is valuable for Bektaş, it is a contemporary event bridging all temporal tenses, and consequently, the Turkish folk house is a structure for the past, present and future.

By putting together, terms such as cultural consciousness, folk architecture, and houses as real needs reflectors, it is possible to justify the existence of public awareness and therefore, it is not unpredictable to find traces of participation in Bektaş's ideas. All in all, Bektaş is neither wholly a traditionalist architect nor an intellectual since, unlike his traditional signs of poems or interest in historical buildings, his architectural designs reflect an utterly rationalised manner. Bektas is one of the apparent supporters of "form follows functions", justifying it as an essence of Turkish Folk architecture and has to be following the local body measurements. Form Bektas's vision transforms as fashion changes over time. Also, Bektas rejects the traditional construction methods, believing that it disrupts present and future needs. However, at the same time, his concern was the incorrect technological influences; accordingly, prefabrication can bring about more with less since his TMO project was realised as the first example of prefabrication in Turkey bridging the past with the present (Ibid, 2007:117). While the traditionalists recognised symbols, Bektaş was against ethnic classification and national symbolism in Turkey (Bektaş, 2001). It is possible to confirm that Bektaş is the product of the time overlapping modernity and post-modernism (Bektasş, 2007:43 & Erarslan, 2020b:161). His humanistic vision is a hybrid approach of local specifics and modern standards. In terms of place, his architectural language follows mostly a similar approach to Kenneth Frampton to generate cultural consciousness based on local identity.

#### 15. Doğan Tekeli (1929-)

The 1950s was an essential period in Turkey's socio-political discourses affecting architecture. It was the decade for the dominancy of international modernism because of diverse situations such as the Marshal Fund plan or the appearance of American companies in the country. The country was the field of practising modern architecture by the young architects who graduated in Turkey or the European-licensed Turkish talents returning home to rebuild their desired environment. These circumstances accelerated when Democratic Party won the election, and Adnan Menderes was appointed the new prime minister. While architects chose to serve the dynamics imposed by the zeitgeist, a few architects like Cansever aimed at redefining identity. In the meantime, some architects were trying to modernise Turkish architecture or, in other words, regenerate Turkish modernism. Doğan Tekeli and, to be precise, the Tekeli-Sisa office took a significant role in Turkish architecture for decades.

Tekeli graduated from ITU in 1952 and immediately began working with Riza Askan for the Izmir Municipality project bureau. In 1954 he established the S.I.T.E architectural firm with Sami Sisa, which later continued with the title "Tekeli-Sisa" bureau. As young architects, they had to participate in architectural competitions. In line with practical works, Tekeli started to work in the academic

environment as an assistant to Arif Hikmet in 1956 at the Istanbul academy of fine arts and then at ITU Macka architecture engineering high school between the years 1961-1970 (Tekeli,2006:10). He worked as a well-known and top-level architect, writer, and professor for 61 years. Among his various vital responsibilities, it is noteworthy to name a few such as Istanbul Metropolitan Municipality Advisory Board between 1985-1987, member of the jury at the Agha khan architectural award between 1992-1998 and chairman of Istanbul free architects between 2006-2008. Tekeli won more than 60 awards, including 28 first prizes, in architectural project competitions he participated in with Sisa; He designed 180 projects, 120 of which were implemented (Salt Galata,2019). Among these works, the Tekeli-Sisa bureau designed numerous buildings in Istanbul, such as Istanbul textile manufacturers (IMC), renovation and landscape design of Rumeli Hisari, Australia wool yarn factory, Neyir Knitwear and Clothing Factory, Chrysler truck assembly factory, Kadırga student residence, APA Ofset printing plant, Turkey İş Bank Headquarters Complex, metro city and Show TV complex, is explained in their two published monographs. Besides Tekeli and Sami Sisa's Collaboration, Metin Hepguler was another critical figure participating with them in various projects.

Nevertheless, most works were recognised as Tekeli-Sisa products. Given the nickname "The Industrial facilities architect" by historians and critics, Tekeli's design principles manifested a modern mentality in architectural discourses. However, there are not too many written documents, and in most cases, his projects were analysed and marked either as the representation of a transition or a general image of what modern architecture can know. If the Hilton hotel symbolised international modernism in Istanbul, IMC reflects a softer version of modernity. The project was a winning design by a team consisting of Tekeli, Sisa and Hepguler in a historical site with the monuments such as Süleymaniye mosque, a Roman aqueduct and Ataturk Boulevard. What distinguishes this project as Tekeli's modus operandi from others is the practice of small, fragmented parts as one of the popular building approaches in the period (Bozdoğan and Akcan,2012:175).

The project is considered modern while being responsive to slopes between Unkapani and Sarachane, respecting the importance of the mosque and the aqueduct and being recognised as metabolism of traditional Bazaars in Turkish experience in a more contemporary scope.

Tekeli's modern architectural formation reflects a critical influence of his educational period, as Emin Onat and Paul Bonatz played a massive role in it. Tekeli, in an interview, exemplifies the effects of Onat's teachings through details like the best spatial perception in rectangular volumes or the positive sense of transitional spaces by movement magnifying the formal experiences of Emin Onat (Tekeil, 2019).

Considering time as a deciding factor in determining modernity and traditionalism, Tekeli takes a more different and direct approach than Sedad Hakki Eldem and Turgut Cansever. Tekeli believes there is no meaning in finding pattern, idea, and form in the past while the architecture must represent the status quo inside the Turkish republic and the 20th century (Tekeli,2020). However, there could be a few exceptions of regional and local instances like the restoration works in Ortaköy and Anadolu Hisari and Şark coffee house despite the fact he claimed there was no possibility of a free design approach (Tekeli,2020). Also, Tekeli accepts the criticism of modern architecture, believing it was impossible to

reject Venturi's criticism of modernist architecture altogether. However, Tekeli confirms that the vindication of Venturi did not cause him to abandon modernism, and it provided some relaxation and relief in our modernist attitude (Tekeli,2002). This relief led us to use some motifs stylised in exposed concrete in our 1st Halkbank building (Karasözen & Özer,2006:113), design the domes in Metrocity, and even give legitimacy to these practices in his conscience.

Tekeli's Agha Khan experience as an honorary jury member clarifies his position on modern architectural principles, saying that the good intentions of the aga khan were even a bit distorted by the orientalist perspectives of great western architects (Salt Galata, 2019). Moreover, his tendency toward the cultural aspect of conservation rather than the historical approach once again magnifies his valorisation of protectionist understanding of modernity towards ensuring continuity.

### Appendix 3

#### Interview for the Grounded Theory

## A. Letter of Invitation for the Interview Panel – The selection of interviewees

I would like to invite and request you as an expert in the fields of modern architecture and urbanism to participate in an interview by zoom/ online survey designated for the PhD Thesis entitled "How To balance modernism and Traditionalism in the 20th-century cities: Comparative studies of architectural discourse in Lisbon and Istanbul in the 20th century."

I realise that professionals are extremely busy in their respective fields. Considering this situation and practical terms, I would require no more than an hour of your time, spread out over to at least two separate occasions. The main objective of the research is to define the critical factors for harmonizing the proposed cities based on the theory, to introduce the dominant modern and traditional zones in the city and to suggest the layers following the spectrum model between them.

This process includes evaluating the importance of the factors derived from the grounded theory methodology. The expert has to evaluate the keywords to identify modernism and traditionalism in architecture and urbanism. If there is a second round for the interview, it will be sent to you after filling the form the first round to reach a consensus.

I would appreciate your participation in this vital process. There could be two possible approaches for your participation: Based on a conversation by Zoom {or any other virtual platform} or by completing the form at the following link (If the first choice is convenient, you can confirm by replying to the email):

https://forms.gle/HqMiJMHURZVfNfhr8

please feel free to contact me by replying to this email. Thank you in advance for your time.

Yours sincerely, Arsalan Nezhadfard

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Expert no	Specialty	Location
1	Assistant Professor in Architecture	Asia(Middle East)
2	Post-Doc Researcher in Urban Design	Asia(Middle East)
3	PhD Researcher in Architecture	Europe
4	Assistant Professor in Architecture	Europe
5	Professor in Architectural History and Theory	Asia (Middle East)
6	Assistant Professor in Urbanism (urban sociology)	Asia( Middle East)

#### **B. Questionnaire: The Content**

Section 1 of 6

# Identification of the key Elements in modenism and traditionalism in architecture

The societies in the 20th century experienced several clashes of ideas in various majors with an Interdisciplinary intersection mostly rooted in continuous socio-political issues.

The binaries derived mainly by the modern and traditional core of societies and subsequently started to evolve and then reflect in philosophy and architecture. The challenge was an open-ended paradigm, moving on in the current century and seeking for the architecture of peace beside the Environmental concerns looks critical. That is why the research tries to investigate modernity and traditionalism in two different cities inside the intertwined architectural, philosophical and socio political core. The central objective is to find a roadmap to balance the polemics causing the civil anxieties. Considering time, place and human as the critical variables of the study, the grounded theory and Delphi method are the methodological tools to observe the qualitative data besides the practical tools. In order to promote peace by architecture, these tools and variables will be reviewed inside the case studies, including Istanbul (Asia-Europe intersection) and Lisbon (the intersection between Europe, Africa and America) in the period between 1917-1998 in order to promote peace by architecture and give readability through balance between modernity and traditionalism.

Section 2 of 6		
Personal information	×	:
Based on the regulations it is mandatory to have the identity of the survey participants for round two survey.	o of the	
Name *		
Short answer text		
Institution *		
Short answer text		
Specialty *		
Short answer text		
Email Address *		
Short answer text		

Section	3	ot	6

Traditionalism in Architecture

Please answer all the questions to the best of your knowledge. Many of the questions are multiple choices and can be answered with only a single selection. Every key word contains a brief information and explanation as a further clarification. These keywords derived from the literature review regarding architectural theory, history, philosophy, phenomenology and etc.

 $\label{eq:Aspace} \mbox{A space is also provided for you to comment on the underlying reasons for your responses.}$ 

You have to grade from 1 to 9. 1 is extremely unimportant and 9 is extremely important.

#### 1. Culture

Long answer text

Being rooted from Roman term "cultura animi", the term in Cambridge dictionary contains one of the simplest meaning ever which is "the way of life". The most critical point on culture is that it generates the group of people and the groups of people themselves create it over the time. This vis-à-vis connection results in growing culture and integration with continuity in tradition.

In your opinion, to what extent culture has shaped the traditional architecture? $^{\ast}$
O 1
○ 2
○ 3
○ 4
○ 5
○ 6
O 7
○ 8
O 9
further explanation:

:::

#### 2. Hierarchial Organization

"The traditional cities insisted on hierarchies." This sentence was the most straightforward criticism toward modernity in architecture and urban planning claimed by the post-modern critics. The required hierarchy for traditional architecture is the more levels or stages of hierarchy to reach from the public to private. The identity of communities in specific districts experienced a severe neglection of representation in the previous century. In some cities, the level of the hierarchy is seven for a symbolic and religious reason. That is why the term and importance is selected to be investigated in this questionnaire.

How do you grade the importance of "hierarchial Organization" in traditional urban fabric? $^{\star}$
○ 1
○ 2
○ 3
○ 4
○ 5
○ 6
O 7
○ 8
O 9
Other
Further explanation
and another text

3.Memory *
: Possibly, any inhabitants of an urban space passing by a particular street or square recall a memory shaped since childhood until a very near past. Based on this experience, there will be around the population number case scenarios to build the city upon considering only the static image of a selective period by each person. How much importance does the memory have in shaping the physical traditional built environment?
O 1
O 2
○ 3
O 4
O 5
O 6
O 7
O 8
O 9
Further Explanation
Long answer text
I. Organic Organizing * In general, the organic city is more contextual and subjected to surroundings. That is why the organic city is subtoome of the deterministic compactness overlapped with cultural preconceptions. It is not the plan that epresents the power on the built environment. The crucial element is the earth and the component, as a metaphoric reading of the growing plants and trees in the nature. The old towns in majority started with an organic pattern (except Romans) and then continued either in organic way or combined with a regular geometrical master plan and nowadays, the organic concept has found its' way toward the digital architecture. What do you think regarding importance of organic planning in traditional fabrics and built environment?
O 1
) <sub>2</sub>
○ 3
○ 4
5
6
○ 7
8
9
Further explanation

Middle East as the cities in China, Iberian Peninsula and Medieval Europe contained the narrow and winding paths. the characteristics like being pedestrian friendly and compactness is probable through the narrow alleys. How do you rate the importance of this factor?
Option 1
○ 2
Оз
O 4
O 5
O 6
O 7
O 8
O 9
6. Ornaments and Decorations *  The argument on ornament and architecture had been a typical debate, starting from decades before the 20th century when the architectural theories were inside the vast domain of dilemmas such as style, revivalism and progressivism. Nonetheless, it was not a matter of time first, but the matter of being existed in architecture or not. Is ornament a signifier for traditionalism in architecture? If yes, to what extent?
O 1
O 1
<ul><li>○ 1</li><li>○ 2</li></ul>
<ul><li>1</li><li>2</li><li>3</li></ul>
<ul><li>1</li><li>2</li><li>3</li><li>4</li></ul>
<ul><li>1</li><li>2</li><li>3</li><li>4</li><li>5</li></ul>
<ul> <li>1</li> <li>2</li> <li>3</li> <li>4</li> <li>5</li> <li>6</li> </ul>
<ul> <li>1</li> <li>2</li> <li>3</li> <li>4</li> <li>5</li> <li>6</li> <li>7</li> </ul>

5.Narrow and Winding Paths \*

Symbol as a complete wide term started to regain its' position in the second half of 20th century and owes thi return to emergence of semiotics and phenomenology with the noticeable works of scholars like Eco, Barthes and Norberg-Schulz. The generality of the term also presents the possible connection with the keywords like "culture", "memory" and "ornaments" since finding the boundaries between the words have been a difficult tas The notion in the contemporary context deals with core discussion took place in post-modernism. Do you consider a link between symbol and traditionalism in architecture?
O 1
O 2
○ 3
O 4
O 5
O 6
○ 7
○ 8
O 9
Long answer text
8-Strong Centers *
8-Strong Centers * Strong centers are the other critical principle introduced by Christopher Alexander reflecting the feature of the traditional built environment. The human tendency to look for central points and following the patterns resulte by centrality had been a prolonged mentality. How do you rate the strong centers and their importance in shaping the traditional built environments?
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Strong centers are the other critical principle introduced by Christopher Alexander reflecting the feature of the traditional built environment. The human tendency to look for central points and following the patterns resulte by centrality had been a prolonged mentality. How do you rate the strong centers and their importance in shaping the traditional built environments?  1 2 3
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Strong centers are the other critical principle introduced by Christopher Alexander reflecting the feature of the traditional built environment. The human tendency to look for central points and following the patterns resulte by centrality had been a prolonged mentality. How do you rate the strong centers and their importance in shaping the traditional built environments?  1 2 3 4 5 6 7

	10 Av. 1 10 Av. 1 10 Av. 1 Av.
spe	compact cities are the consequences of restrictions such as topography, defence and also the importanc griculture. In all over the world, there are cities of being known for the cities of seven hills such as Athens, pane, Istanbul, Lisbon, Mecca, Rome and San Francisco, with different histories and reasons behind their cific environment. To what extent, slopes and adaptations toward it can be the important factor for tifying traditional fabrics?
0	1
0	2
0	3
0	4
0	5
0	6
0	7
0	8
0	9
10-	Circle and Circularity *
The nar	Circle and Circularity * notion of "circle" and in general, "circularity" played a critical role in a sensible physical world and also in ative reflections of architecture. In primitive dwellings and huts of Eastern Asia and Latin America, the ge of the circle, represented itself as the most fundamental form, being sensible for the first civilizations. vimportant can this factor be in representing the traditionalism in architecture?
The narr usa Hov	notion of "circle" and in general, "circularity" played a critical role in a sensible physical world and also in rative reflections of architecture. In primitive dwellings and huts of Eastern Asia and Latin America, the ge of the circle, represented itself as the most fundamental form, being sensible for the first civilizations.
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The name usa How	notion of "circle" and in general, "circularity" played a critical role in a sensible physical world and also in ative reflections of architecture. In primitive dwellings and huts of Eastern Asia and Latin America, the ge of the circle, represented itself as the most fundamental form, being sensible for the first civilizations. vimportant can this factor be in representing the traditionalism in architecture?  1 2 3 4
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The name usa How	notion of "circle" and in general, "circularity" played a critical role in a sensible physical world and also in ative reflections of architecture. In primitive dwellings and huts of Eastern Asia and Latin America, the ge of the circle, represented itself as the most fundamental form, being sensible for the first civilizations. vimportant can this factor be in representing the traditionalism in architecture?  1 2 3 4 5
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The traditional cities included horizontal walls extended parallel to the rows of courtyard houses. For some
scholars such as Amos Rapoport, the horizontal and non-enclosing flat walls can reflect the traditional architecture, especially in rural vernacular houses regardless of a specific locale. This issue can generate a possibility for boundaries in hierarchies, courtyard housing and integrative community. How do you rate this factor?
○ 1
○ 2
○ 3
○ 4
○ 5
○ 6
○ 7
○ 8
<b>9</b>
Further explanation
Long answer text
12-Local Symmetry *
Local Symmetries is a term introduced by Christopher Alexander. The term follows a pattern that generates centrality for each entity to contribute the livability of the system. In a greater picture, every part has its own identity and now totally, the community oriented societies accompanied with other spaces, perceived as strong centers are the examples of local symmetries for the urban space as an organism. Can Local Symmetry identify traditionalism in architecture?
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The mixed-zone was evident in majority of oldest cities from East Asia to Latin America reflecting	
rhetorical and evident facts on cities. This approach paves the way for walking friend passes with cars .Furthermore, the mixed-use development is the product of pluralism in societies since it incl regeneration" paradigm and "social integration". What do you think on the term and its link to trade environment?	the control of udes "cultural
O 1	
○ 2	
○ 3	
○ 4	
○ 5	
○ 6	
○ 7	
○ 8	
O 9	
Further explanation  Long answer text	
Long answer text	
	example for or verticality
Long answer text  14-Alternating Repetition *  Alternation repetition is another term identified by Christopher Alexander. The term refers to every subjective features of repetition such as hierarchical rich articulation of ornaments could be the etraditional repetition which is unlike the identical modular buildings emphasizing on horizontality	example for or verticality
14-Alternating Repetition *  Alternation repetition is another term identified by Christopher Alexander. The term refers to every subjective features of repetition such as hierarchical rich articulation of ornaments could be the etraditional repetition which is unlike the identical modular buildings emphasizing on horizontality can represent the modern type. In your opinion, how vital can this factor be in terms of traditional	example for or verticality
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	15- Pedestrian Oriented Passages ^		
	According to neo traditionalists and also post modern critics like Krier and Jacobs the old towns we comfortable for walking rather than the contemporary types and the neo-traditionalists in majority a model approving walking freindly. Even in the greatly influenced modern cities, the historical zone to be more pedestrian friendly and considering this, it will be more evident to recognize this term a traditional element. To what extent this factor can be friendly in shaping the traditional fabrics?	seek ou es are lil	t for cely
	O 1		
	○ 2		
	○ 3		
	○ 4		
	○ 5		
	○ 6		
	○ 7		
	○ 8		
	O 9		
	Further explanation  Long answer text		
9	Section 4 of 6		
	Personal Feedback	×	:
	Description (optional)		
	What are the other factors that you believe could be as the defining key words for traditionalism in architecture?	*	
	Long answer text		

Section 5 of 6		
Modernism In Architecture	×	:
Please answer all the questions to the best of your knowledge. Many of the questions are multip can be answered with only a single selection. Every key word contains a brief information and expert further clarification. These keywords derived from the literature review regarding architectural the philosophy, phenomenology and etc.  An additional space is also provided for you to comment on the underlying reasons for your response.	xplanation neory, histo	as a
You have to grade from 1 to 9. 1 is extremely unimportant and 9 is extremely important		
1- Free Facades *		
Free facade is introduced by the modern architect, Le Corbusier among the five points of archite facade or" facade libre" makes itself independant from the interior structure paving the way to re How do you rate the regarding the importance of this factor?		
O 1		
○ 2		
Оз		

○ 4
○ 5
○ 6
○ 7
○ 8
O 9
Further explanation
Landanasan

specifically the metropolitans. Indeed Prefabrication is a broad term since it comprises different diverse terms, making every attempt for definition subjective and not complete. Nevertheless, the simple definition for Prefabrication could be manufacturing the elements of a designed entity in a factory and then connecting them on the projected location. To what extent is prefabrication important?
O 1
O 2
O 3
O 4
O 5
O 6
O 7
○ 8
O 9
Further explanation
Long answer text
2 High Dica Duidings *
3- High-Rise Buildings *  The erected high-rise buildings all over the cities nowadays reflect modernity with this primordial depiction regardless of being the typical public image toward modernity or the professional historical view in architectural and urban discourses. High rise building and vertical urbanism entered into European architectural discourses since the scholars in beginning of 20th century bore the concerns toward land use, being influenced by zoining laws in united states and the cities such as New York. How do you rate the importance of the High-Rise Buildings as a modern architecture factor?
O 1
O 2
○ 3
O 4
O 5
O 6
O 7
○ 8
O 9
Further explanation
Long answer text

Prefabrication became one of the fundamental ideals of the modern movement in the 20th century when the social context was surrounded by advancements in technologies resulting in the transformation of the cities,

2-Prefabrication \*

The Identical blocks were the entities to identify as the feature of modern architecture. The primary representation of identical blocks in the 20th century was the residential blocks and monotonous office buildings. what is generally known as "egalitarianism", theoretically established the justification for these types of design. The other factor for the creation of identical blocks is the standardization along with geometry providing also the base for building repetitive buildings regardless of height and function. Economical reasons were also another motivation for modernists to conclude in building identical blocks mostly as grand ensembles in a cubic form.
○ 3
O 4
○ 5
○ 6
O 7
○ 8
O 9
Further explanation
Long answer text
5-Monotonous Buildings *
Repetition in architecture is indispensable since there are patterns, elements, spaces and sub-spaces to convey specific sign for establishing the desired harmony in design. Even so, modern architecture is described as the architecture with the consequence of monotonous repetition. The modern movement of the 20th century involved the concept of standardization, which was parallel with the "international style". How Important do you see the monotonous buildings?
O 1
O 2
○ 3
<ul><li>○ 3</li><li>○ 4</li></ul>
<ul><li>3</li><li>4</li><li>5</li></ul>
O 4
<ul><li>○ 4</li><li>○ 5</li></ul>
<ul><li>4</li><li>5</li><li>6</li></ul>
<ul><li>4</li><li>5</li><li>6</li><li>7</li></ul>
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<ul> <li>4</li> <li>5</li> <li>6</li> <li>7</li> <li>8</li> </ul>

4- Identical Blocks \*

The rectangular and cubic box and the cylindrical shape are the inseparable elements of modern architecture, although the Greeks and Romans used in residential and public spaces such as Forum Romanum.  Notwithstanding, it was a dominant form in the modern architectural discourse of the 20th century.
O 1
○ 2
○ 3
○ 4
○ 5
○ 6
○ 7
○ 8
O 9
Further explanation
Long answer text
7- Ribbon windows *
One of the essential features of modern architecture belongs to the ribbon windows from the 1920s. The ribbon windows consist of a series of windows set side by side to form a continuous band horizontally across a façade (Merriam-Webster). These windows are listed in Le Corbusier's five points of architecture, and like the other four principles, Villa Savoye represented that as the archetype.
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8. Roof Terraces *  When the store for the nitched roof construction in the 10th century storted to fode gradually the	
When the taboo for the pitched roof construction in the 19th century started to fade gradually, the consciousness for organizing space on the era's unorthodox flat roof appeared. Like previous key	words
identifying modernity, roof terraces are the exclusive members of this movement, since Le Corbus mentioned before several times, listed them among the "five points of a new architecture". In you	
what grade does this factor recieve?	
O 1	
O 2	
○ 3	
O 4	
○ 5	
O 6	
O 7	
○ 8	
O 9	
Long answer text	
9. Simplification *	
Simplification contains almost all the elements, selected to discuss briefly before. Before modern	
Simplification contains almost all the elements, selected to discuss briefly before. Before modern defined the way of life in the 20th century. As a result of this, the modern architects pursued the all	rchitecture of
Simplification contains almost all the elements, selected to discuss briefly before. Before modern defined the way of life in the 20th century. As a result of this, the modern architects pursued the accertainty and pragmatism.it is possible to find out that definition for simplicity and therefore simple dependent on distinct impulses such as functionalism, structuralism, internationalism and minimal dependent.	rchitecture of dification is alism. When
Simplification contains almost all the elements, selected to discuss briefly before. Before modern defined the way of life in the 20th century. As a result of this, the modern architects pursued the accertainty and pragmatism.it is possible to find out that definition for simplicity and therefore simple to the content of the content o	rchitecture of dification is alism. When
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10. Single-Colored Fabrics *
Colour was one of the most controversial themes for the architectural discourses of the 20th century, and the most critical challenge refers to the position that colour takes in architectural designwhite "modernism" signifies most of the era's architecture and never seized to perform. Even the architects known as the "New York five architects" respectively prioritized the natural colours of the material and also the white stucco as for Richard Meier, white was "the source of all colours in the rainbow, intensifying and reflecting the light and shadow . How do you rate the importance of single-colored fabrics from 1 to 10?
○ 1
O 2
O 3
O 4
O 5
O 6
O 7
O 8
O 9
Long answer text
11. Single-used Zones *  the Euclidean zoning was an effort to mobilize life respective to low-income families with a preferable form of life according to standards of light and air .The so-called single-use zoning was an opposing strategy to the utterly traditional concept of mixed-use zoning, which regardless of the modern approach started since the beginning of civilization. Now it is time to now your opinion by grading this item.
O 1
O 2
○ 3
○ 5
○ 6
O 7
○ 8
O 9
Further explanation
Long answer text

12. The Thin Ex	ternal Walls *
and beam suppor	ted that the walls in the modern architecture are thinner since concrete and steel columns ts the structural loads unlike the traditional walls. The modern movement accentuate on a light walls as a result of the open plan. To what extent the thin external walls are important?
O 1	
O 2	
○ 3	
O 4	
O 5	
O 6	
O 7	
O 8	
O 9	
Long answer text	
13. Wide and Bro	pad Avenues *  city as in indsutrial scope and a as a factory in the modernist creed brings about the fact for executing the production in this system could be streets and avenues. In the turn of the
13. Wide and Bro Understanding the that the container f 20th century, the ca	oad Avenues * city as in indsutrial scope and a as a factory in the modernist creed brings about the fact
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14. Flat roof overhangs *
It is almost impossible not to talk about the regard and value the flat roof overhang had since the dawn of modern architecture, besides their presence as an opposite alternative to gable or pitched roof, the flat cantilevered roof encountered with a particular delight, functionally and aesthetically. What was the impulse behind the flat roof overhang? In the first place, and also without a doubt, the geometry self generates this possibility. The flat cube produces a flat surface, and then the flat cantilevered roof is an outcome for several reasons such as formal integration. The other impulse might have historical traces, even though the usage of flat roofs was not limited to the 20th century and a few residential buildings in the 19th century contained flat roofs. How do you rate this factor regarding its importance to be identified as the modern architecture's critical element?
O 1
O 2
○ 3
O 4
O 5
O 6
O 7
○ 8
O 9
Long answer text
15. Industrial Buildings and Districts *  The industrial space and modern spaces are somehow intertwined that studying them separately seems to be almost impossible. Industrial buildings are the products of time since the industrial revolution and afterwards, the machine age created the necessity for factories influencing the urban fabric. In your opinin, to what extend the industrial buildings and in general districts could function as one the key factors of the modernism?
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Further explanation

Long answer text

# Personal Feedbacks on Modernism Description (optional) What are the other factors that you believe could be as the defining key words for Modernism in architecture? Long answer text

# Other Possible Proposed Keywords



Already covered in previous parts

Rejected due to unclarity, over-generality ,over-subjectivity and checking with literature review Added

### Traditionalism in Architecture and Urbanism Modernism in Architecture and Urbanism compact cities. garden-oriented districts Transparency meaning Asymmetry gradient Pilotis contrast, nonleftover spaces · Reinforced Concrete interlocks inner calm and simplicity · Clean and Horizontal lines non-separateness · The separation between pedestrians and vehicles echoes roughness environmental determinism perceived homogenous informality, and religious spaces Sanctity(Semantic issues) Height of buildings Urban interaction spaces Hijab - religion - Custom - Family relation - .... Natural Material, Peacefulness Economic considerations

# C. Open Questions: The Body

- How do you define Traditionalism and modernity in architecture and urbanism?
- What are the central roles of traditionalism and modernity in social space?
- How can traditional and modern architectural design affect urban space?
- If it is possible to imagine a cause and effect situation between T\_M tendencies and Civil
  anxieties (If you accept this fact), Then how can these tendencies in design result into such
  situations?
- How can Geographical attributes in general image and also architectural discourse influence the discourse between Traditionalism and modernism?
- What are the interaction between modern and traditional architecture in the 20th century?
- How can architectural styles and space be related respective to modern and traditional architecture?
- What are the most sensible and physical factors for modernity and traditionalism in architectural design?
- How can architects and urban designers balance between modernity and traditionalism?

## D. Answers

Questions	Expert Number 1: Assistant Professor in Architecture
Q1	<ul> <li>Modernism can include contemporary discourse such as modern movement.</li> <li>Traditionalism is any architectural connotations displaying the cultural values of past in contrast with modernity</li> </ul>
Q2	<ul> <li>The central role of modernity could be to follow the true time spirit (mostly the present) while for traditionalism is to recreate traditional space</li> </ul>
Q3	<ul> <li>A modern design imposes rationalism such as rectilinear lines while traditional design is more subjective without rigid instructions</li> </ul>
Q4	<ul> <li>Neglecting traditionalism and modernity can endanger the space for social representation and social justice</li> </ul>
Q5	<ul> <li>Geographical attributes in global scale manifests a positive coefficient correlation between East -Traditionalism and West-Modernism</li> </ul>
Q6	<ul> <li>The only interaction between traditionalism and modernity can be their transformation through time as anything traditional was modern on its time.</li> </ul>
Q7	<ul> <li>Architectural styles might impose in diverse lifestyles. Respective to traditional and modern aspects of the styles, they probably reshape the social space.</li> </ul>
Q8	<ul> <li>For traditionalism ornaments are the most straightforward themes. Modernism is represented through rectilinear forms, materials like concrete and steel.</li> </ul>
Q9	<ul> <li>Projects including both modern and traditional aspects of architecture is the most straightforward example.</li> </ul>

Questions	Expert Number 2: Post-Doc Researcher in Urban Design
Q1	<ul> <li>Modernism occurred coincidently with enlightenment and later on the industrial revolutions.</li> <li>Traditionalism mainly supports the ideological beliefs of theology centralised in the Middle East. The traditional architectural instances could be found in Anatolia, Persia, Egypt and Mesopotamia</li> </ul>
Q2	- Their role has to be reorganisation of their social base and community
Q3	<ul> <li>Modernisation mostly concludes demolition of traditional fabrics and in opposite, traditionalism tends to preserve which be also harmful</li> </ul>
Q4	<ul> <li>There is no certainty about the relationship as any probable connection between social groups and their traditional or modern feature has to be observed</li> </ul>
Q5	- Geographic instances such as topography can manifest traditionalism
Q6	The interaction can happen physically where traditionalism meet modernity. For instance, public places, plazas and parks can be the spatial practice for such situation where heritage and modern buildings meet
Q7	The term style is not easily definable. Therefore, it is not possible to address traditional and modern aspects for style. One should define style in the matter of space production rather than architecture. Other than, it look like to problematic.
Q8	<ul> <li>Traditionalism in architecture has major subjective mental forms such as domes or central courtyards in Middle East. Conversely as studied in architectural history, modernism reflect broad examples such as rectangular-cubic and transparent forms.</li> </ul>
Q9	- Fusion between traditionalism and modernity regardless of the project scale.

Questions	Expert Number 3: PhD Researcher in Architecture
Q1	<ul> <li>Modernism is a western paradigm practiced in countries like France, UK, Germany, Austria, and United States</li> <li>Traditionalism is the way architecture and urbanism materialised the continuous rituals</li> </ul>
Q2	- The central role of modernity is to serve commercial and industrial spaces. For traditionalism cultural heritage and conservation ought to be its role
Q3	<ul> <li>Modernism causes urban growth as it might design from scratch. Traditional design revives the traditional ambition which is evident in neo-traditional design</li> </ul>
Q4	- It can reinforce radical traditional and modern groups which can result in civil unrests
Q5	<ul> <li>Geographic dichotomy between traditionalism and modernity is not necessarily related to West-East as it can be traced in South-North classification.</li> </ul>
Q6	<ul> <li>Projects with adaptive reuse exemplify this interaction. In larger scale, it is the matter of possibility</li> </ul>
Q7	<ul> <li>The plural term for style is problematic. If the assumption is through historical representations and evolution, then the more one goes toward time, the so-called styles tend to be traditional.</li> </ul>
Q8	<ul> <li>Any architectural practice after enlightenment can be labelled as modern. They can also be traditional in the same time.</li> </ul>
Q9	- The integration of preservation and modern projects.

Questions	Expert Number 4: Assistant Professor in Architecture
Q1	<ul> <li>Modernism as a notion empowered with time with chronological influences of Crystal Palace, Chicago style, Art Nouveau, Art Deco, De Stijl and Expressionism</li> <li>Traditionalism refers the philosophical school with the presence of Schoun, Legenhausen and Nasr</li> </ul>
Q2	<ul> <li>For modernity, the objective to dominate new commodity while for traditionalism, the task in society is to reinforce cultural and religious groups</li> </ul>
Q3	<ul> <li>Modernity in architectural design rejuvenated the space and increase the land value.</li> <li>The same issue can happen for traditional design if it is regeneration of traditional practice</li> </ul>
Q4	- The collective behaviour is not predictable therefore every traditional and modern community ( if it is related to architecture) might have their subjective differences.
Q5	<ul> <li>One can not ignore the role of Orientalism in shaping the principles of traditionalism either in philosophical vision or architectural discourse</li> </ul>
Q6	<ul> <li>It is the moment where different social classes live adjacently. Neighbourhoods with shanty houses near commercial areas are the best examples.</li> </ul>
Q7	<ul> <li>Religious buildings are the most certain examples to manifest the classified styles.         Therefore, If we suppose traditionalism is practiced through religious buildings, then styles are more or less correlated to traditionalism than modernity. Modernity is not a style anymore even if there were artistic styles to formulate it.     </li> </ul>
Q8	<ul> <li>Since there is no specific example for traditionalism in architecture, it is better to generalise them with vernacular realities such as local materials and cultural realities. On the other side modernism is simple to label with gridiron planning, industrial spaces and fast-construction processes.</li> </ul>
Q9	<ul> <li>Adaptive Reuse is the most recent state of the art. In this case traditional space can become modern and adaptive toward time.</li> </ul>

Questions	Expert Number 5: Professor in Architecture History and Theory
Q1	<ul> <li>A philosophical notion of "new" resonated with western vision reflected in buildings nowadays.</li> <li>There is no specific definition for traditionalism in architecture. It mostly connected to revival of certain tradition</li> </ul>
Q2	<ul> <li>Modernism imposes the global cultural phenomenon as a similar pattern or sometimes an alien paradigm. For traditionalism, the central image is to resist that.</li> </ul>
Q3	<ul> <li>Modern architectural design might lead in non-liveable environment and traditional design without continuous quality of site is a luxurious and superficial paradigm</li> </ul>
Q4	<ul> <li>Social justice could be jeopardised and, in this sense, social injustice brings about social anxieties</li> </ul>
Q5	<ul> <li>The only geographical science for this subject considers the production of space. Any superficial categorisation interrupt the subjective traditional architectural quality of each region. The same vision is applied for Japanese architecture as well.</li> </ul>
Q6	- Buildings built in eclectic styles.
Q7	<ul> <li>Architectural styles are simply the approaches to describe how traditionalism is linked or evolved to modernism and later on post-modernism and so forth. It is problematic to trace the relationship between styles and spaces.</li> </ul>
Q8	<ul> <li>Culture as a dominant factor imposes traditionalism in architecture. in some Middle Eastern cities with Hijab as a compulsory factor, buildings are more introvert with less transparency while in modernism, the image is contrary. You can compare Farnsworth house with a village house in Egypt or Iran.</li> </ul>
Q9	<ul> <li>There is no way but synthesis. Other than that, a continuous justification between modernism and traditionalism would resolve this tension.</li> </ul>

Questions	Expert Number6: Assistant Professor in Urbanism(Urban Sociology)
Q1	<ul> <li>Anything opposes to incapability of the past with mainly materialistic advancements.</li> <li>Traditionalism in architecture is concentrating on collective form of traditional architecture. It should be noted that traditionalism in architecture can generate traditional space</li> </ul>
Q2	<ul> <li>Modernism supports the young social groups and on the other side, traditionalism supports the older communities. In fact, it is the encounter between the old and new</li> </ul>
Q3	<ul> <li>Modernism involved with vertical developments and traditionalist design conserve the cultural space by valuation of the past</li> </ul>
Q4	<ul> <li>Historical analysis showed the political stance toward each of them radicalised both of them. Therefore, social unrest is probable through contaminated urban space</li> </ul>
Q5	<ul> <li>Geographical vision on this polarity is deterministically undeniable. Yet if it can be projected as a pyramid the top levels can contain more subjective elements.</li> </ul>
Q6	<ul> <li>Cultural preservation inside a dominantly modern area. The way around can also implicate. Suppose turning a historical area to CBD. In this regard, developments policies intersect the regulations for preserve the monuments and historical fabrics.</li> </ul>
Q7	<ul> <li>Architectural or artistic styles, social space and social classes seem to be interrelated although there are not significant evidence to prove this.</li> </ul>
Q8	<ul> <li>Traditional architecture follows a local pattern such as local materials and contextual realities while modernism is an abstracted design language following different examples like reinforced concrete buildings, pilotis, Horizontal windows, vertical towers, prefabrication and etc.</li> </ul>
Q9	<ul> <li>Nowadays, designing neighbourhoods as gated communities with aspects of traditional cities such as narrow and winding alley near modern developments can balance the situation. Also the traditional facades with modern construction base is another approach.</li> </ul>