An Analytical Framework to Read the Interior Space Atmosphere Creation of Set-up Lofts: Case of Existing Industrial Building Stock Re-functioned as Film Spaces in İstanbul

Zehra Babutsalı

Submitted to the
Institute of Graduate Studies and Research
In partial fulfillment of the requirements for the Degree of

Doctor of Philosophy
In
Architecture

Eastern Mediterranean University
February 2021
Gazimağusa, North Cyprus

Approval of the Institute of Graduate Studies and Research

Prof. Dr. Ali Hakan Ulusoy
Director

I certify that this thesis satisfies the requirements as a thesis for the degree of Doctor of Philosophy in Architecture.

Prof. Dr. Resmiye Alpar Atun
Chair, Department of Architecture

We certify that we have read this thesis and that in our opinion it is fully adequate in scope and quality as a thesis for the degree of Doctor of Philosophy in Architecture.

Prof. Dr. Uğur Ulaş Dağlı
Co-Supervisor

Prof. Dr. Nil Paşaoğluları Şahin
Supervisor

Examining Committee

1. Prof. Dr. Nafia Gül Asatekin
2. Prof. Dr. Kokan Grchev
3. Prof. Dr. Başak İpekoğlu
4. Prof. Dr. Yonca Kösebay Erkan
5. Prof. Dr. Özlem Olgaç Türker
6. Prof. Dr. Nil Paşaoğluları Şahin
7. Prof. Dr. Uğur Ulaş Dağlı

ABSTRACT

Re-functioning of various existing historical industrial buildings and new buildings into residential use is called '*lofts'*. Lofts are alternative living spaces due to the presence of imbued distinctive characteristics which address them as alternative living spaces. Recently, use of lofts as set-up spaces for various film activities is a spotlight and enriches vitality of abandoned/derelict existing industrial building stock. Yet this type of alternate re-functioning process was not studied adequately.

The thesis therefore conducts an in-depth research to examine re-functioning of industrial buildings such as historical industrial buildings and non-historical industrial buildings into film spaces and set-up them as lofts for various series. The aim is to investigate the effect of widespread criteria which plays an effective role on the formation of interior atmosphere/design of set-up lofts. Accordingly, development of an analytical framework has been shaped/created with the basis of three main criteria as a result of the taxonomy method and named as fictitious user (character) identity, existing building essence and anatomy of interior space and then followed by the implementation process. This process guides the exploration of the interior space atmosphere of lofts by an in-depth reading of *set-up lofts* through multiple case studies; 9 different cases have been selected from 5 different existing industrial building stocks that are located in Beykoz, Balat and Cibali in Istanbul, Turkey between 2012-2017.

Consequently, this thesis concluded with the determination of the issues effective on the creation of interior space atmosphere of set-up lofts that are alternate cases of re-functioning process. Results of analytical reading have revealed that fictitious user

(character) identity has an imperative role in the process of set-up lofts' creation. It has been revealed that personal belongings of user such as changeable/movable displays, objects and special accessories affect personalization of these spaces particularly in an alternate instance and plays a significant/primary role on the creation of visual and physical atmosphere. In turn, existing building characteristics and space elements listed under the category of anatomy of interior space subordinate the interior atmosphere creation in set-up lofts.

Keywords: Loft spaces, Set-up Lofts, Adaptive Re-use, Fictitious User (Character) Identity, Existing Building Essence, Anatomy of Interior Space.

ÖZ

Endüstriyel binaların konut olarak yeniden işlevlendirilmesine '*loft'* adı verilmektedir. Loft'ların en önemli özelliği alternatif yaşam alanları olmalarıdır. Bugünlerde, loftların, film/dizi çekim mekanı olarak işlevlendirildiği görülmektedir. Bu tür endüstri yapılarının atıl kalmasını/yıkılmasını önleyerek yeniden yaşama kazandırılmasında etkili olduğu gözlemlenmektedir.

Bu tez çalışmasında film çekim mekanı olarak işlevlendirilen birçok endüstri yapısının çeşitli film/dizilerde loft olarak kullanılan kurgu mekanların iç mekan atmosfer oluşumuna etki eden faktörlerin tespit edilmesi ve loftları diğer yaşam alanlarından ayıran ayırt edici özelliklerinin belirlenmesi amaçlanmıştır. Bu çalışma kapsamında iç mekan atmosferinin oluşumunda etkili rol oynayan bir çok kriterlerin bir araya getirilmesi ile inceleme sırasında kullanılacak kapsamlı bir analitik çerçeve geliştirilmiştir. Analitik Çerçeve, taksonomi yöntemi sonucunda üç ana kriter temelinde oluşturulmuş ve kurgusal kullanıcı (karakter) kimliği, mevcut binanın özü (ruhu) ve iç mekan anatomisi olarak adlandırılan kriter gruplarının çerçevesinde film/dizi çekim mekanlarının kapsamlı okunması sağlanmıştır. İstanbul/Türkiye'nin, Beykoz, Balat ve Cibali bölgelerinde bulunan yakın geçmişten 2 endüstriyel yapı ve 3 tarihi endüstriyel yapıyı içeren toplam 5 farklı yapıda film çekim mekanı olarak kullanılan 9 farklı kurgu loft, 2012-2017 yılları arasında incelenmiştir.

Bu çalışma, yeniden kullanım sürecinin alternatif bir yaklaşımı olan kurgu loftların iç mekan atmosferinin yaratılmasında etkili olan faktörlerin belirlenmesi ile sonlandırılmıştır. Yapılan analitik okumanın sonuçlarında, kurgusal kullanıcı

(karakter) kimliğinin, kurgu loftlarının yaratılması sürecinde, iç mekan atmosferinin oluşumu üzerinde önemli bir role sahip olduğunu ortaya koymuştur. Kurgu, kullanıcının kişilik, karakter ve/veya mesleği ile ilişkili kişisel objeleri ve kişisel aksesuarlar gibi taşınabilir/değişebilir unsurlarının iç mekanın görsel ve fiziksel atmosferinin oluşumunda en etkili unsurlar olduğu tespit edilmiştir. Bunun yanı sıra mevcut binanın karakteri/mimari özellikleri ve iç mekan anatomisi başlığı altında gruplanan kriterlerin iç mekan atmosferi üzerinde ikincil rol oynadığı tespit edilmiştir.

Anahtar Kelimeler: Loft Mekanları, Kurgu Loftları, Yeniden Kullanım, Kurgu Kullanıcı (karakter) Kimliği, Mevcut Binanın Özü (Ruhu), İç Mekanın Anatomisi.

AKNOWLEDGEMENTS

I would like to express gratitude to my supervisor Prof. Dr. Nil Paşaoğluları Şahin and also my co-supervisor Prof. Dr. Uğur Ulaş Dağlı for their valuable guidance and supports. This thesis could have never been accomplished at all without their patient supervision.

I would also like to thank to my valuable monitoring jury members, Prof. Dr. Özlem Olgaç Türker and Asst. Prof. Dr. Münevver Özgür Özersay for their guidance and suggestions throughout the study.

I also owe thanks to Şükran Savant for her support in case study section that provided on-site visit possibilities to set-up lofts.

Special thanks to my family for their love, affection and invaluable support during my life and my study. I should express my deepest gratitude to my little daughter Yaz, my little son Aral and my husband Burak Alpler for their support and patience.

……TO MY SON AND DAUGHTER

TABLE OF CONTENTS

ABSTRACT iii

ÖZ v

AKNOWLEDGEMENTS vii

LIST OF TABLES xii

LIST OF FIGURES xiv

1 INTRODUCTION 1

1.1 Subject Matter and Problem Statement 1

1.2 Aims and Objectives of The Study 7

1.3 Limitations of the Research 9

1.4 Structure of the Research 10

2 METHODOLOGY OF THE RESEARCH 13

2.1 Documentation 14

2.2 Analytical Framework Formation / Development and Stages of Implementation 15

3 THEORETICAL EXPLORATION OF FOUR KEY CONCEPTS: RE-FUNCTIONING, LOFT, SET-UP AND SET-UP DESIGN, FUNDAMENTALS OF INTERIOR DESIGN 17

3.1 Concept of Re-functioning 22

3.1.1 Definition and Significance of Re-functioning 23

3.1.2 Role of Existing Building on Developing Re-functioning Strategy 29

3.1.3 Re-functioning of Industrial Buildings (Historical and Non-historical) ... 43

3.2 Re-Functioning of Existing Industrial Building Stocks into Residential Use; Lofts 50

3.2.1 Definition of Lofts 50
3.2.2 Determinants of Loft Spaces 53
3.2.3 Historical Improvement/Evolution of Lofts 60
3.2.4 Design Approaches of Lofts 67
3.3 Set-up and Set-up Design 82
3.3.1 Definition of Set-up 83
3.3.2 Set-up Design Approach 86
3.3.3 Production Designer/Art Director in Set-up 91
3.3.4 Lofts as the Context of Set-up 94
3.4 Fundamentals of Interior Design 98
3.4.1 Interior Design Approach 98
3.4.2 Role of Tactics in The Interior Design Approach 102
3.4.3 Role of User in the Interior Design Approach 125
4 ANALYTICAL FRAMEWORK DEVELOPMENT TO READ INTERIOR SPACE ATMOSPHERE CREATION 131
4.1 Taxonomy Method for Analytical Framework Development 131
4.2 Implementation of Taxonomy Method 135
4.2.1 Listing Definitions of Re-functioning Key Concept and Determining its Taxa 135
4.2.2 Listing Definitions of Lofts_ Re-functioning of Existing Industrial Building Stocks to Residential Use Key Concept and Determining its Taxa 138
4.2.3 Listing Definitions of Set-up and Set-up Design Key Concept and Determining its Taxa 140
4.2.4 Listing Definitions of Fundamentals of Interior Design and Determining its Taxa 142

4.3 Interrelating and Naming Taxa 144
4.4 Criteria and Sub-Criteria Determination of Analytical Framework 146
4.4.1 Fictitious User (Character) Identity Criteria and Sub-Criteria Determination 146
4.4.2 Existing Building Essence Criteria and Sub-Criteria Determination 148
4.4.3 Anatomy of Interior Space Criteria and Sub-Criteria Determination 150
5 INVESTIGATING INTERIOR SPACE ATMOSPHERE CREATION OF SET-UP LOFT SPACES 154
5.1 Case Selection 154
5.2 Information About Five Existing Industrial Building Stocks 160
5.3 Development of Inventory to collate information upon the criteria effective on the creation of interior space atmosphere 173
5.4 Investigating the Creation of Interior Space Atmosphere at the Selected Cases through Analytical Framework 177
5.4.1 In-depth Reading of Nine Set-up Lofts: Determinants/Bases of the Interior Space Atmosphere Creation 177
5.4.2 Discussing the Role of Determinants/Bases on The Creation of Interior Space Atmosphere of Set-Up Lofts 214
6 CONCLUSION 226
REFERENCES 234
APPENDICES 259
Appendix A: Reading of Cases-Nine Set-up Loft Spaces 260
Appendix B: Interview with Art Directors and Producer Chief 269
Appendix C: List of Films/Series that Shot in Loft Spaces 272
Appendix D: Reading of Nine Loft Examples from London 275

LIST OF TABLES

Table 1: Concept and sub-concept of re-functioning definition and significance.....24

Table 2: Concept and sub-concept of the contribution of re-functioning to environment 28

Table 3: Concept and sub-concept of role of existing building on developing re-functioning strategy 33

Table 4: Overview of authors on re-functioning strategies 35

Table 5: Intervention levels of responsive approach (Brooker and Stone, 2007) 39

Table 6: Intervention levels of autonomous approach (Brooker and Stone, 2007)....42

Table 7: Concept and sub-concept of re-functioning of existing industrial building stocks 46

Table 8: Concepts and sub-concepts of re-functioning concept.....49

Table 9: Concepts and sub-concepts of loft definition 53

Table 10: Concept and sub-concepts of lofts determinants.....59

Table 11: Concept and sub-concept of design approaches of lofts 78

Table 12: Concepts and sub-concepts of re-functioning of existing industrial building stocks into residential use; lofts.....81

Table 13: Concept and sub-concept of definition of set-up.....85

Table 14:Concept and sub-concept of set-up design 90

Table 15: Concepts and sub-concepts of set-up and set-up design 97

Table 16: Concept and sub-concept of interior design approach 101

Table 17: Concept and sub-concept of role of tactics in the interior design approach 124

Table 18: Concept and sub-concept of user in the interior design approach.....127

Table 19: Concepts and Sub-concepts of Fundamentals of interior design 128

Table 20: Determining taxa of re-functioning key concept.....137

Table 21: Determining taxa of lofts key concept 139

Table 22: Determining taxa of set-up and set-up design key concept.....141

Table 23: Determining taxa of fundamentals of interior design key concept 143

Table 24: Existing industrial building stocks from 3 different locations, which were determined as the cases.....160

Table 25: Case Areas, set-up loft names and inventory numbers 174

Table 26: Inventory design 176

Table 27*:* Reading of Case 1- Ali Sülen Loft.....179

Table 28*:* Reading of Case 2- Kerem Sayer Loft 180

Table 29*:* Reading of Case 3- Meltem Karayel Loft 181

Table 30*:* Reading of Case 4- Hakan Eren Loft 182

Table 31*:* Reading of Case 5- Haldun Arsoy Loft.....183

Table 32*:* Reading of Case 6- Halil Loft 184

Table 33*:* Reading of Case 7- Güneş Sayer Loft.....185

Table 34*:* Reading of Case 8- Ateş German Loft.....186

Table 35*:* Reading of Case 9- Deniz Kaya Loft 187

LIST OF FIGURES

Figure 1: Methodology of the thesis 16

Figure 2: Interconnection of four key concepts for theoretical exploration 22

Figure 3: A loft space that is located in industrial building (URL 1) 55

Figure 4: Brick walls, timber and cast-iron structure and window of a loft space (URL 2) 57

Figure 5: Evolution timeline of lofts 62

Figure 6: Origin of Loft; Manhattan district of New York (URL 3, developed by author) 63

Figure 7: Timeline of lofts' law and organizations 66

Figure 8: Country of Origin; New York/America and other countries that Loft buildings were spread by years (URL 4, developed by author) 67

Figure 9: Facade of multi storey London lofts (photos by author, 2014, London) 72

Figure 10: Existing brick walls of loft spaces (photos by author, 2014, London) 73

Figure 11:Existing structure in the Loft spaces (photos by author, 2014, London) ... 74

Figure 12: Space organization of London Lofts (photos by author, 2014, London) .. 75

Figure 13: Vertical elements in loft spaces (photos by author, 2014, London) 75

Figure 14:Interventions on horizontal planes in London Lofts (photos by author, 2014, London) 76

Figure 15: Displays in London Lofts (photos by author, 2014, London) 77

Figure 16: The Factory-Andy Warhol's loft (Field and Irving, 1999) 95

Figure 17: Example of an existing industrial building stocks that was used as loft in a TV serial, İstanbul/Turkey (photo by author, 2016) 96

Figure 18: Design elements and design principles as sub-categories of tactics 104

Figure 19: Vertical and Horizontal Plane in Spaces (URL 5) 105
Figure 20: Staircase/movement as a main component in interior space (URL 6-9).107
Figure 21: Combination of Color in Interior Space (URL 10-11).....109
Figure 22: Effect of Color in Spaces (Grimley and Love, 2007) 110
Figure 23: Visual and Tactile Texture in interior Space (URL 12).....112
Figure 24: The Characteristics of Pattern (URL13-16).....113
Figure 25: Effect of light in interior that is distinguishing space elements (Leydecker, 2013).....114
Figure 26: Examples from Accessories of an Interior Space as Functional and Decorative Accessories (URL 17-24).....116
Figure 27: Objects as focal element in interior space (URL 25-27).....117
Figure 28: Axis system in interior space (URL 28).....118
Figure 29: Symmetrical and Asymmetrical Balance in Interior Space (URL 29-31) 119
Figure 30: Datum system in interior space (URL 32) 120
Figure 31: Harmony in interior space (URL 33-34).....121
Figure 32: Unity in interior space (URL 35-36).....121
Figure 33: Emphasis/Dominance in Interior Space (URL 37-39).....122
Figure 34: Rhythm/Repetition in Interior Space (URL 40-41) 123
Figure 35: Relation between four key concepts 130
Figure 36: Development of analytical framework.....134
Figure 37: Naming taxa; fictitious user (character) identity, existing building essence and anatomy of interior space.....146
Figure 38: Analytical criteria of fictitious user (character) identity with coding system 148

Figure 39: Analytical criteria of existing building essence with coding system 149
Figure 40: Analytical criteria of anatomy of interior space with coding system 151
Figure 41: Analytical framework for reading of interior space atmosphere creation of set-up lofts 153
Figure 42: Steps of selection of total 12 series and set-up lofts 157
Figure 43: Steps of five case study buildings and nine set-up loft spaces selection 159
Figure 44: Industrial site from Bosphorus (Beykoz): Beykoz Leather and Shoe Factory 161
Figure 45: Historical industrial buildings in Beykoz Leather and Shoe Factory 162
Figure 46: Information of Case 1, Rubber Revision Section in Beykoz Leather and Shoe Factory 164
Figure 47: Information of Case 2, Fire Station in Beykoz Leather and Shoe Factory 165
Figure 48: Information of Case 3, Old Factory in Beykoz Leather and Shoe Factory 167
Figure 49: Industrial buildings from Golden Horn (Balat-Cibali) 169
Figure 50: Information of Case 4, Carbonated Water Warehouse 170
Figure 51: Information of Case 5-9, Former Soap Factory 172
Figure 52: Analytical reading of fictitious user (character) identity 190
Figure 53: Analytical reading of existing building essence 194
Figure 54: Analytical reading of anatomy of interior space-plane and design bases 198
Figure 55: Analytical reading of anatomy of interior space-object and displays 200
Figure 56: Analytical reading of anatomy of interior space-surface (color) 202
Figure 57: Analytical reading of anatomy of interior space-surface (material) 203

Figure 58: Analytical reading of anatomy of interior space-surface (texture) 204
Figure 59: Analytical reading of anatomy of interior space-surface (pattern) 205
Figure 60: Analytical reading of anatomy of interior space-light 207
Figure 61: Analytical reading of anatomy of interior space-design principles 209
Figure 62: Analytical reading of anatomy of interior space-strategy 211
Figure 63: Reading of nine set-up loft spaces-case areas 213
Figure 64: Displays in set-up lofts.....217
Figure 65: Displays belong to fictitious user (character) identity 218
Figure 66: Contrasting with new inserted space and vertical planar elements in the existing building 220
Figure 67: Existing roof structure.....221
Figure 68: Existing brick wall surface as a part of interior design.....222
Figure 69: Interventions according to characteristics of existing buildings.....223
Figure 70: Color use on displays and furnitures created dominance in interior.....224
Figure 71: Colored light effect in set-up lofts 225

Chapter 1

INTRODUCTION

1.1 Subject Matter and Problem Statement

Re-functioning of unused areas is a significant concern for their sustainable future. Today, historical buildings have an important place in the continuity of culture, history and architecture. Therefore, these unused buildings need to be renewed and sustain their existence. Re-functioning them has an important role to sustain the existence of an unused and historical building. Adaptive re-use in this respect is described as changing a place for its existing use or a proposed use (ICOMOS, 2013). Thus, it could be said that the adaptive re-use is the integration of the old structure/building's values with the new functions that respond to today's activities. While adapting the interiors of both new and historical buildings to new use, building type, space quality and the new function are the effective factors to be considered during new design approaches.

Adaptive re-use is a concept at the intersection of architecture and interior architecture. Additionally, it is an approach that is one of the significant study fields of interior architecture. Therefore, adaptive re-use approach is applied in various buildings that have different qualities. It is applied to the buildings that were recently built but it is not used or the buildings that are not utilized in the proposed/original function. Thus, adaptive re-use can be accepted as the re-functioning of many buildings that have different values. Accordingly, in this thesis re-functioning will be used instead of

adaptive re-use concept since this research is not a study carried out in the field of conservation and restoration.

Re-functioning has been applied in many types of facilities (Langston, Francis, Eddie and Li-yin, 2008). In general, more popular adaptations are museums, art studios, live-work spaces, restaurants, offices, residential units and schools in historical buildings (Synder, 2005). It is possible to see examples of re-functioning of both new and historical buildings in many different locations around the world. Re-functioning can help to transform an unused building into a usable place as well as providing the added profit of regenerating an area in a sustainable way. It not only retains the building but also conserves the skills, effort and dedication of the original builders while changing function of the historical building (Bullen and love, 2011). Thus, it sustains the social, cultural and the historical value and protects historically significant buildings from demolition.

Recently, it can be seen that unused existing industrial building stock are continuously being adapted according to certain necessities. Re-functioning of industrial buildings started to gain popularity in 1990s. Historical industrial buildings, which consist of workshops, mills, factories, warehouses and stores, have historical, social, technological, scientific and architectural value. Moreover, historical industrial buildings are the evidence of activities that have had and continue to have historical consequences (TICCIH, 2003). It can be said that they should be protected for future generations. Adaptation of historical industrial buildings depends on preserving functional integrity, and interventions made on buildings should therefore aim to maintain this as far as possible (TICCIH, 2003). Furthermore, those significant buildings have lately been adapted to several different new uses. For instance, it is

possible to see functional change of existing industrial building stock such as cases adapted from commercial space to commercial space or from commercial space to private space. Currently, re-functioning of various historical industrial buildings and new buildings into residential use is called '*lofts'*. Lofts are re-functioning of commercial spaces to private spaces. Generally, the term 'loft' means an open, semi-transparent space, which is located in industrial buildings such as historical industrial buildings and non-historical industrial buildings. Today, lofts possess a new meaning as mentioned by Culto (2001), which is a large, renewed space where industrial architecture is used for domestic purposes.

Furthermore, as it was stated by Zukin (1982), lofts inhabit "alternative urban lifestyle". Loft spaces are kinds of alternative living spaces, which have some different aspects from regular living spaces to designate them as alternative living spaces. In addition, lofts are living and working spaces that have a different volume from other interior spaces. Karagöz (2007) and Pamukçu (2009) mentioned that lofts have single volume, free plan, high ceiling, timber and cast-iron structure, cast iron windows and brick walls. According to the researches, change in users of space, volume of space, natural lighting, openness, urban landscape and industrial elements constitute the factors of lofts that differentiates it from regular living spaces (Zukin, 1982; Karagöz 2007; Pamukçu, 2009; Banks and Tanqueray, 1999). Therefore, lofts have not possessed similar physical aspects with the usual living spaces and all the mentioned aspects differentiate loft living from regular living spaces. In addition, it can be said that loft living has some inappropriateness to live in based on the stated factors because lofts distinguish themselves from regular living spaces with their characteristic features. Although there are some unusual aspects within those spaces, people prefer to live in in those trendy spaces that have cultural and historical patterns in them.

During this research, on-site observations of set-up lofts were carried out in İstanbul at 2013 and real lofts in London at 2014 in order to understand the conceptual idea behind the loft spaces better for interior articulation. Therefore, initial observations have revealed that lofts are spaces that have distinctive conditions in the interior and, one of the significant factors that have caused this distinction is the user of the space. Although lofts are extraordinary living spaces, it has been observed that the users, who continue their lives in there, are quite different or unique and have exceptional characters/personalities.

Accordingly, it has been noticed that the relationship between space and the user in loft spaces has an interior space design, which is not customary. That is to say, user has a very strong influence on the space, and user's personal characteristics act as one of the major driving factors on the created atmospherics. Hence, it has been noticed that the personal traces of the user or the reflection of user's character have very strongly been mirrored on the interior atmosphere. One could see that this is one of the indications that lofts have a distinctive condition due to an indivisible/inseparable organic relation among the space and the user that depend on each other. Thus, lofts could be called as personalized spaces due to the mentioned intimate relationship between the interior space and the user.

As a result of the on-site observations in terms of loft related interior architectural issues in İstanbul and London, it has been revealed that lofts are distinctive cases of residential interiors. Hence, interior space details in loft spaces that form space constituents need to be studied in detail due to the fact that these are infrequent and striking constituents in the interior, which grab attraction.

Recently, lofts have appeared as one of the significant and a common field of study for both architecture and interior architecture. Literature review on lofts has revealed that lofts have been studied by various researchers from different points of view. For instance, social and economic development of loft living was studied by Tam (2009), and adaptation process and necessary strategies of loft living was studied by Kouzminova (2012). Form and concept of lofts according to its types was studied by Karagöz (2007) while architectural features of loft spaces were studied by Pamukçu (2009). Applicability of historical industrial buildings into loft usage was studied by Taner (2013), and historical and cultural values and economic contribution of lofts with examples from Germany and Turkey was studied by Can (2016). Yet, it is exposed that there is limited number of researches on lofts within the field of interior architecture and a gap in the literature considering the formation of interior space atmosphere of lofts with a comprehensive point of view as already stated, which must be studied in detail.

Furthermore, in depth studies on the subject set forth that loft designs have emerged in a different sub section in the field of interior architecture. Persistently, loft spaces arise in several media products such as films or series in different parts of the world as well as in Turkey. In the course of on-site field study in İstanbul, Turkey, it has been noticed that existing industrial building stock such as industrial buildings and historical industrial buildings were adapted as film making spaces. Re-functioning of existing industrial building stock into lofts in various media products has been observed recurrently. On the other hand, it should be noted that film industry plays a significant role on the sustainable future of these buildings. As it is argued by Mathews (2010), “film industry has functioned as an important intermediary tenant before these places

were adapted to a permanent use and the memory of film practice is drawn into a contemporary strategy for place differentiation."

Furthermore, the media, by the help of popular films and television programmes, act as a pull factor in terms of generating interest in various locations, places or context in which they feature. These places are perceived as important and/or unique because of a particular image that has been created through the media (Schofield, 1996). As it was argued by Goodey (1973), media incursions into viewers' perceptual space help mould their images of areas outside those they are familiar with. Experience of the world and hence certain different places ensued through a series of 'framed images' on TV screen provide a constant source of image as the product of information passing through a television filter (Berry, 1970; Schofield, 1996). Accordingly, incorporating historical industrial buildings recurrently on popular films or series as lofts indeed helps generating an interest to these alternative residential interiors. Especially, it acts as a pull factor in taking interest of viewers who are not familiar with this altering type of residential interior by the image created on the screen.

After spotting the significance of this topic, a need for a comprehensive research on the subject of lofts in media products has come into existence. Thus far, scarcity of research has been detected during the documentary studies/review of numerous literature sources on the re-functioning of existing industrial building stock into film making spaces and their usage as 'lofts' in different media products. There are only a few studies that have affirmed alternating re-functioning of existing industrial building stock as film spaces, which are becoming mesmerizing discourses, but lofts were not placed within the scope of those studies. Therefore, industrial buildings such as historical industrial buildings and non-historical industrial buildings , which have been

adapted as film making spaces and incorporated as lofts in various media products (films or series), are determined as the main scope of this current research. From this point onwards, these cases will be mentioned as "*set-up lofts*" in the entire research.

Set-up lofts could be defined as existing industrial building stock that are organized as a living space of a fictitious user (character), which is defined in scenario of film or series. In addition, it should be noted that set-up lofts are exceptional cases of private domestic interiors, which are made public via the TV screen. They are distinctive cases since they could be called as publicized private spaces. Accordingly, this thesis focuses on this matter and conducts an in-depth research to address the mentioned gap in the literature.

1.2 Aims and Objectives of The Study

The first aim of this study is to determine the widespread criteria, which plays an effective role on the formation (the act of bringing together parts or combining to create something) of interior atmosphere that will be the main inputs of the analytical framework development. The second aim is to understand the interior space atmosphere of lofts as an example of altered building to be used as set-up spaces by an in-depth reading of *set-up lofts* with the developed analytical framework through multiple case studies in İstanbul, Turkey; whilst representing adaptive re-use within its intersection with the field of interior architecture.

Accordingly, the main research question for this study is;

-How is the interior space atmosphere of set-up loft spaces, which is adapted from industrial buildings such as historical industrial buildings and non-historical industrial buildings created?

The current research has focused on/shaped around the four main key concepts that are *re-functioning*, *loft spaces*, *set-up and set-up design* and *fundamentals of interior design* in order to address the stated research question. Correspondingly, the sub-questions of this thesis are determined as;

-How does the refunctioning decisions of existing industrial building stock affect the sustainable future of the existing building?

- How does the existing building essence affect the creation of interior space atmosphere of set-up lofts?

- Which kind of interior space anatomy (fundamentals of interior space) affects the creation of interior space atmosphere of set-up lofts?

- How does a set-up loft's fictitious user (character) identity affect the creation of interior space atmosphere?

The aforementioned sub-questions would assist in identifying which kind of interior space design criteria appeared while adapting an industrial building (historical and non-historical) into a set-up loft space with the help of selected case areas from İstanbul.

In order to achieve the stated aims, objectives of the study have been determined as;

- To review various literature sources in order to determine in-depth space criteria that will direct the development of the analytical framework.

- To develop a model (an analytical framework) in order to read/detect factors playing a significant role on the formation of the interior space characteristics/atmosphere of set-up lofts.

- To carry out an on-site observation on different loft spaces and set-up lofts via field study in order to understand the conceptual ideas behind loft spaces.

-To carry out on-site observations in multiple cases of loft spaces and set-up lofts via field study in order to understand the relationship between the essence of existing building and the design of new interior space.

- To get the idea of art directors of series and films through interviews in order to understand the relationship between the interior space and the fictitious user (character) mentioned in the scenario.

- To make observation on different set-up loft spaces via on-site observation in order to understand the effect of fictitious user identity on the set-up loft design.

1.3 Limitations of the Research

According to the aim of this thesis, this study is mainly limited with the reading of interior space atmosphere of lofts with the developed framework. Analytical reading is limited to reading of set-up loft interiors with a multi case study method. Accordingly, number of the multiple-cases is limited to 9 different set-up loft spaces that have been determined among 12 different set-up lofts during the pre-analysis. Therefore, 9 set-up lofts were selected from Turkish TV series that were shown in prime time at 4 different TV channels (Channel D, ATV, Fox and Star TV) between 2012-2017. Three set-up lofts were eliminated due to original buildings of two cases

couldn’t be determined and the other one was eliminated due to its location outside İstanbul. Selected 9 set-up loft spaces are located in 5 different buildings such as two industrial buildings from Balat and Cibali and three historical industrial buildings from Beykoz in İstanbul. Thus, 3 buildings are selected from Beykoz that are listed historical industrial buildings and 2 buildings are selected from Balat and Cibali that are industrial buildings which were built more recently. Additionally, selected set-up loft spaces are direct imitation of loft living spaces (original lofts) which are designed in line with original character of original loft living. Therefore, it is limited to the determination of interior space atmosphere as a result of re-functioning from an industrial utility to a private one as the significant study area of interior architecture field. Adaptive re-use was not involved in this thesis as the strategy of conservation and it’s worthwhile to state that this is not a study/research of the field of conservation and restoration yet the term re-functioning was used in the entire thesis rather than adaptive reuse.

1.4 Structure of the Research

The thesis study is composed of six chapters. The first chapter is the introduction, which consists of subject matter and problem statement of the thesis, aims, objectives, research questions, limitations of the research and structure of the research.

The second chapter consists of the methodology of the research, which consists of qualitative research that was conducted with the case study method. Accordingly, methodology is put forward in the next chapter in-depth.

The third chapter consist of the theoretical exploration of the thesis that has shaped around the four main key concepts of the study that are refunctioning, loft spaces, set-

up and set-up design and fundamentals of interior design. As a result of the comprehensive theoretical exploration; concepts of refunctioning, lofts, set-up and set-up design and fundamentals of interior design were explored and guided the analytical framework development.

The fourth chapter consists of the development of a unique analytical framework that has implemented to read and accomplish the interior space atmosphere formation. Accordingly, taxonomy system, which was followed to develop the analytical framework and steps of taxonomy system, is explained in detail in this chapter. Therefore, as a result of the taxonomy process three main criteria has been identified that are fictitious user (character) identity, existing building essence and anatomy of interior space which constituted the analytical framework. This framework analyses the role of changing user identity, the role of existing building qualities as well as the role of adapting a building with a different function into a set-up living space and the role of interior design issues and spatial tools on the creation of interior space atmosphere.

Chapter five is the investigation of the interior space atmosphere creation at the selected case study areas that are set-up loft spaces with the analytical framework implementation. Therefore, 9 set-up loft spaces that were organized in 3 historical industrial buildings and 2 industrial buildings were investigated and findings put forward. Divergent factors, which were effective on the creation of interior space atmosphere of set-up lofts, were unveiled.

The last chapter is the conclusion chapter that highlights the divergent factors effective on the created interior space atmosphere of set-up lofts, which makes them unlike

living spaces. Furthermore, it reveals several impacts of re-functioning of the industrial buildings such as historical industrial buildings and non-historical industrial buildings as film spaces on their continuity.

Chapter 2

METHODOLOGY OF THE RESEARCH

This thesis is done with qualitative research method and the case study is the research approach for the thesis. "Qualitative research relates to a broad range of conceptual and methodological approaches that examine the lives and situations of real people in real times and places" (Seamon & Gill, 2014).

The case study is one of the dedicated types of qualitative research (Yin, 2004). Process of a case study could be defined as something to study and collection of data followed by analysis-interpretation of the results to draw conclusions based on empirical findings (Yin, 2004). Therefore, the case study is studied in the thesis and descriptive case study that is a design type of research has been conducted as the sub-type of this method. Case study is a kind of empirical study that should use newly collected data, which is based on a fresh set of data collection procedures. Accordingly, in this thesis, data collection of re-functioning, lofts, set-up and set-up design and fundamentals of interior design key concepts is provided through the literature review of books, articles and online sources as well as the field survey through series of on-site observations and interview techniques. Hence, this thesis has been progressed in a two-staged qualitative research method whereas the first stage is documentation and the second stage are analytical framework formation/development, which is described in depth in the following sections.

2.1 Documentation

The basis of documentary research of this study is constituted of four main key concepts, which are *re-functioning, lofts, set-up and set-up design and fundamentals of interior design* while exploring them in-depth to guide analytical framework development and also to identify the criteria and sub-criteria of the developed analytical framework. In addition, information/data about the mentioned key concepts has been collected from various documents. Accordingly, the data collection techniques are literature review and field survey for the *four main key concepts*. Therefore, the necessary data has been collected through literature view in numerous tools such as books, articles and online sources. Furthermore, field survey is the other data collection technique that was obtained by on-site observations/reading. The first on-site reading of loft spaces was carried out from July 2014 to January 2015 in London. The second on-site observation that is about set-up and set-up lofts was carried out from September 2012 to September 2017 in İstanbul. As a result of the on-site observations/reading, data collection on the re-functioning, set-up and set-up design and interior design fundamentals concepts has been provided both in London and in İstanbul. Collected data has been found useful in order to develop a better idea about all four key concepts. Besides, interviews have been carried out with art directors, executive producers and executive assistants during İstanbul field survey in order to get a deeper understanding on the concepts of set-up and set-up design. Based on the collected data in the first stage of this documentary research, theoretical exploration of the four main key concepts has played a significant role in the development of analytical framework formation and for determination of the criteria and the sub-criteria of the framework.

2.2 Analytical Framework Formation / Development and Stages of Implementation

The theoretical exploration stage on the four main key concepts as a result of the extensive documentation has guided the development of the analytical framework. Theory that are revealed as a result of extensive documentation are grouped and classified according to the taxonomy system. Therefore, analytical framework is developed in five steps with the help of sub-types of taxonomy. The *first step* of framework development is *listing* (that is a sub-type of taxonomy); then, *tree-structure method* is followed the first step as the *second step* of analytical framework development. The *third step* is *negotiation of common vocabularies*. And then the *fourth step* of framework development is the naming *of common vocabularies* that is known as nomenclature. Moreover, *determination of sub-criteria* of main criteria category is the *fifth step* of framework development and have act as the main analysis criteria of the framework. Therefore, criteria and sub-criteria are clarified and then a coding system is constituted that is used in the design of analytical framework. Additionally, the details of taxonomy system's sub-types are mentioned in the Chapter 4.

After the formation of analytical framework, such additional tools as inventories/models have been developed as supplementary tools of the framework to read the interior space design of set-up loft spaces. This step has also tested the usability of the developed analytical framework. In addition, Figure 1 shows all parts of the thesis methodology.

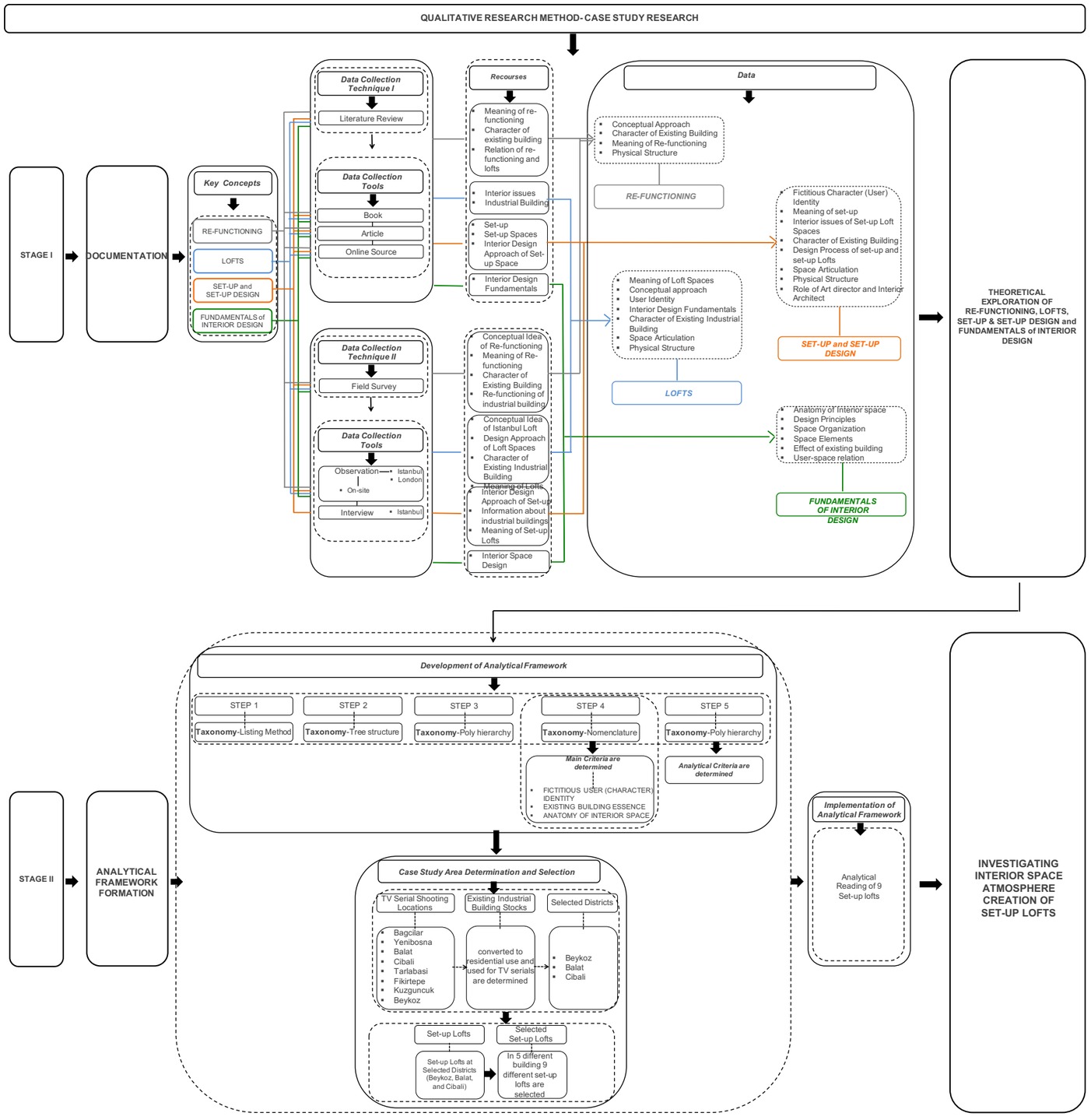


Figure 1: Methodology of the thesis

Chapter 3

THEORETICAL EXPLORATION OF FOUR KEY CONCEPTS: RE-FUNCTIONING, LOFT, SET-UP AND SET-UP DESIGN, FUNDAMENTALS OF INTERIOR DESIGN

Design of interior space has significant association with the concepts of re-functioning and fundamentals of interior design. Re-functioning is an important strategy/action, when considering the interrelationship between existing building and interior design. Therefore, this section of the research is constituted by an in-depth theoretical exploration of the four key concepts which have interrelationship with each other. Firstly, the potential and limitation of re-functioning criteria for existing building essence of industrial buildings such as historical industrial buildings and non-historical industrial buildings are discussed and then loft spaces that is re-functioning of existing industrial building stock to residential use is discussed. In addition, set-up is discussed that this thesis focuses to set-up lofts. Accordingly, the four key concepts that will be discussed in this chapter are constituted as re-functioning, lofts, set-up and set-up design and fundamentals of interior design. Prior to an in-depth theoretical exploration of each concepts one by one; an introductory critical discussion is put forward in order to express the idea behind the initial decision that these concepts have a reciprocal connection with each other.

Interior architecture is a multi-directional profession in which technical and creative solutions are applied within structure to provide a built interior environment (Coleman, 2002). These solutions are functional, enhance the quality of life, aesthetical and cultural attractive solutions (IIDAhttp://www.ncidqexam.org/about-interior-design/definition-of-interior-design/). It focuses specifically on interior environments and all aspects of their aesthetical, structural, spatial, social, cultural and material factors (IIDAhttp://www.ncidqexam.org/about-interior-design/definition-of-interior-design/). Accordingly, interior architecture is the creation of internal space that implies the intervention on architectural scale which including the structural elements, staircases, walls and floors. Therefore, all these terms are applied to proposals within both existing and new buildings (Spankie, 2009).

Space is the main element of interior architects, which is designed in line with the necessities. Furthermore, "space denotes the three-dimensional organization of the elements which make up a place and character denotes the general atmosphere which is the most comprehensive property of any place" (Norberg-Shulz, 1979). And hence, interior space is designed with the integration of space elements as it was stated by Hollis (2017), the interior is emerged as a physical, three-dimensional space.

Interior space is the most effective element between human and environment that ties deep relationships between them (McKelfresh, Clemons, Banning, 2006). Wynveen, Kyle and Sutton (2012) stated that, interior space has meaning not only related with individuals and their social interaction but also related with the interpretations of a setting's physical attributes. Therefore, interior spaces are designed with social and also physical dimensions. Interior space design covers many different functions and uses (Brooker and Stone, 2010). The meaning of the interior space design is much

more than ‘what looks right’. It is about holistic view of the way that users use and enjoy the space. Human being is a main member of interior space and a physical environment, which is a designed space for human is taken form within necessities of the user. Accordingly, user is a general overview and it provides insights, which help to develop design (Dodsworth, 2009). The interior space is designed according to necessities of user. It means that the design of interior space should respond to the expectations and needs of user and also characteristics of physical environment.

The design of interior space could be done in different design approaches. Interior architecture and building re-use are approaches that deal with the development and design of interior space. In general, interior space design is a process of intervening existing buildings that can be contemporary or historical. Therefore, spaces in different contexts can be various context such as newly designed building or spaces of an existing historical building, which there is an aim of bringing it to life within re-functioning approach. In due course, Tangaz (2006), highlights the role of interior architects in this process as; *“interior architects might be called upon to modify and improve existing spaces, either by reorganizing what already exists, or by providing an entirely new approach which is challenging”.* Therefore, interior space of existing building that has historical characters can be designed with an approach that existing building’s character was preserved or in turn it can be designed with a new approach that does not take the existing building character in to consideration.

Furthermore, there is an important factor while designing interior space with a re-functioning approach, which is ‘existing building character’. History of the building should be understood and studied well in order to create a design proposal in a proper relationship with the existing building. When an existing building is adapted to a new

use, extensive analyses of building characteristics should be carried out during the process by a particular focus on the history, character, form, original purpose, construction material and structure in order to provide a new approach to interior space that may enhance the qualities of the building properly. There is always evidence of forms, materials, construction, additions and alterations within the existing building. And hence, this is one of the essential aspects in order to recognize and understand the existing building character when creating new interior spaces. Existing industrial building stocks have special characteristic features in it which can be preserved while creating a new interior space design approach such as cast-iron columns, timber columns, brick walls, cast-iron windows or old machines (Pamukçu, 2009). The stated characteristic features of the existing buildings can be the part of its interior design process. Various types of historical industrial buildings such as warehouse, factory, mill and hangar buildings have historic, architectural and cultural values (TICCIH, 2003). There are abandoned industrial buildings such as historical industrial buildings and non-historical industrial buildings all around the world which were left to decline.

Nowadays, adapting these buildings into different purposes can be seen as museums, restaurant, office, hotel and residential use (Taner, 2011). Re-functioning of existing industrial building stocks into new utilities supports sustainable future of those abandoned places. Accordingly, giving new function to these buildings makes a significant contribution to the sustainability of these buildings. In addition, particularly existing buildings such as historical industrial buildings and non-historical industrial buildings.are attributed, as sustainable building practices of their construction time for sustaining the continuity of the descendant social, historic and cultural values as well (Cocen and Baniotopoulos, 2013). Currently, sustaining the continuity of existing industrial buildings stocks has started to be seen more often by their re-functioning as

a residential use. However, re-functioning of existing industrial buildings stocks to residential use is attributed as lofts. Lofts are alternative living spaces that have different characteristic features than regular living spaces, because, they are converted from commercial space to private space. Furthermore, lofts have been taken, as unique milieu of the field of interior architecture. They are used as film spaces and initial observations have revealed that they were organized for films and serial shootings both in Turkey and in the world as well. Loft spaces are organized and designed according to the fictitious user (character), which is mentioned at the scenario.

Accordingly, in-depth exploration of the aforementioned four key concepts is put forward in the following section consecutively as re-functioning, lofts, set-up and set-up design and fundamentals of interior design in order to provide mutual relation between them. Therefore, each key concept is interconnected with each other as it is illustrated in the figure below. Thus, interconnections of key concepts are numbered into each other. Set-up and set-up design and fundamentals of interior design are numbered as 1, set-up and set-up design and loft spaces are numbered as 2, loft spaces and fundamentals of interior design are numbered as 3, loft spaces and re-functioning are numbered as 4, fundamentals of interior design and re-functioning are numbered as 5, set-up and set-up design, fundamentals of interior design and loft spaces are numbered as 6, fundamentals of interior design, loft spaces and re-functioning are numbered as 7, set-up and set-up design, fundamentals of interior design, loft spaces and re-functioning are numbered as 8 (Figure 2).



Figure 2: Interconnection of four key concepts for theoretical exploration

3.1 Concept of Re-functioning

An interior is a holistic entity, which consist of movable and immovable elements that provides particular quality with the combination of tangible with the intangible aspects as texture, color light, material and view (Plevoets, 2014). Accordingly, relationship between the elements create an interior atmosphere and tells the narrative of that space which represents intangible aspects of interior. In recent years, re-functioning emanating from the pens of interior architects. This identification perhaps by introducing the sensibility of the interior thinker on adaptive re-use (Plevoets and Cleempoel, 2013).

In addition, this thesis deal with re-functioning of industrial buildings such as historical industrial buildings and non-historical industrial buildings through intangible aspects that are related with interior atmosphere creation. Accordingly, in this section, definition and significance of re-functioning, role of existing building in the re-functioning concept, re-functioning strategy and re-functioning of various existing industrial building stocks are discussed.

3.1.1 Definition and Significance of Re-functioning

The meaning of re-functioning has been come from the combination of two terms as 'when time is to change something in order to deal with different conditions, it is to be re-used for different purpose and hence needs re-functioning' (Oxford Learners Dictionary, 2020). Bullen and Love (2011) stated re-functioning as; "*... a process that changes a disused or ineffective item into a new item that can be used for a different purpose*". In addition, Ahunbay (2007) states it as; giving new function is a tool for historical buildings to be saved from being demolished. Re-functioning is likely described as the act of decision in giving a new use for a historical building whilst the "change of use" in the original use and also the fabric of a building for extending the life of the historical building, since re-functioning extends the lifespan of the buildings (Chen, Judd and Hawken, 2016; Chen, Chiu and Tsai, 2018; Tan, Shuai, Wang, 2018). It could be said that re-functioning is an approach while bringing buildings back to life that have lost their lives, are abandoned or have lost their original use. Furthermore, re-functioning is a process that changes the building to accommodate changing needs according to users (Snyder, 2005).

Accordingly, it can be said that two concepts can be constituted in terms of different re-functioning definition and significance as *save historical significance of building while saving from being demolished by giving new function and extending lifespan of the existing building by giving new function* with sub-concepts (Table 1).

Table 1: Concept and sub-concept of re-functioning definition and significance

Definition and Significance of Re-functioning		
Researchers	**Definition**	**Concept and Sub-concept**
Bullen and Love (2011)	A process that changes a disused or ineffective item into a new item	▪ Save historical significance of building while saving from being demolished by giving new function ▪ New function to disused or ineffective spaces ▪ New function to historical building ▪ Save from being demolished
Ahunbay (2007)	Giving new function is a tool for historical buildings to be saved from being demolished	
Synder (2005)	A process that changes the function of building to accommodate changing needs according to user	
Chen, Judd and Hawken, (2016) Chen, Chiu and Tsai, (2018) Tan, Shuai, Wang (2018)	Change of use for extending the life of a historical building	▪ Extending lifespan of the existing building by giving new function ▪ Extend the life with giving new function

The Contribution of Re-functioning to Environment

Re-functioning proposes to give new way to the existing building with a contemporary approach. Interior architecture and re-functioning approach draw more on the "soft values". It could be able to draw the connection between alteration and poetry. Re-functioning introduces notions of generosity and empathy in user response to existing buildings and their adaptation to the sensibility and needs of new users (Plevoets and Cleempoel, 2013). In addition, the importance of re-functioning a sense of the old/existing interior in adaptations is not just aesthetically but also through the narrative of the existing building. Re-functioning is a significant challenge, which focuses to re-image the physical relationship between the existing building and new intervention. Therefore, new interventions appear more poetic on the memory of the existing building that is represented in interior and through its interior features (Plevoets and Cleempoel, 2014). Thus, there is more modest and sensitive relationship that is created between old and new. Furthermore, Brooker (2009) highlights that,

> "*The transformation of an existing building is a procedure that initially consists of reading the place. This is a course of action that involves the study of structural and physical elements and also the analysis of concealed matter such as memories, values, narratives and traditions. The reading of the host ensures that site-specific conditions can be exposed and then used as potential generators of ideas for the modification process".*

In addition, adaptation of an existing building by giving new function to it shows contribution to the environment. Cantell (2005) states, by the help of re-functioning process the change of the disused, empty or ineffective buildings into different purposes were enriched. Furthermore, re-functioning extends the life cycle of a building, in line with the circular economy principles which aim to prolong the lifetime of resources as long as possible and avoid resources consumption (De Medici, De Toro and Nocca, 2019). Ball (1999) emphasized that persistently vacant buildings are less

able to be re-used than newly vacated premises and pointed out the need to consider timeliness in some cases as an important characteristic whilst identifying re-functioning potential.

Re-functioning can help to transform historical building into a usable place. It has uncovered new challenges to conservation from both a theoretical and a technical point of view. Accordingly, re-functioning by giving new function to historic buildings was at the center of a theoretical debate. The changes affect the significance of buildings and add contemporary layers that provide value for the future (Ball, 1999).

Additionally, re-functioning originally was developed as a method to protect historically significant buildings from demolition. When buildings are obsolete or rapidly approaching disuse and potential demolition; generally become raw materials for new projects. However, there is even more effective decision despite of demolition and assigning new application that is to leave the basic structure and fabric and to change its use that is called re-functioning (Langston, Francis, Eddie and Li-yin, 2008).

Re-functioning moreover allows conserving the different values of buildings, both the intrinsic one and the use value. Changes about what and how to conserve in order to represent user and their past for future generations reveal that there are many different values as aesthetic, economic, political, cultural and educational to discuss (Bottero, D'Alpaos and Oppio, 2019).

The Burra Charter advocates a cautious approach to change; "*...do as much as necessary to care for the place and to make it useable, but otherwise change it as little as possible so that its cultural significance is retained*" (ICOMOS, 2013). Moreover,

there is an emphasis on the compatible use *"…which respects the cultural significance of a place. Such use involves no or minimal impact on cultural significance*" (ICOMOS, 2013). If an adaptation has minimal impact on the cultural significance of the place, it has acceptability. It should involve minimal change to significant existing building. The cultural significance means historic, aesthetic, social, scientific or spiritual values for past, present or future.

Accordingly, contribution of re-functioning to environment can be mentioned in four concepts as *re-functioning approach to existing building, extend the life cycle of a building, protect historically significant buildings from demolition* and *conserving the different values of buildings for future* with sub-concepts (Table 2).

Table 2: Concept and sub-concept of the contribution of re-functioning to environment

The Contribution of Re-functioning to Environment		
Researchers	**Definition**	**Concept and Sub-concept**
Plevoets and Cleempoel (2013)	Interior architecture and re-functioning approach draws more on the "soft values"	▪ Re-functioning approach to existing building ▪ New interventions in the existing building ▪ Re-image the physical relationship ▪ Memories and narrative of existing building for new interventions
Plevoets and Cleempoel (2014)	Re-functioning is a significant challenge, which focuses to re-image the physical relationship between the existing building and new intervention New interventions appear more poetic on the memory of the existing building that is represented in interior	
Brooker and Stone (2009)	Reading of the existing qualities (structural and physical elements) Memories, values, narratives and traditions of existing building	
Cantell (2005)	By the help of re-functioning process the change of the disused, empty or ineffective buildings into different purposes were enriched	▪ Extend the life cycle of a building ▪ New function to disused, empty or ineffective spaces ▪ New function to historical building
Ball (1999)	Re-functioning can help to transform historical building into a usable place	
Langston, Francis, Eddie and Li-yin (2010)	Re-functioning originally was developed as a method to protect historically significant buildings from demolition Assigning new application	▪ Protect historically significant buildings from demolition ▪ Conserving intrinsic values ▪ New function to historical building
Bottero, D'Alpaos and Oppio (2019)	Re-functioning allows conserving the different values of buildings, both the intrinsic one and the use value Continuity of building values for future generation	▪ Conserving the different values of buildings for future ▪ Conserving intrinsic values ▪ Using potential of buildings (use value)

3.1.2 Role of Existing Building on Developing Re-functioning Strategy

Most valuable re-use theories try to compromise two key aspects as how to describe the original values of the existing building and the other is how to make them related with present and future generations through an adaptation design approach (Theodossopoulos, 2012). Architect/interior architect transforms new life into spaces that have a history and building character. Therefore, in order to achieve this transformation, the designer must understand the contribution of history of existing building to create a design proposal in a relation with the existing building (Coles and House, 2007). Accordingly, existing qualities of the building are very effective factors that directly orient the design such as location, dimensional consideration, materials, structure, history of building, historical use of the building and surrounding of building (Gewirtzman, 2016).

In addition, according to Tangaz's argument (2006), the first step of design is to take the possibilities of the site into consideration and enjoy the possibilities through exploring the context. A contextual analysis is a research activity that looks at the existing conditions of a building for potential future conditions. In addition, Gewirtzman (2016) states, understanding of re-functioning buildings are more context than the understanding of precedents. Within existing building there is always evidence of forms, materials, construction, additions and alterations (Coles and House, 2007). In addition, the form and proportion of space, the existing surfaces that are created by materials and existing structures reflect the characteristics of existing building that are in responsibilities of interior architects to use these opportunities while creating a re-functioning project (Coles and House, 2007).

Aforementioned descriptions mention that the understanding of existing building is an essential aspect to provide different architectural and interior design strategies in terms of re-functioning approaches. Accordingly, the interaction between new and the existing space pointed out recently by several researchers (Brooker and Stone 2010; Coles and House 2007; Dodsworth 2009; Grimley and Love 2007). Architects/interior architects are generally providing connections between characters of existing building and newly created interior design (Coles and House, 2007).

Different architectural and interior architectural strategies are developed in terms of re-functioning approaches. Being at the intersection of architecture and interior architecture, re-functioning strategy according to Eden (2005) include programming, architectural style and application framework. In addition, Brooker and Stone (2010) states, "strategy is general information of existing building for interior design such as history, context, function and form and how it controls the proposed design of interior spaces".

Robert (1989) argued that the architectural re-functioning strategy could be done in five different types as *building within, building over, building around, building alongside and adapting to a new function*. Brooker and Stone (2004) stated that strategies are based on the level of integration between the existing building and new design that are categorized in three groups as *intervention, insertion* and *installation*. Accordingly, intervention strategy emphasises the relationship between new and old. In the insertion strategy new elements and existing building are more independent than intervention. Installation of objects as temporal displays is perceived in installation strategy. Ozik (2006) argued in her study that categorization of strategy could be in four; *old kernel-new shell, old shell-new kernel, additions/incisions* and *integrated*

infill. Accordingly, a new roof structure is constructed over an existing building at the old kernel-new shell approach; existing building presents a structurally uninterrupted space at the old shell-new kernel; more spaces are added at the additions/incisions approach; the original building's skin and structure is kept unaltered while the internal configuration of space is revamped at the integrated infill approach. Joger (2010) uses three different categories for re-functioning strategy as *additions, transformations* and *conversions*.

Strategic approach often dictated by the amount of integration between old and new, by the amount that the existing interacts with the proposed. Brooker and Stone (2010) argues, as a result of reading the existing qualities, the ways how architect and interior architect could employ a particular approach to re-functioning of building could be broken into two distinct parts as *responsive approach* and *autonomous approach*. An architect can develop the strategic approach in interior either by electing to fully hold the given restrictions and limitations hence propose an interior that is responsive to its contextual environment or can choose to reject the constraints and influences of the existing space and create an interior that is autonomous (Brooker and Stone, 2010).

When there is a contemporary interpretation of what is already there; where new elements take cues from the host building, the interior is "responsive" in this strategy. Generally, responsive approach represents the protectionist approach in the building and on the contrary autonomous approach represents the liberalistic approach in the building (Brooker & Stone, 2010).

On the contrary, when the new and the old exist very much independently of each other, making the existing building little more than a vessel to hold the new elements and objects, then interior is “autonomous” in this strategy.

Accordingly, a number of strategies have been developed in interior spaces that can manifest the interior in many different ways. An interior architect has developed a strategic decision with an emphasis on re-functioning and interior architecture. In due course as Brooker and Stone (2010) mentioned,

> “*Interior architecture and building re-use are very closely linked subjects, all of which deal, in varying degrees, with the transformation of a given space, whether that is the crumbling ruin of an ancient buildings or the drawn parameters of a new building proposal”*.

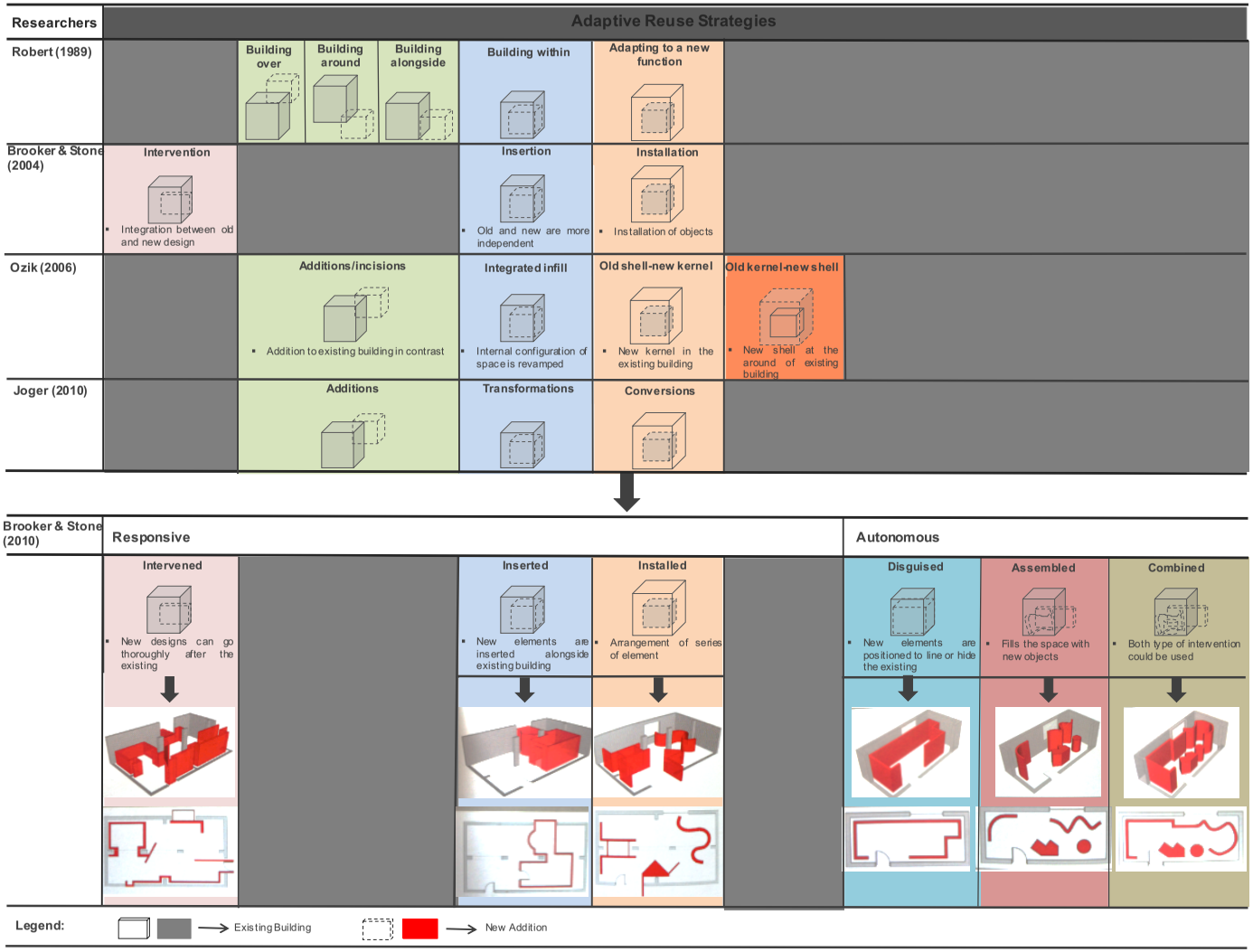
According to the abovementioned theory, it could be mentioned that there is narrative and characteristics features of an existing building which affect the creation of a strategic approach. Therefore, concepts and sub-concepts of role of existing building on developing re-functioning strategy can be mentioned in two groups as *intervention in the existing building* and *narrative and characteristics features of the existing building* (Table 3).

Table 3: Concept and sub-concept of role of existing building on developing re-functioning strategy

Role of Existing Building on Developing Re-functioning Strategy		
Researchers	**Definition**	**Concept and Sub-concept**
Eden (2005)	Re-functioning strategy is an architectural style	▪ Intervention in the existing building ▪ Design approach
Brooker and Stone (2004)	Integration between existing building and new design	
Brooker and Stone (2010)	General information of existing building for interior design (history, context, function, form)	▪ Narrative and characteristic features of existing building ▪ Understanding of existing building character and history for a design approach ▪ Old and new relations as an approach
Coles and House (2007)	Understanding of history of existing building Characteristics of existing building (form and proportion, existing surface, building material, existing structure)	
Gewirtzman (2016)	Existing qualities of the building (location, dimensional consideration, materials, structure, history of building, historical use of the building and surrounding of building)	
Tangaz (2006)	Possibilities of the site (existing conditions of a building)	
Theodossopoulos (2012)	Describing the original values of the existing building Relation of present and future generations through a design approach	

In addition, Table 4 presents re-use strategies by different authors. Although different approaches and strategies are defined with different concepts; in fact, it was determined that there are intersections at some points and there are similar points despite of differences. Besides, the differences between the authors' approaches are interpretations about the practice of re-functioning in terms of architectural and interior architectural strategies. Robert's (1989) approach refers to the replacement of an old building with a new building in the style of original or a new building constructed and attached to existing building. Like Robert's approach, the other authors refer to more architectural approaches for re-functioning except Brooker and Stone. Brooker and Stone's (2010) viewpoint about re-functioning interior architecture that focuses their strategies on alterations in mainly given the existing building. Therefore, re-functioning strategy of Brooker and Stone (2010) direct the discussion of re-functioning strategy within the existing building. Furthermore, they were among the first authors that give description about the re-functioning strategy with interior architecture point of view. Thus, the other researchers' strategies are related with Brooker and Stone's approach. Accordingly, in this thesis, re-functioning approach in terms of interior architectural strategies is discussed within the existing building. Therefore, Brooker and Stone's (2010) strategy is based on for this thesis, that is mentioned as either responsive or autonomous approach with different intervention levels.

Table 4: Overview of authors on re-functioning strategies



Responsive Approach

The responsive approaches can be strongly associated with the methods of connected and reconnected organizations. Responsive approaches are provided to demonstrate the existing design's strength. The existing attributes have strong ties with new designs and no direct intervention to the existing skin exists since the character of existing building is incorporated as a part of the new design or the organization. Generally, in this approach, the existing building's form has a strong influence on the new designs.

Machado (1976) argues the activity of building re-use is not limited to the production of 'form' but rather that the 'meaning' of the past should be considered essential. An existing building has story and meaning that is related with the past. Accordingly, interventions in the existing building have meaning while it is relating with the main source as story of building. In addition, Robert (1989) states, an alteration of an existing building could be well when there is compatibility between the original and new uses. Thus, Tran (2008) states, a compatibility strategy set out the visual balance between the old and the new without actually replicating the original work to achieve harmony in the overall architectural design. Besides, since there is a conservative attitude, new designs avoid to be designed as fixed to the existing skin and are kept as freestanding elements. They are not designed directly fixed to the walls in the responsive spaces. New designs cannot resist to the power of the existing buildings quality.

In addition, Brooker and Stone (2007), in their study describe responsive approach, where emphasis is put on the existing building, which is identified as a guidebook that contains much of the information in order to provide impetus for redesign. The attempt begins with the reading of the original space, which presents certain clues or indicators

to the nature of the design (Brooker and Stone 2007). In the process of building re-use, a balance between the past and the future is provided. The past takes on a greater significance because it, itself, is the material to be altered and reshaped. In addition, the past provides the already written, the marked 'canvas' on that each successive re-use will find its own place. Therefore, the past becomes a 'package of sense' of built up meaning to be accepted (maintained), transformed or suppressed (refused) (Machado, 1976). The intervention embraces removal of elements to reveal the hidden meaning of the building before intervening new elements. There is a motto of "form follows form" where the form of the existing influences the new. Brooker and Stone (2007) states, the responsive approach is divided to different intervention levels as intervened approach, inserted approach and installed approach.

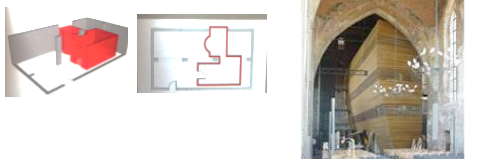
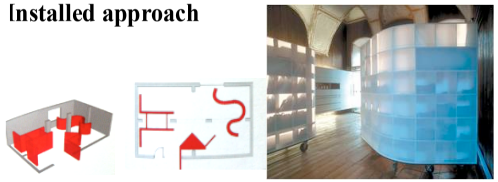
Intervened approach is where the new design can go thoroughly after the existing. It activates repressed meaning of a specific building through uncovering, clarification and interpretation. Accordingly, existing building is used as the part of the new designs. In addition, in the intervened interior space organization, new elements don't cover all of the existing planes and only linear freestanding elements are used. The freestanding elements can be designed as higher and also shorter elements. In addition, in the intervened organization, only linear planar elements are used to define the vertical surfaces and accordingly, horizontal definers are constituted with 90-degree angle (Brooker and Stone, 2007).

Inserted approach let to use an independent object but is governed by the existing building. New elements are inserted to the interior of the existing building and a new design is created having a contrasting relationship with the previous use and the new function. Therefore, inserted interiors are constituted with having much more closer

relations between old and new. In addition, space within a space is created in the inserted spaces. Linear and curvilinear form vertical planar elements are used to define surfaces and horizontal definers are constituted with curvilinear and linear shapes (Brooker and Stone, 2007).

Installed approach is as an arrangement of series of elements within a space that are closely related to it but do not alter it. Additionally, it combines the new and old without compromising or interfering with each other. Installed interiors have more independent designs. However, existing building should be perceived behind new designs. In addition, new designs do not touch existing buildings. Linear, folded and curvilinear planar elements are used as vertical planar elements to define surfaces and accordingly horizontal definers can be designed with 90-degree angles, wide angles and other types of horizontal defining element which is constituted with curvilinear and linear shapes (Brooker and Stone, 2007). Table 5 shows intervention levels of responsive approach.

Table 5: Intervention levels of responsive approach (Brooker and Stone, 2007)

RESPONSIVE APPROACH				
Intervened approach 	New design can go thoroughly after the existing	New elements do not cover all of existing plane	Linear planar elements are used	The main idea of design approach is existing building
Inserted approach 	New design is created having a contrasting relationship with the existing	New elements can cover existing plane as partly	Linear and curvilinear elements are used	The main idea of design approach is equality of existing building and new addition
Installed approach 	New design and existing is combined	New elements can cover existing plane but should be perceived	Linear, curvilinear and folded elements are used	The main idea of design approach is new addition

Autonomous Approach

On the other hand, disconnected space organization is referred to autonomous approach. In the autonomous approach, spaces are organized without the building's pressure or limitations, as disconnected from it. The physical qualities of the existing building have no priority in the organization of autonomous spaces since the new design elements shaping the space are the priority in this approach. Plevoets (2014) states, a more liberal adaptation of the space could be seen in some projects that called 'imitatio'. It's a kind of contemporary interpretation in the existing building. Tran (2008) argues, a contrast approach privileges differentiation over compatibility from the character of the existing building and its setting. Therefore, existing buildings are repaired or restored to its original state but is left alone and separate from new approach. The overall existing building can be intervened and may not have any significance in autonomous organizations. For instance; new elements such as panels or wall additions can be designed fixed to the existing building irrespectively. In this approach, the building acts as a pursuer of the leadership of the new design intervention. In addition, Brooker and Stone (2007) stated that this approach stated as a result of an independent process in shaping and organising spaces where the process was only constrained by the extent of the established volume. In this manner, the original building was thought merely as an envelope, which contains a new atmosphere with the positioning of the new elements that are making reference only to themselves and not to the existing building which is accepted as the container.

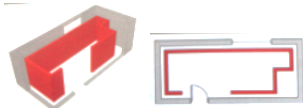
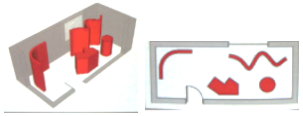
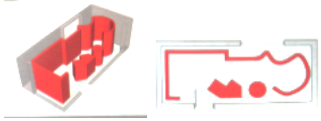
In their approach, Brooker and Stone (2010) divided autonomous approach to different intervention levels as disguised approach, assembled approach and combined approach.

Disguised approach, is where the new elements could either be positioned to line or hide the existing building and these new elements are independent from the existing building. Therefore, new design elements cover the all existing planes of the building and design of new elements are independent from the existing building. Linear planar and folded planar elements are used as vertical wall definers to define surfaces and accordingly horizontal definers are constituted with 90-degree angle and with organic shape planar.

Assembled approach fills the space with new objects, which are designed as dominating elements. In addition, sculptural elements are used to create emphasis in the interior spaces. Folded and curvilinear planar elements are used as vertical elements to define surfaces and accordingly, horizontal definers can be constituted with organic shape. Linear planar elements are not used solely; it is used with curvilinear shape in assembled interiors.

Combined approach is where both types of the intervention could be used at the same time. Existing building is hidden in new additions. Main space is divided into subspaces to create different locations and different functions. Linear, folded and curvilinear planar elements are used for vertical elements to define vertical surfaces. In addition, horizontal definers can be constituted with 90-degree angle, wide angles and also with organic shape and other type horizontal planar element, which is constituted with linear and curvilinear, shapes as well. Table 6 shows the intervention levels of autonomous approach.

Table 6: Intervention levels of autonomous approach (Brooker and Stone, 2007)

AUTONOMOUS APPROACH			
Disguised approach  	New elements can cover all of the existing plane	Linear and folded planar elements are used	The main idea of design approach is hidden of existing building with new elements
Assembled approach  	New objects which are designed as dominating elements	Folded and curvilinear planar elements are used	The main idea of design approach is dominated new objects
Combined approach  	Main space is divided to sub-spaces	Linear, folded and curvilinear planar elements are used	The main idea of design approach is sub spaces that created

3.1.3 Re-functioning of Industrial Buildings (Historical and Non-historical)

Re-functioning has been successfully applied in many types of facilities, including government buildings, industrial utilities, offices, schools or religious buildings (Langston, Francis, Eddie and Li-yin, 2008). There are various re-functioning types during process such as from commercial to commercial or from commercial to private-residential/office and so far. Re-functioning of industrial utilities (as the instance of commercial buildings) came into existence in many places recently.

Nowadays, it could be seen that existing unused/abandoned industrial buildings such as historical industrial buildings and non-historical industrial buildings are adapted into new functions in line with the certain necessities frequently. Re-functioning of existing industrial building stock started to gain popularity in 1990's. Re-functioning is preferred to be the appropriate approach for those buildings if industrial facility is not the viable choice. It is possible to see examples of re-functioning of industrial buildings (historical and non-historical) in many different locations across the globe.

The global process of industrialization continued over the past two centuries that constitutes a major part of the human history (ICOMOS, 2011). After the 20th century, industrial buildings such as historical industrial buildings and non-historical industrial buildings, which were built during the industrial revolution, were started to be abandoned, because of the socio-economic reasons (Karagöz, 2007). Changes in the city formation were initiated due to the move of industrial zone from city centres to the sub-urban areas. Therefore, city centres' attraction and liveliness were declined (Taner, 2011). The historical industrial buildings are highly at risk, often lost for lack of recognition, documentation, awareness or protection but also because of changing economic trends, environmental issues, negative perceptions or its size (ICOMOS, 2011). Although historical industrial buildings are highly at risk, abandoned industrial

buildings (historical and non-historical) have made great contribution to urban redevelopment, which were an important part of the cities. Besides, they make a great contribution to the aesthetic quality of a city as well (Wang and Nan, 2007; Canaran, 2009). Giving a new function is usually acceptable for existing industrial buildings stocks except in the case of sites of particular significance. Re-functioning of existing industrial building stocks has been a common practice currently in a growing number of cities in the world. It has been taken attention both in the developed countries in Europe and US and also in the developing countries' communities provides a valuable perception of their industrial identity (Samadzadehyazdi, Ansari, Mahdavinejad and Bemaninan, 2018). And recently, giving new function to these historical industrial buildings gain popularity, since these buildings have economical characteristics thus a new atmosphere is created in the existing structure and historical texture is protected in the urban areas (Taner, 2011).

The aim of re-functioning of historical industrial buildings principally is the protection of building from becoming old, unusable and to prevent collapse of buildings that would also affect the environment. The ideas about abandoned historical industrial buildings have started to be valuable and should be converted into new uses. Therefore, new uses of building should respect the significant material and maintain original patterns of circulation and activity (TICCIH, 2003). Hence, the interventions should consider characteristics of the historical industrial buildings and should be reversible that have a minimal impact (TICCIH, 2003; Claver, Dominguez and Sebastian, 2018). There are cases of historical industrial buildings which were adapted by giving new function and used for cultural events due to their spatial characteristics; having large span and high ceiling that let the new use to be performed with a minimal intervention to the spatial characteristics (Bayraktaroglu and Arabacioglu, 2019; Taner, 2011).

In addition, the empty and unused buildings have often been adapted into art museums and other cultural venues. In the last decade, numerous abandoned industrial buildings such as historical industrial buildings and non-historical industrial buildings in the United States and Europe have been functionally and formally adapted into cultural sites (Crisman, 2007). Moreover, by extending the life-cycle of existing structures, re-functioning of existing industrial building stock can contribute to provide sustainable development at the local, national and international levels. It touches the social, physical and environmental aspects of development (ICOMOS, 2011). Re-functioning of buildings by giving new function has been applied in many cities, which is fundamental to a sustainable development (Tan, Shuai, Wang, 2018).

Accordingly, international institutions are actively moving in promoting actions to provide the sustainable development. Additionally, Cantell (2005) states that by the help of this process the change of the disused, empty or ineffective buildings into different purposes were enriched.

The concept of re-functioning of industrial buildings (historical and non-historical) can be mentioned as *continuing the historical industrial buildings value, design approach in terms of existing characteristics* and *extend the life cycle of a building* (Table 7).

Table 7: Concept and sub-concept of re-functioning of existing industrial building stocks

Re-functioning of Industrial Buildings (Historical and Non-historical)		
Researchers	**Definition**	**Concept and Sub-concept**
TICCIH (2003)	Abandoned historical industrial buildings have industrial values Industrial culture (historical, technological, social, architectural or scientific value)	▪ Continuing the historical industrial buildings value ▪ Values of historical industrial building
TICCIH (2003) **Bayraktaroglu and Arabacioglu (2019)** **Taner (2011)**	Re-functioning in terms of spatial characteristics (original pattern, large span, high ceiling)	▪ Design approach in terms of existing characteristics ▪ Existing building characteristics
Crisman (2007)	Re-functioning of abandoned industrial buildings such as historical industrial buildings and non-historical industrial building	▪ Extend the life cycle of a building ▪ New function for abandoned building ▪ Extend the life
ICOMOS (2011)	Extending life cycle of the existing building (sustainable development) by re-functioning	

According to aforementioned exploration about re-functioning concept can be said that architecture/interior architecture is related with re-functioning of existing building. A strategy which is the overall design approach in interiors within the re-functioning is achieved that can be in different ways with different intervention levels as it is stated. Nowadays, re-functioning strategies have started to be appeared more in the field of interior architecture. This shows how much this issue is the point of concern. It has been explored that there are various approaches, which are developed in the existing building as keeping hints of the existing building since every existing building has its own story prior to its re-functioning. An existing building can have characteristic features, which are integrated in its history. Therefore, it must be noted that while developing an approach to extend its lifetime, respecting to the character of the existing building could provide/enhance the existing building to be more powerful.

On the other hand, there could be another approach that is possible to emphasize the new atmosphere contrarily, which is constituted without including the existing building character as the strongest feature of the new interior space. In addition, sometimes, the existing building character becomes a part of the design that has dominancy in the space but sometimes the newly created interior atmosphere has dominancy that passes the character of existing building. In particular, the understanding and analysis of an existing building has more significance in re-functioning approach, because, character of an existing building has significance in design of space. In addition, re-functioning is not like a new construction project. The existing building is re-designed within the existing physical constraints of the building.

A historical building is implemented within the scope of the re-functioning concept and the continuity of the building history and value is ensured. Nowadays, historical

buildings have popularity with preserving the historical texture and character of the existing building during re-functioning. Re-functioning enables people at the environment to get more attention as a positive way from exterior and interior. In addition, re-functioning approach in interior and at the shell of an existing building provides another important phenomenon that is sustainability. Sustainability of building itself with a new re-functioning approach is provided to do the continuation of building for future. Historical buildings that have historic and architectural values have been abandoned for certain reasons and have lost their lives. Accordingly, these buildings are brought to life with giving new functions. The building that is brought to life can have a new meaning with a new function such as social, cultural or educational. In fact, using the historical buildings with a new function as commercial, administrative, residential, health related does not only give life to the building. At the same time, the building's environment begins to gain meaning. Thus, all of these contribute to provide the sustainability of historical buildings.

In addition, aforementioned exploration about re-functioning provides to clarify the concepts and sub-concepts, which can be input to the framework. Furthermore, at the following sections in depth explorations of other key concepts that are lofts, set-up and set-up design and fundamentals of interior design are discussed with similar to the adaptive-re-use exploration (Table 8).

Table 8: Concepts and sub-concepts of re-functioning concept

CONCEPT OF RE-FUNCTIONING		
Definition and Significance of Re-functioning		
Researchers	**Definition**	**Concept and Sub-concept**
Bullen and Love (2011)	A process that changes a disused or ineffective item into a new item	▪ Save historical significance of building while saving from being demolished by giving new function ▪ New function to disused or ineffective spaces ▪ New function to historical building ▪ Save from being demolished
Ahunbay (2007)	Giving new function is a tool for historical buildings to be saved from being demolished	
Synder (2005)	A process that changes the function of building to accommodate changing needs according to user	
Chen, Judd and Hawken, (2016) Chen, Chiu and Tsai, (2018) Tan, Shuai, Wang (2018)	Change of use for extending the life of a historical building	▪ Extending lifespan of the existing building by giving new function ▪ Extend the life with giving new function
The Contribution of Re-functioning to Environment		
Plevoets and Cleempoel (2013)	Interior architecture and re-functioning approach draws more on the "soft values"	▪ Re-functioning approach to existing building ▪ New interventions in the existing building ▪ Re-image the physical relationship ▪ Memories and narrative of existing building for new interventions
Plevoets and Cleempoel (2014)	Re-functioning is a significant challenge, which focuses to re-image the physical relationship between the existing building and new intervention New interventions appear more poetic on the memory of the existing building that is represented in interior	
Brooker and Stone (2009)	Reading of the existing qualities (structural and physical elements) Memories, values, narratives and traditions of existing building	
Cantell (2005)	By the help of adaptive reuse process the change of the disused, empty or ineffective buildings into different purposes were enriched	▪ Extend the life cycle of a building ▪ New function to disused, empty or ineffective spaces ▪ New function to historical building
Ball (1999)	Re-functioning can help to transform historical building into a usable place	
Langston, Francis, Eddie and Li-yin (2010)	Re-functioning originally was developed as a method to protect historically significant buildings from demolition Assigning new application	▪ Protect historically significant buildings from demolition ▪ Conserving intrinsic values ▪ New function to historical building
Bottero, D'Alpaos and Oppio (2019)	Re-functioning allows conserving the different values of buildings, both the intrinsic one and the use value Continuity of building values for future generation	▪ Conserving the different values of buildings for future ▪ Conserving intrinsic values ▪ Using potential of buildings (use value)
Role of Existing Building on Developing Re-functioning Strategy		
Eden (2005)	Re-functioning strategy is an architectural style	▪ Intervention in the existing building ▪ Design approach
Brooker and Stone (2004)	Integration between existing building and new design	
Brooker and Stone (2010)	General information of existing building for interior design (history, context, function, form)	▪ Narrative and characteristic features of existing building ▪ Understanding of existing building character and history for a design approach ▪ Old and new relations as an approach
Coles and House (2007)	Understanding of history of existing building Characteristics of existing building (form and proportion, existing surface, building material, existing structure)	
Gewirtzman (2016)	Existing qualities of the building (location, dimensional consideration, materials, structure, history of building, historical use of the building and surrounding of building)	
Tangaz (2006)	Possibilities of the site (existing conditions of a building)	
Theodossopoulos (2012)	Describing the original values of the existing building Relation of present and future generations through a design approach	
Re-functioning of Industrial Buildings (Historical and Non-historical)		
TICCIH (2003)	Abandoned historical industrial buildings have industrial value Industrial culture (historical, technological, social, architectural or scientific value)	▪ Continuing the historical industrial value ▪ Values of historical industrial building
TICCIH (2003) Bayraktaroglu and Arabacioglu (2019) Taner (2011)	Re-functioning in terms of spatial characteristics (original pattern, large span, high ceiling)	▪ Design approach in terms of existing characteristics ▪ Existing building characteristics
Crisman (2007)	Re-functioning of abandoned industrial buildings such as historical industrial buildings and non-historical industrial building	▪ Extend the life cycle of a building ▪ New function for abandoned building ▪ Extend the life
ICOMOS (2011)	Extending life cycle of the existing building (sustainable development) by re-functioning	

3.2 Re-Functioning of Existing Industrial Building Stocks into Residential Use; Lofts

Lofts are re-functioning of historical industrial buildings and new buildings into living space. Accordingly, in this section, definition of lofts, determinants of lofts, historical improvement/evolution of lofts and their design approaches are discussed to get the idea about loft spaces.

3.2.1 Definition of Lofts

The dictionary meaning of loft is a space that is placed just below the roof of a house for storing things (URL 1). Accordingly, the term of loft refers to the internal volume of pitched roof of a house or other building (Sinclair, 1990). Another meaning of loft is used for pigeon, roof or attic (Hasol, 2003). Additionally, the dictionary meaning of loft re-functioning is described as "creation into a room for living in it" (URL 1).

There are different meanings about loft/loft living according to dictionaries and different researchers. At the beginning, loft in its origin was an attic or roof level however currently it has become a wide field of application following the re-functioning of industrial utilities. Accordingly, Culto (2001) states, in general, the term of loft means an open, semi-transparent space, which is located in industrial buildings such as historical industrial buildings and non-historical industrial buildings. Nowadays, lofts have new meaning such as large, renewed space that industrial architecture is used for domestic purposes (Culto, 2001).

The term of loft has turn into a chief concept in its field of study in architecture and interior architecture. Namely, a space that is located in the existing industrial building stock and became a dynamic and trend style of these days. Accordingly, Lynch (2014)

states, lofts are re-functioning of non-residential properties to homes that have industrial fabric and also became a popular housing style, which has attracted a growing number of residential buyers.

Although, lofts are re-functioning of existing industrial building stocks as living and/or sometimes both as living and working spaces together that became trend lifestyle a decade ago these days; todays, they turned into a popular and chic living spaces rather than a concept, which could not be sufficient alone as a word (Culto, 2011; Can, 2016).

O'Kelly and Dean (2007) describe loft as a phenomenon of 1990s:

> *"The loft movement was definitely a 1990s phenomenon, but it's still a fascination for young professionals. But the idea of what constitutes a loft has changed. The 1990s loft was an industrial warehouse space with large windows and a view onto a city skyline. Today the term has been twisted to incorporate a multitude of sins. It's a smaller flat with a double height ceiling above the living room, a chic redevelopment or a new-build in the form of a loft".*

Moreover, Schaumburg (2003) states that, lofts are generally big and open space style residential interiors that are not partitioned into different rooms. At first, it was popular in larger cities but now could be seen in cities of all sizes. Pamukçu (2009) mentioned that lofts are re-functioning of existing industrial building stocks to living and working spaces together. On the contrary, Karagöz (2007) states that, lofts are the name of warehouses and factories. These kinds of buildings are called as lofts. Loft buildings are adapted to new functions which could be as restaurant, museum, office and residential.

Field and Irving describe them as (1999):

> "*A loft, in the original sense of the word, deriving from the United States, simply means an upper storey of a warehouse or factory. More specifically, the word now conjures up an image of a converted open plan space in which the original structure is juxtaposed with new architectural insertions and evidence of domestic use"*.

Accordingly, the most common use is defined as multi-storey adapted existing industrial building stock that have large and undivided space on each floor (Elmas, 2014).

Since the end of the 20th century, the word of loft was started to be used in defining the large areas that original structure was adapted into residential use (Ullmann, 2003). Therefore, a loft building is commercial buildings from outside look and in the interior, different function as living space is created that is private space. Banks and Tanqueray (1999) states, lofts are re-functioning of historical industrial buildings that are raw, unrefined and full of the grit and grime of their industrial past in the earlier years. Additionally, lofts are originally occupied by industries such as printing, woodworking, belt and tie manufacturing to residential use. Thus, it has its own trait character with its industrial past. According to Aykac (2014), the meaning of loft is way of life, where the spatial perception can be felt at the highest levels and a spatial formation with the re-functioning of the existing inherent structures is provided. In addition, Erdemir (2016) states, loft is the re-functioning of old factory buildings or warehouses into residential use for artists and dwellers. First, loft spaces were preferred by artists such as painters and sculptors and used as both living and working space. In this way, they provide both living and working space needs (Erdemir, 2016). According to Zukin (1982) lofts are predominantly homes for single persons and couples without children. Definitions emphasize in a common sense that although loft is a type of living space, it has different type of space characteristics or organization

and hence can be called an ‘alternative living space’ to the well-known norms and standards of usual living spaces. Therefore issues, which makes loft an alternative living space necessitates, are at further exploration.

According to different researchers’ definitions about lofts, it can be said that lofts have two concepts as *re-functioning of industrial buildings (historical and non-historical)* and *re-functioning of industrial buildings (historical and non-historical) into living spaces* (Table 9).

Table 9: Concepts and sub-concepts of loft definition

Definition of Lofts		
Researchers	**Definition**	**Concept and Sub-concept**
Culto (2001)	An open and semi transparent spaces which are located in industrial buildings such as historical industrial buildings and non-historical industrial buildings	▪ Re-functioning of Industrial buildings (historical and non-historical) ▪ Industrial buildings (historical and non-historical) with new function ▪ Open plan spaces ▪ Multi-story industrial buildings (historical and non-historical) ▪ Large and undivided space ▪ Industrial warehouse space
Karagöz (2007)	The name of warehouse and factories that are adapted to new functions as restaurants, museums, office and residentials	
Field and Irving (1999)	Re-functioning of open plan spaces	
Elmas (2014)	Multi-story adapted existing industrial building stocks that have large and undivided space on each floor	
O’Kelly and Dean (2007)	1990’s lofts were an industrial warehouse space with large windows	
Culto (2001)	Re-functioning of existing industrial building stocks as living and/or sometimes both living and working spaces together.	▪ Re-functioning of industrial buildings (historical and non-historical) into living spaces ▪ Re-functioning to living space ▪ Re-functioning to living and working space ▪ Open space style residentials ▪ Re-functioning to living space for artist and dwellers ▪ Residential for single person and couples without children ▪ Alternative living space ▪ Living space that have double height ceiling
Lynch (2014)	Re-functioning of non-residential properties to home that have industrial fabric.	
Pamukçu (2009)	Re-functioning of existing industrial building stocks to living and working spaces together	
Schaumburg (2003)	Big and open space style residential interiors	
Ullmann (2003)	Large areas that original structure was adapted into residential use	
Banks and Tanqueray (1999)	Re-functioning of historical industrial buildings into residential use	
Aykaç (2014)	Loft is way of life where the spatial perception can be felt at the highest levels	
Erdemir (2016)	Re-functioning of old factories or warehouses into residential use for artists and dwellers	
Zukin (1982)	Predominantly homes for single persons and couples without children that have different characteristics called ‘alternative living spaces’	
Can (2016)	They are living spaces as popular and chic	
O’Kelly and Dean (2007)	Todays, lofts are a smaller flat with a double height ceiling and a chic redevelopment	

3.2.2 Determinants of Loft Spaces

Loft spaces have a strong architectural language and specific spatial characters both in the interior and exterior. Therefore, these buildings have significance that refers to the

past. Zukin (1982) stated that lofts are alternative living spaces. Therefore, they have new social and cultural values that have emerged as a new lifestyle with the re-functioning of historical industrial buildings into residential use. Accordingly, Zukin has mentioned that lofts have specific factors to address them as alternative living spaces. These are accessibility, availability, space and time factor and paradoxical (Zukin, 1982).

With the help of artistic production, loft spaces have gained the *accessibility* to reach large masses. Art dealers, collectors and museum curators have visited New York artists in their lofts and increasing amount of publicity has drawn attention to these artists' living and working spaces. Thus, this attention has provided lofts to be an alternative living of publicity (Zukin, 1982). In addition, loft spaces provide *availability* according to the financial condition. In the beginning, they were used as living and working spaces for artists with low rents and low sale prices (Zukin, 1982). Today, the loft spaces are not only artists' living and working spaces but also a popular living space for everyone. Therefore, it has a broad spectrum which can be used by photographers, fashion designers, film directors, lawyers and bankers (Banks and Tanqueray, 1999).

There is *space and time* factor in loft spaces. Zukin (1982) has put forward that

> *"The changing appreciation of old loft buildings also reflects a deeper preoccupation with space and time. A sense that the great industrial age has ended creates melancholy over the machines and the factories of the past".*

In the first place, lofts were uncomfortable spaces used by New York artists, who were 'living under poor conditions' in existing industrial building stocks without any change. Accordingly, the question of what type of conditions is needed has risen to

answer how to achieve a loft space. After that, an increasing number of middle-class and upper-class people moved into certain cultural patterns, and historic adaptation became active (Zukin, 1982). In addition to these, the spaces were tried to be protected for artists but later, they were assigned as loft spaces. Moreover, Zukin mentioned that

> "*Until the 1970s, living in a loft was considered neither chic nor comfortable-if the possibility was considered at all. Making a home in a factory district clearly contradicted the dominant middle-class ideas of "home" and "factory," as well as the separate environments of family and work on which these ideas were based*" (Zukin, 1982).

Lofts are *paradoxical* because from outside they look like a factory but a living space on the inside (Zukin, 1982). In addition, lofts have distinctive architectural details on the exterior and are symbolically rich interior spaces (Lynch, 2014). Therefore, lofts have a kind of tourist attraction that most apartments or houses cannot have. This is based on the uniqueness of each loft arrangement, and the absence of standard floor plans and the unexpectedness of architectural, aesthetical and historical details. (Figure 3).



Figure 3: A loft space that is located in industrial building (URL 2)

In addition to these, there is *user changing*. The commercial buildings are repackaged as legitimate living spaces. Therefore, commercial buildings as manufactures' user and the new function living spaces' user are different from each other and possess different characters. Loft spaces are used in a completely new way. Industrial setting is a working space but residential building is a living space. Who are the people involved? Able to develop new ways of life, trends and activities, and act as pioneers for social change, a large number of people feel attracted by these buildings. These people are willing to start experiments, which can provide a basis for creativity and innovation (Baum and Christiaanse, 2012).

Lofts have *non-residential features.* They are multi storey or single storey existing industrial building stocks. Single storey buildings have open floor plans which are between 700 and 2000 square feet whereas multi storey buildings are between 2000 and 10000 square feet on each floor (Zukin, 1982). In addition, Karagöz (2007) and Pamukçu (2009) mentioned that lofts have single volume, free plan, high ceiling, timber and cast-iron structure, cast-iron windows and brick walls. The ceilings of lofts are high which can be between 10 feet (3 metres) and 14 feet (4, 25 metres) floor area is huge. Although lofts have huge volumes, some small lofts between 700 and 800 square feet (65-74 square metres) (Banks and Tanqueray, 1999) can be seen. Accordingly, contemporary elements and appliances are blended with brick walls, exposed pipes, electrical connection boxes and oversized windows which receive direct natural light into the interiors (Schaumburg, 2003; Banks and Tanqueray, 1999).

Urban landscape is another distinctive factor of lofts. It may be difficult because it is not completely essential. However, a train and a plane pieces, a bicycle or an

automobile can be seen in lofts as emphasized urban landscape elements within the space (Banks and Tanqueray, 1999).

Loft spaces have a plan, open or partly open, which provides *openness*. It is possible to see a few walls (Banks and Tanqueray, 1999; Taner, 2011). In some lofts, the living room and the kitchen are built together as an open space but private rooms are at the back and are organized as closed rooms. Therefore, the interior space of a loft is partitioned and the unit is provided with interior design elements and furniture. According to these characteristic features, loft spaces have allowed us to design the interior freely (Banks and Tanqueray, 1999) (Figure 4).



Figure 4: Brick walls, timber and cast-iron structure and window of a loft space (URL 3)

In addition, it is implied that loft spaces have several distinctive characteristics to be addressed as alternative living spaces. These are accessibility, availability, space and time, user changing, paradoxical, non-residential features, urban landscape and openness. Such characteristics differentiate loft spaces from regular living spaces as an alternative living.

How have lofts emerged and evolved throughout the history to possess/own the above stated characteristics and turned into alternative living spaces?

The concepts of loft determinants can be described as *popular and alternative living space as new lifestyle* and *distinctive factors from regular living space* with sub-concepts (Table 10).

Table 10: Concept and sub-concepts of lofts determinants

Determinants of Lofts		
Researchers	**Definition**	**Concept and Sub-concept**
Zukin (1982)	Emerged as new lifestyle	▪ Popular and alternative living space as new lifestyle ▪ New lifestyle ▪ Popular living space ▪ Alternative living
	Popular living space for everyone	
	Alternative living of publicity	
	Lofts have accessibility	▪ Distinctive factors from regular living space ▪ Accessibility ▪ Industrial sense ▪ Differentiation of User ▪ Factory from outside ▪ Open plan ▪ Non-residential feature ▪ Unusual accessories ▪ Contemporary elements with existing characters ▪ Distinctive details
	Space and time factors (sense from industrial age)	
	Lofts are paradoxical (from outside they look like a factory)	
Baum and Christiaanse (2012)	User changing (commercial building repackaged as living space)	
Banks and Tanqueray (1999) **Taner (2011)**	Openness (open plan or partly open plan)	
Zukin (1982) **Karagöz (2007)** **Pamukçu (2009)**	Non-residential features (multi storey or single storey industrial contexts, open floor plan , single volume, high ceiling, timber and cast iron structure, cast iron windows and brick walls)	
Schaumburg (2003) **Banks and Tanqueray (1999)**	Urban landscape (train and plane pieces, bicycle or automobile)	
	Contemporary elements and appliances are blended with brick walls, exposed pipes, electrical connection boxes and oversized windows	
Lynch (2014)	Distinctive architectural detail on the exterior and symbolically rich interior spaces	

3.2.3 Historical Improvement/Evolution of Lofts

It is important to understand the historical improvement process of lofts, which are emerged in America for the first time.

In 1609, simple trading post was established in an island and shipping activities have started on two rivers in New York. Private residences appeared on side streets. In addition, the expansion of new residences continued throughout the 18th and early 19th Centuries. However, the expanding mercantile had the urge to push the earlier residential quarters, mostly because of the urban growth. During the American Revolution (1775-1783) many settlements were destroyed by a massive fire. In 1835, another disastrous fire destroyed the major part of the city and it was followed by a financial crisis in 1837. However, there was a decision for rebuilding and Manhattan became the centre of commerce and was known as the Financial District (Slesin, Cliff, Rozensztroch, 1986). In the 19th Century, the displaced warehouse and factory buildings were expanded towards the north side of Manhattan. Until the first half of the 20th Century, warehouse and factory districts were developed in lower Manhattan. In addition, in the mid-19th Century, warehouse and factory buildings were also places for storage and sale for wholesale goods. Thus, these historical buildings (factories and warehouses) were placed near rivers and ports to serve storage and foodstuffs in large cities (Slesin, Cliff, Rozensztroch, 1986). For instance, in Boston-New York and in London-Docklands areas, many historical buildings were originally built as warehouses for spices, cheese, coffee, sugar, cacao, fruit and tea. Therefore, the residential areas were moved out of the cities (URL 4).

Following the Second World War (1939-1945), New York City's port started to decline, because of cheap labour. In addition, New York City's historical buildings

have also started to decline as a port. By the half of the 20th Century, as mercantile business still continued to move out of the city, there were abandoned sizeable areas. These abandoned buildings had large open spaces because they had been built in the electric age (URL 4). Therefore, they had high ceilings and large windows to receive natural lighting and ventilation inside.

In the 20th Century, historical industrial buildings were less preserved and their locations were not in the developed areas. On the other hand, these buildings, which were architecturally significant and had low prices, in Manhattan districts were quite valuable. Therefore, in the last quarter of the 20th Century, lower Manhattan renewed itself by discovering new uses for these valuable historical industrial buildings (URL 4). The re-functioning of historical industrial buildings into residential use started in Manhattan district in 1950s (Karagöz, 2007) (Figure 5).

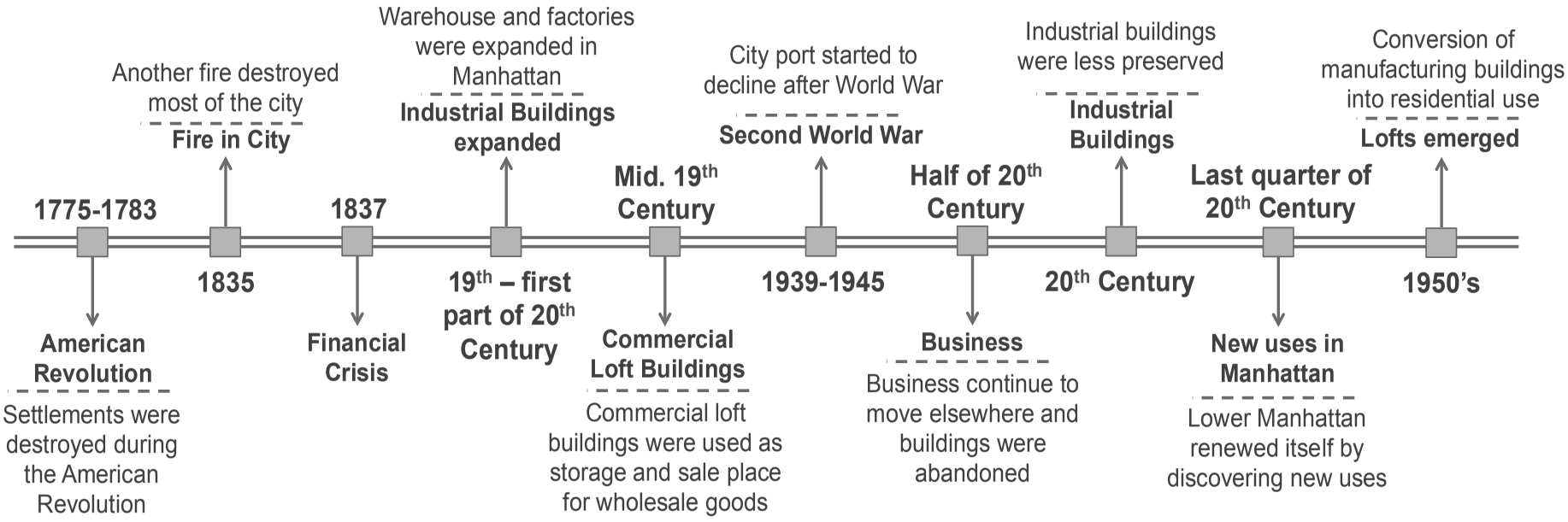


Figure 5: Evolution timeline of lofts

Transforming from an illegal formation into a legal setting in New York

The first loft has appeared in Manhattan district of New York City in 1950's. It was used by artists illegally because lofts were large spaces with high ceiling and low-prices which were rented by artists to satisfy their need for a studio to create art (Karagöz, 2007). These have been the perfect ingredients for a studio. Sculpture artists and painter artists created their studios in loft spaces. Artworks generally need expansive high ceiling studios. Therefore, painters were on the upper floors of lofts and sculptors, whose materials and finished pieces were heavier, were on the lower and ground floors. On the other hand, in late 1960s, The Factory, Pop-up artist Andy Warhol's loft was used in some movies as a setting place (Slesin, Cliff, Rozensztroch, 1986). Therefore, film directors started to use some other loft spaces to make a film or series in it. The main point of attraction of those buildings was their cheap price. Besides, lofts were affordable enough to rent and also had enough size to live in and work together (Field & Irving, 1999) (Figure 6).

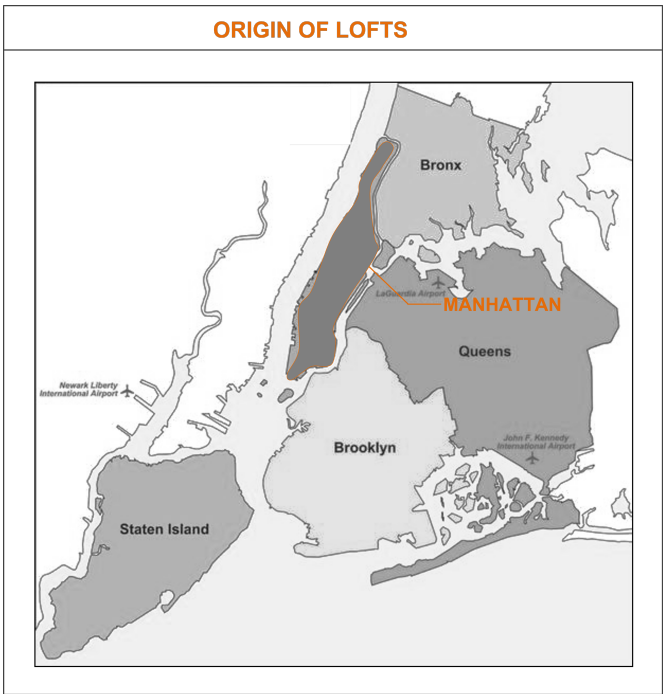


Figure 6: Origin of Loft; Manhattan district of New York (URL 5, developed by author)

As mentioned, the origin of lofts is New York city. Therefore, transforming of lofts from an illegal formation into a legal setting in New York city is mentioned in-detail with organizations. Accordingly, in 1960s, began to represent the common interests of lofts. The first organization was Artists' Tenants Association (ATA) to protect their illegal tenancy. In 1961, ATA persuaded the city to establish a short-lived Artist in Residence (A.I.R.). This showed the limitation for usage such as two artists per loft building but it ended in 1963 (URL 6). Additionally, in 1964, an amendment was made on Multiple Dwelling Law in New York. It defines the physical requirements for loft buildings to be used as residential buildings in terms of width and type of staircases, fire escapes, rear yard sizes and other health and safety issues. It has helped provide the first minimum standards for living but has not overcome all issues of loft living (URL 6).

The SoHo Artists Association (SAA) was established in 1968. It consisted of loft dwellers in SoHo who preferred rezoning to protect their investment. In 1971, SoHo was selected as City Planning Commission to become the first loft district for rezoning followed by NoHo and Tribeca in New York city in 1976. In 1974, SoHo was found to be "*the most exciting place to live in the city*" by the New York Magazine. The artists were not silent and secret artist of lofts anymore. Therefore, a new type of use called Joint Living-Work Quarters for Artists (JLWQA) was established. It permitted artist to live and work together on the upper floors of the buildings. Later, loft tenants established Lower Manhattan Loft Tenants (LMLT) in 1978 and New York State established the Loft Law to legalize the properties (URL 6). Thus, it gave responsibilities to tenants and landlords. Lastly, the New York City Loft Board was established by Loft Law to settle arguments between tenants and landlords. Lower Manhattan loft districts have started to be designated by The New York City Landmark

Preservation Commission starting with 26 blocks of SoHo in 1973 and followed by Ladies Mile in 1989, TriBeCa in 1992 and NoHo in 1999. In addition, the help of various media articles about lofts constituted a wide spread notice on the lofts. In 1981, a further zoning change for re-functioning as living lofts was accepted by City Planning Commission. Additionally, SoHo became a well-known international shopping centre and destination (URL 6).

Therefore, it can be said that a new language of living has been started. Architects, city planners, lawyers, loft cooperative boards, loft newspapers, loft legalization provided the power of a new movement (Banks and Tanqueray, 1999) (Figure 7).

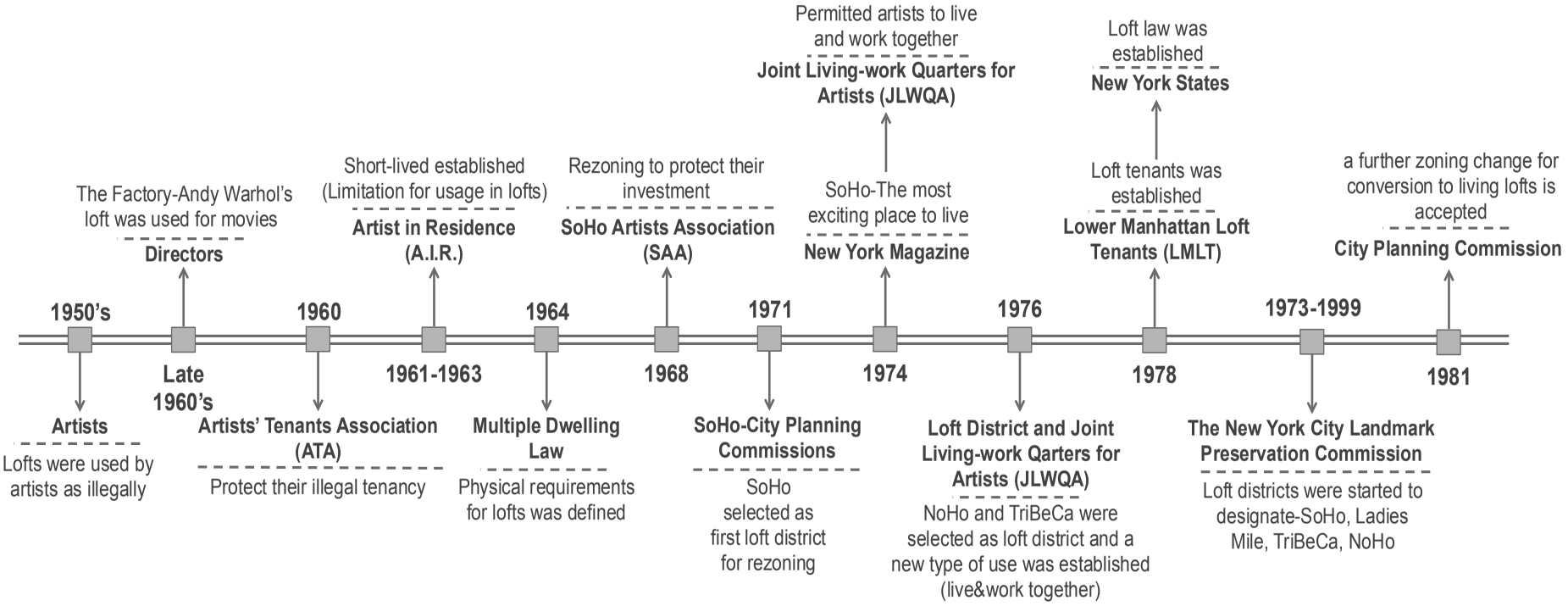


Figure 7: Timeline of lofts' law and organizations

The Spread of Lofts to all over the World

After the emergence of lofts in New York in 1950's, re-functioning of industrial buildings such as historical industrial buildings and non-historical industrial buildings into living and working spaces started to spread to such other countries rapidly where are the first determined places in the next fifty years are shown in the figure 8. Therefore, in the first 50 years, it was spread to Berlin/Germany (1960), London/England (1990's), Sydney/Australia (1990s), Los Angeles/America (1998) and İstanbul/Turkey (2006) respectively and afterwards, it was started to be seen in different countries of the world. Additionally, in 2000s, loft living became a trendy life style in all European countries. However, until early 1970s, living in a loft was not comfortable (Banks and Tanqueray, 1999).

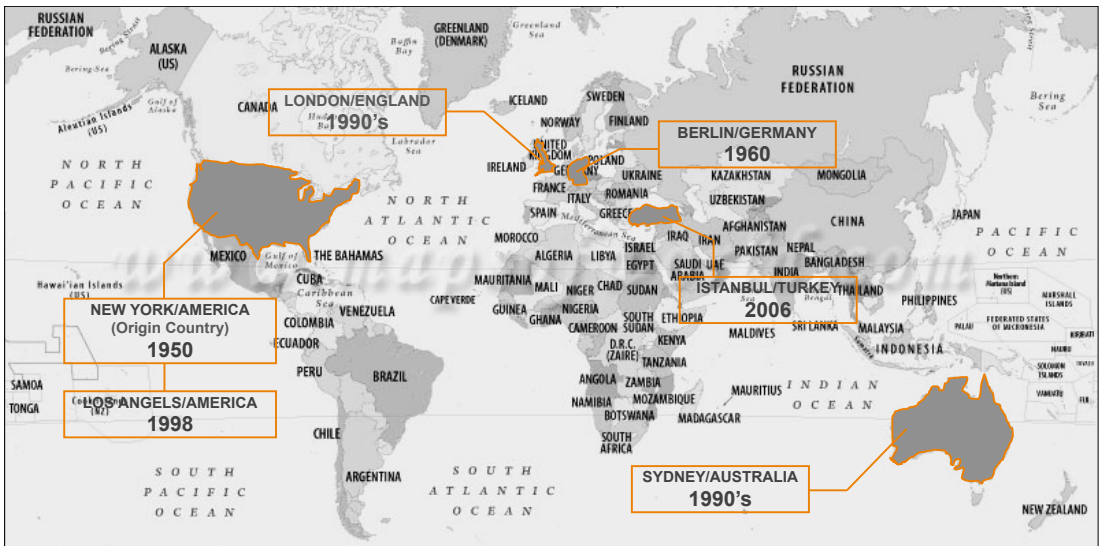


Figure 8: Country of Origin; New York/America and other countries that Loft buildings were spread by years (URL 7, developed by author)

3.2.4 Design Approaches of Lofts

The design of a loft space is created in an existing building, which have historical, architectural and cultural values. There are different factors about design approaches of lofts as;

Existing building and new use; During the formation of lofts, there is a juxtaposition of existing building and the new use besides a holistic view of the way that users use and enjoy the space (Dodsworth 2009: 8). Accordingly, lofts are simple domestic spaces where the structural elements are used as design elements, creating a warm space without the use of designing appliance in the interiors (Culto, 2001).

Holistic perception; In a loft space, the elements that divide the space are minimized and a single space is created. This concept provides a holistic perception with uninterrupted transitive spaces (Schaumburg, 2003).

Minimalist strategies; Lofts are pointed by minimalist strategies. It is not only minimalism related to smooth surface areas that are white colour but also minimalism used to create useful and flexible homes that satisfy the architect and user's demands (O'Kelly and Dean, 2007).

User and space relation; User has an interactive relation with the interior space. Accordingly, the character of lofts has very strongly been mirrored on the creation of interior atmosphere. This situation provides that lofts have a distinctive condition due to an indivisible/inseparable organic relation among the space and the user.

Personalization; As Marcus (2006) stated, no matter what the space is, an individual adds a personal touch to it. Therefore, he/she personalises it. Loft spaces present a unique exemplification of the user - space interaction though personalization and creation of the sole interior atmosphere.

Unprecedented design freedom; Banks and Tanqueray (1999) pointed out that lofts liberate people from traditional homes and designs where interior style is broadened and give people unprecedented design freedom. It means that lofts provide and give opportunities to people to do whatever they want, not what they should do for interior design of loft spaces. The parameters of interior style have been changed and unprecedented design freedom has been started in the loft spaces.

Space organization; The space organization of lofts can be left open or closed with additional vertical or horizontal elements. Lofts give freedom to its user instead of typical solutions of a regular residential use and regular approach to design that have divided space, regular window size and construction material (Banks and Tanqueray, 1999). On the contrary, the industrial and useful materials of lofts have started to become the new domestic. The furniture is flexible, informal and kind of independent for not depending on the rooms in the loft spaces (Banks and Tanqueray, 1999).

Furthermore, the examples of lofts cannot be seen everywhere. There is limited literature on their interior design. For this reason, interior design approaches of existing/real lofts have been researched in more detail by examining the interior spaces of lofts in London through an on-site observation/reading and the observation is supported by the literature.

Therefore, during this research an in-depth investigation of the loft spaces has been carried out in 9 different lofts (see Appendix D) in Shoreditch, Islington and Kings Cross, which were adapted from industrial buildings into living spaces through observations via on-site research in 2014. Generally, lofts cases have been selected from Shoreditch district, which was the trade centre of London and adapted into a

residential district. On-site observations are significant in order to understand the design idea of loft spaces in a comprehensive point of view due to limited number of literature sources focusing on the design/interior qualities of the lofts. Accordingly, the idea about design of loft spaces has been provided with the help of these real cases analyses/investigations.

Loft Examples from UK (United Kingdom) - London City

London, which is a metropolitan city of England, was famous for its loft spaces in 1990s. Shoreditch district in London is one of the most popular areas for re-functioning of historical buildings into lofts. It is an inner city in the historic East End of London. In the ancient period, it was the trade centre of the city. Because of this, many wealthy people who were mostly tradesman started to move out of London to Shoreditch. They used to live in double storey warehouses not only to live but also to work. The ground floor was utilized as a workshop area and the upper floor was utilized for living. After the Early Victorian period (1840s), all of these places were destroyed to build multi storey warehouses (Owen, 1991).

After the Industrial Revolution, warehouses were built intensively in Shoreditch and it became the centre of trade especially for clothing, furniture and printing. Accordingly, as the years passed, handmade industry was changed by industrial revolution. Therefore, poor people started to move out from Shoreditch and population decreased as a result of Industrial Revolution. Trade works slowed down and warehouses were closed one by one following the migration (Owen, 1991). On the other hand, these empty warehouses, which were large, open spaces, attracted a large number of upcoming artists. Later on, this group attracted other creative architects, and filmmakers (URL 8).

In 1990s, adaptation of the interiors of historical warehouses into loft apartments by rich people of London city has started (URL 8). Today, Shoreditch of London City is a popular place of loft apartments, which are being sold or rented with high prices within the original characteristic features of warehouses that have been adapted into residential utilities.

Design Approaches of Lofts in London

Different examples from London have been investigated both from the exterior and interior to acquire the conceptual idea behind lofts' design articulation. Accordingly, the facade of the existing building, construction material, existing structure, space organization, planar elements, furniture and space accessories have been observed from the exterior to the interior.

It is understood that the *facade of existing building* has preserved its original characteristics. In addition, the analysed London lofts are multi storey apartment style lofts. The image of the existing building is an industrial one on the outside. However, when it is entered to the space, it is seen that a different atmosphere from the exterior image is used for living purposes (Figure 9).

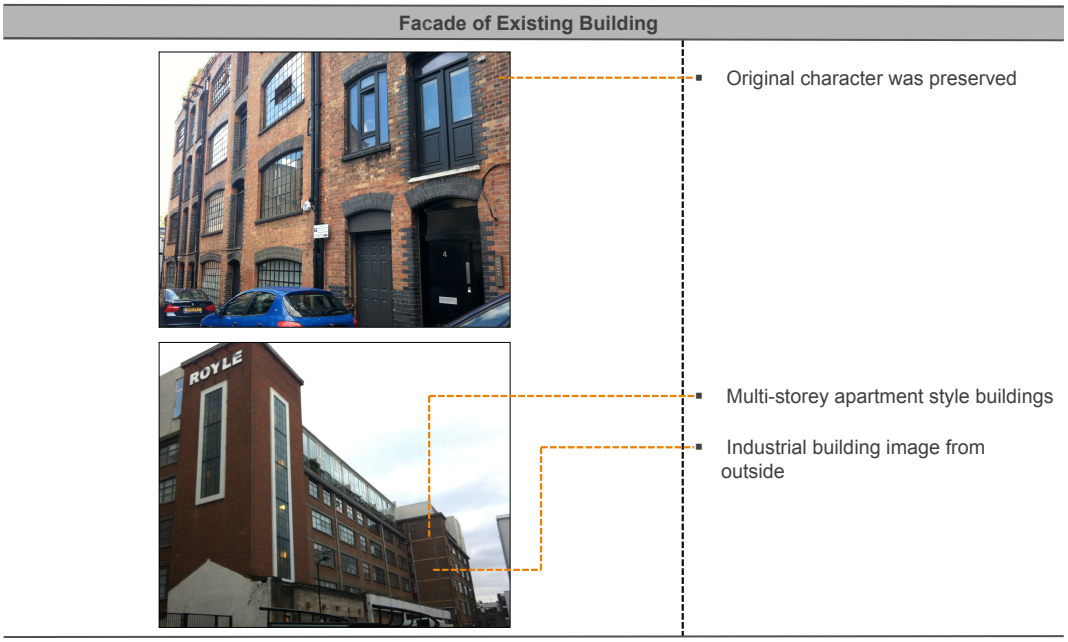


Figure 9: Facade of multi storey London lofts (photos by author, 2014, London)

Observation results have revealed that one of the characteristic features of lofts is the *brick wall material* that has maintained its original nature on the outer shell but can be covered in the interiors of London loft spaces. They can either be preserved as they are or covered in the interiors in line with the interior design of loft spaces such as completely covered, semi covered or uncovered surfaces. Particularly, tactile texture of existing wall surfaces which is either used with its original character or painted in white has been used as a part of design in London lofts. Therefore, original brick walls in loft interiors have not been seen in the majority of the investigated cases and could be identified in a few cases. Furthermore, brick walls of existing industrial buildings that are known as one of the main characteristic features of the lofts' interior have shown that preservation of existing bricks are related with interior design approach of loft spaces (Figure 10).

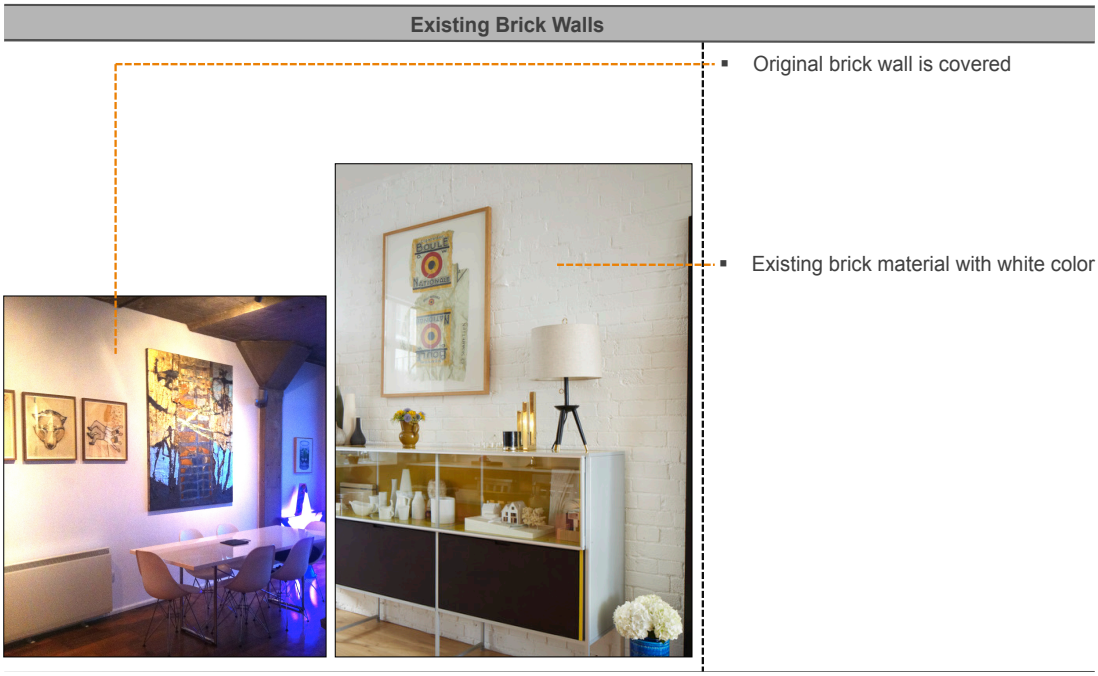


Figure 10: Existing brick walls of loft spaces (photos by author, 2014, London)

Structural elements have revealed other notable features of the loft interiors. Thus, such structural elements of the existing building as concrete, timber or cast-iron beams and columns have been preserved in the loft spaces as one of the unique characteristic features of the lofts. Therefore, it has been seen that the existing structures have created a contrast while using modern design language and furniture in the loft spaces (Figure 11).

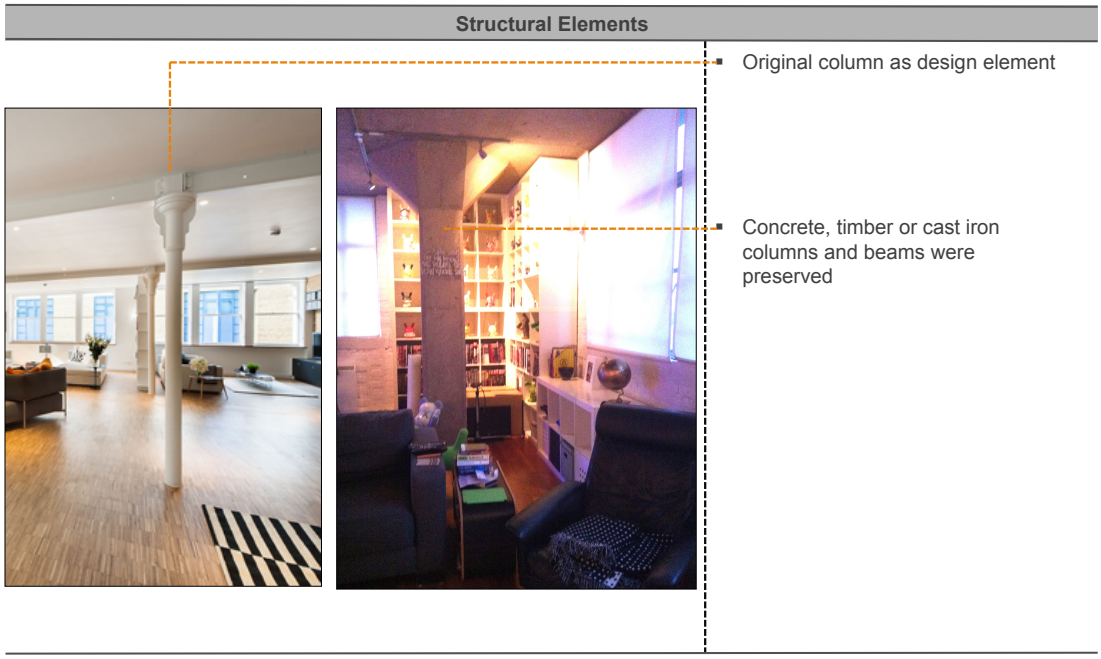


Figure 11:Existing structure in the Loft spaces (photos by author, 2014, London)

Investigations have put forward that intervention in an existing building is related to the characteristic features in line with the previous function and structural characteristics of the existing building. Therefore, it could be noted that when the building type and old function of lofts is a warehouse, factory and a hangar, closed space organization cannot be applied due to their formal characteristics based on being single story spaces. Accordingly, warehouse, factory and hangar buildings have been adapted into single storey lofts, which originally have very high ceilings, but are divided into different spaces with horizontal elements to create different functions in a single volume. On the other hand, apartment style mill buildings as London lofts are multi storey spaces. During the re-functioning of these buildings into lofts, *closed space organization* approach has been preferred with the use of vertical elements to create different sub-spaces in their interiors (Figure 12).

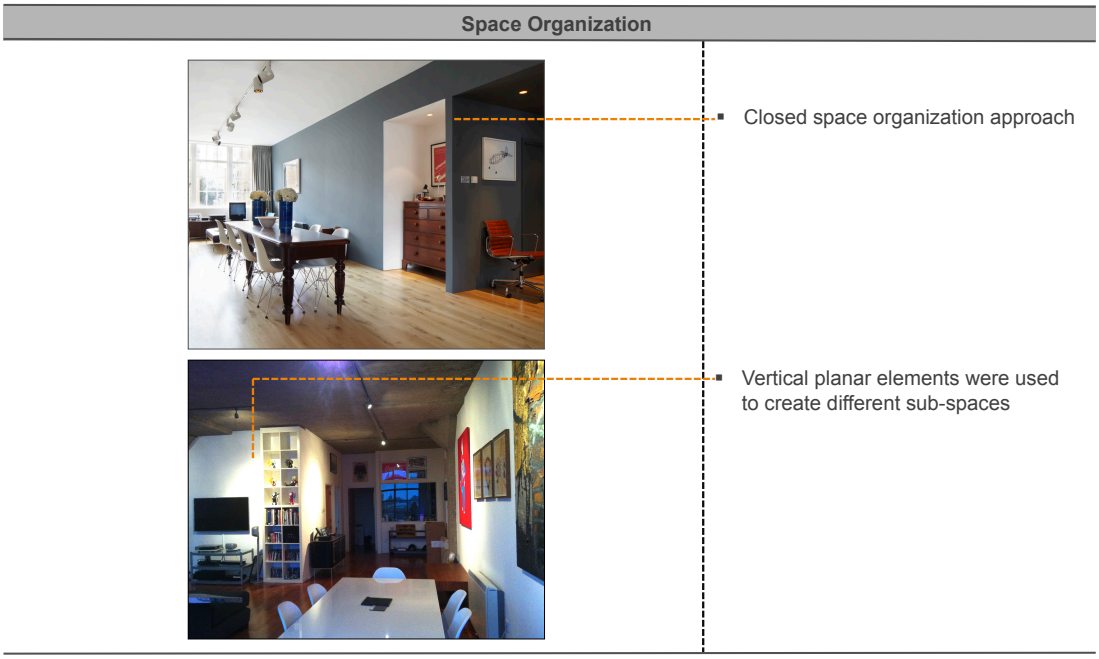


Figure 12: Space organization of London Lofts (photos by author, 2014, London)

According to the closed space organization of London lofts, closed spaces are defined as *vertical planar elements*, which are additions to the existing building surfaces. Although there are vertical planar elements as wall surfaces, freestanding elements have also been preferred to define different spaces in a few lofts (Figure 13).

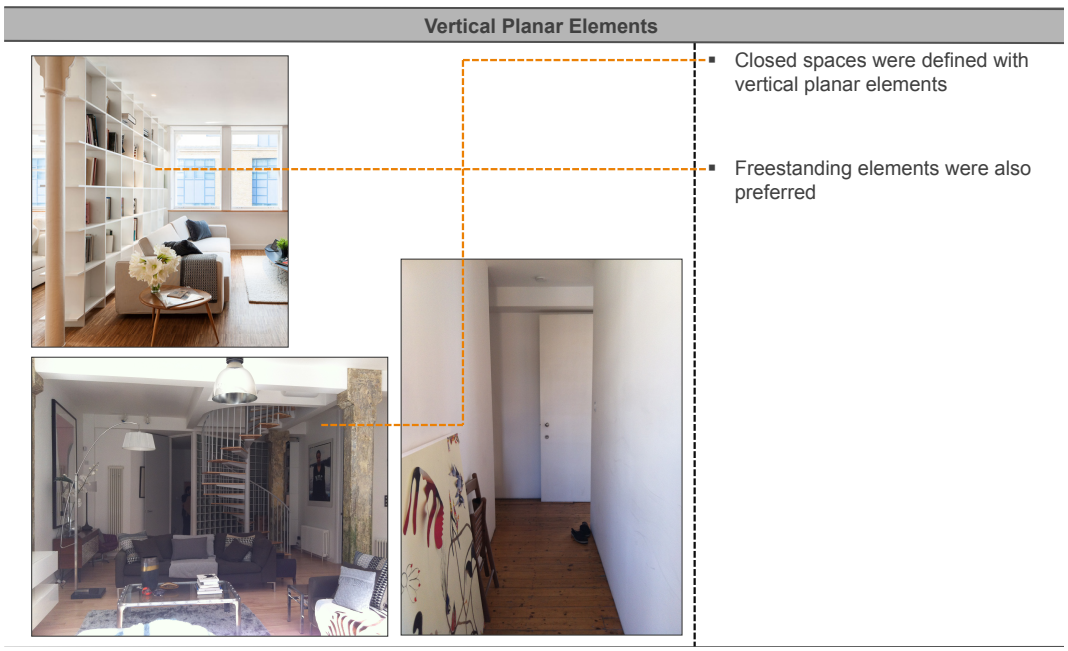


Figure 13: Vertical elements in loft spaces (photos by author, 2014, London)

In general, investigation results have revealed that London lofts are multi storey spaces. Therefore, they do not have high ceilings to create additional level differences within the space except a few examples. These lofts with high ceilings are divided into different floors by the addition of new structures within the interior space. However, loft spaces' floor and ceilings with no high ceiling are covered with new materials (Figure 14).

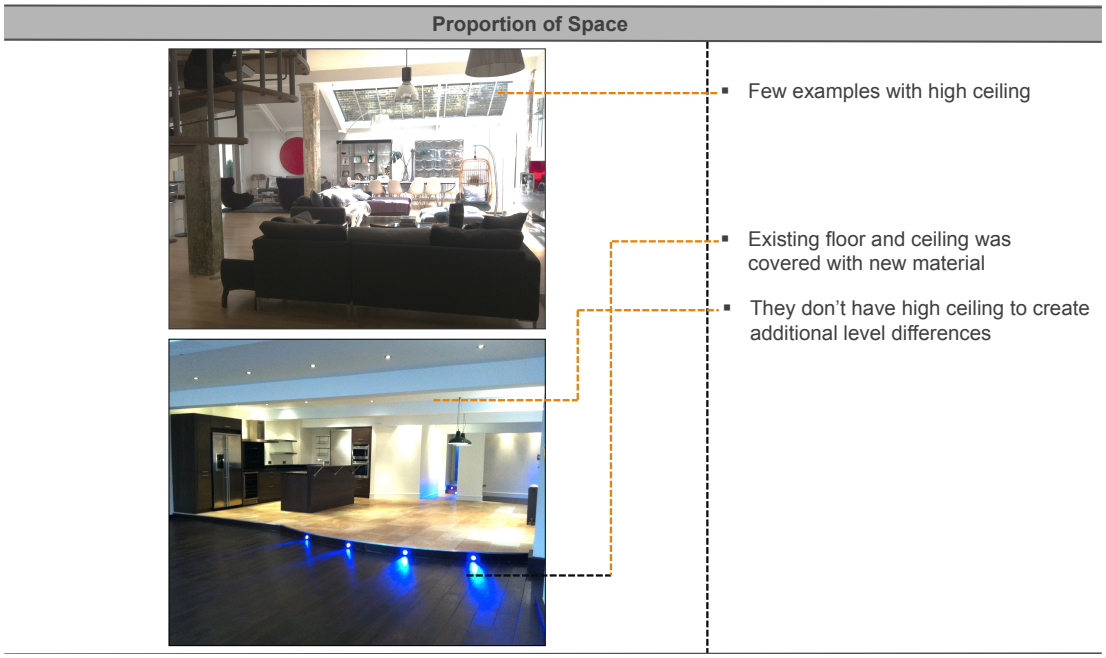


Figure 14:Interventions on horizontal planes in London Lofts (photos by author, 2014, London)

Investigations have put forward that *displays* have been used in London lofts as unusual accessories and intimate visual details. In addition, there is a special emphasis on personalization of interiors while imbuing a peculiar meaning on the interior of lofts. Therefore, displays of London lofts define the character of interior atmosphere both functional and visual with accessories such as wall hanging lamps, pillows, a retro telephone, comic figures or bicycle on the wall surface. Furthermore, displays of lofts have been used as objects that reflect the dominancy in the interior. In general, it is

investigated that the display elements in interiors reflect either interest of the users or their profession. This provides unique exemplification between the space and user of lofts. For instance, on one side of a London Loft, personal items of the users are exposed as displays while on the other side there is a demonstration of numerous animation figures in loft that have been investigated as the chief elements defining the atmosphere (Figure 15).

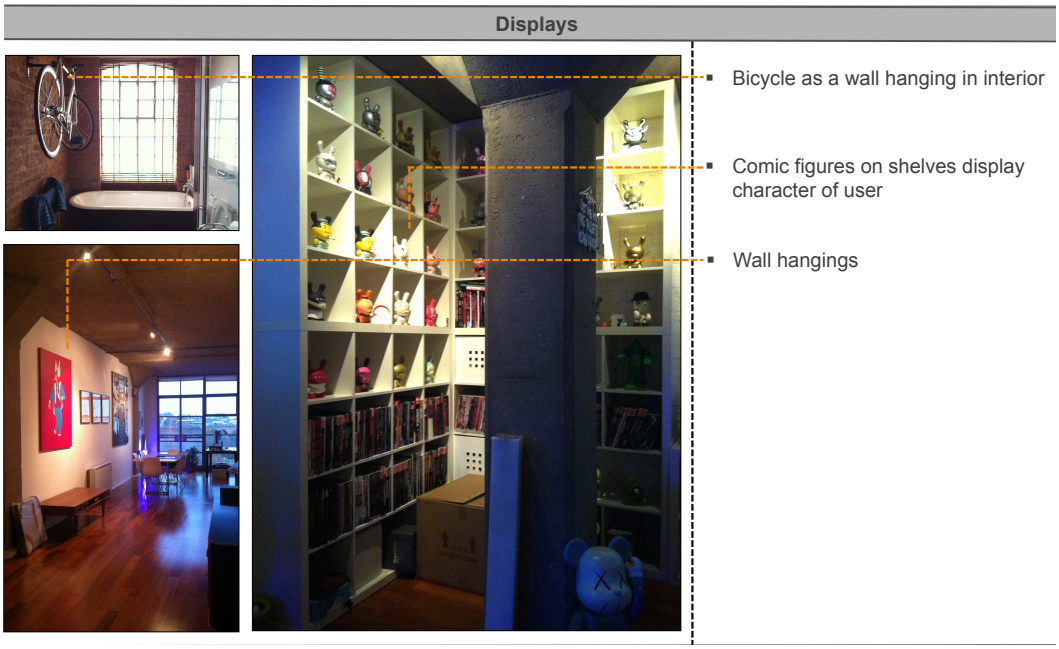


Figure 15: Displays in London Lofts (photos by author, 2014, London)

Accordingly, different examples have been investigated during on-site observations to understand the design idea of loft spaces from a comprehensive point of view. Therefore, the design approaches of lofts have been provided. Firstly, design approaches of lofts have been investigated by theory and on-site observation in London has been conducted to support the design approaches of lofts. Thus, exploration of loft spaces' design approaches can be mentioned with concepts as *combination of old and new as an approach, design approach* and *inseparable organic relation among the space and the user* with sub-concepts shown in Table 11.

Table 11: Concept and sub-concept of design approaches of lofts

Design Approaches of Lofts		
Researchers	**Definition**	**Concept and Sub-concept**
Dodsworth (2009)	Juxtaposition of existing building and the new use	▪ Combination of old and new as an approach ▪ Existing building and new design ▪ Existing character
Culto (2001)	Structural elements are used as design elements	
London on-site reading (2014)	Multi-storey apartment style lofts	
	Existing brick walls are preserved or covered as a shell	
	Concrete, timber or cast-iron beams and columns are preserved	
Schaumburg (2003)	A holistic perception with uninterrupted spaces	▪ Design approach ▪ Space organization ▪ Preservation level of existing character ▪ Design approach in terms of existing character ▪ Unprecedented design approach
Banks and Tanqueray (1999)	Loft gives people unprecedented design freedom	
London on-site reading (2014)	Closed space organization	
	Vertical planar elements create different spaces with freestanding elements	
	In general do not have high ceiling, different floor additions are not seen but few examples with high ceiling and new floor addition	
Marcus (2006)	Personalizing spaces (unique exemplification of the user - space interaction)	▪ Inseparable organic relation among the space and the use ▪ User and space interaction ▪ Distinctive details ▪ Personalization
London on-site reading (2014)	Special emphasis on personalization (display elements in interiors reflect either interest of the users or their profession)	
	Unusual accessorize and intimate visual details	
	Objects as dominant element	

The exploration of lofts can be summarized as the re-functioning of existing industrial building stock such as warehouses, factories, hangars and mills into residential use. These kinds of buildings are unused buildings, which await to have a new life after the re-functioning. In general, a large volume has become a new concept by transforming its high ceiling, unitary integrity and structure containing existing floors, ceilings and walls with architectural and historical values. However, it is seen that London lofts differentiate themselves from these characteristics. In addition, it has been obtained that they have different characters than the known loft characters at certain points. For instance, the selected examples in London lofts are apartment style lofts that do not have high ceilings and existing brick walls are partly preserved or covered. Therefore, it can be said that design approach of lofts can show differences between each other.

Lofts can be described as *"alternative living spaces that are original and personalized"*. Lofts are a kind of "alternative living" in terms of distinctive factors that differentiate them from regular living spaces. The reason behind is lofts are non-residential spaces that have characteristics different from regular living spaces with their high ceilings, single volume, large cast iron windows and cast iron/timber structures. In addition, they are paradoxical and have openness with a free plan approach. Furthermore, lofts are "personalized spaces" since they integrate with their users. Loft spaces have unusual belongings that reflect the character of user profile in the interior. It has an organic structure with the user which cannot be divided. Thus, lofts present a unique exemplification of a user-space interaction. Although this relation is very important also in regular living spaces, loft spaces have stronger relation because of the personalization and unique exemplification. Furthermore, space criteria are one of the most important factors to reflect the character of user profile in the interior such as colour, texture, style and accessories.

Aforementioned exploration about lofts provides clarification on concepts and sub-concepts, which are the inputs of the framework. Accordingly, sub-concepts of re-functioning of existing industrial building stocks into residential use; lofts (3.2) are clarified in Table 12.

Table 12: Concepts and sub-concepts of re-functioning of existing industrial building stocks into residential use; lofts

RE-FUNCTIONING OF EXISTING INDUSTRIAL BUILDING STOCKS INTO RESIDENTIAL USE; LOFTS		
Definition of Lofts		
Researchers	**Definition**	**Concept and Sub-concept**
Culto (2001)	An open and semi transparent spaces which are located in industrial buildings such as historical industrial buildings and non-historical industrial buildings	▪ Re-functioning of Industrial buildings (historical and non-historical) ▪ Industrial buildings (historical and non-historical) with new function ▪ Open plan spaces ▪ Multi-story industrial buildings (historical and non-historical) ▪ Large and undivided space ▪ Industrial warehouse space
Karagöz (2007)	The name of warehouse and factories that are adapted to new functions as restaurants, museums, office and residentials	
Field and Irving (1999)	Re-functioning of open plan spaces	
Elmas (2014)	Multi-story adapted existing industrial building stocks that have large and undivided space on each floor	
O'Kelly and Dean (2007)	1990's lofts were an industrial warehouse space with large windows	
Culto (2001)	Re-functioning of existing industrial building stocks as living and/or sometimes both living and working spaces together	▪ Re-functioning of industrial buildings (historical and non-historical) into living spaces ▪ Re-functioning to living space ▪ Re-functioning to living and working space ▪ Open space style residentials ▪ Re-functioning to living space for artist and dwellers ▪ Residential for single person and couples without children ▪ Alternative living space ▪ Living space that have double height ceiling
Lynch (2014)	Re-functioning of non-residential properties to home that have industrial fabric	
Pamukçu (2009)	Re-functioning of existing industrial building stocks to living and working spaces together	
Schaumburg (2003)	Big and open space style residential interiors	
Ullmann (2003)	Large areas that original structure was adapted into residential use	
Banks and Tanqueray (1999)	Re-functioning of historical industrial buildings into residential use	
Aykaç (2014)	Loft is way of life where the spatial perception can be felt at the highest levels	
Erdemir (2016)	Re-functioning of old factories or warehouses into residential use for artists and dwellers	
Zukin (1982)	Predominantly homes for single persons and couples without children that have different characteristics called 'alternative living spaces'	
Can (2016)	They are living spaces as popular and chic	
O'Kelly and Dean (2007)	Todays, lofts are a smaller flat with a double height ceiling and a chic redevelopment	
Determinants of Lofts		
Zukin (1982)	Emerged as new lifestyle	▪ Popular and alternative living space as new lifestyle ▪ New lifestyle ▪ Popular living space ▪ Alternative living
	Popular living space for everyone	
	Alternative living of publicity	
	Lofts have accessibility	▪ Distinctive factors from regular living space ▪ Accessibility ▪ Industrial sense ▪ Differentiation of User ▪ Factory from outside ▪ Open plan ▪ Non-residential feature ▪ Unusual accessories ▪ Contemporary elements with existing characters ▪ Distinctive details
	Space and time factors (sense from industrial age)	
	Lofts are paradoxical (from outside they look like a factory)	
Baum and Christiaanse (2012)	User changing (commercial building repackaged as living space)	
Banks and Tanqueray (1999) Taner (2011)	Openness (open plan or partly open plan)	
Zukin (1982) Karagöz (2007) Pamukçu (2009)	Non-residential features (multi storey or single storey industrial contexts, open floor plan , single volume, high ceiling, timber and cast iron structure, cast iron windows and brick walls)	
Schaumburg (2003) Banks and Tanqueray (1999)	Urban landscape (train and plane pieces, bicycle or automobile)	
	Contemporary elements and appliances are blended with brick walls, exposed pipes, electrical connection boxes and oversized windows	
Lynch (2014)	Distinctive architectural detail on the exterior and symbolically rich interior spaces	
Design Approaches of Lofts		
Dodsworth (2009)	Juxtaposition of existing building and the new use	▪ Combination of old and new as an approach ▪ Existing building and new design ▪ Existing character
Culto (2001)	Structural elements are used as design elements	
London on-site reading (2014)	Multi-storey apartment style lofts	
	Existing brick walls are preserved or covered as a shell	
	Concrete, timber or cast-iron beams and columns are preserved	
Schaumburg (2003)	A holistic perception with uninterrupted spaces	▪ Design approach ▪ Space organization ▪ Intervention level of existing character ▪ Design approach in terms of existing character ▪ Unprecedented design approach
Banks and Tanqueray (1999)	Loft gives people unprecedented design freedom	
London on-site reading (2014)	Closed space organization	
	Vertical planar elements create different spaces with freestanding elements	
	In general do not have high ceiling, different floor additions are not seen but few examples with high ceiling and new floor addition	
Marcus (2006)	Personalizing spaces (unique exemplification of the user - space interaction)	▪ Inseparable organic relation among the space and the user ▪ User and space interaction ▪ Distinctive details ▪ Personalization
London on-site reading (2014)	Special emphasis on personalization (display elements in interiors reflect either interest of the users or their profession)	
	Unusual accessorize and intimate visual details	
	Objects as dominant element	

3.3 Set-up and Set-up Design

In this section, definition of set-up, historical improvement of set-up design, set-up design approach, production designer/art director in set-up and lofts as the context of set-up are discussed to get an idea about set-up and set-up design related with lofts which are used as set-up spaces.

> *"Television and cinema are both powerful visual media that use moving images and sound to captivate and motivate audiences"* (Mahon, 2010).

Cinema is a dynamic that animates the world around us and transports us the world. Dynamism of cinema has the capacity to arrange and rearrange time and motion which reveals its dimensions as social, industrial, historical, technological, political, aesthetical, philosophical, psychological and personal. Therefore, cinema constitutes a huge part of the daily life. People spend time watching it and it also influences people's awareness and constitutes the ideas about the world and its inhabitants (Barnwell, 2008).

Created the illusion of movement, cinema emerged in the world in the late 19th Century. The largest film industry in the world is United States followed by India that has produced 800-900 films per year (Villarejo, 2007). In the beginning, there was no set-up design in the earliest films. A basic setting was created with painted backdrops and simple props by filmmakers. In addition, the set-up design was not realistic in approach and result. It was perceived as an accessory of the screen because it was not interpretive and expressive craft. After this period, art directors and other unit members developed massive factory art departments in the classic Hollywood studio system (Lobrutto 2002). Thus, in film history, from late 1920s to late 1930s was a moment

that more prominence and attention was given to set-up design than other periods (Bergfelder, Harris and Street, 2007).

Set-up design commenced in 1920s and 1930s when filmmakers started to realize the effect of movies on social values and ideals of American culture. Therefore, set-up design was commenced in the first place as a marketing technique for films and architects were called to design the set-up spaces (Egan, 2014). The earlier days of set-up design tried to define what the audience would see on screen. In addition, set-up design focused on repeating a world that many audiences wished to be a part of it. It was more related to duplicate the world instead of the design. Thus, reflection of design to set-up spaces did not have a priority in earlier days. Social values and cultures had the priority in the set-up spaces (Egan, 2014).

Not only on sound stages but in streets and real locations chosen by art directors within the narrative of films, cinema designs are everywhere. Everything starts with a story and design decisions are followed to support the narrative. Thus, films and TV series are shot in an organized set-up space that could be in the interior and exterior in line with the narrative. In recent years, set-up design has been re-emerged and become a key part in the filming process. The set-up design of shootings is related with fictitious user (character user) and the scenario. Therefore, its design constitutes the focal point in the filming process due to its significance in the visualization of scenario to the screen. Thus, who is the responsible person for designing set-up spaces?

3.3.1 Definition of Set-up

The dictionary definition of set up is “a way of organizing something” (URL 9) or “installation of something” (URL 10).

Set-up has another meaning in media as a way of organizing a space for TV screen. Thus, it is a physical space that is organized within the narrative world. The key point in a space is the character, which is fictional. Therefore, the space is organized according to the fictitious user's (character user) character to create the narrative world for a filming or TV series. Lobrutto (2002) states that a set-up is the creation of a film/series with its unique look and has a geographical, historical, social and cultural context. Additionally, sets are spaces that serve the narrative significantly. They are visible to and also integral of the story (Tashiro, 1998). Set-up creates immersive spaces and achieves visual proficiency (Chang and Hsieh, 2018). Furthermore, it is a completed production that animates the place, environment and atmosphere of the story in terms of form, pattern, colour and lighting (Tosun, 2011). Set-up is a space that provides language of a film or series. Thus, it is used for all selected or designed locations.

According to the definition of set-up, it can be said that there is a creation of psychical space and this created space is the narrative space for the character of the narrative world. Therefore, two concepts are constituted as *creation of physical space* and *creation of narrative space*. Additionally, Table 13 shows the concept and sub-concept of set-up that have been determined by the definitions.

Table 13: Concept and sub-concept of definition of set-up

Definition of Set-up		
Researchers	**Definition**	**Concept and Sub-concept**
Dictionary Definition	A way of organizing something Installation of something	▪ Creation of Physical space ▪ Organization
Chang and Hsieh (2018)	Sets create immersive spaces Achieving visual proficiency	▪ Creation of narrative space ▪ Immersive spaces ▪ Visuality ▪ Unique look ▪ Space of story
Lobrutto (2002)	Creation of a film/series with its unique look	
Tosun (2011)	Completed production that animates the place, environment and atmosphere of story	
Tashiro (1998)	Sets serve narrative significant Visible and integral to the story	

3.3.2 Set-up Design Approach

Set-up design has always had dominance in productions made in studios or in real locations. In addition, set-up design renders the screenplay in visual points, colour palette, location, period specification, designs and sets (Lobrutto, 2002).

Bordwell and Thompson (2008) stated that set-up design is like the centre of mise-en-scene. This word derives its name from French which means “putting into the scene”. Therefore, it is an appearance in the film frame. Mise-en-scene includes setting, lighting, costume and the behaviour of the figures (Bordwell and Thompson, 2008). As Villarejo (2007) has put forward, set-up design is a sign of the cinema life and a sense of elements that are created for visual statement of cinema.

Set-up design is the visual art of cinematic storytelling. The look and style of a film and series is constituted by the creativity, artistry and collaboration between the director, director of photography and production designer. The script of the film and director’s vision are interpreted by the production designer and its translation into physical environment presents the story (Villarejo, 2007).

There are different categories of films in cinema. Some films are like stories and some are like novels or series. Additionally, films enlist perception, sensation and responses. It reflects different senses. Therefore, design and space elements reflect the sense of cinema. In addition, a sense of place can be provided with the design of a film. The mood and emotional feelings of the film are essential to establish the atmospheric qualities of sets, location and environment. The director of photography can create the atmosphere in a set-up with the application of colour, choice of lenses, lighting smoke and diffusion (Barnwell, 2008). At first, art directors may provide the physical

environment with such space elements as colour, texture and props according to the generic design. The director of photography can create the mood and emotional feelings with applications. Therefore, it means that the art director and the director of photography can work together to create an emotional sense of the atmosphere. In addition, costumes, hair, make up and accessory also constitute the design decisions. They can be combined with all visual elements of design to create an environment (Donaldson, 2014).

Framing and composition are essential elements that can create a visual image. Framing includes the angle, distance and height of a vantage point onto an image and composition directs the view of the viewer. Therefore, framing involves decisions on what to include in and what to exclude from the formation of space because the space in frame creates the world that is in the film. Additionally, framing shapes the viewers' experience and forces them to only receive the details and contents of the frame (Chang and Hsieh, 2018). In addition, the idea of how to frame images inside the frame has several tools as vertical and horizontal lines, contrast of light and shadow, rule of thirds, colour scheme and other visual design principles (Chang and Hsieh, 2018).

The composition of design elements while creating a set-up space has importance that are space, volume, colour, lighting, texture and props. Thus, art directors create space, building, film set or cities to connect them to the film's narrative. In addition, Bordwell and Thompson (2008) stated that there must be some principles that help create the set-up space for films/series. These can be categorised in five general principles as function, difference and variation, similarity and repetition, development and unity/disunity.

Furthermore, the main theme of a film or series provides the conceptual reflection where the theme can be drama, horror, action, adventure, romantic, comedy, romantic-comedy and science fiction (Ildem, 2014). Accordingly, the main theme provided by the scenario affects the creation of different set-up spaces in line with different conceptual approaches. Thus, the fictitious user (character user) can develop their characters in this physical environment, because set-up space is created to reflect their personal characteristics which is related with story. Personality reflects character, abilities and the life of a human. Accordingly, the personality of fictitious user (character user) can be sanguine, phlegmatic, choleric and melancholic (Ildem, 2014). Sanguine character has a social and active personality. Choleric character has a short-tempered and fast or irritable personality and melancholic character has a wise and quiet personality. Personality has an effective factor in the set-up to reflect the personality of fictitious user to the design of set-up space.

Art directors transform the story and fictitious characters into images that cover architecture, physical space, texture and tonality. Selected space, which is designed by art directors, should be appropriate for the film and the fictitious character. Sketches, photographs, models and detailed storyboards are used to plan every shot in detail. In addition, it is known that the set-up design of a film/series expresses the story and support the fictitious character through architecture, space, shape, colour and texture (Barnwell, 2008).

Colour has many meanings in the set-up design. It is not only used in the images. It can reflect time and place, describe the characters and establish emotion, mood, atmosphere and psychological sensibility. A set-up location or environment is defined

by its use of colour (Barnwell, 2008). An art director of a film produces a colour palette that is a powerful design tool in the set-up.

Additionally, colour allows the art directors to provide harmony or contrast with the narrative. Colour theory is divided into two different areas that are light and pigment. How the spectrum creates colour is provided with light and pigments are provided physically by creating colours through painting. Art directors deal with pigments while director of photography deals with light (Barnwell, 2008).

Visual texture and details of the story are called props. Props are necessary for the story that represent the fictitious user (character user) (Morahan, 1951). Accordingly, the list of props is constituted for each space in terms of scenario such as wallpaper, painting, floor covering, furniture, photograph, book, magazine, newspaper, appliances and audio-visual equipment. Furthermore, it is not possible to tell that design is only a physical representation since it reflects the audience the perception of the story and the character. The story can be visually interpreted to communicate psychological states and the director's point of view as well (Barnwell, 2008).

Additionally, all films have textures. If texture is taken as appealing or inviting to touch through tactile properties of material, slimy, smooth and knobbly, it means that there are many moments of the film sparking a felt connection (Donaldson, 2014). Furthermore, the texture in building materials, fabrics and furnishing create contrast and complement which add realism and tactile sense to the design of set-up spaces. The texture that is real or created by the art department provides veracity of the story (Barnwell, 2008). Texture plays an important role in informing our sense of quality of the space. The depth of the field, how much one can see or hear of what appears on-

screen and whether it is in focus or not, have an important role in the design of set-up spaces (Donaldson, 2014).

Accordingly, the concepts of set-up design can be mentioned in two groups as *narrative world* and *creation of atmosphere in terms of narrative world* with sub-concepts that are shown in Table 14.

Table 14:Concept and sub-concept of set-up design

Set-up Design Approach		
Researchers	**Definition**	**Concept and Sub-concept**
Bordwell and Thompson (2008)	Centre of 'mies-en-scene', putting into the scene	▪ Narrative world
	Appearance which is in the film frame	▪ Image of story
Villarejo (2007)	Visual statement of cinema	▪ Main theme (Conceptual reflection)
	Sign of cinema life	▪ Fictitious user and space relation
	Visual art of cinematic storytelling	▪ Personality
Ildem (2014)	Main theme of a film or series provides the conceptual reflection (drama, horror, action, adventure, romantic, comedy, romantic-comedy and science fiction)	
	Set-up space is created to reflect fictitious user (character user) personal characteristics	
	Personality of fictitious user (character user) are sanguine, phlegmatic choleric and melancholic	
Chang and Hsieh (2018)	Framing and composition are essential elements that can create a visually image	▪ Creation of atmosphere in terms of narrative world
	Framing shapes the viewers' experiences	▪ Visual image
	Frame images has several tools (vertical and horizontal lines, light and shadow, color scheme, design principles)	▪ Design elements (Visual image)
Bordwell and Thompson (2008)	Set-up is created with principles (function, difference and variation, similarity and repetition, development and unity/disunity)	
Villarejo (2007)	Set-up design is a sense of elements	▪ Principles
Barnwell (2008)	Design and space elements reflect sense of cinema	▪ Fictitious user and space relation
	Selected space should be appropriate for the film and fictitious user	
	Set-up design expresses the story and support the fictitious character	▪ Color
	Color has meaning in the set-up design	
	A set-up, location or environment is defined by its use of color	▪ Texture
	Texture in building materials, fabrics and furnishing create contrast that is adding realism and tactile sense to the design of set-up spaces	▪ Design details (props)
Morahan (1951)	Visual texture and details of story - props	
	Props represent fictitious user (character user)	

3.3.3 Production Designer/Art Director in Set-up

Production designer or art director organizes the general look of a film. The rise of the art director, who is an important contributor to the production process, is linked with the history of film to increase the technological sophistication of studios in Hollywood in 1910s and 1930s (Villarejo, 2007). In 1920s and 1930s, art direction in movies came in a sophisticated art form, which was supported by a rich organisation. However, it did not encompass the film visualization that translated the story and gave the characters a living environment. With the emergence of professional title 'art director' by the end of the 1930s, studio design became the key to the dominant mode of production in Hollywood and Europe.

In the film making process, especially in the production context, where the emphasis is on storytelling rather than the visual effect, sets have gained the value they did not have before and combined the requirements of a film narrative (Bergfelder, Harris and Street, 2007). In addition, art directors apply imagination, technique and reality to visually enhance the script by creating images out of ideas.

According to Kuter (1957), an art director should be a cross between an architect, an imaginative artist, an interior architect and a geographer. He may know the history, costume and architecture as well (Street, 2004). However, it may not be enough. An art director should know the angles, lighting effects and colour of space that a cameraman photograph designed space (Deveci, 2013).

The art director is the head of art department who works with the director to conceive how a film is brought onto the screen (Halligan, 2012). An art director is brought in the pre-production part of the process. All films start with an idea, a concept and a

story. Therefore, an art director joins the earlier stage of a film/ series to create a set-up.

The aim of art directors' is to create a design that supports script and fictitious user/ character. In addition, art directors visually translate stories both into a physical design that is easily realized and poetic metaphors that communicate on an intellectual, psychological and emotional level (Morahan, 1951). The visualization of film and impression of the story is provided by the director and art director. The physical environment of the story is the primary concern of the art director. In addition, art directors plan the visual style of film rather than the background set where the action takes place. Although art directors often design and construct a space that the action can take place, they create the space appropriately for the characters residing in them.

An art director has responsibilities on physical environment, sets and locations. They also have other responsibilities which are the selection, creation and construction of sets, locations and environment of a film. Sometimes, the setting space does not need to be constructed. It can be referred to as the streets. Therefore, the set-up is not limited to interiors. If context are arrangements of elements, properties help add mood and give more meaning to context (Villarejo, 2007). Accordingly, the art director who is also called as the production designer is responsible of the whole setting, design and construction for the production. The job of an art director is a complicated process containing the creation of whole world vision (Halligan, 2012).

The visual style or look of a film/series comes from the trinity that is constituted with the director, the director of photography and the art director. First, the art director reads the screenplay and begins to constitute a concept for the material. In addition, the art

director does some research to find a visual potential for the film and expresses it in the physical environment. He takes notes concerning period, location, space, colour and texture (Halligan, 2012). Therefore, he should have the ability to transfer their vision while doing a film/series.

Halligan (2012) highlighted that there are three factors to be an art director. One should adapt oneself to storytelling, know the drawing techniques to draw, and comprehend 3D visualization. In addition, many successful art directors come from fine art departments or study architecture. In addition, an art director should have an idea about space design, costume design, history and technical information on set-up light and photography (Halligan, 2012). Thus, art directors assert that their job provides physical setting advertising the fictitious user (character) and the story. They need to create a combined environment and have to master different skills, from having basic knowledge of styles and art history to the ability to draw sketches and storyboards, selecting props, the demands of planning and preparing construction (Bergfelder, Harris and Street, 2007).

The work continues in collaboration with directors, cinematographers, costume designers and their own staff (Tashiro, 1998). Therefore, the art director and art departments need to be in communiaction with people from other departments such as screenwriters, costume designers, cinematographers, directors and studios to create a specific look (Egan, 2014). The design of a set-up provides the connection of all forms of design and art that includes architecture, interior design, product design, illustration, graphic design, sculpture and painting (Avenell, 2008). Many art directors' education is on architecture which has brought structural design concept to storytelling (Lobrutto, 2002). Accordingly, Tosun (2011) stated that art directors come from cinema-TV or

architecture departments. However, according to the interviews done with art directors in 2013 during on-site studies, it was revealed that the education of art directors is not architecture (see Appendix B). Therefore, it is believed that there is a lack of interior architects in the team of production that could provide positive effect to the process in the team.

3.3.4 Lofts as the Context of Set-up

Art department can organize different spaces as set-up spaces. For instance, filming could be carried out in a studio, an abandoned building as adapted existing industrial building stock as a loft, an apartment or an outside place. Therefore, diversified atmosphere with different set-ups can be created either in the interior space or at the outdoor space.

There are many issues which plays a significant role while an art director shapes the set up context such as architectural style, space, color and texture of wall, floor and ceiling, construction materials, doors, windows, flowers, furniture, floor material, wall material, ceiling material, lighting fixtures, pictures, mirrors, musical instruments, newspapers, posters, art works, photographs, books, rugs, tables, telephones, vases, candlesticks and speciality items which are related to the specificity of the fictitious user (character) and the story (Lobrutto, 2002). Therefore, all of these issues are strongly related with fictitious user (character) especially in set up living spaces, due to the significance where in such context, the space itself echoes the personality of the user as it was stated by, Lobrutto (2002), *"Where we work and live is a reflection of who we are"*. Accordingly, firstly the art director needs to create a breakdown of the characters, which are in the script such as by clarifying "How old are they? What is their ethnic and social background? What social class do they belong to? What is their role in the story? What is their personal style? What is their physical appearance?"

Therefore, the creation of atmosphere would have a strong relation with the specification of a character that is mentioned in the scenario.

Some specific architectural characteristics of lofts such as having large span, high ceiling, large cast-iron windows, and timber/cast-iron structure are found as favourable features by the producers and they prefer to rent these spaces for filming and/or series shooting. As already stated in the previous sections, lofts were rented to artists with lower-price during the time of their emergence and they created their studios both as living and working spaces as well as for the creation of art. Generally, it has been seen that sculpture artists and painter artists created their studios in loft spaces and this usage triggered producers and film artists to start using these spaces for their filming activities. For instance, 'The Factory', Pop-up artist Andy Warhol's loft was a significant/well known instance of this utility as one of the first examples, which has sheltered several movie shootings as a set-up space (Figure 16). This has created attraction for directors to start to use loft spaces as set-up spaces.



Figure 16: The Factory-Andy Warhol's loft (Field and Irving, 1999)

In addition, lofts are used for different purposes. In old times lofts were used by artists in movies as living and working space. Todays, again lofts are used as set-up spaces that are living space and sometimes living and working space together for fictitious user. In fact, abandoned existing industrial building stocks are gained to live with usage of these spaces as set-up spaces. For instance, there are several examples of which they are articulated as living space (loft) for the fictitious user (character) that is shaped/described in the scenario (Figure 17). Furthermore, they are presented to people and they can take attraction by showing these spaces from TV screen.



Figure 17: Example of an existing industrial building stocks that was used as loft in a TV serial, İstanbul/Turkey (photo by author, 2016)

Aforementioned exploration about set-up and set-up design provides a ground to clarify the concepts and sub-concepts (Table 15).

Table 15: Concepts and sub-concepts of set-up and set-up design

SET-UP AND SET-UP DESIGN		
Definition of Set-up		
Researchers	**Definition**	**Concept and Sub-concept**
Dictionary Definition	A way of organizing something Installation of something	▪ Creation of Physical space ▪ Organization
Chang and Hsieh (2018)	Sets create immersive spaces Achieving visual proficiency	▪ Creation of narrative space ▪ Immersive spaces ▪ Visuality ▪ Unique look ▪ Space of story
Lobrutto (2002)	Creation of a film/series with its unique look	
Tosun (2011)	Completed production that animates the place, environment and atmosphere of story	
Tashiro (1998)	Sets serve narrative significant Visible and integral to the story	
Set-up Design Approach		
Bordwell and Thompson (2008)	Centre of 'mies-en-scene', putting into the scene Appearance which is in the film frame	▪ Narrative world ▪ Image of story ▪ Main theme (Conceptual reflection) ▪ Fictitious user and space relation ▪ Personality
Villarejo (2007)	Visual statement of cinema Sign of cinema life Visual art of cinematic storytelling	
Ildem (2014)	Main theme of a film or series provides the conceptual reflection (drama, horror, action, adventure, romantic, comedy, romantic-comedy and science fiction) Set-up space is created to reflect fictitious user (character user) personal characteristics Personality of fictitious user (character user) are sanguine, phlegmatic, choleric and melancholic	
Chang and Hsieh (2018)	Framing and composition are essential elements that can create a visually image Framing shapes the viewers' experiences Frame images has several tools (vertical and horizontal lines, light and shadow, color scheme, design principles)	▪ Creation of atmosphere in terms of narrative world ▪ Visual image ▪ Design elements (Visual image) ▪ Principles ▪ Fictitious user and space relation ▪ Color ▪ Texture ▪ Design details (props)
Bordwell and Thompson (2008)	Set-up is created with principles (function, difference and variation, similarity and repetition, development and unity/disunity)	
Villarejo (2007)	Set-up design is a sense of elements	
Barnwell (2008)	Design and space elements reflect sense of cinema Selected space should be appropriate for the film and fictitious user Set-up design expresses the story and support the fictitious character Color has meaning in the set-up design A set-up, location or environment is defined by its use of color Texture in building materials, fabrics and furnishing create contrast that is adding realism and tactile sense to the design of set-up spaces	
Morahan (1951)	Visual texture and details of story - props Props represent fictitious user (character user)	

3.4 Fundamentals of Interior Design

In this section role of design elements and principles in the creation of interior atmosphere and role of user in the creation of atmosphere are discussed.

Interior architecture employs architectural theory, history, design principles and creation of interior spaces (Coles and House, 2007). In addition, it bridges the practices of architecture and interior architecture that often dealing with structure, environment, function and aesthetic.

Accordingly, fundamentals of interior design can be considered as a field of specialization in interior architecture. It can be constituted as starting with the abstract elements; coming into existence by visual properties; and getting into relation with other parts to provide a whole by the help of organizational strategies (Cetin, 2006).

Therefore, as a general definition, it could be said that design elements and design principles are used to create a unique space in terms of space user while designing an interior space.

3.4.1 Interior Design Approach

Design of an interior space is delineated by the relationship between people/user and the spaces that are shaped by the psychical and psychological parameters that is effective on the enhancement of quality of life. In addition, design of an interior space adds new dimension to a space. It adds depth, understanding and meaning to the space (Dodsworth, 2009). The senses, which are sound, touch, smell and sight are essential parts of the interior space. They transmit messages to the brain in a sense of balance, proportion and psychological reaction (Coles and House, 2007). Furthermore, the interior space is a holistic aspect, which consists of movable and immovable elements.

This derives its quality from the combination of tangible aspects with intangible aspects as texture, light, form and view (Klingenberg, 2012). Thus, the relationship between elements creates an atmosphere and tells a story of life and activities that represents the aspect of the interior.

Design elements are the keys of interior to create an atmosphere (Ching and Binggeli, 2018). They create atmosphere and personality of interior space. In addition, design elements establish the final appearance of an interior space design (Cetin, 2006). Additionally, design elements are palette of interior architects. Therefore, design elements are either used individually or as a combined manner in the interior space. They give character whilst defining the quality and provide the features of a building.

In addition, interior space and design approach create the whole design in interior atmosphere. A concept of interior space is developed within an existing building or within the drawn parameters of a proposed building (Brooker and Stone, 2010). Accordingly, interior architects can create design of interior space in line with different approaches of intervention. For instance, Brooker and Stone (2010) stress on the ways, how architect could employ a conceptual approach of intervention for the interior space atmosphere and mention that the approach could be separated into two distinct parts as *strategy* and *tactics.* They described strategy as the employment of an approach for the overall design of interior and development of a general, overarching plan for the design of the space (Brooker and Stone, 2010). Furthermore, strategy is also mentioned as the elements of space that are shaping its personality; what it looks like, how its feel like or how its sound like in its generic terms (De Certeau, 1984). However, tactics on the other hand stated as the details of design proposal and intimate detailed design of the individual elements, which give character to the space (Brooker

and Stone, 2010). Accordingly, following section of this thesis focuses on the tactics concepts in-depth and further put forward its sub-concepts and their role whilst giving character to the space.

Accordingly, it can be said that interior design approach can have a concept as *creation of interior space* with sub-concepts that is mentioned at the Table 16.

Table 16: Concept and sub-concept of interior design approach

Interior Design Approach		
Researchers	**Definition**	**Concept and Sub-concept**
Cetin (2006)	Design elements establish the final appearance of an interior space design	▪ Creation of interior space ▪ Design elements ▪ Tangible and intangible aspects ▪ Intervention (Design approach) ▪ Tactics (Details/individual elements of space)
Ching and Binggeli (2018)	Design elements are keys of interior to create an atmosphere and they also create personality of interior space	
Klingenberg (2012)	Interior space is a holistic aspect that derives its quality from the combination of tangible aspects with intangible aspects (texture, light, form and view)	
Brooker and Stone (2010)	Design of interior space is created in line with different approaches of intervention (Strategy and tactics) Tactics as details of design proposal and intimate detailed design of the individual elements	

3.4.2 Role of Tactics in The Interior Design Approach

The dictionary meaning of tactic is "a plan or procedure to achieve a result" (URL 11). Additionally, Eden (2005) states that tactics *"aims to overcome shortcoming of the programming or operating environment".* It includes lower level abstractions as design patterns, programming, objects and procedures (Eden, 2005). Thus, tactics are procedures that interventions are transformed into favourable situation. It is a movement that changes the organization of a space. Tactic creates relations between successive moments in an action to the possible intersections of duration and varied rhythms (De Certeau, 1984). Moreover, tactics are installations of interiors that are the features to make up the interior spaces as wall, floor covering, structure, displays and furnishing (Moreno, 2010). These intimate details support conceptual approach of the interior space.

Tactics furthermore explore what interior architects actually do. It addresses the tools of interiors and their tactical employment in the creative industries (Milligan et al., 2011). In addition, in interior architecture, tactics that has been mentioned by different researchers are divided to different groups. Accordingly, Brooker and Stone (2010) revealed that design elements such as light, object, plane and surface including material, color, texture and pattern are the tactics of interior space due to their coexistence as the nature of components or elements of the interior space. For instance, as it was stated by Grimley and Love (2007), surface/plane is the most provocative in the interior due to its determining role on the mood, comfort and atmosphere of spaces. Furthermore, similar to Brooker and Stone's (2010) approach they stated that interior space atmosphere is created with the articulation of the space defining elements and they emphasize the chief role of planes in this definition due to their diversified characteristic including color, material texture and pattern, lighting besides furniture

and displays as functional and decorative accessories which are shaping the atmospherics.

Coles and House (2007) on the other hand categorize design elements and notions that are composing interior space as plane, scale, proportion, vista, movement, transition, accessibility and material, texture, light and color as the integral-introduced elements. Dodsworth (2009) describes elements that define the atmospherics as the details of interior spaces and group them as material and finishes, texture, form, color, furniture, light and ordering system that are axis, balance, datum, harmony, unity, emphasis/dominance and rhythm/repetition.

Design elements and design principles that were grouped by various researchers as the sub-categories of tactics were collated from four key resources by Brooker and Stone (2010) - “What is Interior Design”, Coles and House (2007) - “The Fundamentals of Interior Architecture”, Dodsworth (2009) - “The Fundamentals of Interior Design”, Grimley and Love (2007) - “Color, Space, Style” (Figure 18). This collation would provide a background while developing the analytical framework however there is a need to enrich the general categorization and provide their sub-criteria for a comprehensive point of view. Accordingly, each element that was categorized by the stated researchers is augmented with additional literature review.

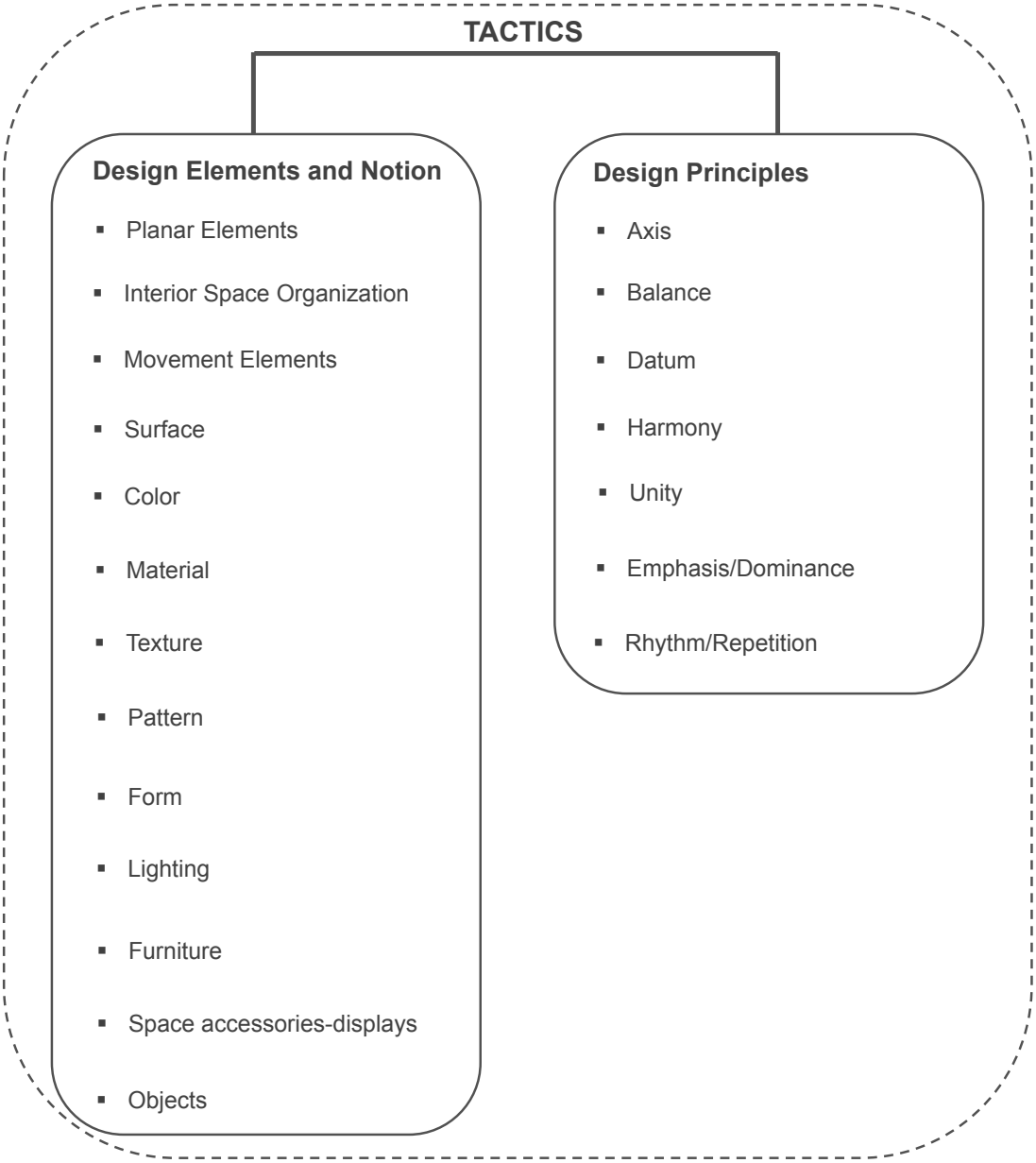


Figure 18: Design elements and design principles as sub-categories of tactics

Design Elements and Notions

Planes are the most fundamental design elements of interior architecture (Dodsworth, 2009). The Spaces are defined with using planes such as wall, floor and ceiling (Coles and House, 2007). Accordingly, a planar element can be vertical (walls and freestanding elements) or horizontal (floors and ceilings) in interiors (Brooker and Stone, 2010). Ching (2007) categorizes plane as overhead plane, wall plane and base plane. The introduction of wall, floor and ceiling in interior allows designers to unite

the various elements of interior. Furthermore, vertical and horizontal elements are utilized to sub-divide and create different spaces in a volume. Articulation of planar elements in interior space is directly related with the proportion and height of the existing building. The properties of plane as color, shape, size and texture and their relationship to one another determine the visual attributes and quality of the interior space (Ching, 2007). Accordingly, design of interior space is determined with the combination of fundamental elements as planes either vertical or horizontal. Furthermore, planar elements provide sense of interior space atmosphere with reflected color, texture and shape. Combination of different space elements with different effects provides the general look of interior space atmosphere (Figure 19).

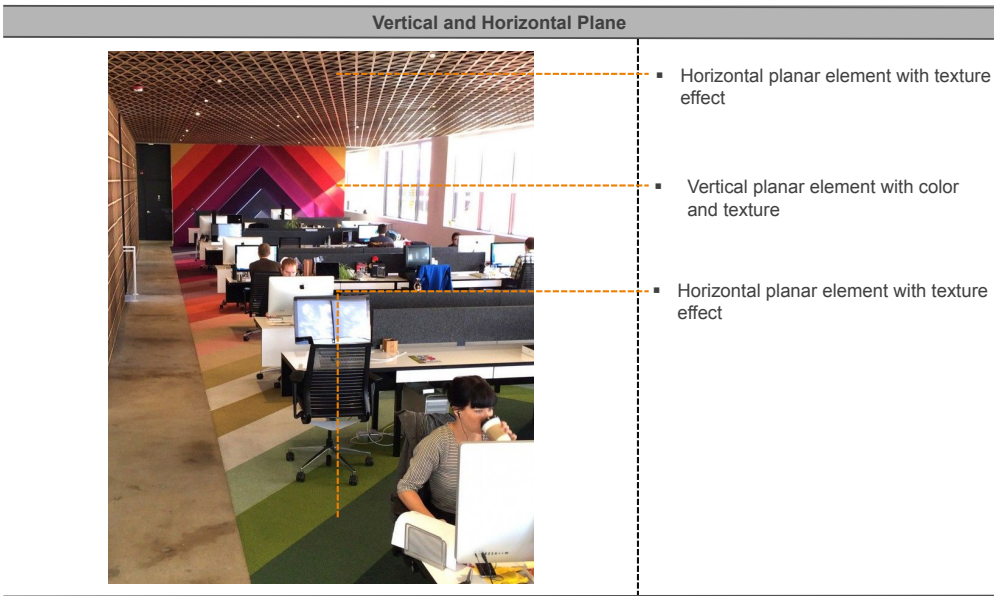


Figure 19: Vertical and Horizontal Plane in Spaces (URL 12)

The interior space can be organized in two categories such as closed plan, which is more compact and contained different spaces, and open plan that has freedom for organizing interior space (Brooker and Stone, 2007). Open plan refers to one and more spaces that are joined to form much larger space by eliminating some of the partition walls. On the contrary, in the closed plan more private spaces are constituted with the

use of vertical planar elements in interior space. Furthermore, interior space organization in the closed plan is constituted with arrangement of space elements as vertical and horizontal planar elements. In addition, Higgins (2015) states interior space can be organized in terms of different methods as linear, radial, clustered and grid organizations. Furthermore, space organization strategies are concerned with making decisions about how they should be organized for the building and how these spaces should do relation into each other. There are four fundamentals ways as space within a space, overlapping spaces, adjacent spaces and spaces linked by a common space (Higgins, 2015).

In addition, stairs, ramps, escalators and elevators are movement elements of space that create possibilities of intrigue. The physical form of staircase offers huge possibilities as a sculpture in its own right and as a device that is linking forms and materials (Coles and House, 2007). For instance, today's staircase is used as a main component of spaces while creating interior space atmosphere which has importance in interior space with its color, form, material and texture (Figure 20).

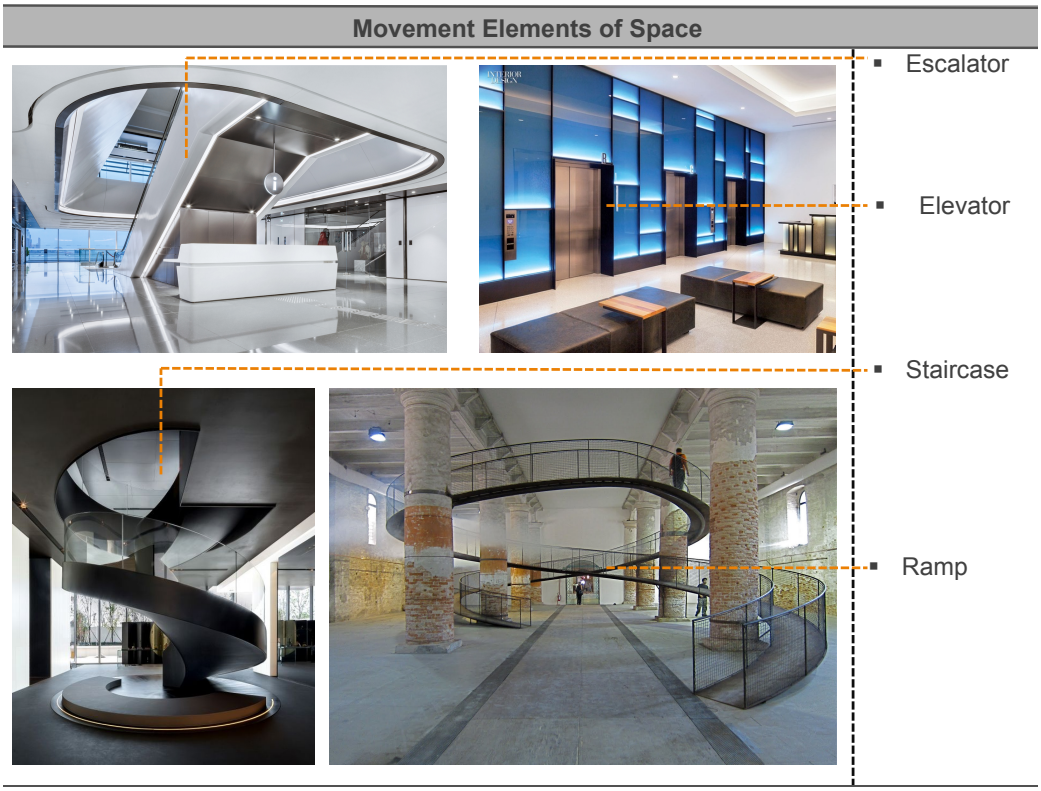


Figure 20: Staircase/movement as a main component in interior space (URL 13-16)

Surfaces are the elements of interior that users have direct contact with it. Surface manipulation is a critical decision for a designer due to selection of it as the distillation or the essence of the message that designer wishes to communicate (Brooker & Stone, 2010). In addition, surfaces are used to define spaces; affect mood, atmosphere and comfort of spaces. Color, material, texture and pattern are highly related and the choice of surface finishes that enables to translate the ideas and how surface variation can impact a space is developed (Grimley & Love, 2007; Coles & House, 2007). Generally, surfaces are discussed in terms of its depth, thinness and the appropriateness of a particular surface to function, space and durability. In detail of surfaces, the designers understand how color, material, texture and pattern have developed while choices of finish is translated into ideas and how its variation can impact the development of an interior space (Grimley and Love, 2007).

An interior is a three-dimensional space, which is enclosed with color completely.

> *"Interior designers must understand the perception and use of color and its result- ing effects on human behaviour. Studies have shown that colour can create excite- ment, relaxation, calmness or cheerfulness… and the way a person interprets or feels colour can vary according to experiences, education and cultural association with colour"* (Kilmer and Kilmer, 1992).

Color has the most affective, powerful and the most mysterious influence in interior design (Reddy, Chakrabarti and Karmakar, 2012). It can add perceived weight to surfaces and change the basic proportions of a room. Additionally, color is one of the fundamental to create a notable space with modest rules or ideas; various schemes or temperature could be used. Color schemes are set of rules for an interior palette. Poore and Ragan (1994) states color temperature as warm colors and cool colors. The color scheme is categorized as monotone, monochromatic, analogous, complementary, split complementary, triads and tetrads. Grimley and Love (2007) states combination of color into six categorize such as monochromatic, analogous, complementary, split complementary, triadic and tetradic. The color temperature is described as warm (reds, oranges, yellows), cold (blues, greens) and neutrals (whites, grays) (Figure 21).



Figure 21: Combination of Color in Interior Space (URL 17-18)

The decisions of designers can change the spatial understanding of space. For instance, color can add perceived weight to surfaces and change the basic proportions of a room. Volumetric approach to color is one of the effecting points in interior space. If interior of space is painted with same color and outside of space has different color, it affects the volumizing of the space. Other point is planar approach to color. Use of color on planar surface can be effective to emphasize the planes in space. Emphasizing small scale of design elements is also affecting point in interior space such as doors and windows. The proportion of a room could be changed according to color usage. Usage of two different colors in a surface can affect the height of a space (Grimley and Love, 2007) (Figure 22).

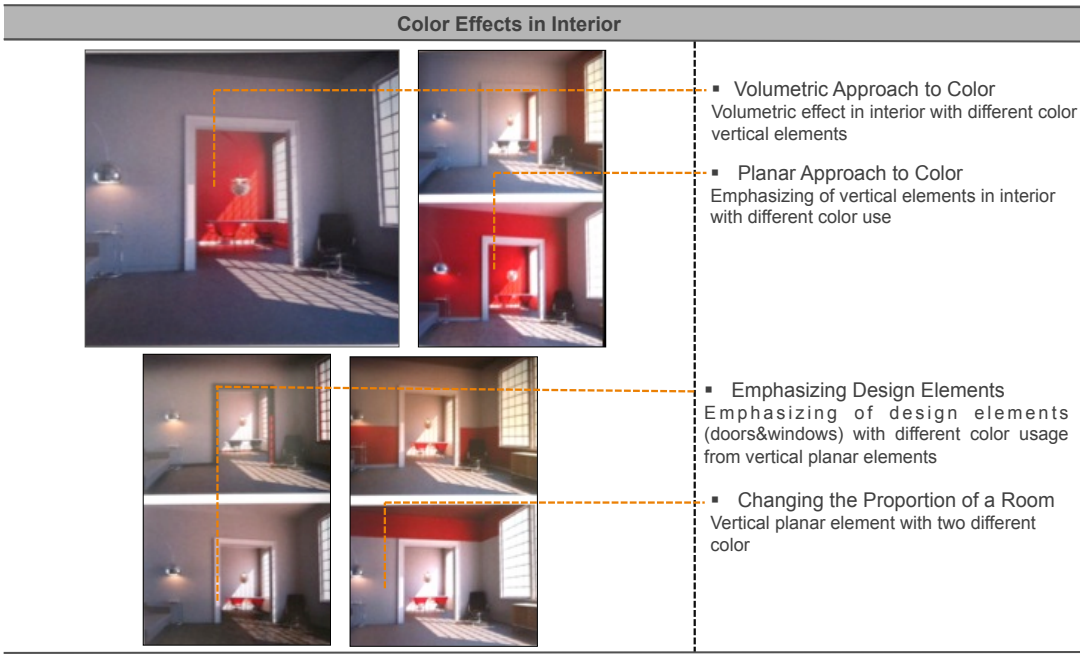


Figure 22: Effect of Color in Spaces (Grimley and Love, 2007)

The use and choice of material in interior is endless. Using the materials imaginatively and evaluating them creatively does not meet the functional of the space that is designed but also find out the abstract, sensual and qualities of place, which are hoped to achieve atmosphere. In addition, materials can direct or change the behaviours of space users. It can be felt as cold or warm, relax or anxious excited or subdued, all because of the "thousand different possibilities in one material alone" (Gagg, 2011).

Materials and the textures that either natural or artificial are often defining the essential qualities of a space. For instance, the handle of a door, the noise that your feet make on the floor, the wall surface that you walk along a corridor, the smells of the wood that surrounds you and the bright reflections form the glass that distract your eye; all of these are the result of treatment, choice, assembly and positioning of materials within the design (Gagg, 2011). In addition, interior space materials are selected according to the features of function (Ayalp, 2012).

In addition, usage of material in interior space creates visual contrast as light versus heavy and opaque versus transparent. ‘Lightness’ and ‘heaviness’ can be achieved through the dimension of elements, their color, texture, proportion and the materials used in their construction. For instance, opaque, solid, matt, thick and darkly coloured wall is perceived as heavy. On the contrary, transparent, shiny, thin, smooth and light in color reflects lightness in an interior space. Materials that are used to create the space divisions determine the levels of opacity and transparency in interior space (Higgins, 2015). The space with transparent material creates an open space effect and opaque material usage creates closed space effects in interior.

Material is the fundamental of interior space, which constitutes the main interior architect’s palette. In addition, materials have strong relation with color, light, texture and pattern. Grimley and Love (2007) mentioed, texture in interior space is interrelated with plane, object, material and color of space. It refers to how the surface of a material feels. Additionally, texture is the first layer of any object which is the first thing that user perceive. It brings the sense of life in a space that can be seen and touched (Reddy, Chakrabarti and Karmakar, 2012). It is the most haptic that can be understood by its touch. Interior architects use the ability of texture to give different feelings to users of spaces (Grimley and Love, 2007; Spankie, 2009). For instance, warm or coldness interior atmospheres could be designed with the use of texture. The user perception on texture is divided into two basic types such as visual and tactile. Visual texture is perceived texture by visual sensation and the tactile texture is a specifically interpreted texture (Safavi, 2013). In addition, visual texture refers to two-dimensional surface qualities and tactile texture refers to three-dimensional surface qualities in interior space (Kamalzadeh, 2014) (Figure 23).

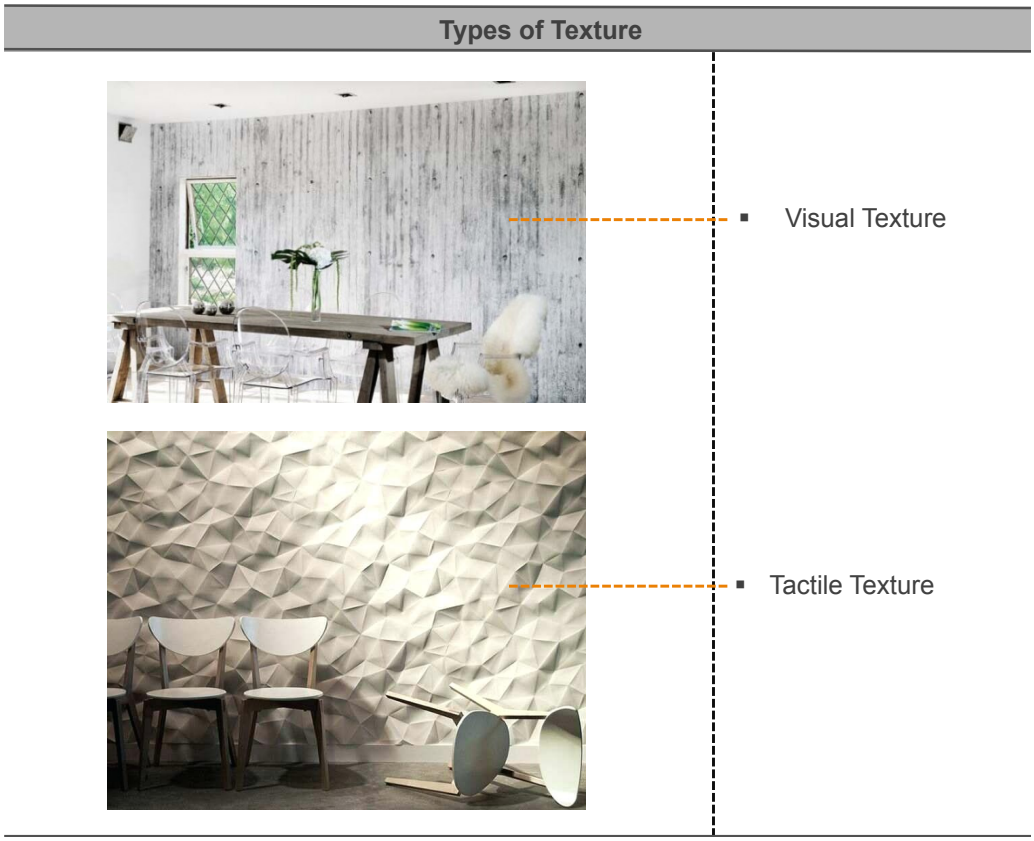


Figure 23: Visual and Tactile Texture in interior Space (URL 19)

In addition, pattern is a repetition of element, which gives visual interests to the surfaces of an interior space (Grimley and Love, 2007). Scale has an important factor that is one of the considerations of pattern. It can be related with wall, floor, ceiling and furniture surfaces in interior space, because, size of the pattern and where it is applied (floor, wall or furniture) should be considered while applying. In addition, pattern is applied to surfaces and figures that repeated indefinitely (Odabasioglu, 2015). It uses techniques of arrangement, reproduction, fragmentation and repetition (Spankie, 2009). Generally, patterns are associated with textiles but it can be found in textural elements of interior space such as a brick wall. The characteristics of pattern can be divided into four such as uniform repeat, rotated repeat, two-dimensional pattern and three-dimensional pattern (Grimley and Love, 2007) (Figure 24).

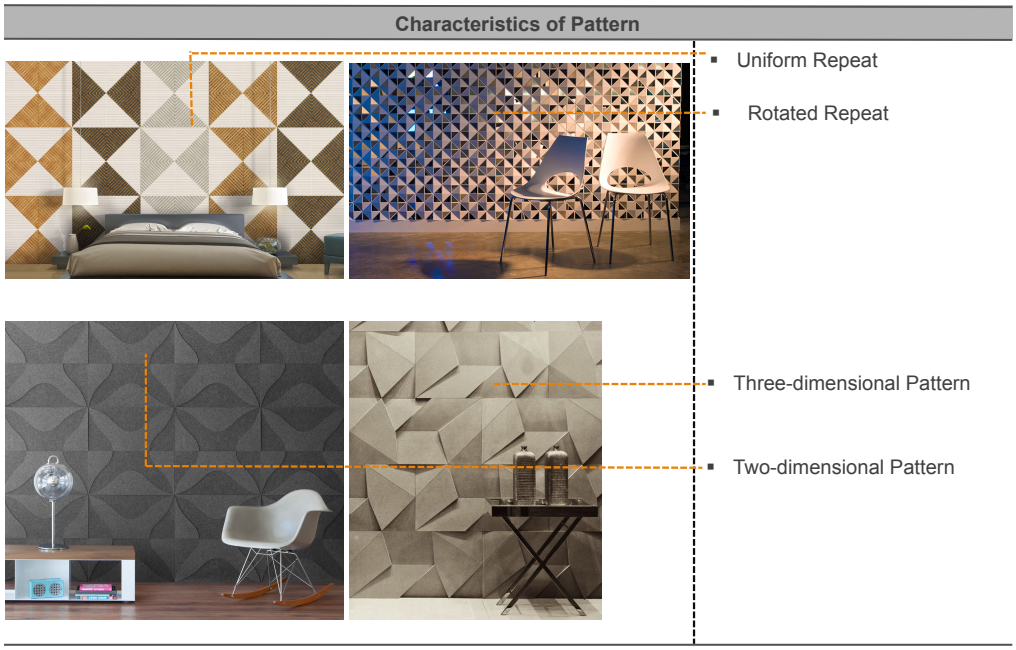


Figure 24: The Characteristics of Pattern (URL20-23)

Form makes reference to both external outline and internal structure and includes a sense of three-dimensional volume. It also refers to the design principles that give unity to the whole (Ching and Juroszek, 2010). It is the most obvious indicator in interior space that form of furniture and planar elements can reflect the style of space (Dodsworth, 2009). Furthermore, it can be said that different planar elements with different forms as linear, curvilinear and cracked effect to the creation of interior space atmosphere. Design bases as furniture and movement and also planar elements define an interior space. These are the main components of interiors, which are affecting to the space with their forms. Accordingly, interior space atmosphere is designed and dominated with the forms of components.

Lighting provides us to perform tasks easily, making us feel safer, more comfortable and allows to enjoy space with its full potential (Reddy, Chakrabarti and Karmakar, 2012). It is the fundamental of interior spaces and careful manipulation of various types (natural and artificial_ ambient, accent, focal or task) lead to spectacular results.

Kelmen and Kelmen (1992) mentioned,

> *"Light brings interiors to life and is important to our activities and perception of the world around us. By controlling and designing with natural and artificial light, the interior designer can create striking design concepts in interior spaces and provide for the visual needs of user activities".*

Additionally, manipulation of artificial light and natural light can shape and alter interior space or used to illustrate a junction between new and old within a space (Brooker & Stone, 2010; Grimly & Love, 2007). In addition, the visibility of objects is provided with lighting in interior space atmosphere. Lighting is a powerful tool in hands of interior architects to direct the observers' attention (Safavi, 2013). For instance, an object and displays are distinguished in the interior by the direction of light. Furthermore, there is a paradox in the relationship between light and form, because of the light which we can see surface, form and color. An interior space without an opening is a black bow; create a window or use artificial lighting to come to life (Spankie, 2009) (Figure 25).

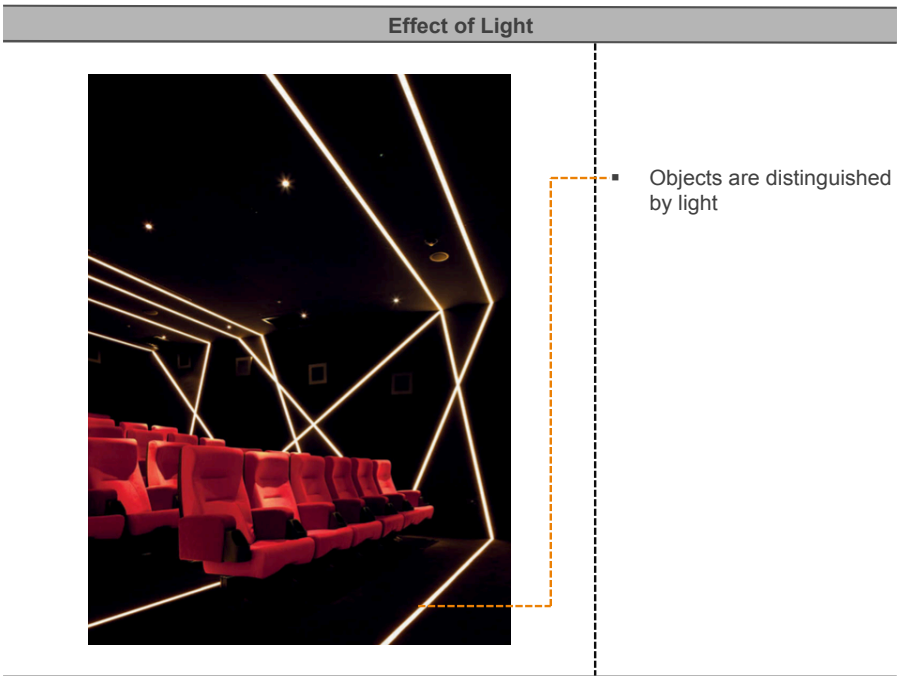


Figure 25: Effect of light in interior that is distinguishing space elements (Leydecker, 2013)

Sully (2015) states that lighting is divided into two as artificial lighting and natural lighting. Accordingly, artificial lighting is divided as general or ambient lighting, task lighting, accent lighting, decorative lighting and illuminated lighting (Sully, 2015). Grimley and Love (2007) categorize artificial lighting as ambient lighting, accent lighting, focal lighting and task lighting. Ambient lighting is used for general purpose of interior space that achieved through many ceiling light fittings. Accent lighting is used as spotlight to emphasize a specific artwork, architectural detail or piece of furniture. Therefore, this can be for restaurants, museums, galleries, exhibitions, theatres and cinemas. Focal lightings could be chandeliers, wall scones and lamps that can be served as focal point in interior space. Task lightings provide a specific activity such as desktop light in offices, night light and reading light (Grimley and Love, 2007; Sully 2015).

Accordingly, interior architecture can not be experienced without light. It allows us to make sense of our surrounding. Light reveals three-dimensional form and color in interior space and plays of light expose the texture of surfaces and materials. In addition, light influences the mood and atmosphere of interior space. Both light and color can be used to provide users' feel as stimulated or subdued (Innes, 2012).

In addition, furnitures are elements that organize a space by defining circulation patterns and and aesthetic identity of an interior space (Kilmer and Kilmer, 1992). In addition, it is the major element in interior design, which have a wide range of color and materials (Ayalp, 2012). Additionally, furniture is one of the needs of interior space. According to the language of interior space, furnitures are determined. They can be either individual or a part of larger collection. Pieces from a collection reflect common style. In addition, furnitures have visual characteristics that can be a dominant

element in the interior space (Dodsworth, 2009). The furniture can also be categorized as fixed and moveable furniture (Grimley and Love, 2007; Kilmer and Kilmer, 1992) or as freestanding and built-in furniture (Dodsworth, 2009).

Space accessories are interior displays that refer to the various objects within the interior space (Yi, 1998). The accessories of an interior space effect to the visual field that is generally smaller than furniture. They have two important roles in interior space. First, they introduce a smaller scale of elements and second, they personalize the spaces. The categories of accessorizes are divided into two as functional accessories and decorative accessories. Mirror, wall clock, telephone and candlestick could be given as example for functional accessories. On the other hand, photographs, plant, wall hanging, rug, pillow could be the example for decorative accessories in an interior space, which have personal sentimental value (Figure 26). The design of an interior space is completed with accessories that are reflects personal characters in interior (Grimley and Love, 2007).

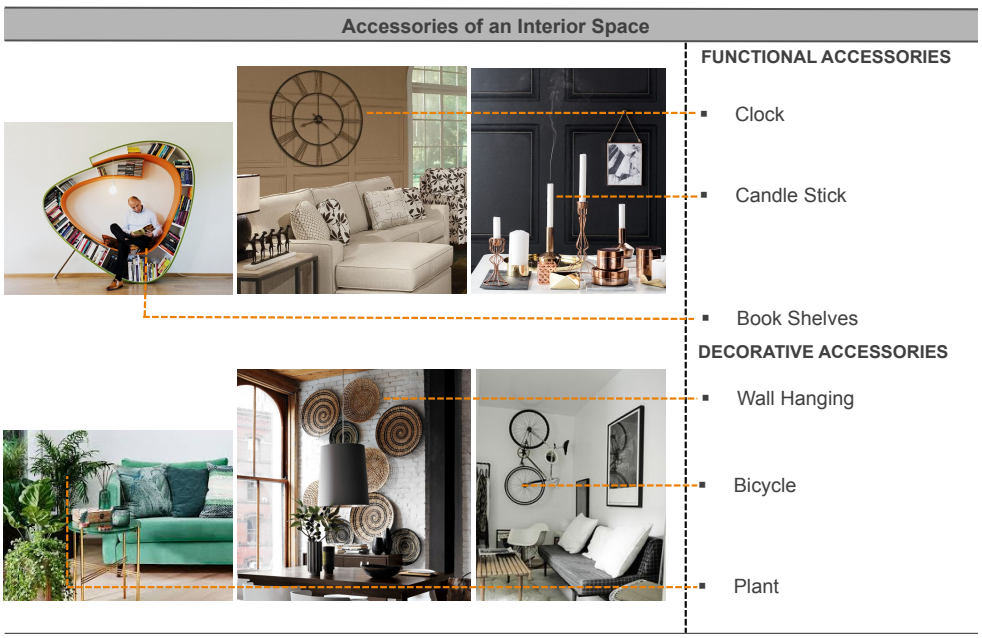


Figure 26: Examples from Accessories of an Interior Space as Functional and Decorative Accessories (URL 23-30)

Objects create construction of the sense of a center and personal territory in the interior space (Tashiro, 1998). An object or a series of objects can be a focal element in a space, which facilitates or encourages movement (Reddy, Chakrabarti and Karmakar, 2012). In addition, focal point created in an interior can a movement, furniture, display and a new mezzanine floor; thus can encourage movement; can be used to create remarkable interiors when they are unusual or extraordinary or can create a contrast within the context; has effect on the visual field besides personalizing and styling interior spaces (Brooker and Stone, 2010; Grimley & Love, 2007). It can provide rhythm or balance and can promote direction, both visually and physically in the interior space (Reddy, Chakrabarti and Karmakar, 2012). In addition, an object has various shapes, forms and hence roles within interior space; can be small or large form (linear, curvilinear, cracked, circular and organic) that could be used to define or organize an interior space (Brooker and Stone, 2010) (Figure 27).

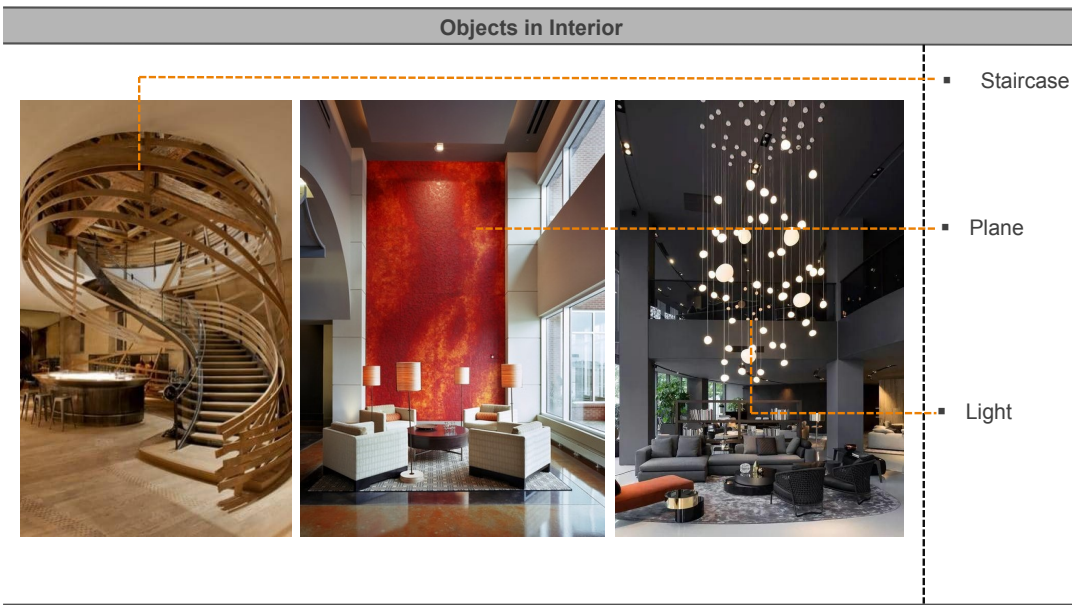


Figure 27: Objects as focal element in interior space (URL 31-33)

Design principles

Design principles define the positioning and the selection of elements that is employed in a composition (Cetin, 2006). The designer should be prepared to do what is necessity for the integrity of the design. Accordingly, design principles are the basic rules, which help the interior architects to put the design elements effectively. Ching (2007) grouped design principles as axis, symmetry, hierarchy, rhythm, repetition, datum and transformation. In addition, Rao (1998) categorized design principles as balance, rhythm, emphasis, unity or harmony and proportion. Accordingly, design principles can be mentioned and categorized as *axis, balance, datum, harmony, unity, emphasis/dominance and rhythm/repetition*.

Axis is a system that uses an imaginary line to organize the space. The organization of elements may be in symmetrical or asymmetrical system (Dodsworth, 2009) (Figure 28).

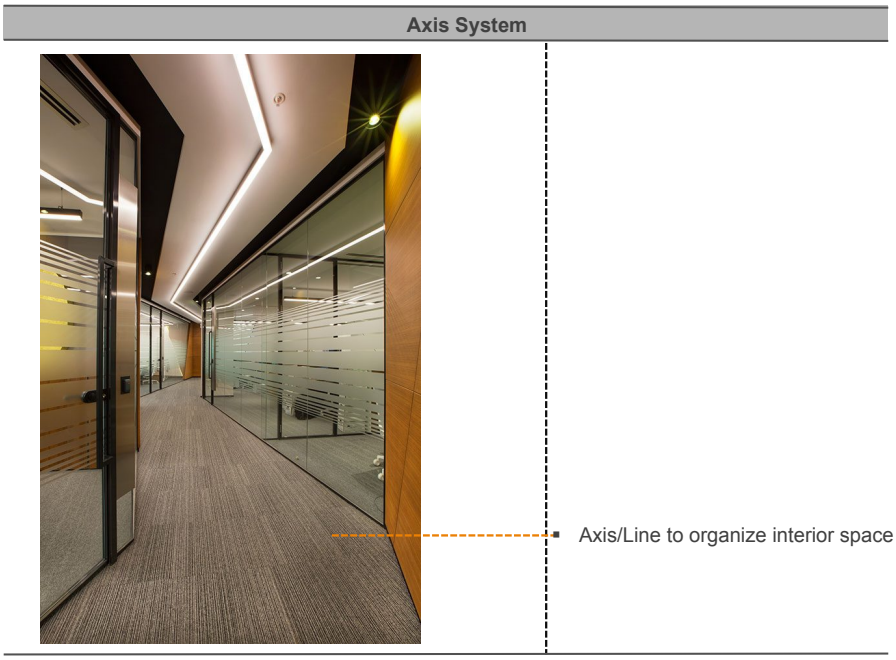


Figure 28: Axis system in interior space (URL 34)

Balance is constituted with the arrangement of different interior space's elements. It is a visual arrangement but it does not mean that all things should be equal in size or placement. Thus, it is the equalization of design elements on both sides of center that is divided into two as symmetrical balance and asymmetrical balance (Rao, 1998; Cakmak, 2020). Design elements have different properties such as form, surface (texture), color and size that need to be arranged in balance with same properties of other elements (Dodsworth, 2009). Additionally, balance is constituted with using color, direction, shape and ratio between the elements that are also aimed to achieve unity in design (Cakmak, 2020) (Figure 29).

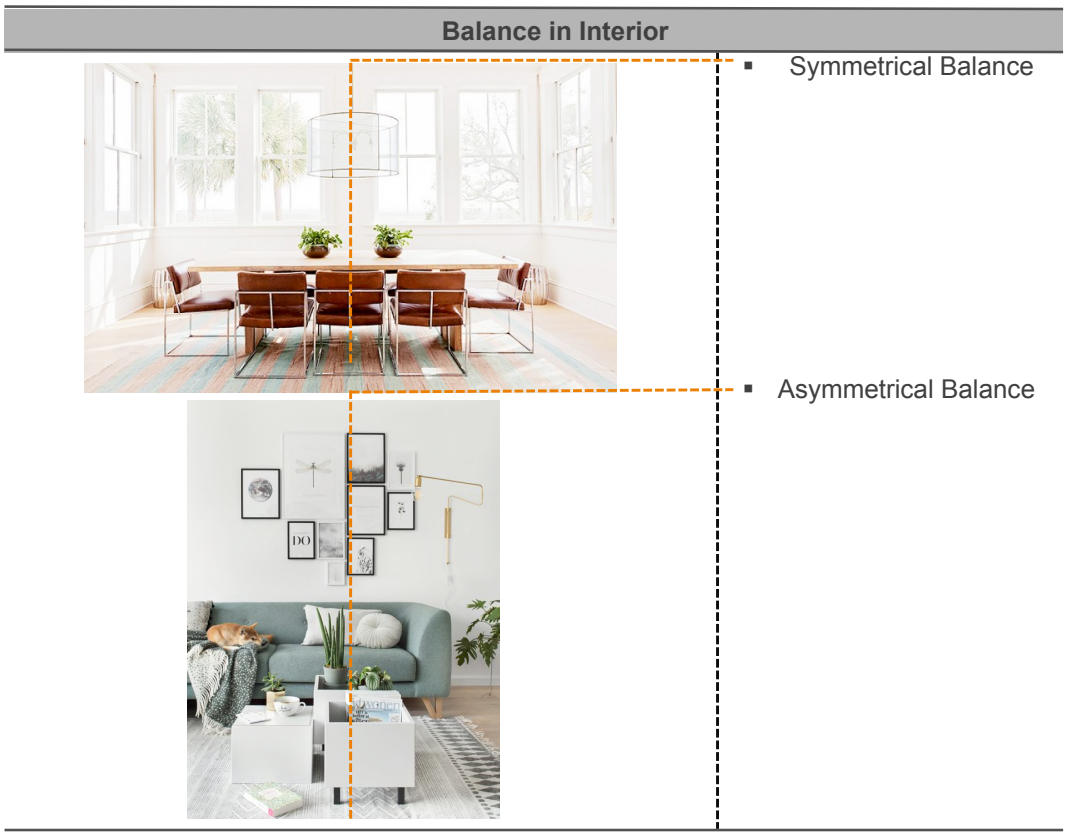


Figure 29: Symmetrical and Asymmetrical Balance in Interior Space (URL 35-37)

Datum is a system that uses a point or a center to arrange other elements of the composition. The datum could be an object or arrangement of furniture or other elements (Dodsworth, 2009) (Figure 30).

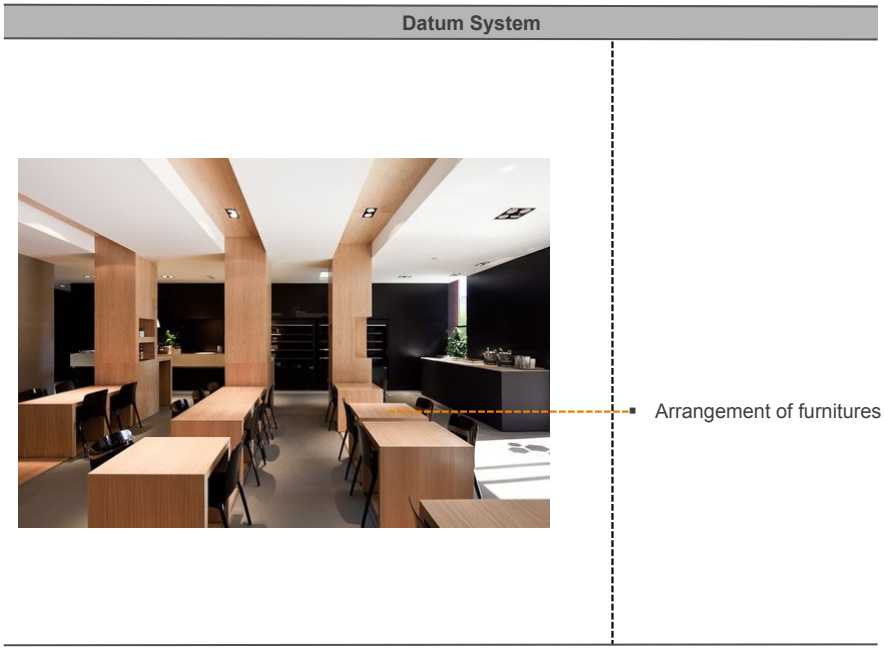


Figure 30: Datum system in interior space (URL 38)

Harmony seeks to achieve related design elements with the usage of shape, color, form and size (Rao, 1998). Therefore, harmony is the connection and arrangement of different design elements in a space, which create unity in interior spaces. Sato and Shingu (2006) states, harmony means the aesthetic value judgment with mutual relations of each design element in the organization of whole (Figure 31).



Figure 31: Harmony in interior space (URL 39-40)

Unity is constituted with the principles of balance and harmony. It is possible with the common property such as material, color, texture, shape and location (Dodsworth, 2009) (Figure 32).

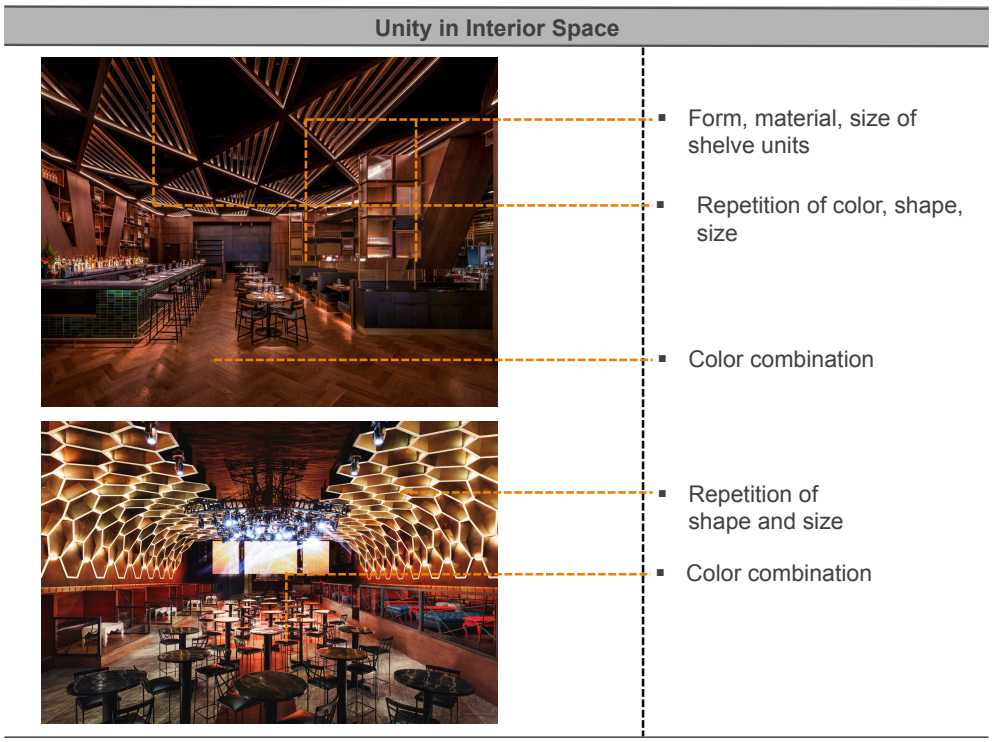


Figure 32: Unity in interior space (URL 41-42)

Emphasis/dominance is a focal point in interior space, which gives visual interest. It is the emphasis of an element or something in interior (Rao, 1998). Emphasis can be provided with size, color or shape. In addition, placement of an object also can be used as emphasis in interior space (Dodsworth, 2009). In addition, Cakmak (2020) states, it is the focal point that has attraction in the design and provided with size, place, shape, color, form and using of lines (Figure 33).



Figure 33: Emphasis/Dominance in Interior Space (URL 43-45)

Rhythm/repetition is a kind of organized movement in continuity that refers to the repetition of line, shapes and color in interior space (Rao, 1998). In addition, rhythm is the repetition of visual elements. It means the repetition of visual movement, colors, shapes or lines that is based on repetition. Generally, the repetitive things are all visual elements. For instance; point, line, color, texture, shape and space can create rhythm by repeating each one (Cakmak, 2020) (Figure 34).

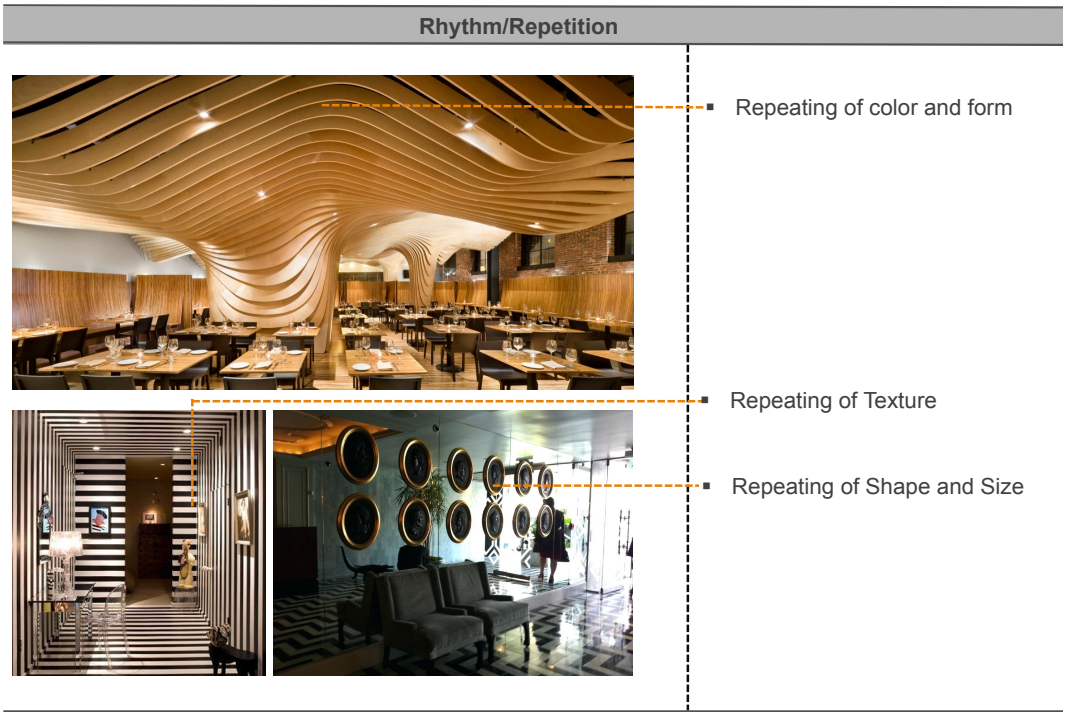


Figure 34: Rhythm/Repetition in Interior Space (URL 46-47)

Accordingly, it can be said that the concept of role of tactics in the interior design approach can be mentioned as *creation of interior space in terms of design elements* and *principles* with sub-concepts (Table 17).

Table 17: Concept and sub-concept of role of tactics in the interior design approach

Role of Tactics in The Interior Design Approach		
Researchers	**Definition**	**Concept and Sub-concept**
Coles and House (2007)	Design elements are plane, scale, proportion, vista, movement transition, accessibility and material, texture, light and color	▪ Creation of interior space in terms of Design elements and principles ▪ Design Elements ▪ Design Principles ▪ Tools of interiors
Dodsworth (2009)	Elements that define the atmospherics as the details of interior spaces are material and finishes, texture, form, color, furniture, light and ordering system	
Brooker and Stone (2010)	Tactics of space are light, object, plane and surface including material, color, texture and pattern	
Grimley and Love (2007)	Interior space atmosphere is created with space defining elements as color, material texture and pattern, lighting besides furniture and displays as functional and decorative accessories	
Milligan et al. (2011)	Tactics address the tools of interiors	
Moreno (2010)	Tactics are the installation of interiors such as wall, floor covering, structure, displays and furnishing	

3.4.3 Role of User in the Interior Design Approach

An interior architect aims to create an environment that not only feels beautiful and comfortable, but also functions should support the necessities of users (Coles and House, 2007).

In addition, human being is the foremost member of an interior space and the physical environment; a designed space takes form by the necessities of user. The identity of user is a general overview and it provides insights, which help to develop design (Dodsworth, 2009) due to users' interactive relation with the interior space. They can have different characteristic features according to differentiation of culture, group, age and gender (Bozdayi, 2004). Differentiation of aims, requests and prospects of different user constitute different designs of interior spaces. Accordingly, various spaces with different function can be designed with diversified design approaches according to user identity. Interior architects communicate on many levels with lots of different personality types (Dodsworth, 2009). There is a major role of interior architects during the design of interior spaces in direct contact with the user during various stages of the decision-making process. Therefore, a user can be an individual, a public organization or a commercial business (Coles and House, 2007). They can be anyone from anywhere. Interior architects communicate on many levels with lots of different types of users and client (Dodtsworth, 2009). For instance, owner of a retail spaces needs to attract customers, store merchandise and displays. Restaurant owners have concerns about, lighting, material, acoustic and cleanliness. Thus, an interior architect specializes in certain types of design according to particular client sector (Addi and Lytle, 2000). In addition, Age, education level, culture, physical status, gender, socioeconomic class and ambitions are factors which shaping users' needs and design of an interior space can vary according to different user experience.

Accordingly, these humanitarian characteristics effect on the interior architecture approach of design (Mahmoud, 2014). Ayalp (2012) states,

> "there is a context interaction between a person and a space. The person defines the space, the space defines the person; the person gives meaning to the space, the space gives meaning to the person. In other words, there is a context and bilateral interaction between the person and the space in its cultural, psychological, economic and physical dimensions".

Accordingly, exploration of fundamentals of interior design can be summarized that there is different interior space atmosphere that is created with different approach, mood and design. An interior space is as a whole with their design approaches. In addition, the design of interior space has strong relation with space user. The identity/character of user is the design that is reflected to the interior atmosphere, because, user identity/character has an important place in the space design. Although, user has an important factor while designing an interior space, design details/tools has also important factor that are space elements such as plane, space organization, movement, surface, color, material, texture, pattern, form, lighting, furniture, displays, objects and design principles as axis, balance, datum, harmony, unity, emphasis/dominance and rhythm/repetition. In other words, while creating an interior space with design details/tools, there is a story that comes from the relationship between the architect and space user.

Accordingly, it can be said that role of user in the creation of interior space atmosphere can have a concept as *creation of interior space in terms of user identity* with sub-concepts that is mentioned at the Table 18.

Aforementioned exploration about fundamentals of interior design provides to clarify the concepts and sub-concepts, which can be input to the framework (Table 19).

Table 18: Concept and sub-concept of user in the interior design approach

Role of User in The Interior Design Approach		
Researchers	**Definition**	**Concept and Sub-concept**
Dodsworth (2009)	Identity of user is a general overview	▪ Creation of interior space in terms of user identity ▪ Identity of user ▪ User and space interaction ▪ Characteristics features of user
	Users have interactive relation with interior space	
Bozdayi (2004) Mahmoud (2014)	Users have different characteristics features that affect design of interior space (culture, age, gender, physical status, education level)	
Mahmoud (2014)	Humanitarian characteristics effect on the interior architecture approach of design	
Ayalp (2012)	The person defines the space, the space defines the person	
	The person gives meaning to the space, the space gives meaning to the person	

Table 19: Concepts and sub-concepts of fundamentals of interior design

FUNDAMENTALS OF INTERIOR DESIGN		
Interior Design Approach		
Researchers	**Definition**	**Concept and Sub-concept**
Cetin (2006)	Design elements establish the final appearance of an interior space design	▪ Creation of interior space ▪ Design elements ▪ Tangible and intangible aspects ▪ Intervention (Design approach) ▪ Tactics (Details/individual elements of space)
Ching and Binggeli (2018)	Design elements are keys of interior to create an atmosphere and they also create personality of interior space	
Klingenberg (2012)	Interior space is a holistic aspect that derives its quality from the combination of tangible aspects with intangible aspects (texture, light, form and view)	
Brooker and Stone (2010)	Design of interior space is created in line with different approaches of intervention (Strategy and tactics) Tactics as details of design proposal and intimate detailed design of the individual elements	
Role of Tactics in The Interior Design Approach		
Coles and House (2007)	Design elements are plane, scale, proportion, vista, movement transition, accessibility and material, texture, light and color	▪ Creation of interior space in terms of Design elements and principles ▪ Design Elements ▪ Design Principles ▪ Tools of interiors
Dodsworth (2009)	Elements that define the atmospherics as the details of interior spaces are material and finishes, texture, form, color, furniture, light and ordering system	
Brooker and Stone (2010)	Tactics of space are light, object, plane and surface including material, color, texture and pattern	
Grimley and Love (2007)	Interior space atmosphere is created with space defining elements as color, material texture and pattern, lighting besides furniture and displays as functional and decorative accessories	
Milligan et al. (2011)	Tactics address the tools of interiors	
Moreno (2010)	Tactics are the installation of interiors such as wall, floor covering, structure, displays and furnishing	
Role of User in The Interior Design Approach		
Dodsworth (2009)	Identity of user is a general overview Users have interactive relation with interior space	▪ Creation of interior space in terms of user identity ▪ Identity of user ▪ User and space interaction ▪ Characteristics features of user
Bozdayi (2004) Mahmoud (2014)	Users have different characteristics features that affect design of interior space (culture, age, gender, physical status, education level)	
Mahmoud (2014)	Humanitarian characteristics effect on the interior architecture approach of design	
Ayalp (2012)	The person defines the space, the space defines the person The person gives meaning to the space, the space gives meaning to the person	

In addition, sub-concepts of four key concepts that are clarified from theoretical exploration will help to produce interior space criteria of analytical framework with a taxonomy system. Accordingly, interior space criteria and analysis criteria of the analytical framework are developed with the help of sub-types of taxonomy system that are mentioned at the following chapter.

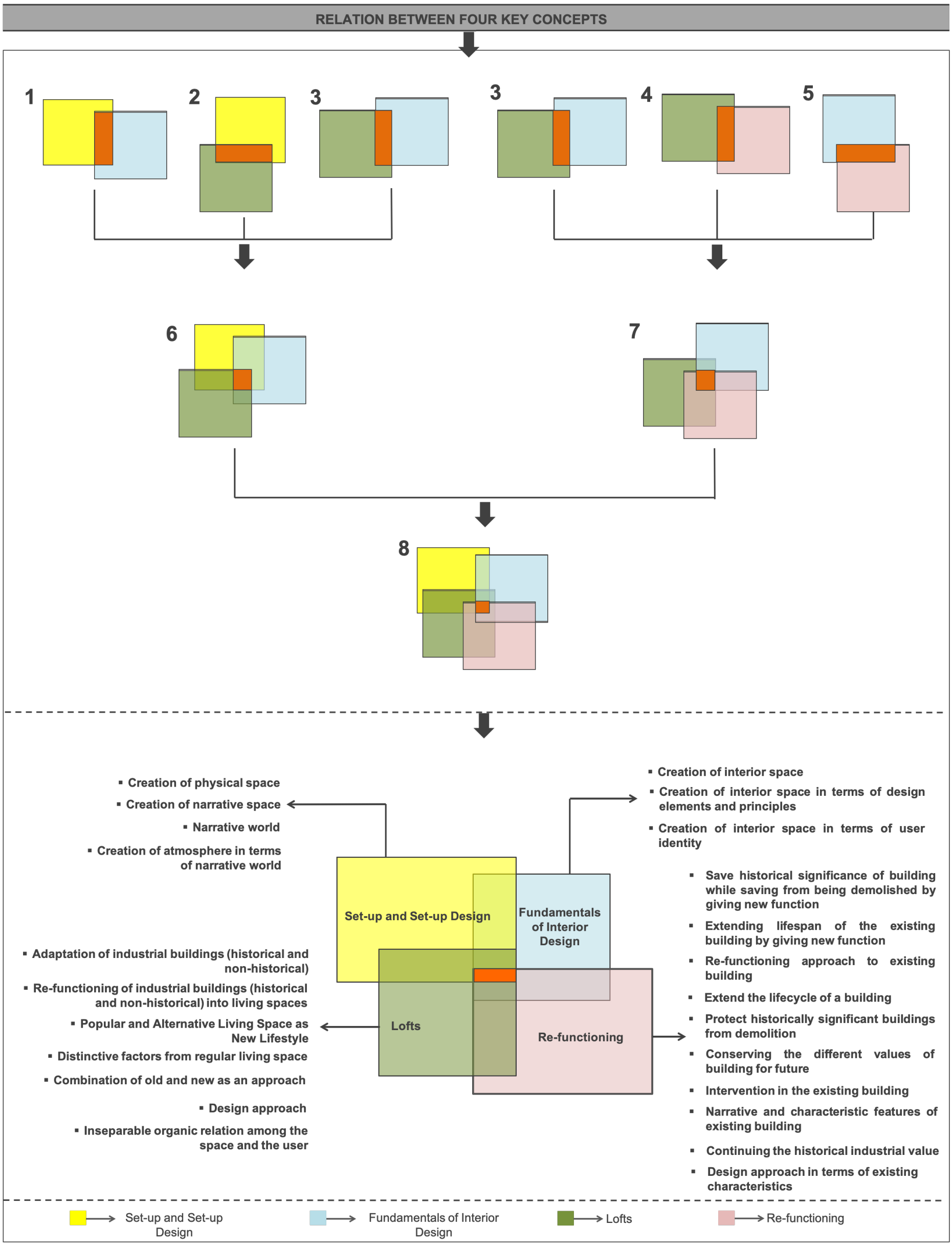


Figure 35: Relation between four key concepts

Chapter 4

ANALYTICAL FRAMEWORK DEVELOPMENT TO READ INTERIOR SPACE ATMOSPHERE CREATION

4.1 Taxonomy Method for Analytical Framework Development

One of the main objectives of this thesis is to develop a comprehensive analytical framework as it was already stated in the chapter 2 in order to conduct/convey an in-depth reading at a diverse array of adapted interior spaces as film making spaces to accomplish how their interior space atmosphere is created. And within the limited scope of this thesis, the developed framework will be used to conduct an in-depth reading at the selected set-up lofts (instances of existing industrial building stocks adapted as film making spaces) as the cases of this research to accomplish and dissociate their interior space atmosphere creation. Accordingly, the necessary data while developing this analytical framework was gathered from theoretical exploration of the four key concepts of this study as a result of the various data collection techniques that are literature review, field survey, observations and interviews as it was already explored extensively in the previous chapter.

Accordingly, analytical framework development is provided with a taxonomy system. Lambe (2007) states taxonomy as: "*the rules or conventions of order or arrangement"*. Taxonomy is a set of descriptions and documents in a logical arrangement. Hence, the *first step* of framework development was *listing* (that is a sub-type of taxonomy); is the stage of listing definitions of four key concepts of the study which was derived

from theory. Therefore, a list is provided at the end of this stage in order to collate related definitions together. Then, *tree-structure method* has followed the first step as the *second step* of analytical framework development. In this step, different definitions of each key concept, which were made by various researchers, were categorized in line with the determination of a homogenous relationship among them. Therefore, concept and sub-concepts of the four key concepts were identified as a result of this stage. The *third step* of taxonomy method for the framework development is *negotiation of common vocabularies*. This step has provided the common vocabulary with the help of poly-hierarchy method as a result of identifying and then classifying the similar sub-concepts that were listed under different key concepts. Accordingly, different sub-concepts, which have homogenous relationship, were placed in the same taxa; depending on their characteristics. And thus, negotiation of common vocabulary has identified the *taxa* of the framework as '*functional change, level of obsolescence, level of intervention, spatial quality indicators, existing building quality, building typology, spatial organization, role of user* and *elements of interior space'*. And then the *fourth step* of framework development is the naming *of common vocabularies* that is 'nomenclature'. According to the identified taxa; three main criteria were clarified as the backbone of the analytical framework. Accordingly, analytical framework has been shaped/created with the basis of these three main criteria as a result of the taxonomy method. As a result of this stage they were named as *fictitious user (character) identity, existing building essence* and *anatomy of interior space* that has guided the in-depth reading of set-up loft spaces in order to dissociate the creation of interior atmosphere. Moreover, as the *fifth step* of framework development; *determination of sub-criteria* of the stated three main criteria category were provided that have acted as the main analysis criteria of the framework. Therefore, criteria and sub-criteria were clarified

and then a coding system is constituted that is used in the design of analytical framework. Figure 36 provides a schematic summary of the steps of analytical framework development.

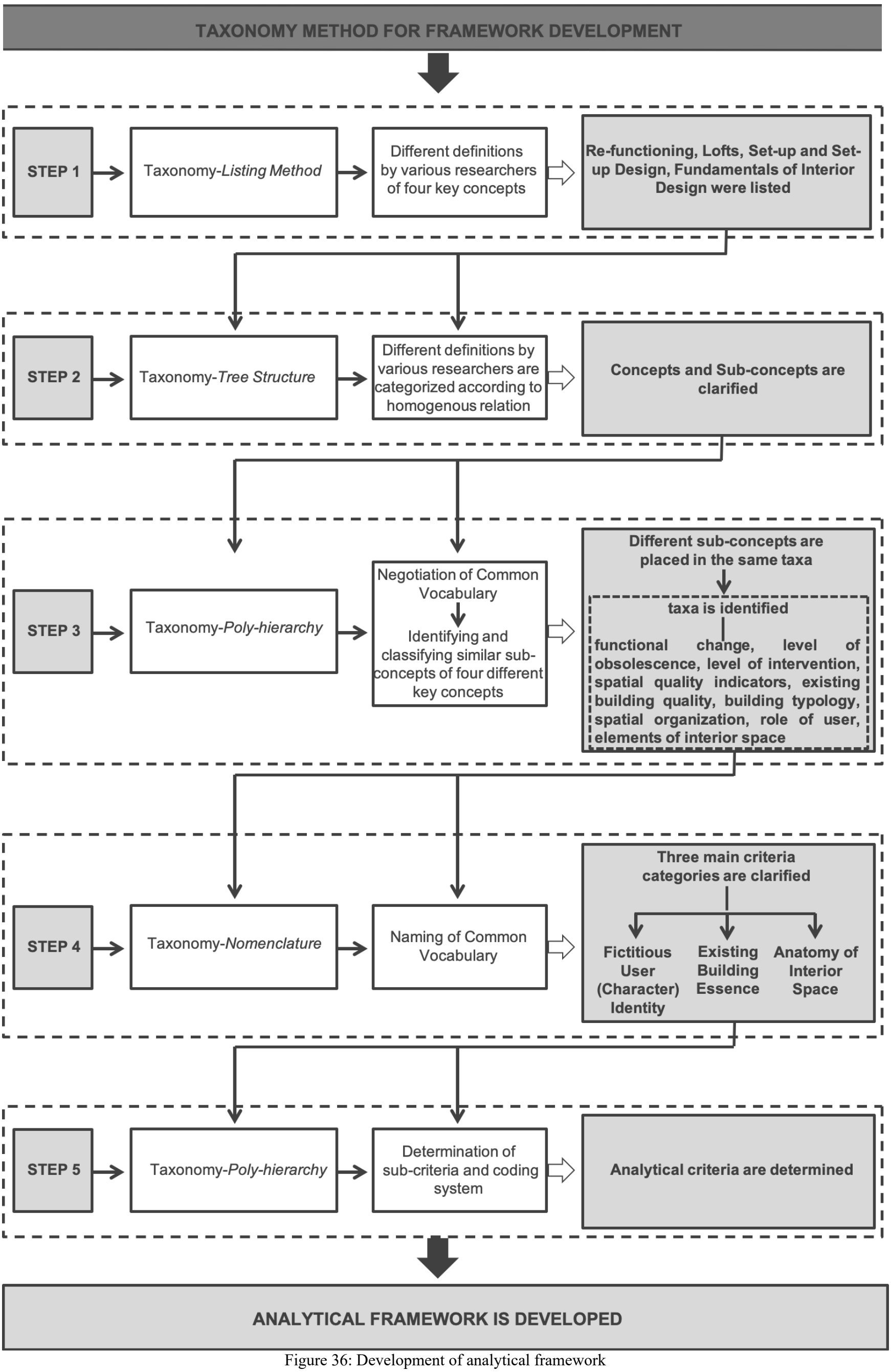


Figure 36: Development of analytical framework

4.2 Implementation of Taxonomy Method

Implementation of the aforementioned steps of taxonomy system has guide the framework design, besides the clarification of the criteria and sub-criteria of the framework. Accordingly, five steps of taxonomy that were discretely implemented on each key concept were set forth in the following section.

4.2.1 Listing Definitions of Re-functioning Key Concept and Determining its Taxa

The first key concept of this thesis is re-functioning. As a result of the first step, different definitions of re-functioning by various researchers were listed. And then it has been followed by the second step that is categorization of the related definitions (having homogenous relation) as a result of the tree-structure method. Therefore, definitions of re-functioning key concept were listed as;

- *saving historical significance of building while saving from being demolished by giving new function*
- *extending lifespan of the existing building by giving new function*
- *re-functioning approach to existing building*
- *extend the life cycle of a building*
- *protecting historically significant buildings from demolition*
- *conserving different values of buildings for future*
- *intervening in the existing building*
- *narrative and characteristics features of existing building*
- *continuing the historical industrial value*
- *design approach in terms of existing characteristics*

And then, common vocabulary and taxa of re-functioning key concept was identified in the next stage with the help of poly-hierarchy method as: '*functional change, level of obsolescence, level of intervention, spatial quality indicators* and *existing building quality'* as it is indicated in the Table 20.

Table 20: Determining taxa of re-functioning key concept

CONCEPT OF RE-FUNCTIONING

Definition and Significance of Re-functioning

	STEP 1 → Taxonomy-*Listing Method*	STEP 2 → Taxonomy-Tree structure	STEP 3 → Taxonomy-Poly-hierarchy	STEP 4 → Taxonomy-Nomenclature (Naming)	STEP 5
RESEARCHERS	**LISTED DEFINITIONS**	**CONCEPTS AND SUB-CONCEPTS**	**IDENTIFIED TAXA**	**CLARIFIED CRITERIA CATEGORIES**	**ANALYTICAL CRITERIA**
Bullen and Love (2011)	A process that changes a disused or ineffective item into a new item	▪ Save historical significance of building while saving from being demolished by giving new function ▪ New function to disused or ineffective spaces	▪ Functional change	History, narrative, soul and identity of existing building → **EXISTING BUILDING ESSENCE** ▪ Building Typology ▪ Elements of Structural System ▪ Construction Material ▪ Building Storey ▪ Building Height and Width	▪ ***Building Typology (BT)*** Architectural Form (AF) Old Function (OF) ▪ ***Elements of Structural System (EST)*** ▪ ***Construction Material (CM)*** ▪ ***Building Storey (BS)*** ▪ ***Building Height and Width (BHW)***
Ahunbay (2007)	Giving new function is a tool for historical buildings to be saved from being demolished	▪ New function to historical building	▪ Functional change		
Synder (2005)	A process that changes the function of building to accommodate changing needs according to user	▪ Save from being demolished	▪ Level of obsolescence		
Chen, Judd and Hawken, (2016) Chen, Chiu and Tsai, (2018) Tan, Shuai, Wang (2018)	Change of use for extending the life of a historical building	▪ Extending lifespan of the existing building by giving new function ▪ Extend the life by giving new function	▪ Level of obsolescence		
The Contribution of Re-functioning to Environment					
Plevoets and Cleempoel (2013)	Interior architecture and re-functioning approach draws more on the "soft values"	▪ Re-functioning approach to existing building ▪ New interventions in the existing building	▪ Level of intervention	History, narrative, soul and identity of existing building → **EXISTING BUILDING ESSENCE** ▪ Building Typology ▪ Elements of Structural System ▪ Construction Material ▪ Building Storey ▪ Building Height and Width	
Plevoets and Cleempoel (2014)	Re-functioning is a significant challenge, which focuses to re-image the physical relationship between the existing building and new intervention New interventions appear more poetic on the memory of the existing building that is represented in interior	▪ Re-image the physical relationship ▪ Memories and narrative of existing building for new interventions	▪ Level of intervention ▪ Level of intervention		
Brooker and Stone (2009)	Reading of the existing qualities (structural and physical elements) Memories, values, narratives and traditions of existing building	▪ Extend the life cycle of a building ▪ New function to disused, empty or ineffective spaces ▪ New function to historical building	▪ Functional change ▪ Functional change	History, narrative, soul and identity of existing building → **EXISTING BUILDING ESSENCE** ▪ Building Typology ▪ Elements of Structural System ▪ Construction Material ▪ Building Storey ▪ Building Height and Width	
Cantell (2005)	By the help of adaptive reuse process the change of the disused, empty or ineffective buildings into different purposes were enriched	▪ Protect historically significant buildings from demolition ▪ Conserving intrinsic values	▪ Level of intervention		
Ball (1999)	Re-functioning can help to transform historical building into a usable place	▪ New function to historical building	▪ Functional change		
Langston, Francis, Eddie and Li-yin (2010)	Re-functioning originally was developed as a method to protect historically significant buildings from demolition Assigning new application	▪ Conserving the different values of buildings for future ▪ Conserving intrinsic values	▪ Level of intervention		
Bottero, D'Alpaos and Oppio (2019)	Re-functioning allows conserving the different values of buildings, both the intrinsic one and the use value Continuity of building values for future generation	▪ Using potential of buildings (use value)	▪ Level of intervention		
Role of Existing Building on Developing Re-functioning Strategy					
Eden (2005)	Re-functioning strategy is an architectural style	▪ Intervention in the existing building ▪ Design approach	▪ Spatial quality indicators	History, narrative, soul and identity of existing building → **EXISTING BUILDING ESSENCE** ▪ Building Typology ▪ Elements of Structural System ▪ Construction Material ▪ Building Storey ▪ Building Height and Width **Design elements, components of interiors, tools of design** → **ANATOMY OF INTERIOR SPACE** ▪ Tactics ▪ Strategy	▪ ***Building Typology (BT)*** Architectural Form (AF) Old Function (OF) ▪ ***Elements of Structural System (EST)*** ▪ ***Construction Material (CM)*** ▪ ***Building Storey (BS)*** ▪ ***Building Height and Width (BHW)*** ▪ ***Tactics (TC)*** Plane (P) Design Bases (DB) Object (O) Surface (S) Light (L) Form (FR) Displays (DS) Space Articulation (SAr) Design Principles (DP) ▪ ***Strategy (STR)*** Responsive Interiors (RI) Autonomous Interiors (AI)
Brooker and Stone (2004)	Integration between existing building and new design	▪ Narrative and characteristic features of existing building ▪ Understanding of existing building character and history for a design approach	▪ Existing building quality		
Brooker and Stone (2010)	General information of existing building for interior design (history, context, function, form)	▪ Old and new relations as an approach	▪ Spatial quality indicators		
Coles and House (2007)	Understanding of history of existing building Characteristics of existing building (form and proportion, existing surface, building material, existing structure)				
Gewirtzman (2016)	Existing qualities of the building (location, dimensional consideration, materials, structure, history of building, historical use of the building and surrounding of building)				
Tangaz (2006)	Possibilities of the site (existing conditions of a building)				
Theodossopoulos (2012)	Describing the original values of the existing building Relation of present and future generations through a design approach				
Re-functioning of Industrial Buildings (Historical and Non-historical)					
TICCIH (2003)	Abandoned historical industrial buildings have industrial value Industrial culture (historical, technological, social, architectural or scientific value)	▪ Continuing the historical industrial value ▪ Values of historical industrial building	▪ Level of intervention	History, narrative, soul and identity of existing building → **EXISTING BUILDING ESSENCE** ▪ Building Typology ▪ Elements of Structural System ▪ Construction Material ▪ Building Storey ▪ Building Height and Width	▪ ***Building Typology (BT)*** Architectural Form (AF) Old Function (OF) ▪ ***Elements of Structural System (EST)*** ▪ ***Construction Material (CM)*** ▪ ***Building Storey (BS)*** ▪ ***Building Height and Width (BHW)***
TICCIH (2003) Bayraktaroglu and Arabacioglu (2019) Taner (2011)	Re-functioning in terms of spatial characteristics (original pattern, large span, high ceiling)	▪ Design approach in terms of existing characteristics ▪ Existing building characteristics	▪ Functional change		
Crisman (2007)	Re-functioning of abandoned industrial buildings such as historical industrial buildings and non-historical industrial buildings	▪ Extend the life cycle of a building ▪ New function for abandoned building	▪ Functional change		
ICOMOS (2011)	Extending life cycle of the existing building (sustainable development) by re-functioning				

4.2.2 Listing Definitions of Lofts_ Re-functioning of Existing Industrial Building Stocks to Residential Use Key Concept and Determining its Taxa

Lofts, which are re-functioning of industrial buildings such as historical industrial buildings and non-historical industrial buildings, is the second key concept. Different definitions of lofts concept by various researchers were listed in the first step of taxonomy as:

- *re-functioning of industrial buildings (historical and non-historical)*
- *re-functioning of industrial buildings (historical and non-historical) into living spaces*
- *popular and alternative living space as new lifestyle*
- *distinctive factors different than regular living space*
- *combination of old and new as an approach*
- *design approach*
- *inseparable organic relation among the space and the use*

Furthermore, each of these concepts was determined with its sub-concepts that are mentioned in detail at the table below. Determination of concepts and sub-concepts was followed with common vocabulary identification by the poly-hierarchy method and then similar sub-concepts were classified in the same taxa. The taxa of lofts were then identified as '*building typology, spatial organization, functional change, spatial quality indicators, elements of interior space, level of intervention* and *role of user'* as it is indicated in the Table 21.

Table 21: Determining taxa of lofts key concept

RE-FUNCTIONING OF EXISTING INDUSTRIAL BUILDING STOCKS INTO RESIDENTIAL USE; LOFTS

Definition of Lofts

	STEP 1 → Taxonomy-*Listing Method*	STEP 2 → Taxonomy-Tree structure	STEP 3 → Taxonomy-Poly-hierarchy	STEP 4 → Taxonomy-Nomenclature (Naming)	STEP 5
RESEARCHERS	**LISTED DEFINITIONS**	**CONCEPTS AND SUB-CONCEPTS**	**IDENTIFIED TAXA**	**CLARIFIED CRITERIA CATEGORIES**	**ANALYTICAL CRITERIA**
Culto (2001)	An open and semi transparent spaces which are located in industrial buildings such as historical industrial buildings and non-historical industrial buildings	▪ Re-functioning of Industrial buildings (historical and non-historical)			
Karagöz (2007)	The name of warehouse and factories that are adapted to new functions as restaurants, museums, office and residentials	▪ Industrial buildings (historical and non-historical) with new function	▪ Building typology		
Field and Irving (1999)	Re-functioning open plan spaces	▪ Open plan spaces	▪ Spatial organization		
Elmas (2014)	Multi-story adapted existing industrial building stocks that have large and undivided space on each floor	▪ Multi-story industrial buildings (historical and non-historical)	▪ Spatial organization		
O'Kelly and Dean (2007)	1990's lofts were an industrial warehouse space with large windows	▪ Large and undivided space	▪ Spatial organization		
		▪ Industrial warehouse space	▪ Building typology		
Culto (2001)	Re-functioning of existing industrial building stocks as living and/or sometimes both living and working spaces together	▪ Re-functioning of industrial buildings (historical and non-historical) into living spaces		History, narrative, soul and identity of existing building → **EXISTING BUILDING ESSENCE**: ▪ Building Typology ▪ Structure ▪ Construction Material ▪ Building Storey ▪ Building Height and Width	▪ ***Building Typology (BT)*** Architectural Form (AF) Old Function (OF) ▪ ***Structure (ST)*** ▪ ***Construction Material (CM)*** ▪ ***Building Storey (BS)*** ▪ ***Building Height and Width (BHW)***
Lynch (2014)	Re-functioning of non-residential properties to home that have industrial fabric	▪ Re-functioning to living space	▪ Functional change		
Pamukçu (2009)	Re-functioning of existing industrial building stocks to living and working spaces together	▪ Re-functioning to living and working space	▪ Functional change		
Schaumburg (2003)	Big and open space style residential interiors	▪ Open space style residentials	▪ Spatial organization		
Ullmann (2003)	Large areas that original structure was adapted into residential use	▪ Re-functioning to living space for artist and dwellers	▪ Functional change ▪ Role of user		
Banks and Tanqueray (1999)	Re-functioning of historical industrial buildings into residential use	▪ Residential for single person and couples without children	▪ Functional change ▪ Role of user		
Aykaç (2014)	Loft is way of life where the spatial perception can be felt at the highest levels	▪ Alternative living space	▪ Functional change		
Erdemir (2016)	Re-functioning of old factories or warehouses into residential use for artists and dwellers	▪ Living space that have double height ceiling	▪ Spatial quality indicators		
Zukin (1982)	Predominantly homes for single persons and couples without children that have different characteristics called 'alternative living spaces'				
Can (2016)	They are living spaces as popular and chic				
O'Kelly and Dean (2007)	Todays, lofts are a smaller flat with a double height ceiling and a chic redevelopment				
Determinants of Lofts					
Zukin (1982)	Emerged as new lifestyle	▪ Popular and alternative living space as new lifestyle			
	Popular living space for everyone	▪ New lifestyle			
	Alternative living of publicity	▪ Popular living space			
	Lofts have accessibility	▪ Alternative living			
	Space and time factors (sense from industrial age)	▪ Distinctive factors from regular living space			
	Lofts are paradoxical (from outside they look like a factory)	▪ Accessibility	▪ Spatial quality indicators		
Baum and Christiaanse (2012)	User changing (commercial building repackaged as living space)	▪ Industrial sense	▪ Spatial quality indicators		
Banks and Tanqueray (1999) Taner (2011)	Openness (open plan or partly open plan)	▪ Differentiation of User			
Zukin (1982) Karagöz (2007) Pamukçu (2009)	Non-residential features (multi storey or single storey industrial contexts, open floor plan , single volume, high ceiling, timber and cast iron structure, cast iron windows and brick walls)	▪ Factory from outside	▪ Spatial quality indicators	History, narrative, soul and identity of existing building → **EXISTING BUILDING ESSENCE**: ▪ Building Typology ▪ Structure ▪ Construction Material ▪ Building Storey ▪ Building Height and Width; Design elements, components of interiors, tools of design → **ANATOMY OF INTERIOR SPACE**: ▪ Tactics ▪ Strategy	▪ ***Building Typology (BT)*** Architectural Form (AF) Old Function (OF) ▪ ***Structure (ST)*** ▪ ***Construction Material (CM)*** ▪ ***Building Story (BS)*** ▪ ***Building Height and Width (BHW)*** ▪ ***Tactics (TC)*** Plane (P) Design Bases (DB) Object (O) Surface (S) Light (L) Form (FR) Displays (DS) Space Articulation (SAr) Design Principles (DP) ▪ ***Strategy (STR)*** Responsive Interiors (RI) Autonomous Interiors (AI)
Schaumburg (2003) Banks and Tanqueray (1999)	Urban landscape (train and plane pieces, bicycle or automobile)	▪ Open plan	▪ Spatial organization		
	Contemporary elements and appliances are blended with brick walls, exposed pipes, electrical connection boxes and oversized windows	▪ Non-residential feature	▪ Spatial quality indicators		
Lynch (2014)	Distinctive architectural detail on the exterior and symbolically rich interior spaces	▪ Unusual accessories	▪ Elements of interior space		
		▪ Contemporary elements with existing characters	▪ Spatial quality indicators		
		▪ Distinctive details	▪ Spatial quality indicators		
Design Approaches of Lofts					
Dodsworth (2009)	Juxtaposition of existing building and the new use	▪ Combination of old and new as an approach			
Culto (2001)	Structural elements are used as design elements	▪ Existing building and new design	▪ Spatial organization		
	Multi-storey apartment style lofts	▪ Existing character	▪ Spatial quality indicators		
London on-site reading (2014)	Existing brick walls are preserved or covered as a shell				
		▪ Design approach			
Schaumburg (2003)	A holistic perception with uninterrupted spaces	▪ Space organization	▪ Level of intervention		
Banks and Tanqueray (1999)	Loft gives people unprecedented design freedom	▪ Intervention level of existing character	▪ Spatial quality indicators ▪ Level of intervention		
	Closed space organization	▪ Design approach in terms of existing character	▪ Spatial quality indicators		
London on-site reading (2014)		▪ Unprecedented design approach		History, narrative, soul and identity of existing building → **EXISTING BUILDING ESSENCE**: ▪ Building Typology ▪ Structure ▪ Construction Material ▪ Building Story ▪ Building Height and Width; Design elements, components of interiors, tools of design → **ANATOMY OF INTERIOR SPACE**: ▪ Tactics ▪ Strategy	
	In general do not have high ceiling, different floor additions are not seen but few examples with high ceiling and new floor addition				
Marcus (2006)		▪ Inseparable organic relation among the space and the user			
	Special emphasis on personalization (display elements in interiors reflect either interest of the users or their profession)	▪ User and space interaction	▪ Role of user ▪ Spatial quality indicators		
London on-site reading (2014)	Unusual accessorize and intimate visual details	▪ Distinctive details	▪ Elements of interior space ▪ Spatial quality indicators		
	Objects as dominant element	▪ Personalization	▪ Elements of interior space ▪ Spatial quality indicators		

4.2.3 Listing Definitions of Set-up and Set-up Design Key Concept and Determining its Taxa

Set-up and set-up design constitute the third key concept of the study. Different definitions of set-up and set-up design concept by various researchers were listed in the first step of taxonomy as:

- *creation of physical space*
- *creation of narrative space*
- *narrative world*
- *creation of atmosphere in terms of narrative world*

Accordingly, common vocabulary was then determined and taxa of set-up and set-up design were identified as '*spatial organization, spatial quality indicators* and *role of user'* as it is indicated in the Table 22.

Table 22: Determining taxa of set-up and set-up design key concept

SET-UP AND SET-UP DESIGN

Definition of Set-up

	STEP 1 → Taxonomy-*Listing Method*	STEP 2 → Taxonomy-Tree structure	STEP 3 → Taxonomy-Poly-hierarchy	STEP 4 → Taxonomy-Nomenclature (Naming)	STEP 5
RESEARCHERS	**LISTED DEFINITIONS**	**CONCEPTS AND SUB-CONCEPTS**	**IDENTIFIED TAXA**	**CLARIFIED CRITERIA CATEGORIES**	**ANALYTICAL CRITERIA**
Dictionary Definition	A way of organizing something Installation of something	▪ Creation of physical space ▪ Organization	▪ Spatial organization	Narrative space, created user, image making with user identity → FICTITIOUS USER (CHARACTER) IDENTITY ▪ Fictitious User ▪ Story; Design elements, components of interiors, tools of design → ANATOMY OF INTERIOR SPACE ▪ Tactics ▪ Strategy	▪ *Fictitious User (FU)* Gender (G) Age (A) Marital Status (MS) User Number (UN) Sharing Status (SS) ▪ *Story (Sto)* Personality (Prs) Main Theme (MTh) ▪ *Tactics (TC)* Plane (P) Design Bases (DB) Object (O) Surface (S) Light (L) Form (FR) Displays (DS) Space Articulation (SAr) Design Principles (DP) ▪ *Strategy (STR)* Responsive Interiors (RI) Autonomous Interiors (AI)
Chang and Hsieh (2018)	Sets create immersive spaces Achieving visual proficiency	▪ Creation of narrative space ▪ Immersive spaces	▪ Spatial quality indicators		
Lobrutto (2002)	Creation of a film/series with its unique look	▪ Visuality			
Tosun (2011)	Completed production that animates the place, environment and atmosphere of story	▪ Unique look	▪ Spatial quality indicators		
Tashiro (1998)	Sets serve narrative significant Visible and integral to the story	▪ Space of story	▪ Role of user ▪ Spatial quality indicators		
Set-up Design Approach					
Bordwell and Thompson (2008)	Centre of 'mies-en-scene', putting into the scene Appearance which is in the film frame	▪ Narrative world ▪ Image of story	▪ Spatial quality indicators		
Villarejo (2007)	Visual statement of cinema Sign of cinema life Visual art of cinematic storytelling	▪ Main theme (Conceptual reflection) ▪ Fictitious user and space relation	▪ Role of user ▪ Spatial quality indicators ▪ Role of user ▪ Spatial quality indicators		
Ildem (2014)	Main theme of a film or series provides the conceptual reflection (drama, horror, action, adventure, romantic, comedy, romantic-comedy and science fiction) Set-up space is created to reflect fictitious user (character user) personal characteristics Personality of fictitious user (character user) are sanguine, phlegmatic, choleric and melancholic	▪ Personality ▪ Creation of atmosphere in terms of narrative world ▪ Visual image	▪ Role of user ▪ Spatial quality indicators	Narrative space, created user, image making with user identity → FICTITIOUS USER (CHARACTER) IDENTITY ▪ Fictitious User ▪ Story; Design elements, components of interiors, tools of design → ANATOMY OF INTERIOR SPACE ▪ Tactics ▪ Strategy	
Chang and Hsieh (2018)	Framing and composition are essential elements that can create a visually image Framing shapes the viewers' experiences Frame images has several tools (vertical and horizontal lines, light and shadow, color scheme, design principles)	▪ Design elements (Visual image) ▪ Principles	▪ Spatial quality indicators ▪ Spatial quality indicators		
Bordwell and Thompson (2008)	Set-up is created with principles (function, difference and variation, similarity and repetition, development and unity/disunity)	▪ Fictitious user and space relation	▪ Role of user ▪ Spatial quality indicators		
Villarejo (2007)	Set-up design is a sense of elements	▪ Color	▪ Spatial quality indicators		
Barnwell (2008)	Design and space elements reflect sense of cinema Selected space should be appropriate for the film and fictitious user Set-up design expresses the story and support the fictitious character Color has meaning in the set-up design A set-up, location or environment is defined by its use of color Texture in building materials, fabrics and furnishing create contrast that is adding realism and tactile sense to the design of set-up spaces	▪ Texture ▪ Design details (props)	▪ Spatial quality indicators ▪ Spatial quality indicators		
Morahan (1951)	Visual texture and details of story - props Props represent fictitious user (character user)				

4.2.4 Listing Definitions of Fundamentals of Interior Design and Determining its Taxa

Fundamentals of interior design are the last key concept of the study. Different definitions of fundamentals of interior design concept by various researchers were listed in the first step of taxonomy as:

- *creation of interior space in terms of design elements and principles*
- *creation of interior space in terms of user identity*

Accordingly, common vocabulary was then determined and taxa of fundamentals of interior design were identified as '*elements of interior space, spatial organization* and *role of user*' as it is indicated in the Table 23.

Table 23: Determining taxa of fundamentals of interior design key concept

FUNDAMENTALS OF INTERIOR DESIGN

Interior Design Approach

	STEP 1 → Taxonomy-*Listing Method*	STEP 2 → Taxonomy-Tree structure	STEP 3 → Taxonomy-Poly-hierarchy	STEP 4 → Taxonomy-Nomenclature (Naming)	STEP 5
RESEARCHERS	**LISTED DEFINITIONS**	**CONCEPTS AND SUB-CONCEPTS**	**IDENTIFIED TAXA**	**CLARIFIED CRITERIA CATEGORIES**	**ANALYTICAL CRITERIA**
Cetin (2006)	Design elements establish the final appearance of an interior space design	▪ Creation of interior space ▪ Design elements	▪ Elements of the interior space	Design elements, components of interiors, tools of design → **ANATOMY OF INTERIOR SPACE** ▪ **Tactics** ▪ **Strategy**	▪ ***Tactics (TC)*** Plane (P) Design Bases (DB) Object (O) Surface (S) Light (L) Form (FR) Displays (DS) Space Articulation (SAr) Design Principles (DP) ▪ ***Strategy (STR)*** Responsive Interiors (RI) Autonomous Interiors (AI)
Ching and Binggeli (2018)	Design elements are keys of interior to create an atmosphere and they also create personality of interior space	▪ Tangible and intangible aspects	▪ Elements of the interior space		
Klingenberg (2012)	Interior space is a holistic aspect that derives its quality from the combination of tangible aspects with intangible aspects (texture, light, form and view)	▪ Intervention (Design approach)	▪ Spatial organization		
Brooker and Stone (2010)	Design of interior space is created in line with different approaches of intervention (Strategy and tactics) Tactics as details of design proposal and intimate detailed design of the individual elements	▪ Tactics (Details/individual elements of space)	▪ Elements of the interior space		
Role of Tactics in The Interior Design Approach					
Coles and House (2007)	Design elements are plane, scale, proportion, vista, movement transition, accessibility and material, texture, light and color	▪ Creation of interior space in terms of design elements and principles ▪ Design Elements	▪ Elements of the interior space	Design elements, components of interiors, tools of design → **ANATOMY OF INTERIOR SPACE** ▪ **Tactics** ▪ **Strategy**	
Dodsworth (2009)	Elements that define the atmospherics as the details of interior spaces are material and finishes, texture, form, color, furniture, light and ordering system	▪ Design Principles	▪ Elements of the interior space		
Brooker and Stone (2010)	Tactics of space are light, object, plane and surface including material, color, texture and pattern	▪ Tools of interiors	▪ Elements of the interior space		
Grimley and Love (2007)	Interior space atmosphere is created with space defining elements as color, material texture and pattern, lighting besides furniture and displays as functional and decorative accessories				
Milligan et al. (2011)	Tactics address the tools of interiors				
Moreno (2010)	Tactics are the installation of interiors such as wall, floor covering, structure, displays and furnishing				
Role of User in The Interior Design Approach					
Dodsworth (2009)	Identity of user is a general overview	▪ Creation of interior space in terms of user identity ▪ Identity of user	▪ Role of user	Narrative space, created user, image making with user identity → **FICTITIOUS USER (CHARACTER) IDENTITY** ▪ **Fictitious User** ▪ **Story** **ANATOMY OF INTERIOR SPACE** ▪ **Tactics** ▪ **Strategy**	▪ ***Fictitious User (FU)*** Gender (G) Age (A) Marital Status (MS) User Number (UN) Sharing Status (SS) ▪ ***Story (Sto)*** Personality (Prs) Main Theme (MTh) ▪ ***Tactics (TC)*** Plane (P) Design Bases (DB) Object (O) Surface (S) Light (L) Form (FR) Displays (DS) Space Articulation (SAr) Design Principles (DP) ▪ ***Strategy (STR)*** Responsive Interiors (RI) Autonomous Interiors (AI)
	Users have interactive relation with interior space	▪ User and space interaction	▪ Role of user ▪ Spatial organization ▪ Elements of the interior space		
Bozdayi (2004) Mahmoud (2014)	Users have different characteristics features that affect design of interior space (culture, age, gender, physical status, education level)	▪ Characteristics features of user	▪ Role of user		
Mahmoud (2014)	Humanitarian characteristics effect on the interior architecture approach of design				
Ayalp (2012)	The person defines the space, the space defines the person The person gives meaning to the space, the space gives meaning to the person				

4.3 Interrelating and Naming Taxa

Above-mentioned steps have clearly indicated the determination of a homogenous relationship among different definitions of the key concepts. Moreover, concept and sub-concepts of the four key concepts were identified afterwards and common vocabulary and classification of similar sub-concepts were then clarified. The next step has clarified their placement in the same taxa depending on their characteristics prior to the nomenclature step. Nomenclature step is the interrelating and naming step of the identified taxa.

Accordingly, identified taxa have been overviewed and interrelations were determined. Therefore, as a result of this stage, three effective dimensions were clarified as the role of user, role of existing building and the role of interior space/design aspects on the formation of interior space atmosphere and naming was made accordingly. Therefore, the stated three taxa will then be mentioned in the analytical framework with their *new naming* as 'fictitious user (character) identity, existing building essence and anatomy of interior space' as it is elucidated below.

User has an imperative role on the formation of interior space and identity of user is exhaustively narrated in the scenario prior to the formation of set-up space. User of the set-up space is imaginary and hence the role of this imaginary user on the formation of interior space atmosphere is named as *fictitious user (character) identity* as the dictionary meaning of fictitious is "created or formed by the imagination".

Existing building with its peculiar qualities has an influential role on the creation of interior space and hence role of those peculiar qualities was named as *existing building* ***essence***. The dictionary meaning of essence is "a significant feature of something and

indispensable quality of something" (URL 7). Therefore, indispensable qualities and significant features of existing building are defined as essence of existing building.

The criteria, which constitute the characteristics of interior space atmosphere, are named as *anatomy of interior space.* The dictionary meaning of anatomy is "artificially separating the different parts of any organized body and anatomical structure or organization" (URL 8). Accordingly, interior space formation is strongly associated with diverse articulations of the elements of interior in order to create a holistic design in the interior space. Elements of interior space and their role in the formation of interior space atmosphere resembles to the integral relationship among human body and its anatomy. Thus, characteristics of interior space and its essential relationship with the interior atmosphere creation is named as the anatomy of interior space in the analytical framework (Figure 37). Additionally, interrelation between sub-concepts and naming of taxa in the three criteria are mentioned as:

- *Fictitious user (character) identity*; role of user.
- *Existing building essence*; building typology, spatial organization, functional change, space quality indicators, level of intervention, level of obsolescence and existing building quality.
- *Anatomy of interior space*; elements of interior space, spatial organization, role of user and space quality indicators.

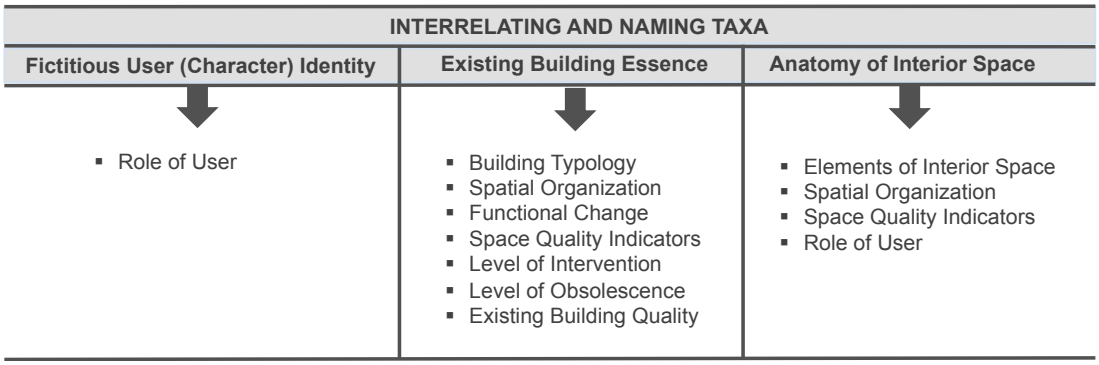


Figure 37: Naming taxa; fictitious user (character) identity, existing building essence and anatomy of interior space

Last step, which has followed naming step, is the identification/determination of the criteria and sub-criteria of three categorizations (fictitious user (character) identity, existing building essence, anatomy of interior space) that are mentioned at the section below.

4.4 Criteria and Sub-Criteria Determination of Analytical Framework

Naming step is followed with the determination of criteria and sub criteria. Therefore, theoretical exploration, which was elaborately stated in the chapter 3, has shed a directing light over the determination of the analytical criteria in order to guide in-depth reading of cases to dissociate creation of interior space atmosphere of set-up loft spaces.

4.4.1 Fictitious User (Character) Identity Criteria and Sub-Criteria Determination

Interior space and the user have organic and inseparable relation with each other. User is the main member of an interior space and the physical environment. Hence, characteristics and necessities of the user play a significant and effective role on design of interior space. Fictitious user and space have inherent relationship in set-up loft space. Thus, it is essential to understand and dissociate how identity of fictitious user

(character) is affecting the atmosphere creation (in real) and hence image making (on screen) of the set-up lofts.

Different definitions by various researchers were collated and this assists determination of analytical criteria of fictitious user (character) identity. Accordingly, criteria of fictitious user (character) identity were gathered from theoretical exploration section; 3.3 set-up and set-up design and 3.4 fundamentals of interior design sections in Chapter 3. In general, set-up, set-up design, fictitious user, character of fictitious user and story were discussed in *3.3.2 Set-up Design* section. In addition, identity of user, relation of user with interior space, different personality types and characteristic features of users were discussed in *3.4.2 Role of User in The Interior Design Approach*. Thus, according to the synthesis which were attained in these sections interrelations were determined and hence sub-criteria for fictitious user (character) identity were divided into two as *fictitious user and story*. The *fictitious user sub-criteria* are further classified as gender, age, marital status, user number and sharing status. Moreover, *criteria for story* were classified as personality and main theme (Figure 38). Personality and main theme have further sub-divisions in it that are mentioned in the analytical framework. In addition, criteria and sub-criteria were clarified and coding system is provided for each criteria and sub-criteria as their summarized expression in the analytical framework.

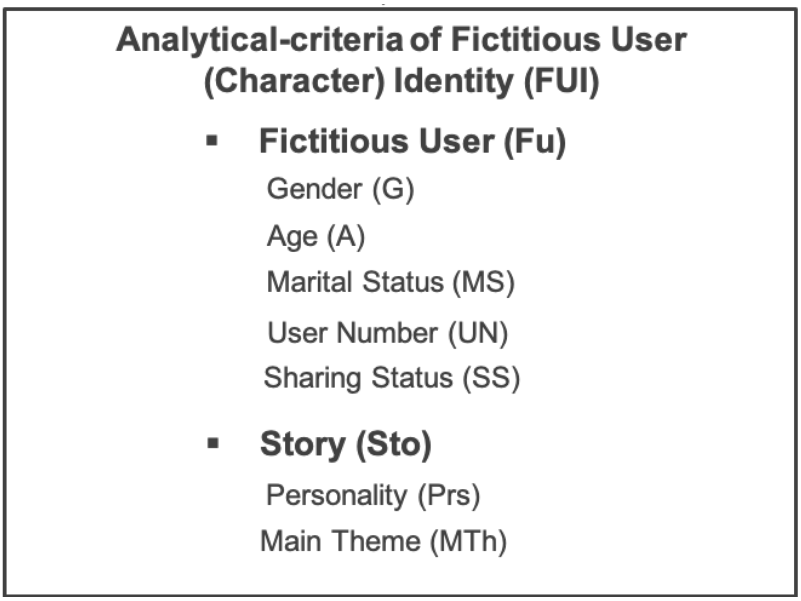


Figure 38: Analytical criteria of fictitious user (character) identity with coding system

4.4.2 Existing Building Essence Criteria and Sub-Criteria Determination

Existing building essence plays a significant role on the process of new interior designs. History and narrative of existing building are significant factors that should be considered while creating a new interior design approach, because, this narrative reflects soul, characteristics and identity of an existing building.

Literature review on re-functioning, existing industrial building stocks, conceptual approach, impact of existing building character and existing building qualities are the main tools for the determination of criteria for existing building essence. Additionally, analysis criteria of existing building essence category were gathered from theoretical exploration section; 3.1 concept of re-functioning and 3.2 re-functioning of existing industrial building stocks into residential use; loft sections in Chapter 3. In general, re-functioning that is related with interior architecture, re-functioning of existing industrial building stocks (historical and non-historical), re-functioning strategies through interior architecture and existing qualities of the building were discussed in

the Contribution of Re-functioning to Environment that is in 3.1.1 Definition and Significance of Re-functioning section and the others are *3.1.2 Role of Existing Building on Developing Re-functioning Strategy* and *3.1.3 Re-functioning of Existing Industrial Building Stocks (Historical and Non-historical)* sections. In addition, characteristics features of existing industrial buildings/lofts, structural elements of lofts and distinctive details of lofts (material, old function, structure, height and width of existing building) were discussed in *3.2.1 Definition of Lofts, 3.2.2 Determinants of Lofts* and *3.2.3 Design Approaches of Lofts*. Thus, according to the synthesis which were attained in these sections, analytical criteria of existing building essence were identified as *building typology (different types of existing industrial building stocks-factory, warehouse, hangar, mill), elements of structural system, construction material, building storey, height and width of building* (Figure 39). And, the *criteria for building typology* are further classified as architectural form and old function. Furthermore, each sub-criterion has further sub-division in it.

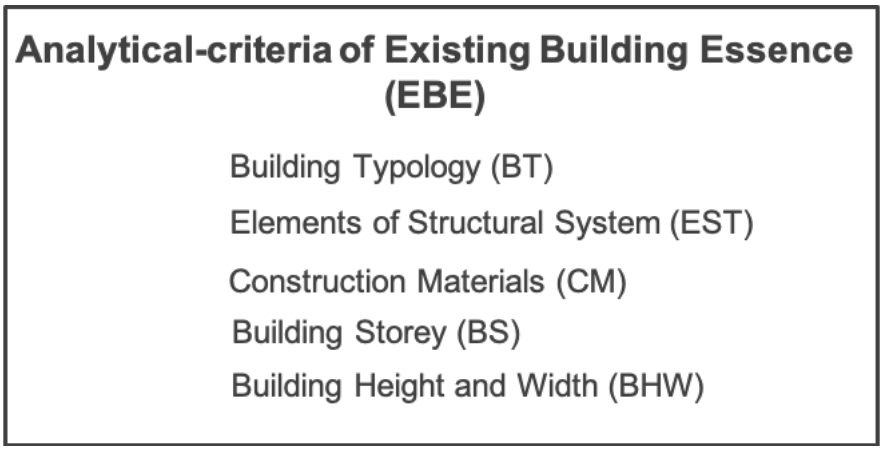


Figure 39: Analytical criteria of existing building essence with coding system

4.4.3 Anatomy of Interior Space Criteria and Sub-Criteria Determination

Versatile effect of interior design fundamentals on the created atmosphere has shaped this category of the analytical framework. Interior design fundamentals are tools, elements and components that an interior space is created with. Anatomy of interior space reflects the inherent details of interior space as it was mentioned extensively in the previous chapter.

Accordingly, literature review on interior space definition, design principles, space organization and elements of space and their relationship with interior space creation are the main tools and components for the determination of criteria for anatomy of interior space. The criteria of *anatomy of interior space* were gathered from theoretical exploration section; 3.1 concept of re-functioning and 3.2 re-functioning of existing industrial building stocks into residential use; lofts, 3.3 set-up and set-up design and 3.4 fundamentals of interior design sections in Chapter 3. In general, strategic approaches of interior space were discussed in *3.1.2 Role of Existing Building on Developing Re-functioning Strategy*; characteristic features of lofts were discussed in *3.2.2 Determinants of Lofts,* conceptual idea of lofts, space organization of lofts and design elements of loft spaces were discussed in *3.2.3 Design Approaches of Lofts;* design and elements of set-up (vertical and horizontal lines, light and shadow, color, design principles) and creation of film/series spaces were discussed in *3.3.2 Set-up Design* section; design elements of interior space (plane, movement, material, texture, light, pattern, form, furniture, ordering system, displays), design principles and tactics were discussed in *3.4.1 Interior Design Approach* and *3.4.2 Role of Tactics in The Interior Design Approach* and relation of user with interior space was discussed in *3.4.3 Role of User in The Interior Design Approach sections*. Thus, according to the synthesis which were attained in these mentioned sections anatomy of interior space

has identified with two criteria as *tactics* and *strategy*. The *tactics criteria* is further classified as the articulation of plane, design bases, object, surface (color, texture, pattern), lighting, form, displays as well as articulation of the space by the help of the stated tactical elements and design principles which plays an important role on the conceptual approach development of the interior space. Moreover, each sub-criterion has its own sub-divisions in it. The *strategy criteria* were classified as responsive interiors and autonomous interiors (Figure 40). Responsive interiors are further divided into sub-divisions as intervened interiors, inserted interiors and installed interiors in line with the approach /level of intervention to the interior space. On the other hand, autonomous interiors are further divided into sub-divisions as disguised interiors, assembled interiors and combined interiors.

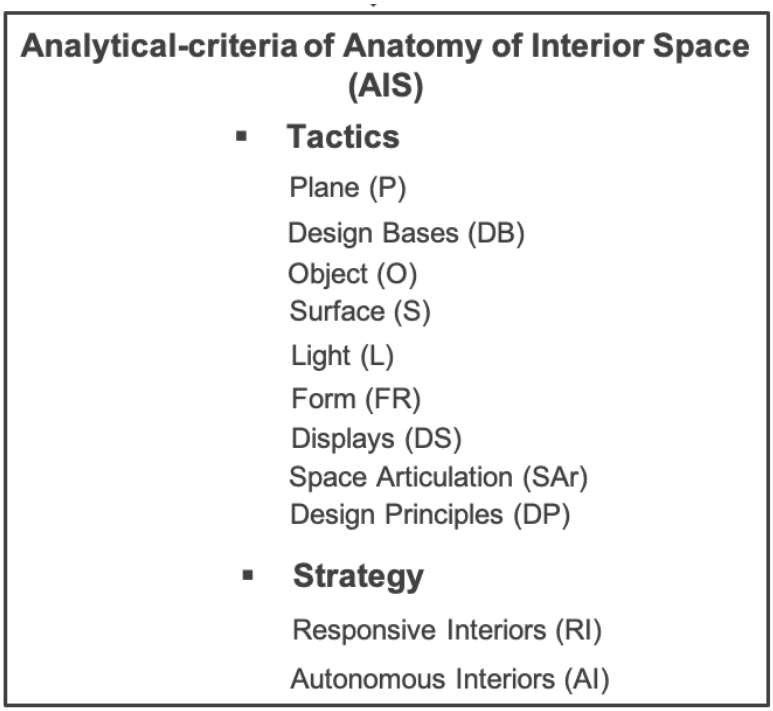
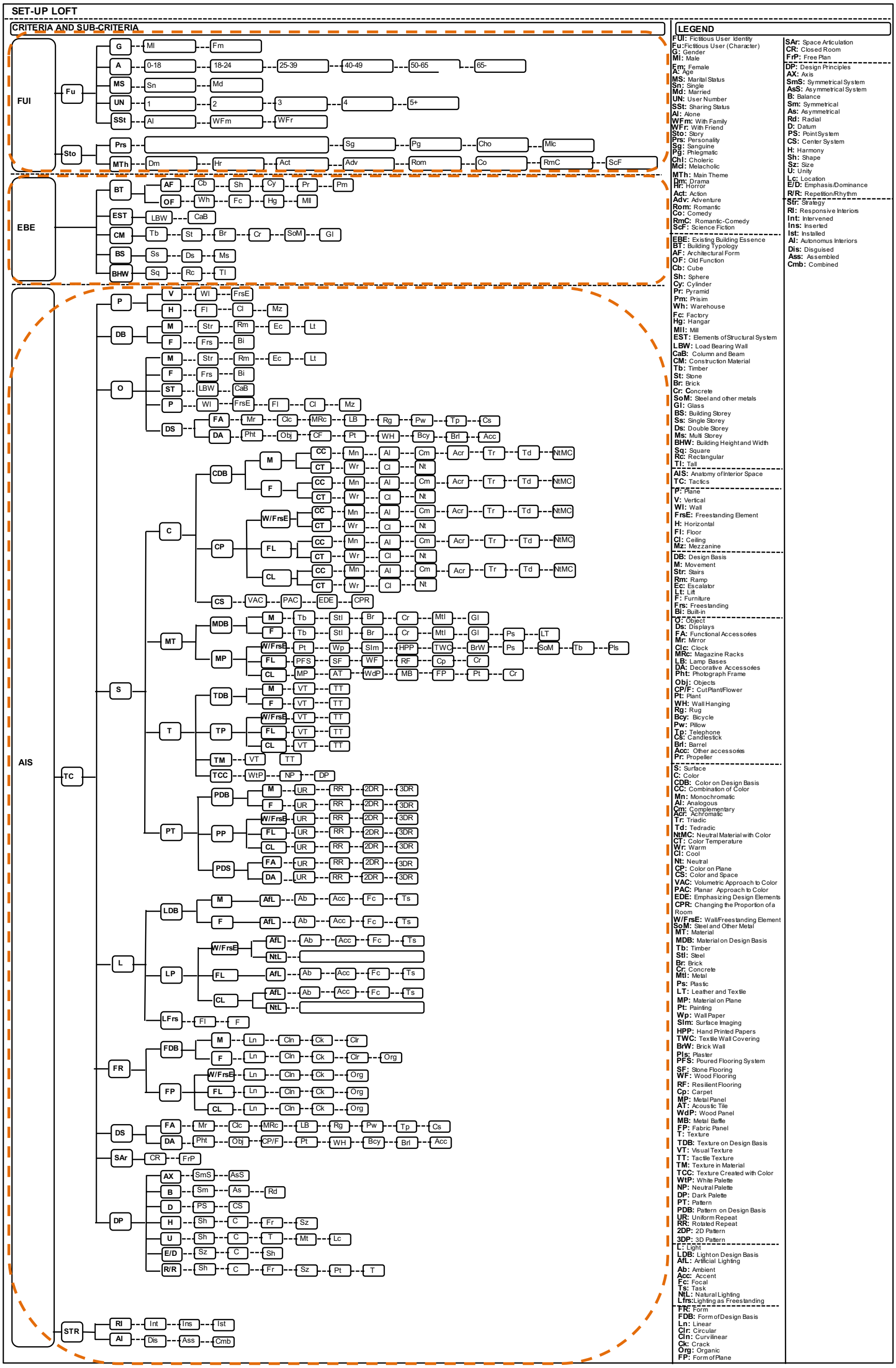


Figure 40: Analytical criteria of anatomy of interior space with coding system

Accordingly, as a result of the stated five steps, main structure of the analytical framework has been determined and hence the three main criteria that would direct

analytical reading in detecting atmosphere creation were accomplished. The analytical framework of this thesis, which was developed, as a result of the above stated stages and steps are presented in the table below (Figure 41).

Figure 41: Analytical framework for reading of interior space atmosphere creation of set-up lofts



Chapter 5

INVESTIGATING INTERIOR SPACE ATMOSPHERE CREATION OF SET-UP LOFT SPACES

An analytical framework was developed as it was already stated in the Chapter 4 in order to accomplish how interior space atmosphere of set-up lofts is created. Set-up lofts are cases of this thesis, which were selected particularly to conduct an in-depth reading via the developed analytical framework in order to clarify their interior space atmosphere creation. Therefore, 9 different set-up loft spaces, which were adapted in 3 historical industrial buildings and 2 industrial buildings in İstanbul have been analysed. An inventory [as a *supplementary tool* of analytical framework] is developed firstly in order to assist determination of the framework criteria, one by one at each case, throughout the analytical reading. Therefore, this chapter is organized in four sequential sections as follows: 1-Case selection, 2-Description of the cases of the study [nine set-up lofts in five existing industrial building stocks], 3-Development of the inventory and 4-Investigation of the interior space atmosphere creation at the cases of the study through analytical framework implementation.

5.1 Case Selection

The existing industrial building stocks in İstanbul, which have preserved their architectural characteristics, are located at the Bosphorus, whereas some of them are mainly located along the shores of Golden Horn (Kayhan, Salman and Akin, 2004). Adaptation of industrial buildings such as historical industrial buildings and non-historical industrial buildings through re-functioning to living spaces that are lofts is

rarely seen in Turkey. Existing industrial buildings (historical and non-historical) were built following the Industrial Revolution in the world. There are few buildings that were built during this period in İstanbul/Turkey. Moreover, some industrial buildings were destroyed until today (Baba, 2015).

Nowadays, some of these buildings which are located at the Bosporus and at the Golden Horn regions were attracted by filmmakers and were existed as a different instance of existing industrial building stocks' re-functioning.

Turkey is one of the main countries of TV series/film shooting sector in the world and İstanbul is a major city for a number of TV productions. Accordingly, major shooting locations for these productions are Tarlabaşı, Bağcılar, Fikirtepe, Yenibosna, Fener-Balat (Golden Horn), Cibali (Golden Horn), Kuzguncuk and Beykoz (Bosphorus) in İstanbul (Rappas, Ipek and Kayhan, 2018).

The former existing industrial building stocks; not only abandoned ones but also the ones which were adapted to new functions but being used as film making spaces (organized as loft in series or films) have constituted the cases of this thesis as set-up lofts. Accordingly, cases of the study were selected among the industrial buildings such as historical industrial buildings and non-historical industrial buildings that are located in Balat, Cibali (Golden Horn) and Beykoz (Bosphorus) in İstanbul. Accordingly, 2 industrial buildings were determined in Golden Horn region and 3 historical industrial buildings were determined from a factory setting in Beykoz (Bosphorus) region. Thus, five case study buildings and nine set-up loft spaces which were organized in those 5 existing industrial building stocks have been investigated for the analytical reading to dissociate their interior space atmosphere creation during

September 2012 and September 2017. Case determination has followed a step by step consecutive method applied for 5 years duration as it is mentioned below:

First step initiated in 2012 till 2013 by a literature review stage in order to understand the general meaning of loft spaces. Thus, this stage has followed the detection of loft spaces, which were used as set-up space for film shots in Europe. At the same time, review studies have provided that loft spaces were used as set-up space for some TV series in İstanbul (see Appendix C). Therefore, TV series that have been shot at İstanbul were watched/inspected systematically at TV channels which were the most viewed in total group as Channel D, Fox TV, ATV and Star TV. Existing industrial building stocks, which were adapted as living spaces/lofts in these series during shootings were, detected one by one. Accordingly, 5 loft spaces in 4 series (Son, Intikam-2 set-up lofts, Merhamet, Güneşi Beklerken) in 2012-2013 were determined. Then, 2 more set-up lofts were detected in 2014 in 'Güneşi Beklerken' serial as the second set-up loft from this serial and from Intikam serial as the third set-up loft from this serial. Moreover, one set-up loft that was used in 'O Hayat Benim' serial was detected in 2015 and then 3 other lofts were detected at 3 other series (Poyraz Karayel, Kiralik Aşk, Hayat Şarkısı) in 2016. Finally, in 2017, 1 more loft space in 'Dolunay' serial was detected. Therefore, 12 set-up loft spaces in total, which were adapted from existing industrial building stock and used as lofts in series, were detected as a result of a systematic inspection of the TV series between years of 2012-2017 (Figure 42).

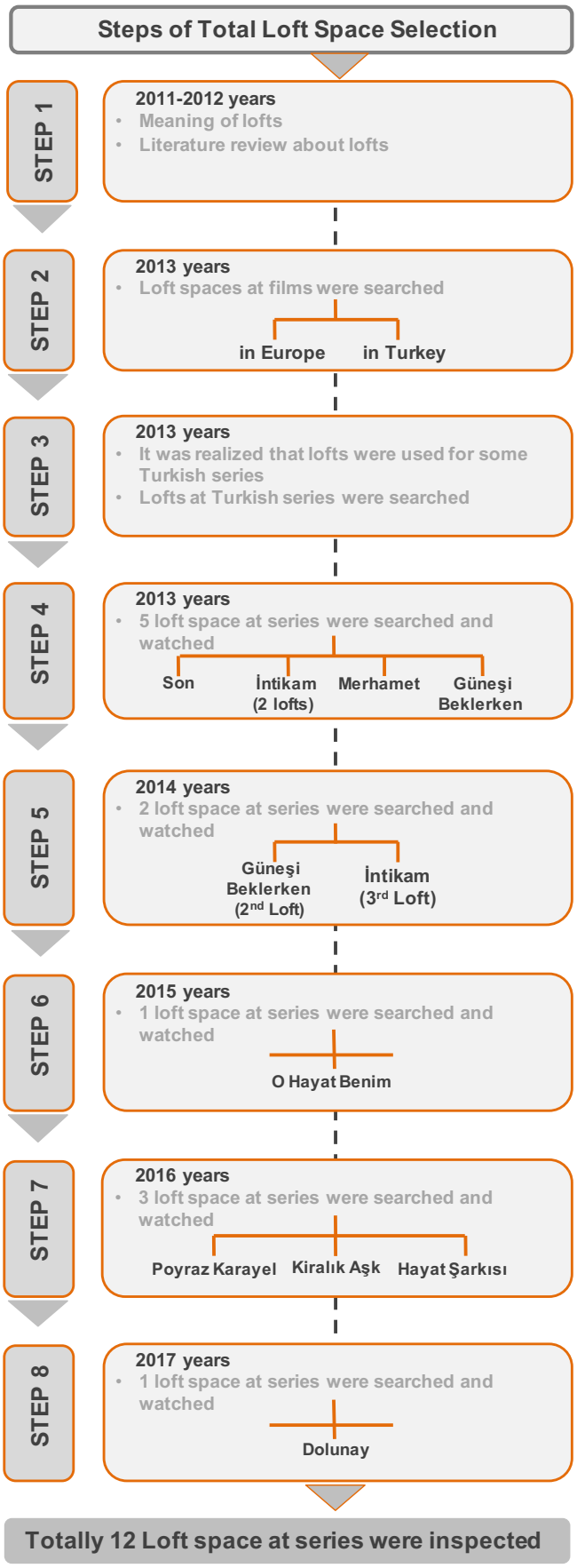


Figure 42: Steps of selection of total 12 series and set-up lofts

In total, 12 different set-up loft spaces have been subjected to a pre-analysis. As a result of pre-analysis stage; 9 out 12 different set-up lofts have been determined as the cases for this thesis. Moreover, pre-analysis stage has also clarified which existing industrial building stocks were adapted as film-making spaces for shooting these series. Accordingly, it has been determined that there are 5 different buildings such as industrial buildings and historical industrial buildings in three previously mentioned districts (Beykoz, Balat and Cibali) which were adapted as film making spaces. Pre-analysis stage has also revealed that, one of the cases was not shot in İstanbul and then it was eliminated as the case of this study. And, the other two cases were eliminated since it couldn't be possible to determine the original building(s), which were adapted as film making space, and hence it wouldn't be possible to convey on-site observation. Consequently, it has been decided to focus on the determined 9 set-up loft spaces, which are located in various industrial zones of İstanbul as Beykoz, Balat and Cibali (Figure 43).

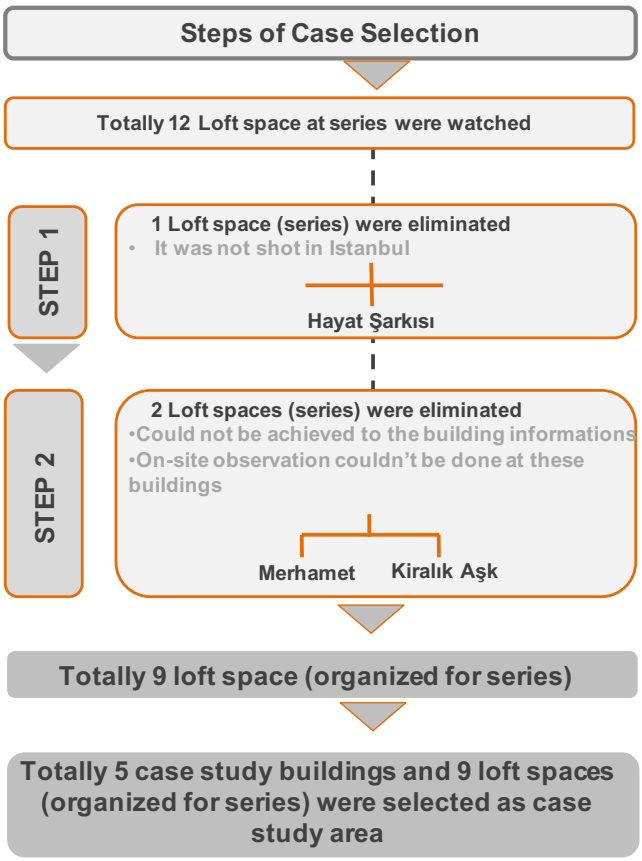


Figure 43: Steps of five case study buildings and nine set-up loft spaces selection

Table below collates information about the location of existing industrial building stocks and TV series, which were shot in these buildings and naming of the cases of this study (Table 24).

Table 24: Existing industrial building stocks from 3 different locations, which were determined as the cases

DISTRICT	CASE AREAS		TV SERIES	SET-UP LOFT and CODES
	Historical Industrial Buildings			
Beykoz (Bosphorus)	**Case 1 (Complex)**	Case 1A	İntikam	Ali Sülen Loft SLS 1
		Case 1B	Güneşi Beklerken	Kerem Sayer Loft SLS 2
		Case 1C	Poyraz Karayel	Meltem Karayel Loft SLS 3
	Industrial Buildings			
Balat (Golden Horn)	**Case 2**		İntikam	Hakan Eren Loft SLS 4
Cibali (Golden Horn)	**Case 3**		İntikam	Haldun Arsoy Loft SLS 5
			Son	Halil Loft SLS 6
			Güneşi Beklerken	Güneş Sayer Loft SLS 7
			O Hayat Benim	Ateş German Loft SLS 8
			Dolunay	Deniz Kaya Loft SLS 9

Therefore, 5 different buildings, which were adapted as 9 set-up lofts, presented [history, previous use, location, architectural/historical value] in the following section prior to their analytical reading.

5.2 Information About Five Existing Industrial Building Stocks

Building 1: Beykoz Leather and Shoe Factory

Beykoz that is a district near Bosphorus, is an industrial area. Beykoz which has been located on the Asian side of İstanbul, is known for its paper and glass factory that was established during the Ottoman period. Additionally, it was an important financial centre that has managed the leather industry and this led to the establishment of *Beykoz Leather and Shoe Factory.* In addition, it was said to be the pioneer of Ottoman Empire for modernization (Yerlitas, 2013). Beykoz Leather and Shoe Factory was first

founded as a tanning yard in 1810. Then, continued to function as a factory by various owners for different purposes until year 2000, which had 3000 workers at that time. Additionally, 30 historical industrial buildings were built in different periods in this area. After privatization of the factory by a private holding in 2004, adaptation through re-functioning authorities were invited and 25 of those buildings were listed (Semercioglu, 2015) (Figure 44).

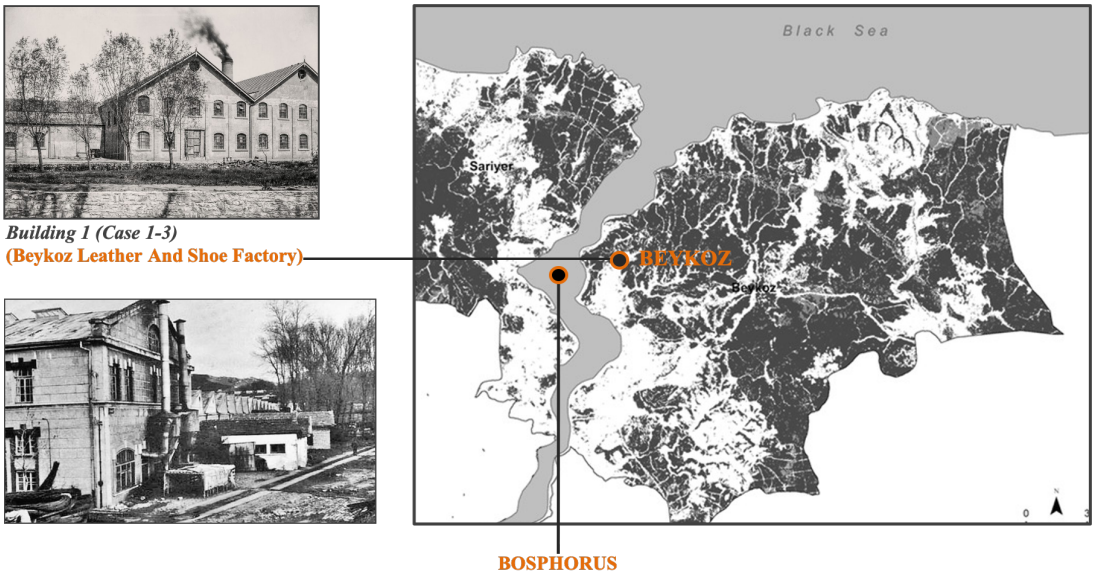


Figure 44: Industrial site from Bosphorus (Beykoz): Beykoz Leather and Shoe Factory

Beykoz Leather and Shoe Factory have historical value due to its historical character that provides connection with the past and a sense of continuity. Additionally, it is one of the important historical values of Turkey with its history dating back more than 200 years. Therefore, it has a symbolic meaning since it owns a deep-rooted history as a venue that continued its activities as Sümerbank Beykoz Leather and Shoe Factory after the proclamation of the republic until 1999. In addition, factory has a social value that was also served as a living space populated by almost three thousand people when

leather and shoes were produced. Therefore, it had a vital role in the economic and social structure of Beykoz (Alpler, Sahin and Dagli, 2020; URL 22).

Nowadays, this historical industrial building serves as a set for TV series and films and constitutes a meeting point that shows and events are hosted and creative ideas are produced (URL 22). Beykoz Leather and Shoe Factory has hosted more than a hundred films and TV productions over the last decade. Therefore, its value has increased immensely (Rappas, Ipek and Kayhan, 2018) (Figure 45).



Figure 45: Historical industrial buildings in Beykoz Leather and Shoe Factory

Accordingly, three set-up spaces that are organized as lofts in three different historical industrial buildings from Beykoz Leather and Shoe Factory were determined as the cases of this study. Therefore, this factory site is named as *Building 1* in this thesis. The first building in this factory site, which was adapted as a set-up loft, is *Rubber Revision Section (Case 1)* building where rubber shoe soles were produced in its original use. This historical industrial building was built by the end of 19th Century

that has a high ceiling and a huge volume with a rectangular plan (24.5mx16m). It preserves its external fabric where its finishes are in a good state in terms of structural and architectural condition (URL 22). Being one of the eldest buildings of the factory context, it has social, historical and symbolic value, which represents industrial architectural quality of its time of origin (Alpler, Sahin and Dagli, 2020).

Accordingly, as a result of the pre-analysis determination, it was achieved that this *Rubber Revision Section* building was used as set-up loft space for a series, which is named as 'İntikam' that was shot between 2013-2015 years. This historical industrial building was organized as set-up loft space for a fictitious user that was mentioned at the scenario. Therefore, fictitious character (new user) of this set-up loft was Ali Sülen. Figure below summarizes information related with the existing building, series shot in this building and duration of use (Figure 46).

Case 1-*Rubber Revision Section (Beykoz Leather and Shoe Factory)*

Construction Date: 19th Century
Original Function: Rubber Revision
New Function: Set-up space (organized as loft in series or films)
Location: Beykoz

Photos





Set-up Information

Name of Series	Year	Director	Art Director	Scriptwriter	Producer	Fictitious User Name	Profession	Age	Gender	Marital Status
Intikam	2013-2015	Mesude Eraslan & Cagri Vila Lostuvali	Ibrahim Ildem	Berkun Oya	In D House Disney	Ali Sulen	Businessman	30's	Male	Single

DURATION OF USE						
Series	Years					
	2012	2013	2014	2015	2016	2017
Intikam						

Figure 46: Information of Case 1, Rubber Revision Section in Beykoz Leather and Shoe Factory

The second set-up loft at this factory site is adapted in *Fire Station (Case 2)* building. This building is one the oldest building in Beykoz Leather and Shoe Factory, which is estimated that it has been built between years 1923-1955. It was used to function as the fire station during its original use that has three sub-sections in it. This historical industrial building is one of the listed buildings in the factory, which is included amongst the cultural properties under preservation. Currently, it is being used as set-up space for films and series permanently (URL 22).

As a result of pre-analysis studies, it was achieved that this building was used as set-up loft space for 'Güneşi Beklerken' serial that was shot between years 2013-2015. It

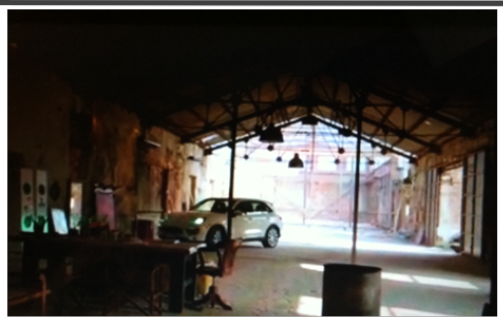
was organized as set-up loft space for a fictitious user that was named as Kerem Sayer. As a result of the interview which was done with Nilufer Uzun Deveci in 2013 (art director of this series) it has been revealed that, “according to the fictitious character, a space is designed and these kinds of old and empty spaces are preferred due to their characteristics appropriate for flexible solutions. Accordingly, Kerem has some hobbies such as boxing sports and therefore as she has stated objects, furniture and accessorises are selected in line with the identity of the character narrated in the scenarios in order to connect set-up space with fictitious user” (2013) (see Appendix B) (Figure 47).

Case 2-*Fire Station (Beykoz Leather and Shoe Factory)*

Construction Date: 1923-1955
Original Function: Fire Station for factory
New Function: Set-up space (organized as loft in series or films)
Location: Beykoz

Photos





Set-up Information

Name of Series	Year	Director	Art Director	Scriptwriter	Producer	Fictitious User Name	Profession	Age	Gender	Marital Status
Gunesi Beklerken	2013-2015	Altan Donmez	Nilufer Uzun Deveci	Gokhan Horzum, Aysin Akbulut	D Production	Kerem Sayer	Student	18	Male	Single

DURATION OF USE						
Series	Years					
	2012	2013	2014	2015	2016	2017
Gunesi Beklerken						

Figure 47: Information of Case 2, Fire Station in Beykoz Leather and Shoe Factory

The third set-up loft is *Old Factory (Case 3)* building at the factory site. This historical industrial building is sub-divided into three different sub-spaces. Therefore, it is one of the largest indoor areas in Beykoz Leather and Shoe Factory and one of the eldest buildings date back to the origins of the factory as it was estimated that this building was built between the years 1923-1955. Currently it is used as set-up space for series.

Accordingly, as a result of the pre-analysis stage, it was achieved that this *Old Factory* building was used as set-up loft space for a series, which is named as 'Poyraz Karayel'. The series was shot between 2015-2017 years and this building was organized as set-up loft space for a fictitious user whose name was Meltem Karayel. She was a hacker and has used this loft space as living and working spaces together. Existing building and set-up information about this series is mentioned at the below figure below (Figure 48).

Case 3-*Old Factory (Beykoz Leather and Shoe Factory)*

Construction Date: 1923-1955
Original Function: Old Factory
New Function: Set-up space (organized as loft in series or films)
Location: Beykoz

Photos





Set-up Information

Name of Series	Year	Director	Art Director	Scriptwriter	Producer	Fictitious User Name	Profession	Age	Gender	Marital Status
Poyraz Karayel	2015-2017	Osman Tasci	Basak Cavdar	Ethem Ozisik	Limon Film	Meltem Karayel	Hacker	30's	Female	Single

DURATION OF USE						
Series	Years					
	2012	2013	2014	2015	2016	2017
Poyraz Karayel						

Figure 48: Information of Case 3, Old Factory in Beykoz Leather and Shoe Factory

On the other hand, Golden Horn has been a significant economic, social and cultural component of İstanbul. Industrial developments were provided respectively by the conquest of İstanbul by Ottoman Empire (15th Century). The government built the first shipyards and factories in the middle of the 19th Century. Thus, industrial buildings in weave, mineral and food sector were constructed after the proclamation of the republic (Taner, 2013).

Golden Horn was an important centre for economic, cultural, social and military development that was left to decline after 1980s. In addition, in the mid-1990s, it has

once again become the central focus for the city governments to create a world city image for İstanbul (Günay and Dökmeci, 2012).

Cibali, Fener and Balat are the areas of industry with the warehouses and factories that were located in the Golden Horn district (Semih, et.al, 1978). In addition, Fener and Balat are the areas, which were home to Jewish bourgeoisie and wealthy Greek and a small Armenian population in the past. Furthermore, Fener has an international significance, because of the existence of Greek Orthodox Patriarchate in this area. In the 18th Century, aristocratic Greek families have started to build villas around the Patriarchate. Therefore, Balat became a retail centre for the navigators, seafarers, porters and street vendors however by the development of industrial areas in the 19th Century; both regions had lost their attraction (Günay and Dökmeci, 2012). In 1985, İstanbul city was added to the world heritage list. Fener and Balat regions, due to their opulent history, were determined as one of the four areas of the historical peninsula that was included in the world heritage list (Dinler and Güçhan, 2017). Furthermore, TV producers discovered Balat when the rehabilitation projects commenced in 1990s. And it gained popularity as a site for TV production following its gentrification process (Rappas, İpek and Kayhan, 2018).

Accordingly, six set-up loft spaces that are organized in two existing industrial buildings were determined from Golden Horn Region (Fener-Balat, Cibali) that were adapted to new uses before filmmakers used them as film making spaces (Figure 49).



Figure 49: Industrial buildings from Golden Horn (Balat-Cibali)

The first one is the *warehouse for carbonated water* in Balat, which was built during 1950-60s. After its abandonment, carbonated water warehouse was owned by a ceramic artist that was then re-used as an art gallery and studio prior to its re-functioning as a set-up space.

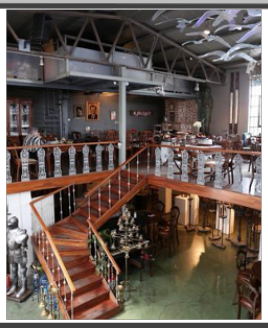
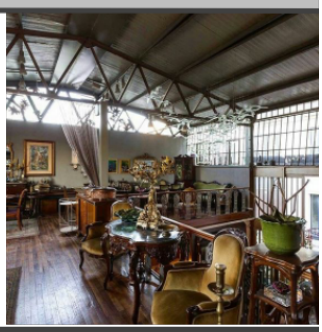
As a result of the pre-analysis determination, it was achieved that this *Carbonated Water Warehouse (Case 4)* building was used as set-up loft space for a series, which is named as 'Intikam' and shot between 2013-2015 years. This building was organized as set-up loft space for a fictitious user that was mentioned at the scenario. Therefore, fictitious character (new user) of this set-up loft was Hakan Eren. He was a businessman that he had a working space in this living space. Thus, set-up loft space of Hakan character was organized as living and working space together. In addition, an interview was done with İbrahim İldem in 2013 (art director of series). He mentioned, "set-up spaces explain the fictitious user's character and life. Therefore, a

loft space was selected for Hakan character to provide relation between space and fictitious user (2013) (see Appendix B) (Figure 50).

Case 4-*Carbonated Water Warehouse*

Construction Date: 1950's-60's
Original Function: Carbonated Water Warehouse
New Function: Set-up space (organized as loft in series or films) and Ceramic Studio/Gallery
Location: Balat/Fatih

Photos

Set-up Information

Name of Series	Year	Director	Art Director	Scriptwriter	Producer	Fictitious User Name	Profession	Age	Gender	Marital Status
Intikam	2013-2015	Mesude Eraslan & Cagri Vila Lostuvali	Ibrahim Ildem	Berkun Oya	In D House Disney	Hakan Eren	Businessman	30's	Male	Single

DURATION OF USE						
Series	Years					
	2012	2013	2014	2015	2016	2017
Son						

Figure 50: Information of Case 4, Carbonated Water Warehouse

The second industrial building is the *former soap factory* in Golden Horn Region. This warehouse building was built during the same period that is located in Cibali. In addition, the former soap factory was owned privately and re-functioning as an office that was then rented to producers as a set-up space.

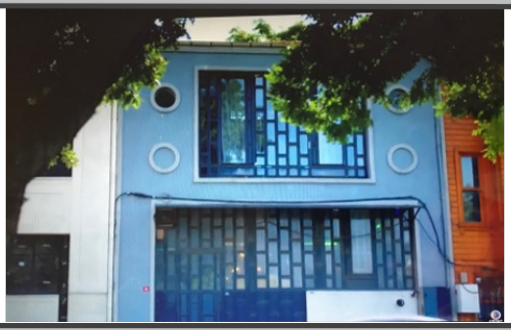
Accordingly, as a result of the pre-analysis determination, it was achieved that this *Former Soap Factory (Case 5-9)* building was used as set-up loft space for some

series, between 2012-2017 years. Therefore, it was achieved that there are 5 different series, which were organized as set-up loft spaces to do shooting in this industrial building. The series were ‘Son (2012), Güneşi Beklerken (2013-2015), O Hayat Benim (2014-2017), Dolunay (2017) and İntikam (2013-2015)’. Thus, fictitious character (new user) of these series was named as Halil (Son), Güneş Sayer (Güneşi Beklerken), Ateş German (O Hayat Benim), Deniz Kaya (Dolunay) and Haldun Arsoy (İntikam). The information of existing building and also set-up information of these series are mentioned at the figure below (Figure 51).

Case 5-9-*Former Soap Factory*

Construction Date: 1950's-60's
Original Function: Soap Factory
New Function: Set-up space (organized as loft in series or films)
Location: Cibali/Fatih

Photos





Set-up Information

Name of Series	Year	Director	Art Director	Scriptwriter	Producer	Fictitious User Name	Profession	Age	Gender	Marital Status
Son	01-06/2012	Uluc Bayraktar	-	Berkun Oya	Ay Yapim	Halil	Architect	30's	Male	Single
Gunesi Beklerken	2013-2015	Altan Donmez	Nilufer Uzun Deveci	Gokhan Horzum, Aysin Akbulut	D Production	Gunes Sayer	-	20's	Male	Single
O Hayat Benim	2014-2017	Hamdi Alkan	-	Canan Sinan, Ali Ercivan	Pastel Film	Ates German	Advocator	30's	Male	Single
Dolunay	07-12/2017	Tolga Coskuntuna	Ibrahim Ildem	Ayşen Günsu Teker Fikret Bekler Elif Özsüt	On Dokuz Productions	Deniz Kaya	Artist who composing musical work	20's	Male	Single
Intikam	2013-2015	Mesude Eraslan & Cagri Vila Lostuvali	Ibrahim Ildem	Berkun Oya	In D House Disney	Haldun Arsoy	Businessman	40's	Male	Single

DURATION OF USE

Series	Years					
	2012	2013	2014	2015	2016	2017
Son						
Gunesi Beklerken						
O Hayat Benim						
Dolunay						
Intikam						

Figure 51: Information of Case 5-9, Former Soap Factory

These industrial buildings that are located in Golden Horn district are significant examples that have a rarity and symbolic value as the reminiscence of few industrial buildings after the demolition of more than 600 factories and warehouses from 1980s in this region (Günay and Dökmeci, 2012; Alpler, Şahin and Dağlı, 2020). They

have/reflect architectural characteristics of industrial buildings that were built by the government during 1950-60s. In addition, these industrial buildings have a functional design, modest architectural planning, lacking aesthetic considerations (minimal ornamentation); and they are single or double storey buildings as the shelter of production (Ilke, 2015).

As a summary, 5 different existing industrial building stocks such as historical industrial buildings and non-historical industrial buildings in 2 different districts of İstanbul (Bosphorus and Golden Horn) were determined as the cases buildings of the study. One of them is a factory site from Bosphorus (Beykoz) that has 3 different historical industrial buildings in it that are re-functioning as film-making spaces currently. On the other hand, 2 other buildings were determined from Golden Horn region (Cibali and Balat districts), which was one of the significant industrial zones of İstanbul until mid-1900's and lost its importance later on, due to abandonment process of the industrial buildings in this region. It must be noted that, these two buildings' adaptation into new permanent functions as private office and cultural use were initially accomplished prior to their being used as set-up loft spaces with their re-functioning characteristics.

5.3 Development of Inventory to collate information upon the criteria effective on the creation of interior space atmosphere

Inventory is developed as a supplementary tool for noting down/collating the specified criteria (on the framework) at each case throughout the analytical framework for the reading of interior space atmosphere creation set-up loft spaces. Inventories are structured under three sections. First section collates data of the fictitious user (character) identity (FUI) category and it is divided into two sections including the

criteria of fictitious user [gender, age, marital status, user number and sharing status of user] and story [personality of fictitious user and main theme of scenario]. The second section collates data of the existing building essence (EBE) category that is divided into 5 sections that are building typology [architectural form and old/former function], structural system and elements, construction material, building storey and building height and width. The third section includes data of the anatomy of interior space (AIS) category and it is divided into two sections including the criteria of tactics [plane, design bases, object, surface, light, form, displays, spatial articulation and design principles] and strategy [responsive interiors and autonomous interiors].

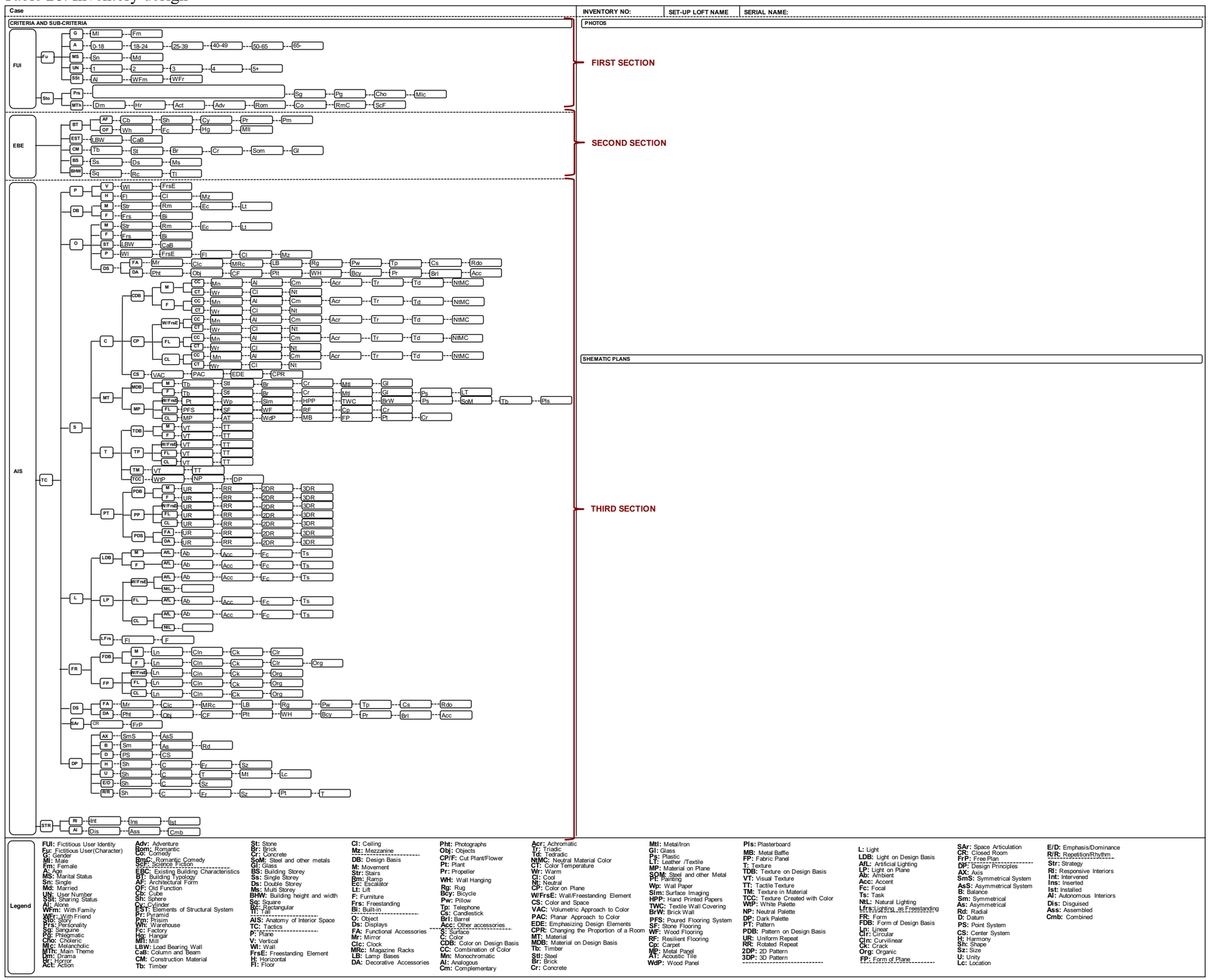
Moreover, each set-up loft space is assigned with a code. Therefore, lofts name, their codes and inventory numbers of set-up lofts are determined accordingly as they are indicated in the Table 25.

Table 25: Case Areas, set-up loft names and inventory numbers

CASE AREAS, SET-UP LOFT NAMES & INVENTORY NUMBERS		
Building 1	**Building 2**	**Building 3**
Rubber Revision Section	**Carbonated Water Warehouse**	**Former Soap Factory**
Ali Sülen Loft ↓ Case1-IN 01	Hakan Eren Loft ↓ Case4-IN 04	Haldun Arsoy Loft ↓ Case5-IN 05
Fire Station		Halil Loft ↓ Case6-IN 06
Kerem Sayer Loft ↓ Case2-IN 02		
Old Factory		Güneş Sayer Loft ↓ Case7-IN 07
Meltem Karayel Loft ↓ Case3-IN 03		
		Ateş German Loft ↓ Case8-IN 08
		Deniz Kaya Loft ↓ Case9-IN 09
IN ⟶ Inventory Number		

Accordingly, inventory, which is divided into three sections, is schematized in the table below (Table 26).

Table 26: Inventory design



Legend

FUI: Fictitious User Identity
Fu: Fictitious User(Character)
G: Gender
MI: Male
Fm: Female
A: Age
MS: Marital Status
Sn: Single
Md: Married
UN: User Number
SSt: Sharing Status
Al: Alone
WFm: With Family
WFr: With Friend
Sto: Story
Prs: Personality
Sg: Sanguine
Pg: Phlegmatic
Cho: Choleric
Mlc: Melancholic
MTh: Main Theme
Dm: Drama
Hr: Horror
Act: Action

Adv: Adventure
Rom: Romantic
Co: Comedy
RmC: Romantic Comedy
ScF: Science Fiction
EBC: Existing Building Characteristics
BT: Building Typology
AF: Architectural Form
OF: Old Function
Cb: Cube
Sh: Sphere
Cy: Cylinder
EST: Elements of Structural System
Pr: Pyramid
Pm: Prisim
Wh: Warehouse
Fc: Factory
Hg: Hangar
Mll: Mill
LBW: Load Bearing Wall
CaB: Column and Beam
CM: Construction Material
Tb: Timber

St: Stone
Br: Brick
Cr: Concrete
SoM: Steel and other metals
Gl: Glass
BS: Building Storey
Ss: Single Storey
Ds: Double Storey
Ms: Multi Storey
BHW: Building height and width
Sq: Square
Rc: Rectangular
Tl: Tall
AIS: Anatomy of Interior Space
TC: Tactics
P: Plane
V: Vertical
Wl: Wall
FrsE: Freestanding Element
H: Horizontal
Fl: Floor

Cl: Ceiling
Mz: Mezzanine
DB: Design Basis
M: Movement
Str: Stairs
Rm: Ramp
Ec: Escalator
Lt: Lift
F: Furniture
Frs: Freestanding
Bi: Built-in
O: Object
Ds: Displays
FA: Functional Accessories
Mr: Mirror
Clc: Clock
MRc: Magazine Racks
LB: Lamp Bases
DA: Decorative Accessories

Pht: Photographs
Obj: Objects
CF/F: Cut Plant/Flower
Pt: Plant
Pr: Propeller
WH: Wall Hanging
Rg: Rug
Bcy: Bicycle
Pw: Pillow
Tp: Telephone
Cs: Candlestick
Brl: Barrel
Acc: Other accessories
S: Surface
C: Color
CDB: Color on Design Basis
CC: Combination of Color
Mn: Monochromatic
Al: Analogous
Cm: Complementary

Acr: Achromatic
Tr: Triadic
Td: Tedradic
NtMC: Neutral Material Color
CT: Color Temperature
Wr: Warm
Cl: Cool
Nt: Neutral
CP: Color on Plane
W/FrsE: Wall/Freestanding Element
CS: Color and Space
VAC: Volumetric Approach to Color
PAC: Planar Approach to Color
EDE: Emphasizing Design Elements
CPR: Changing the Proportion of a Room
MT: Material
MDB: Material on Design Basis
Tb: Timber
Stl: Steel
Br: Brick
Cr: Concrete

Mtl: Metal/Iron
Gl: Glass
Ps: Plastic
LT: Leather /Textile
MP: Material on Plane
SoM: Steel and other Metal
Pt: Painting
Wp: Wall Paper
Stm: Surface Imaging
HPP: Hand Printed Papers
TWC: Textile Wall Covering
Br'W: Brick Wall
PFS: Poured Flooring System
SF: Stone Flooring
WF: Wood Flooring
RF: Resilient Flooring
Cp: Carpet
MP: Metal Panel
AT: Acoustic Tile
WdP: Wood Panel

Pls: Plasterboard
MB: Metal Baffle
FP: Fabric Panel
T: Texture
TDB: Texture on Design Basis
VT: Visual Texture
TT: Tactile Texture
TM: Texture in Material
TCC: Texture Created with Color
WtP: White Palette
NP: Neutral Palette
DP: Dark Palette
PT: Pattern
PDB: Pattern on Design Basis
UR: Uniform Repeat
RR: Rotated Repeat
2DP: 2D Pattern
3DP: 3D Pattern

L: Light
LDB: Light on Design Basis
AfL: Artificial Lighting
LP: Light on Plane
Ab: Ambient
Acc: Accent
Fc: Focal
Ts: Task
NtL: Natural Lighting
Lfrs: Lighting as Freestanding
FR: Form
FDB: Form of Design Basis
Ln: Linear
Clr: Circular
Cln: Curvilinear
Ck: Crack
Org: Organic
FP: Form of Plane

SAr: Space Articulation
CR: Closed Room
FrP: Free Plan
DP: Design Principles
AX: Axis
SmS: Symmetrical System
AsS: Asymmetrical System
B: Balance
Sm: Symmetrical
As: Asymmetrical
Rd: Radial
D: Datum
PS: Point System
CS: Center System
H: Harmony
Sh: Shape
Sz: Size
U: Unity
Lc: Location

E/D: Emphasis/Dominance
R/R: Repetition/Rhythm
Str: Strategy
RI: Responsive Interiors
Int: Intervened
Ins: Inserted
Ist: Installed
AI: Autonomous Interiors
Dis: Disguised
Ass: Assembled
Cmb: Combined

Inventories acted as useful supplementary tools in gathering comprehensive information about the selected cases. They were filled by on-site investigations in accordance with the criteria specified in the analytical framework, which was achieved as a result of an extensive literature review. Moreover, analytical reading was supported with photographic documentation of the set-up lofts and by drawing their plans schematically. 9 inventory forms were filled totally (see Appendix A).

5.4 Investigating the Creation of Interior Space Atmosphere at the Selected Cases through Analytical Framework

This section explores/presents investigation of interior space atmosphere creation at the stated nine set-up lofts space by means of unveiling the criteria, which have contributed to the creation of interior space. Therefore, nine different set-up loft spaces, which were set in five different existing industrial building stocks, were read through the developed analytical framework. Accordingly, set-up spaces' interior space creation was investigated in line with the three main groups of criteria that have already stated in the previous section as: fictitious user (character) identity, existing building essence and anatomy of interior space. In the following section, initially, findings of the in-depth reading are put forward and then direct and indirect influence of the framework criteria as the determinants/bases of the formation of interior atmosphere; is discussed elaborately subsequently.

5.4.1 In-depth Reading of Nine Set-up Lofts: Determinants/Bases of the Interior Space Atmosphere Creation

Nine set-up loft spaces, which were selected as the cases of the study was read and in-depth investigation was determined with the help of developed analytical framework. Accordingly, in-depth reading has revealed the diversified role of the *three main determinants,* Fictitious User (character) Identity, Existing Building Essence and

Anatomy of Interior Space on the interior space atmosphere creation and their sub-criteria. Accordingly, in-dept reading of nine set-up loft spaces are stated in the following (Table 27-35).

Table 27*:* Reading of Case 1- Ali Sülen Loft

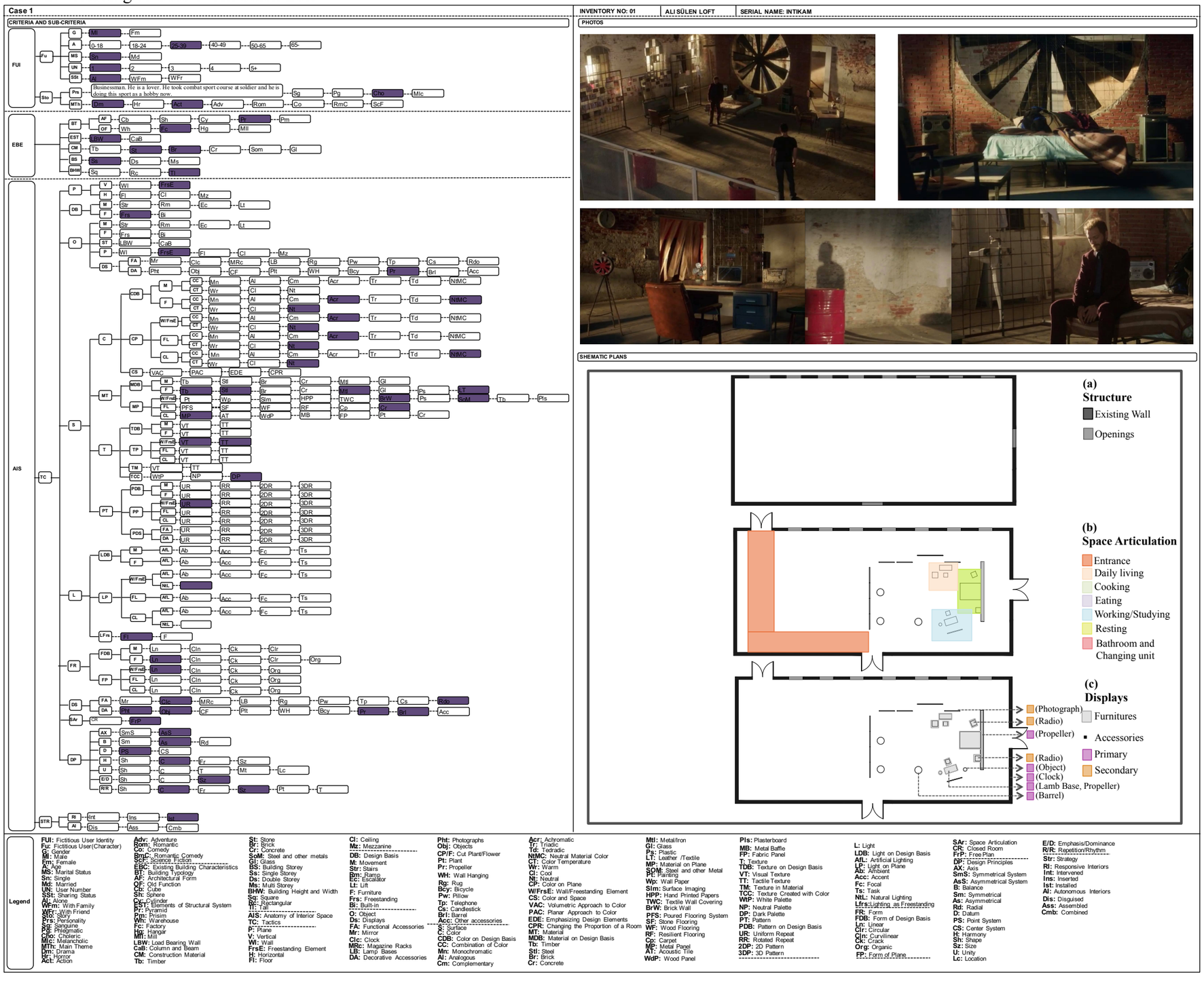


Table 28*:* Reading of Case 2- Kerem Sayer Loft

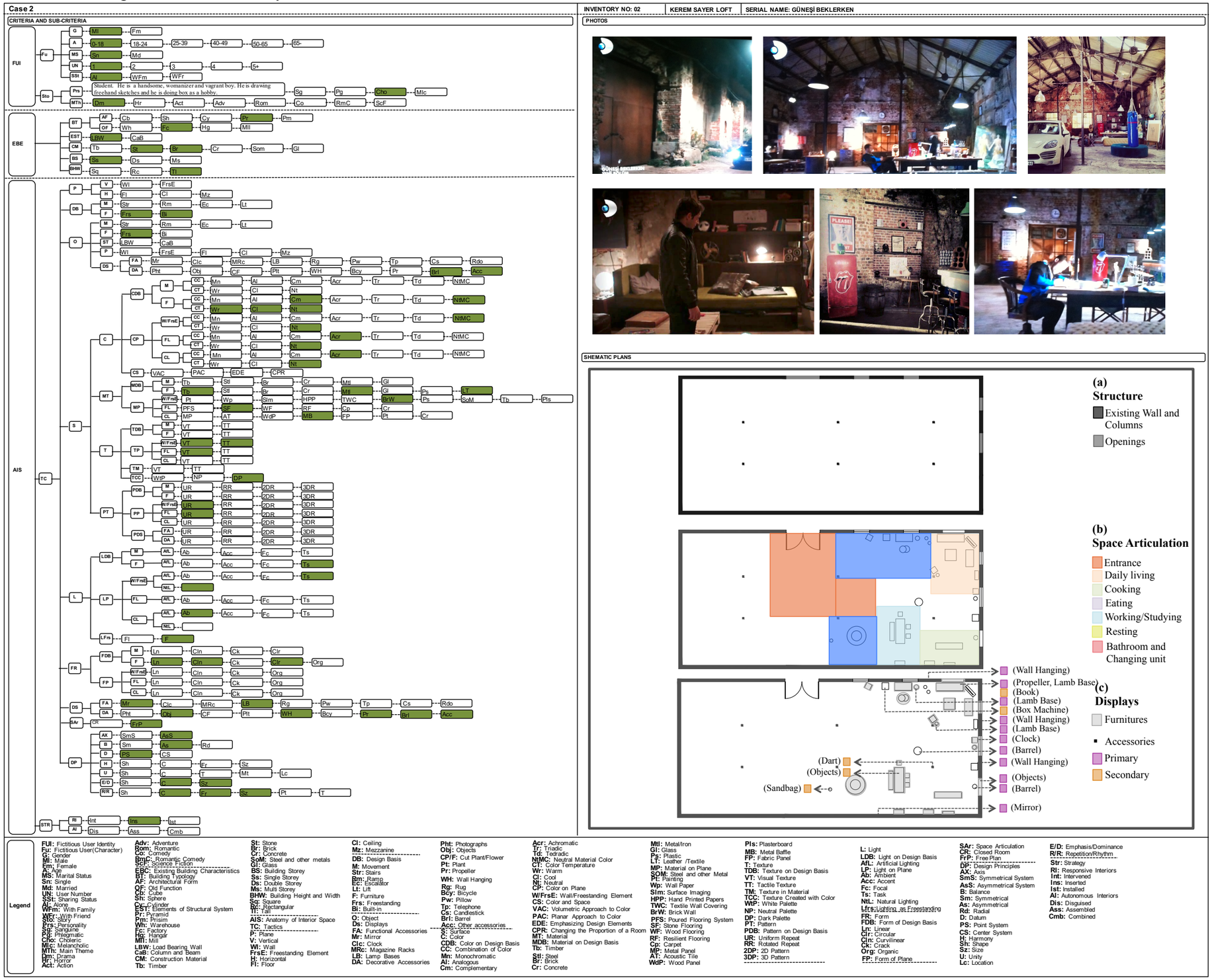
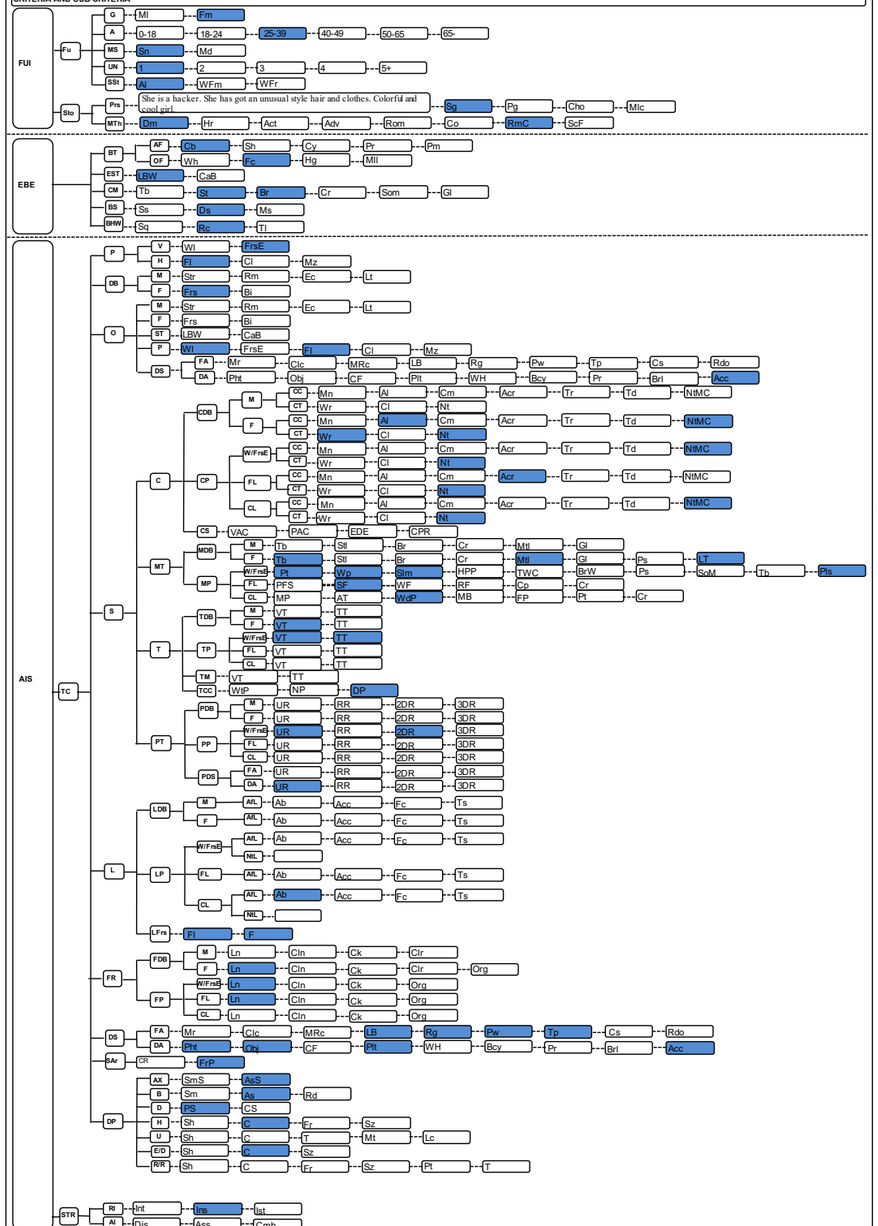


Table 29*:* Reading of Case 3- Meltem Karayel Loft

Case 3 | **INVENTORY NO: 03** | **MELTEM KARAYEL LOFT** | **SERIAL NAME: POYRAZ KARAYEL**

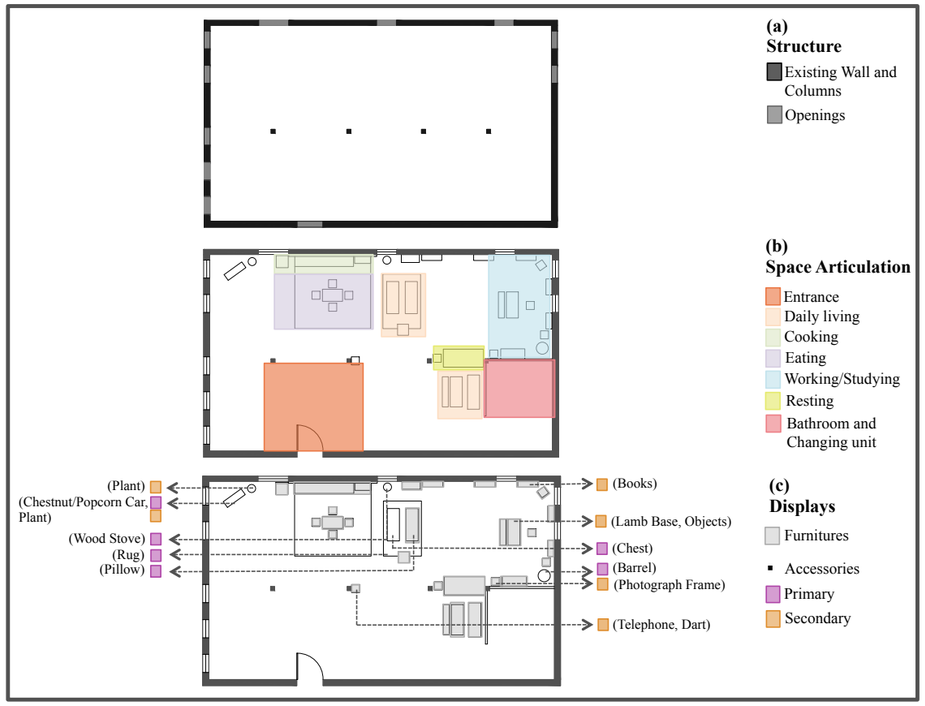
CRITERIA AND SUB-CRITERIA



PHOTOS



SHEMATIC PLANS



Legend

FUI: Fictitious User Identity
Fu: Fictitious User(Character)
G: Gender
Ml: Male
Fm: Female
A: Age
MS: Marital Status
Sn: Single
Md: Married
UN: User Number
SSt: Sharing Status
Al: Alone
WFm: With Family
WFr: With Friend
Sto: Story
Prs: Personality
Sg: Sanguine
Pg: Phlegmatic
Cho: Choleric
Mlc: Melancholic
MTh: Main Theme
Dm: Drama
Hr: Horror
Act: Action

Adv: Adventure
Rom: Romantic
Co: Comedy
RmC: Romantic Comedy
ScF: Science Fiction
EBC: Existing Building Characteristics
BT: Building Typology
AF: Architectural Form
OF: Old Function
Cb: Cube
Sh: Sphere
Cy: Cylinder
EST: Elements of Structural System
Pr: Pyramid
Pm: Prisim
Wh: Warehouse
Fc: Factory
Hg: Hangar
Mil: Mill
LBW: Load Bearing Wall
CaB: Column and Beam
CM: Construction Material
Tb: Timber

St: Stone
Br: Brick
Cr: Concrete
SoM: Steel and other metals
Gl: Glass
BS: Building Storey
Ss: Single Storey
Ds: Double Storey
Ms: Multi Storey
BHW: Building Height and Width
Sq: Square
Rc: Rectangular
Tl: Tall
AIS: Anatomy of Interior Space
TC: Tactics
P: Plane
V: Vertical
W: Wall
FrsE: Freestanding Element
H: Horizontal
Fl: Floor

Cl: Ceiling
Mz: Mezzanine
DB: Design Basis
M: Movement
Str: Stairs
Rm: Ramp
Ec: Escalator
Lt: Lift
F: Furniture
Frs: Freestanding
Bi: Built-in
O: Object
Ds: Displays
FA: Functional Accessories
Mr: Mirror
Clc: Clock
MRc: Magazine Racks
LB: Lamp Bases
DA: Decorative Accessories

Pht: Photographs
Obj: Objects
CP/F: Cut Plant/Flower
Pt: Plant
Pr: Propeller
WH: Wall Hanging
Rg: Rug
Bcy: Bicycle
Pw: Pillow
Tp: Telephone
Cs: Candlestick
Brl: Barrel
Acc: Other accessories
S: Surface
C: Color
CDB: Color on Design Basis
CC: Combination of Color
Mn: Monochromatic
Al: Analogous
Cm: Complementary

Acr: Achromatic
Tr: Triadic
Td: Tedradic
NtMC: Neutral Material Color
CT: Color Temperature
Wr: Warm
Cl: Cool
Nt: Neutral
CP: Color on Plane
W/FrsE: Wall/Freestanding Element
CS: Color and Space
VAC: Volumetric Approach to Color
PAC: Planar Approach to Color
EDE: Emphasizing Design Elements
CPR: Changing the Proportion of a Room
MT: Material
MDB: Material on Design Basis
Tb: Timber
Stl: Steel
Br: Brick
Cr: Concrete

Mtl: Metal/Iron
Gl: Glass
Ps: Plastic
LT: Leather /Textile
MP: Material on Plane
SoM: Steel and other Metal
Pt: Painting
Wp: Wall Paper
Slm: Surface Imaging
HPP: Hand Printed Papers
TWC: Textile Wall Covering
BrW: Brick Wall
PFS: Poured Flooring System
SF: Stone Flooring
WF: Wood Flooring
RF: Resilient Flooring
Cp: Carpet
MP: Metal Panel
AT: Acoustic Tile
WdP: Wood Panel

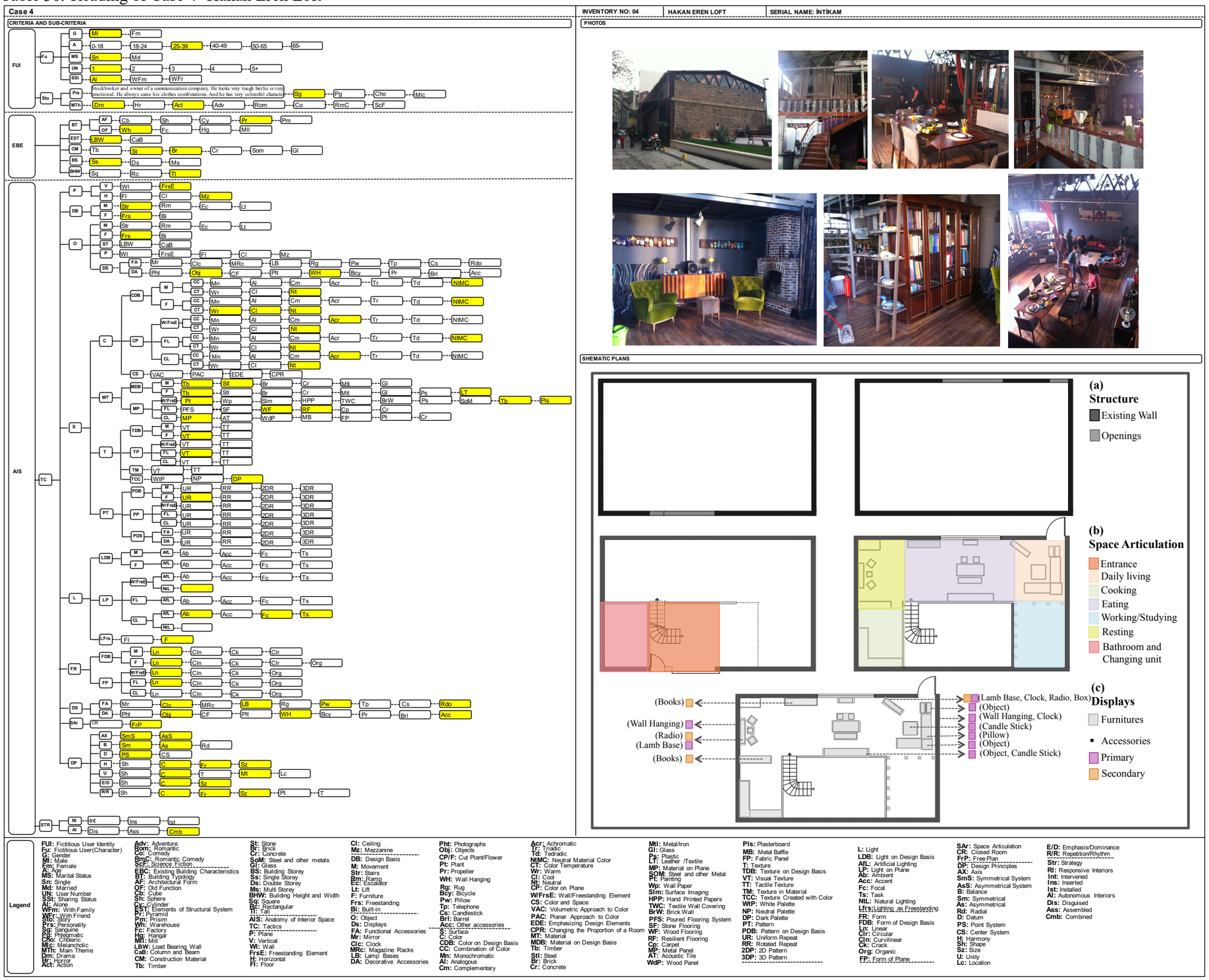
Pls: Plasterboard
MB: Metal Baffle
FP: Fabric Panel
T: Texture
TDB: Texture on Design Basis
VT: Visual Texture
TT: Tactile Texture
TM: Texture in Material
TCC: Texture Created with Color
WtP: White Palette
NP: Neutral Palette
DP: Dark Palette
PT: Pattern
PDB: Pattern on Design Basis
UR: Uniform Repeat
RR: Rotated Repeat
2DP: 2D Pattern
3DP: 3D Pattern

L: Light
LDB: Light on Design Basis
AfL: Artificial Lighting
LP: Light on Plane
Ab: Ambient
Acc: Accent
Fc: Focal
Ts: Task
NtL: Natural Lighting
Lfrs: Lighting as Freestanding
FR: Form
FDB: Form of Design Basis
Ln: Linear
Clr: Circular
Cln: Curvilinear
Ck: Crack
Org: Organic
FP: Form of Plane

SAr: Space Articulation
CR: Closed Room
FrP: Free Plan
DP: Design Principles
AX: Axis
SmS: Symmetrical System
AsS: Asymmetrical System
B: Balance
Sm: Symmetrical
As: Asymmetrical
Rd: Radial
D: Datum
PS: Point System
CS: Center System
H: Harmony
Sh: Shape
Sz: Size
U: Unity
Lc: Location

E/D: Emphasis/Dominance
R/R: Repetition/Rhythm
Str: Strategy
RI: Responsive Interiors
Int: Intervened
Ins: Inserted
Ist: Installed
AI: Autonomous Interiors
Dis: Disguised
Ass: Assembled
Cmb: Combined

Table 30*:* Reading of Case 4- Hakan Eren Loft



Legend

FUI: Fictitious User Identity
Fu: Fictitious User(Character)
G: Gender
MI: Male
Fm: Female
A: Age
MS: Marital Status
Sn: Single
Md: Married
UN: User Number
SSt: Sharing Status
Al: Alone
WFm: With Family
WFr: With Friend
Sto: Story
Prs: Personality
Sg: Sanguine
Pg: Phlegmatic
Cho: Choleric
Mlc: Melancholic
MTh: Main Theme
Dm: Drama
Hr: Horror
Act: Action

Adv: Adventure
Rom: Romantic
Co: Comedy
SroC: Romantic Comedy
SciF: Science Fiction
EBC: Existing Building Characteristics
BT: Building Typology
AF: Architectural Form
OF: Old Function
Cb: Cube
Sh: Sphere
Cy: Cylinder
ESt: Elements of Structural System
Pr: Pyramid
Pm: Prism
Wh: Warehouse
Fc: Factory
Hg: Hangar
Mll: Mill
LBW: Load Bearing Wall
CaB: Column and Beam
CM: Construction Material
Tb: Timber

St: Stone
Br: Brick
Cr: Concrete
SoM: Steel and other metals
Gl: Glass
BS: Building Storey
Ss: Single Storey
Ds: Double Storey
Ms: Multi Storey
BHW: Building Height and Width
Sq: Square
Rc: Rectangular
Tl: Tall
AIS: Anatomy of Interior Space
TC: Tactics
P: Plane
V: Vertical
Wl: Wall
FrsE: Freestanding Element
Fl: Floor

Cl: Ceiling
Mz: Mezzanine
DB: Design Basis
M: Movement
Str: Stairs
Rm: Ramp
Ec: Escalator
Lt: Lift
F: Furniture
Frs: Freestanding
Bi: Built-in
O: Object
Ds: Displays
FA: Functional Accessories
Mr: Mirror
Clc: Clock
MRc: Magazine Racks
LB: Lamp Bases
DA: Decorative Accessories

Pht: Photographs
Obj: Objects
CP/F: Cut Plant/Flower
Pt: Plant
Pr: Propeller
WH: Wall Hanging
Rg: Rug
BCy: Bicycle
Pw: Pillow
Tp: Telephone
Cs: Candlestick
Brl: Barrel
Acc: Other accessories
S: Surface
C: Color
CDB: Color on Design Basis
CC: Combination of Color
Mn: Monochromatic
Al: Analogous
Cm: Complementary

Acr: Achromatic
Tr: Triadic
Td: Tedradic
NtMC: Neutral Material Color
CT: Color Temperature
Wr: Warm
Cl: Cool
Nt: Neutral
CP: Color on Plane
W/FrsE: Wall/Freestanding Element
CS: Color and Space
VAC: Volumetric Approach to Color
PAC: Planar Approach to Color
EDE: Emphasizing Design Elements
CPR: Changing the Proportion of a Room
MT: Material
MDB: Material on Design Basis
Tb: Timber
Stl: Steel
Br: Brick
Cr: Concrete

Mtl: Metal/Iron
Gl: Glass
Ps: Plastic
LT: Leather /Textile
MP: Material on Plane
SOM: Steel and other Metal
Pt: Painting
Wp: Wall Paper
Slm: Surface Imaging
HPP: Hand Printed Papers
TWC: Textile Wall Covering
BrW: Brick Wall
PFS: Poured Flooring System
SF: Stone Flooring
WF: Wood Flooring
RF: Resilient Flooring
Cp: Carpet
MP: Metal Panel
AT: Acoustic Tile
WdP: Wood Panel

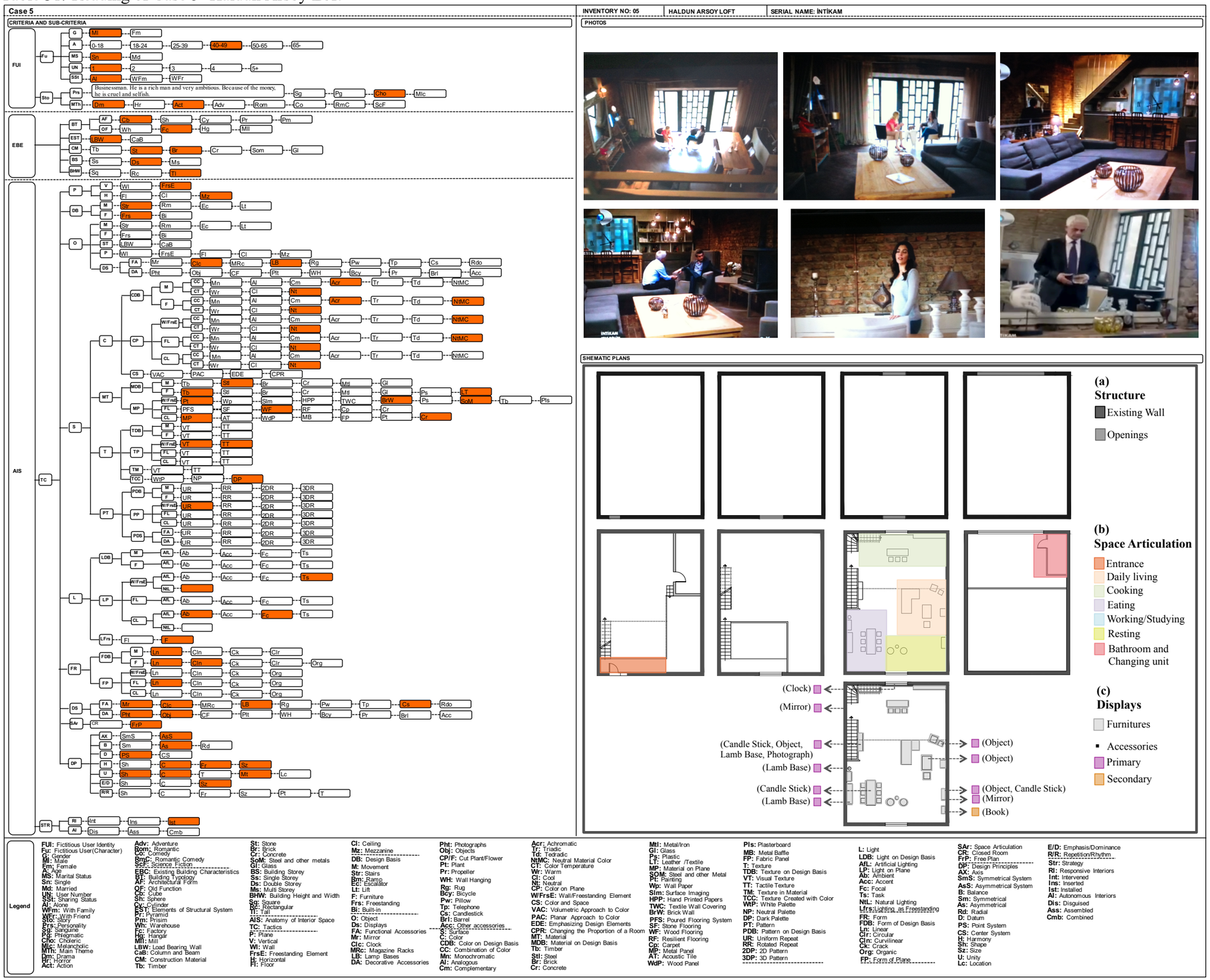
PIs: Plasterboard
MB: Metal Baffle
FP: Fabric Panel
T: Texture
TDB: Texture on Design Basis
VT: Visual Texture
TT: Tactile Texture
TM: Texture in Material
TCC: Texture Created with Color
WtP: White Palette
NP: Neutral Palette
DP: Dark Palette
PT: Pattern
PDB: Pattern on Design Basis
UR: Uniform Repeat
RR: Rotated Repeat
2DP: 2D Pattern
3DP: 3D Pattern

L: Light
LDB: Light on Design Basis
AfL: Artificial Lighting
LP: Light on Plane
Ab: Ambient
Acc: Accent
Fc: Focal
Ts: Task
NtL: Natural Lighting
Lfrs: Lighting as Freestanding
FR: Form
FDB: Form of Design Basis
Ln: Linear
Clr: Circular
Cln: Curvilinear
Ck: Crack
Org: Organic
FP: Form of Plane

SAr: Space Articulation
CR: Closed Room
FrP: Free Plan
DP: Design Principles
AX: Axis
SmS: Symmetrical System
AsS: Asymmetrical System
B: Balance
Sm: Symmetrical
As: Asymmetrical
Rd: Radial
D: Datum
PS: Point System
CS: Center System
H: Harmony
Sh: Shape
Sz: Size
U: Unity
Lc: Location

E/D: Emphasis/Dominance
R/R: Repetition/Rhythm
Str: Strategy
RI: Responsive Interiors
Int: Intervened
Ins: Inserted
Ist: Installed
AI: Autonomous Interiors
Dis: Disguised
Ass: Assembled
Cmb: Combined

Table 31: Reading of Case 5- Haldun Arsoy Loft



Legend

FUI: Fictitious User Identity
Fu: Fictitious User(Character)
G: Gender
Ml: Male
Fm: Female
A: Age
MS: Marital Status
Sn: Single
Md: Married
UN: User Number
SSt: Sharing Status
Al: Alone
WFm: With Family
WFr: With Friend
Sto: Story
Prs: Personality
Sg: Sanguine
Pg: Phlegmatic
Cho: Choleric
Mlc: Melancholic
MTh: Main Theme
Drm: Drama
Hr: Horror
Act: Action

Adv: Adventure
Rom: Romantic
Co: Comedy
RmC: Romantic Comedy
SciFc: Science Fiction
EBC: Existing Building Characteristics
BT: Building Typology
AF: Architectural Form
QF: Old Function
Cb: Cube
Sh: Sphere
Cy: Cylinder
EST: Elements of Structural System
Pr: Pyramid
Pm: Prism
Wh: Warehouse
Fc: Factory
Hg: Hangar
Mll: Mill
LBW: Load Bearing Wall
CaB: Column and Beam
CM: Construction Material
Tb: Timber

St: Stone
Br: Brick
Cr: Concrete
SoM: Steel and other metals
Gl: Glass
BS: Building Storey
Ss: Single Storey
Ds: Double Storey
Ms: Multi Storey
BHW: Building Height and Width
Sq: Square
Rc: Rectangular
Tl: Tall
AIS: Anatomy of Interior Space
TC: Tactics
P: Plane
V: Vertical
Wl: Wall
FrsE: Freestanding Element
H: Horizontal
Fl: Floor

Cl: Ceiling
Mz: Mezzanine
DB: Design Basis
M: Movement
Str: Stairs
Brn: Ramp
Ec: Escalator
Lt: Lift
F: Furniture
Frs: Freestanding
Bi: Built-in
O: Object
Ds: Displays
FA: Functional Accessories
Mr: Mirror
Clc: Clock
MRc: Magazine Racks
LB: Lamp Bases
DA: Decorative Accessories

Pht: Photographs
Obj: Objects
CP/F: Cut Plant/Flower
Pt: Plant
Pr: Propeller
WH: Wall Hanging
Rg: Rug
Bcy: Bicycle
Pw: Pillow
Tp: Telephone
Cs: Candlestick
Brl: Barrel
Acc: Other accessories
S: Surface
C: Color
CDB: Color on Design Basis
CC: Combination of Color
Mn: Monochromatic
Al: Analogous
Cm: Complementary

Acr: Achromatic
Tr: Triadic
Td: Tedradic
NtMC: Neutral Material Color
CT: Color Temperature
Wr: Warm
Cl: Cool
Nt: Neutral
CP: Color on Plane
W/FrsE: Wall/Freestanding Element
CS: Color and Space
VAC: Volumetric Approach to Color
PAC: Planar Approach to Color
EDE: Emphasizing Design Elements
CPR: Changing the Proportion of a Room
MT: Material
MDB: Material on Design Basis
Tb: Timber
Stl: Steel
Br: Brick
Cr: Concrete

Mtl: Metal/Iron
Gl: Glass
Ps: Plastic
LT: Leather /Textile
MP: Material on Plane
SOM: Steel and other Metal
Pt: Painting
Wp: Wall Paper
Sim: Surface Imaging
HPP: Hand Printed Papers
TWC: Textile Wall Covering
BrW: Brick Wall
PFS: Poured Flooring System
SF: Stone Flooring
WF: Wood Flooring
RF: Resilient Flooring
Cp: Carpet
MP: Metal Panel
AT: Acoustic Tile
WdP: Wood Panel

PIs: Plasterboard
MB: Metal Baffle
FP: Fabric Panel
T: Texture
TDB: Texture on Design Basis
VT: Visual Texture
TT: Tactile Texture
TM: Texture in Material
TCC: Texture Created with Color
WtP: White Palette
NP: Neutral Palette
DP: Dark Palette
PT: Pattern
PDB: Pattern on Design Basis
UR: Uniform Repeat
RR: Rotated Repeat
2DP: 2D Pattern
3DP: 3D Pattern

L: Light
LDB: Light on Design Basis
AtL: Artificial Lighting
LP: Light on Plane
Ab: Ambient
Acc: Accent
Fc: Focal
Ts: Task
NtL: Natural Lighting
LFrs: Lighting as Freestanding
FR: Form
FDB: Form of Design Basis
Ln: Linear
Clr: Circular
Cln: Curvilinear
Ck: Crack
Org: Organic
FP: Form of Plane

SAr: Space Articulation
CR: Closed Room
FrP: Free Plan
DP: Design Principles
AX: Axis
SmS: Symmetrical System
AsS: Asymmetrical System
B: Balance
Sm: Symmetrical
As: Asymmetrical
Rd: Radial
D: Datum
PS: Point System
CS: Center System
H: Harmony
Sh: Shape
Sz: Size
U: Unity
Lc: Location

E/D: Emphasis/Dominance
R/R: Repetition/Rhythm
Str: Strategy
RI: Responsive Interiors
Int: Intervened
Ins: Inserted
Ist: Installed
AI: Autonomous Interiors
Dis: Disguised
Ass: Assembled
Cmb: Combined

Table 32*:* Reading of Case 6- Halil Loft

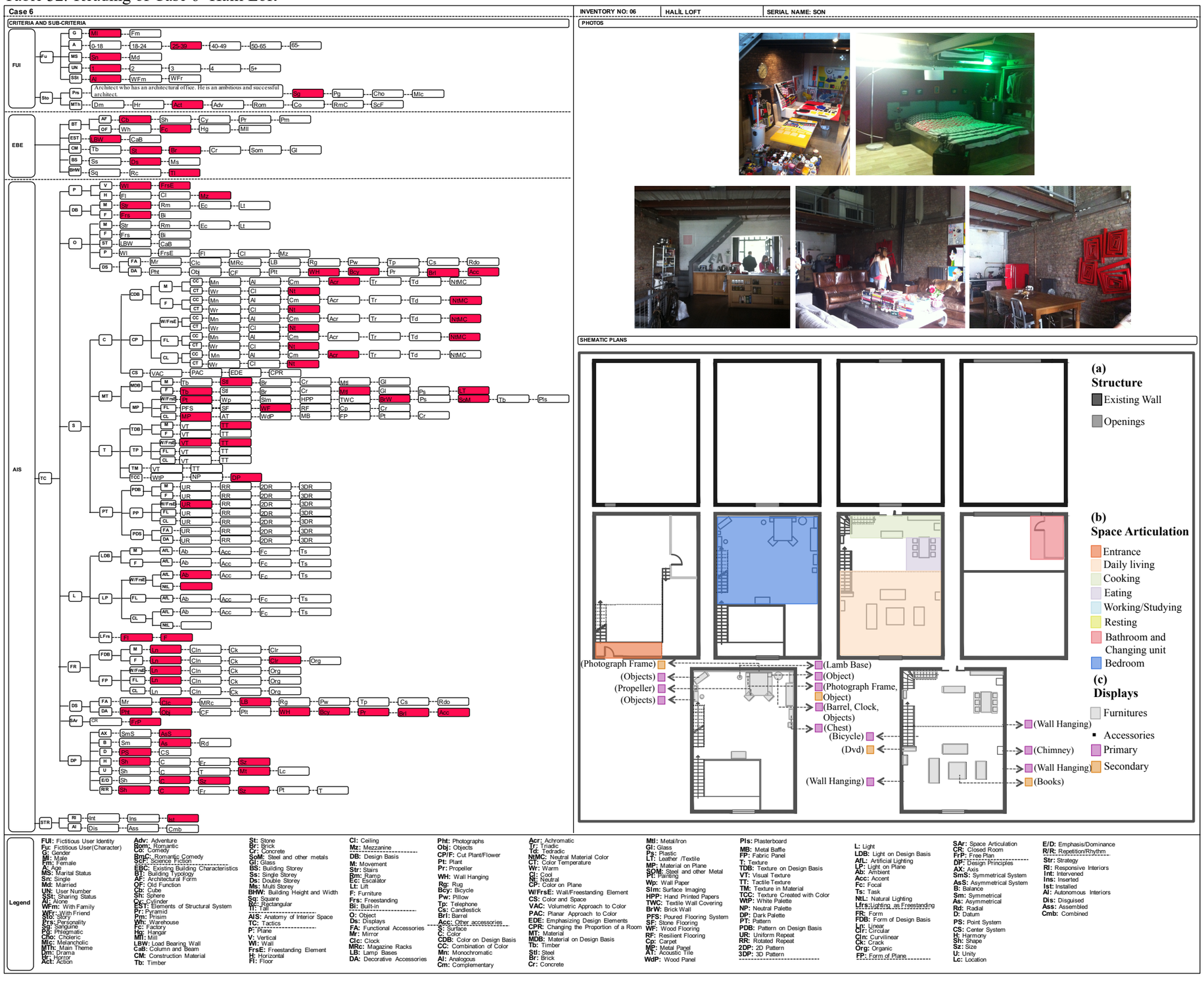
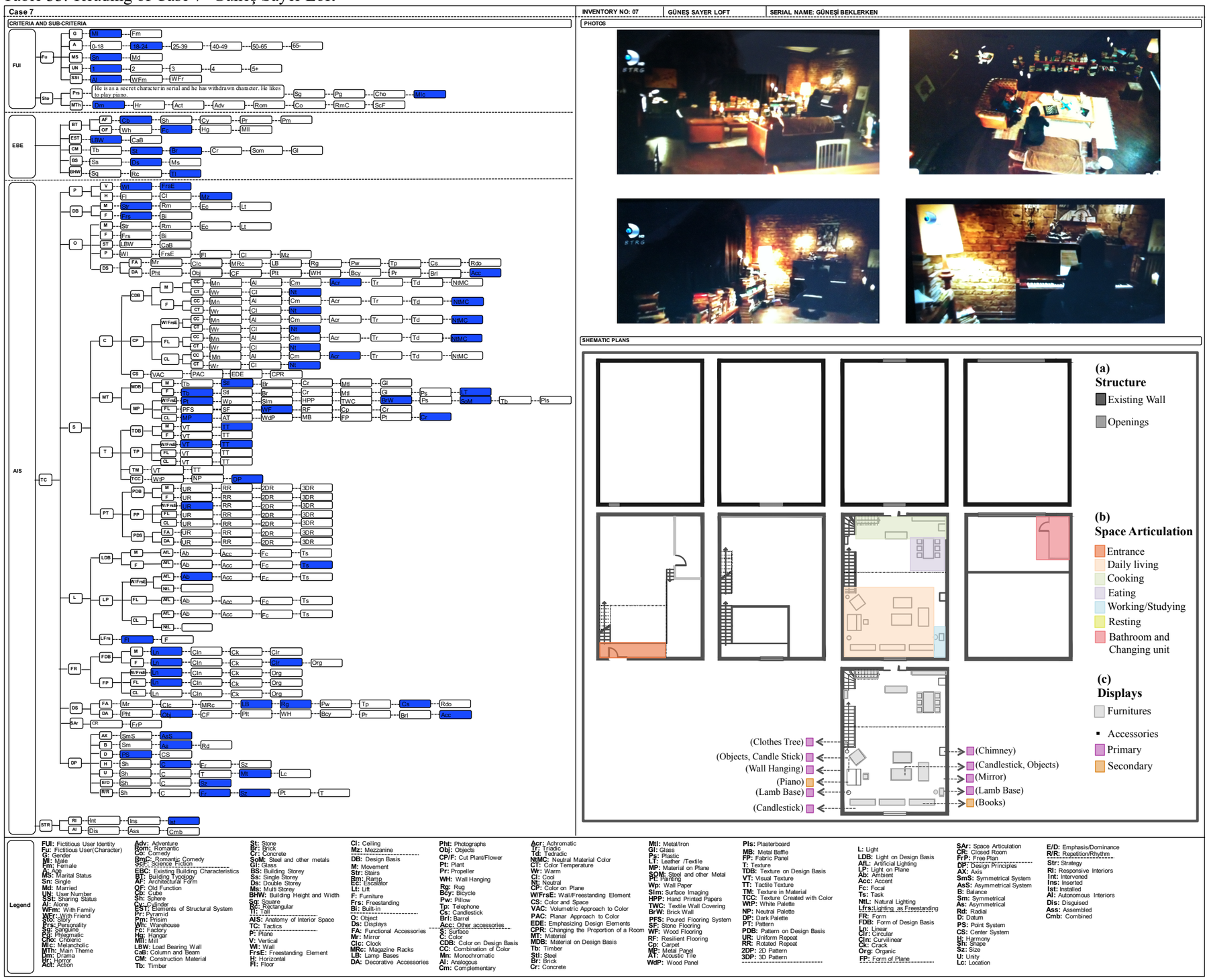


Table 33: Reading of Case 7- Güneş Sayer Loft



Legend

FUI: Fictitious User Identity
Fu: Fictitious User(Character)
G: Gender
Ml: Male
Fm: Female
A: Age
MS: Marital Status
Sn: Single
Md: Married
UN: User Number
SSt: Sharing Status
Al: Alone
WFm: With Family
WFr: With Friend
Sto: Story
Prs: Personality
Sg: Sanguine
Pg: Phlegmatic
Cho: Choleric
Mlc: Melancholic
MTh: Main Theme
Dm: Drama
Hr: Horror
Act: Action

Adv: Adventure
Rom: Romantic
Co: Comedy
RmC: Romantic Comedy
ScF: Science Fiction
EBC: Existing Building Characteristics
BT: Building Typology
AF: Architectural Form
QF: Qid Function
Cb: Cube
Sh: Sphere
Cy: Cylinder
ES T: Elements of Structural System
Pr: Pyramid
Pm: Prisim
Wh: Warehouse
Fc: Factory
Hg: Hangar
Mll: Mill
LBW: Load Bearing Wall
CaB: Column and Beam
CM: Construction Material
Tb: Timber

St: Stone
Br: Brick
Cr: Concrete
SoM: Steel and other metals
Gl: Glass
BS: Building Storey
Ss: Single Storey
Ds: Double Storey
Ms: Multi Storey
BHW: Building Height and Width
Sq: Square
Rc: Rectangular
Tl: Tall

AIS: Anatomy of Interior Space
TC: Tactics
P: Plane
V: Vertical
Wl: Wall
FrsE: Freestanding Element
H: Horizontal
Fl: Floor

Cl: Ceiling
Mz: Mezzanine
DB: Design Basis
M: Movement
Str: Stairs
Rm: Ramp
Ec: Escalator
Lt: Lift
F: Furniture
Frs: Freestanding
Bi: Built-in
O: Object
Ds: Displays
FA: Functional Accessories
Mr: Mirror
Clc: Clock
MRc: Magazine Racks
LB: Lamp Bases
DA: Decorative Accessories

Pht: Photographs
Obj: Objects
CP/F: Cut Plant/Flower
Pt: Plant
Pr: Propeller
WH: Wall Hanging
Rg: Rug
Bcy: Bicycle
Pw: Pillow
Tp: Telephone
Cs: Candlestick
Brl: Barrel
Acc: Other accessories
S: Surface
C: Color
CDB: Color on Design Basis
CC: Combination of Color
Mn: Monochromatic
Al: Analogous
Cm: Complementary

Acr: Achromatic
Tr: Triadic
Td: Tetradic
NtMC: Neutral Material Color
CT: Color Temperature
Wr: Warm
Cl: Cool
Nt: Neutral
CP: Color on Plane
W/FrsE: Wall/Freestanding Element
CS: Color and Space
VAC: Volumetric Approach to Color
PAC: Planar Approach to Color
EDE: Emphasizing Design Elements
CPR: Changing the Proportion of a Room
MT: Material
MDB: Material on Design Basis
Tb: Timber
Stl: Steel
Br: Brick
Cr: Concrete

Mtl: Metal/Iron
Gl: Glass
Ps: Plastic
LT: Leather /Textile
MP: Material on Plane
SOM: Steel and other Metal
Pt: Painting
Wp: Wall Paper
Slm: Surface Imaging
HPP: Hand Printed Papers
TWC: Textile Wall Covering
BrW: Brick Wall
PFS: Poured Flooring System
SF: Stone Flooring
WF: Wood Flooring
RF: Resilient Flooring
Cp: Carpet
MP: Metal Panel
AT: Acoustic Tile
WdP: Wood Panel

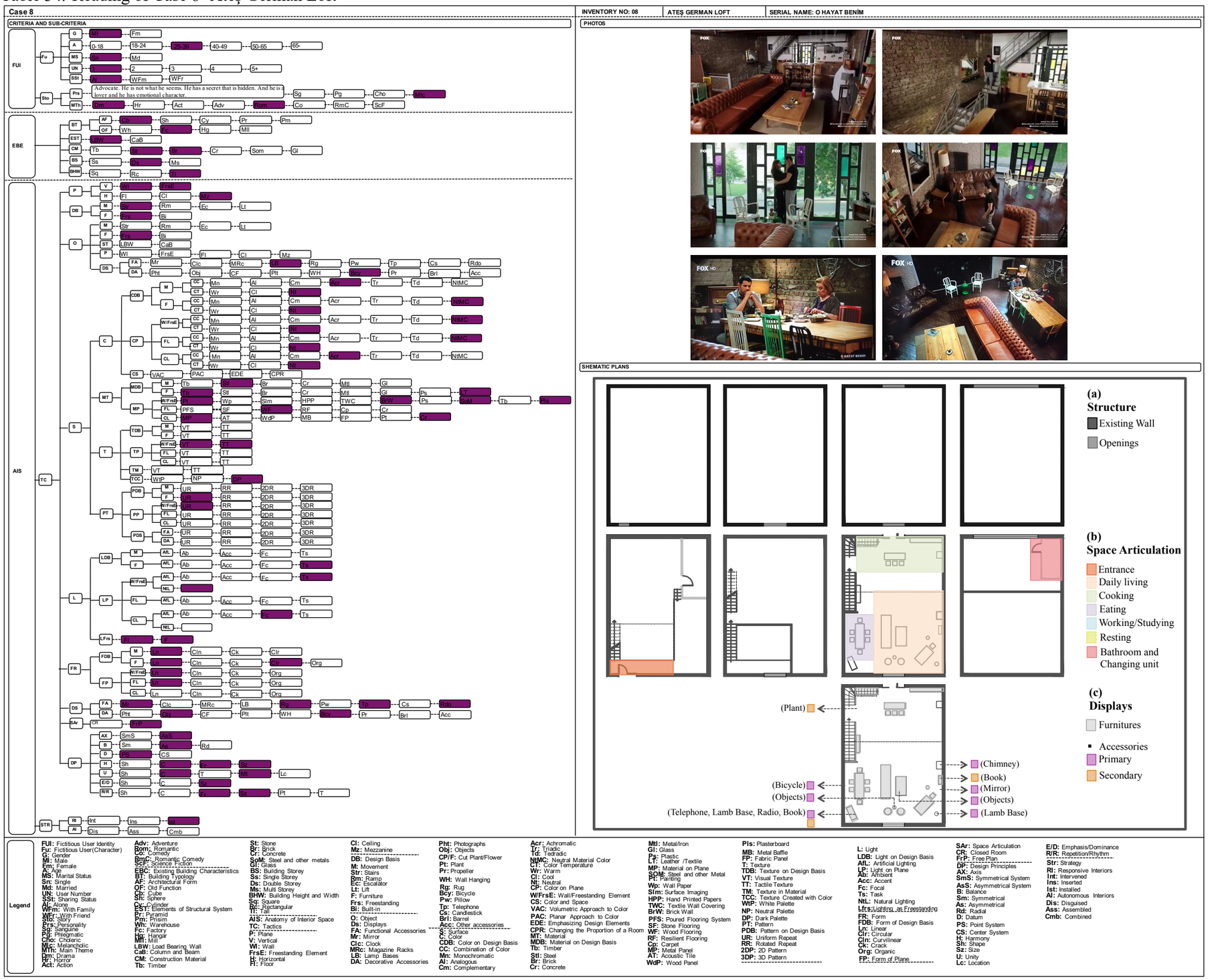
Pls: Plasterboard
MB: Metal Baffle
FP: Fabric Panel
T: Texture
TDB: Texture on Design Basis
VT: Visual Texture
TT: Tactile Texture
TM: Texture in Material
TCC: Texture Created with Color
TWC: Textile Wall Covering
NP: Neutral Palette
DP: Dark Palette
PT: Pattern
PDB: Pattern on Design Basis
UR: Uniform Repeat
RR: Rotated Repeat
2DP: 2D Pattern
3DP: 3D Pattern

L: Light
LDB: Light on Design Basis
ArL: Artificial Lighting
LP: Light on Plane
Ab: Ambient
Acc: Accent
Fc: Focal
Ts: Task
NtL: Natural Lighting
Lfrs: Lighting as Freestanding
FR: Form
FDB: Form of Design Basis
Ln: Linear
Clr: Circular
Cln: Curvilinear
Ck: Crack
Org: Organic
FP: Form of Plane

SAr: Space Articulation
CR: Closed Room
FrP: Free Plan
DP: Design Principles
AX: Axis
SmS: Symmetrical System
AsS: Asymmetrical System
B: Balance
Sm: Symmetrical
As: Asymmetrical
Rd: Radial
D: Datum
PS: Point System
CS: Center System
H: Harmony
Sh: Shape
Sz: Size
U: Unity
Lc: Location

E/D: Emphasis/Dominance
R/R: Repetition/Rhythm
Str: Strategy
RI: Responsive Interiors
Int: Intervened
Ins: Inserted
Ist: Installed
AI: Autonomous Interiors
Dis: Disguised
Ass: Assembled
Cmb: Combined

Table 34*:* Reading of Case 8- Ateş German Loft



Legend

FUI: Fictitious User Identity
Fu: Fictitious User(Character)
G: Gender
Ml: Male
Fm: Female
A: Age
MS: Marital Status
Sn: Single
Md: Married
UN: User Number
SSt: Sharing Status
Al: Alone
WFm: With Family
WFr: With Friend
Sto: Story
Prs: Personality
Sg: Sanguine
Pg: Phlegmatic
Cho: Choleric
Ml: Melancholic
MTh: Main Theme
Dm: Drama
Hr: Horror
Act: Action

Adv: Adventure
Rom: Romantic
Co: Comedy
RmC: Romantic Comedy
ScF: Science Fiction
EBC: Existing Building Characteristics
BT: Building Typology
AF: Architectural Form
OF: Old Function
Cb: Cube
Sh: Sphere
Cy: Cylinder
ESTr: Elements of Structural System
Pr: Pyramid
Pm: Prism
Wh: Warehouse
Fc: Factory
Hg: Hangar
Ml: Mill
LBW: Load Bearing Wall
CaB: Column and Beam
CM: Construction Material
Tb: Timber

St: Stone
Br: Brick
Cr: Concrete
SoM: Steel and other metals
Gl: Glass
BS: Building Storey
Ss: Single Storey
Ds: Double Storey
Ms: Multi Storey
BHW: Building Height and Width
Sq: Square
Re: Rectangular
Tl: Tall
AIS: Anatomy of Interior Space
TC: Tactics
P: Plane
V: Vertical
Wl: Wall
FrsE: Freestanding Element
H: Horizontal
Fl: Floor

Cl: Ceiling
Mz: Mezzanine
DB: Design Basis
M: Movement
Str: Stairs
Rm: Ramp
Ec: Escalator
Lt: Lift
F: Furniture
Frs: Freestanding
Bi: Built-in
O: Object
Ds: Displays
FA: Functional Accessories
Mr: Mirror
Clc: Clock
MRc: Magazine Racks
LB: Lamp Bases
DA: Decorative Accessories

Pht: Photographs
Obj: Objects
CP/F: Cut Plant/Flower
Pt: Plant
Pr: Propeller
WH: Wall Hanging
Rg: Rug
Bcy: Bicycle
Pw: Pillow
Tp: Telephone
Cs: Candlestick
Bri: Barrel
Acc: Other accessories
S: Surface
C: Color
CDB: Color on Design Basis
CC: Combination of Color
Mn: Monochromatic
Al: Analogous
Cm: Complementary

Acr: Achromatic
Tr: Triadic
Td: Tedradic
NMC: Neutral Material Color
CT: Color Temperature
Wr: Warm
Cl: Cool
Nt: Neutral
CP: Color on Plane
W/FrsE: Wall/Freestanding Element
CS: Color and Space
VAC: Volumetric Approach to Color
PAC: Planar Approach to Color
EDE: Emphasizing Design Elements
CPR: Changing the Proportion of a Room
MT: Material
MDB: Material on Design Basis
Tb: Timber
St: Steel
Br: Brick
Cr: Concrete

Mtl: Metal/Iron
Gl: Glass
Ps: Plastic
LT: Leather /Textile
MP: Material on Plane
SOM: Steel and other Metal
Pt: Painting
Wp: Wall Paper
Sim: Surface Imaging
HPP: Hand Printed Papers
TWC: Textile Wall Covering
BrW: Brick Wall
PFS: Poured Flooring System
SF: Stone Flooring
WF: Wood Flooring
RF: Resilient Flooring
Cp: Carpet
MP: Metal Panel
AT: Acoustic Tile
WdP: Wood Panel

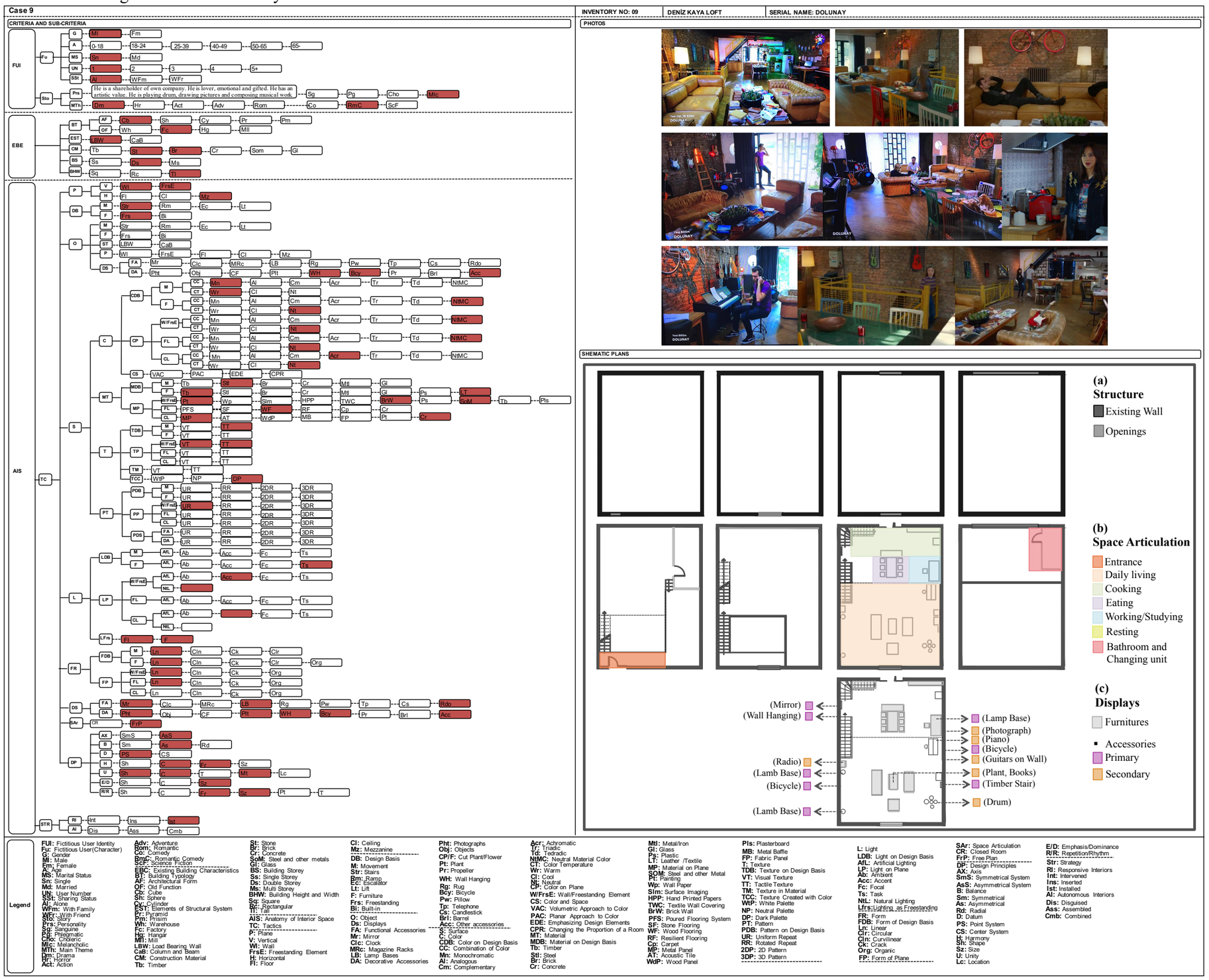
Pls: Plasterboard
MB: Metal Baffle
FP: Fabric Panel
T: Texture
TDB: Texture on Design Basis
VT: Visual Texture
TT: Tactile Texture
TM: Texture in Material
TCC: Texture Created with Color
WtP: White Palette
NP: Neutral Palette
DP: Dark Palette
PT: Pattern
PDB: Pattern on Design Basis
UR: Uniform Repeat
RR: Rotated Repeat
2DP: 2D Pattern
3DP: 3D Pattern

L: Light
LDB: Light on Design Basis
AfL: Artificial Lighting
Ab: Ambient
Acc: Accent
Fc: Focal
Ts: Task
NtL: Natural Lighting
LFrs: Lighting as Freestanding
FR: Form
FDB: Form of Design Basis
Ln: Linear
Clr: Circular
Cln: Curvilinear
Ck: Crack
Org: Organic
FP: Form of Plane

SAr: Space Articulation
CR: Closed Room
FrP: Free Plan
DP: Design Principles
AX: Axis
SmS: Symmetrical System
AsS: Asymmetrical System
B: Balance
Sm: Symmetrical
As: Asymmetrical
Rd: Radial
D: Datum
PS: Point System
CS: Center System
H: Harmony
Sh: Shape
Sz: Size
U: Unity
Lc: Location

E/D: Emphasis/Dominance
R/R: Repetition/Rhythm
Str: Strategy
RI: Responsive Interiors
Int: Intervened
Ins: Inserted
Ist: Installed
AI: Autonomous Interiors
Dis: Disguised
Ass: Assembled
Cmb: Combined

Table 35*:* Reading of Case 9- Deniz Kaya Loft



Legend

FUI: Fictitious User Identity
Fu: Fictitious User(Character)
G: Gender
Ml: Male
Fm: Female
A: Age
MS: Marital Status
Sn: Single
Md: Married
UN: User Number
SSt: Sharing Status
Al: Alone
Wfm: With Family
WFr: With Friend
Sto: Story
Prs: Personality
Sg: Sanguine
Pg: Phlegmatic
Cho: Choleric
Mlc: Melancholic
MTh: Main Theme
Dm: Drama
Hr: Horror
Act: Action

Adv: Adventure
Rom: Romantic
Co: Comedy
RmC: Romantic Comedy
ScF: Science Fiction
EBC: Existing Building Characteristics
BT: Building Typology
AF: Architectural Form
OF: Old Function
Cb: Cube
Sh: Sphere
Cy: Cylinder
EST: Elements of Structural System
Pr: Pyramid
Pm: Prism
Wh: Warehouse
Fc: Factory
Hg: Hangar
Mll: Mill
LBW: Load Bearing Wall
CaB: Column and Beam
CM: Construction Material
Tb: Timber

St: Stone
Br: Brick
Cr: Concrete
SoM: Steel and other metals
Gl: Glass
BS: Building Storey
Ss: Single Storey
Ds: Double Storey
Ms: Multi Storey
BHW: Building Height and Width
Sq: Square
Rc: Rectangular
Tl: Tall
AIS: Anatomy of Interior Space
TC: Tactics
P: Plane
V: Vertical
Wl: Wall
FrsE: Freestanding Element
H: Horizontal
Fl: Floor

Cl: Ceiling
Mz: Mezzanine
DB: Design Basis
M: Movement
Str: Stairs
Rm: Ramp
Ec: Escalator
Lt: Lift
F: Furniture
Frs: Freestanding
Bi: Built-in
O: Object
Ds: Displays
FA: Functional Accessories
Mr: Mirror
Clc: Clock
MRc: Magazine Racks
LB: Lamp Bases
DA: Decorative Accessories

Pht: Photographs
Obj: Objects
CP/F: Cut Plant/Flower
Pt: Plant
Pr: Propeller
WH: Wall Hanging
Rg: Rug
BCy: Bicycle
Pw: Pillow
Tp: Telephone
Cs: Candlestick
Brl: Barrel
Acc: Other accessories
S: Surface
C: Color
CDB: Color on Design Basis
CC: Combination of Color
Mn: Monochromatic
Al: Analogous
Cm: Complementary

Acr: Achromatic
Tr: Triadic
Td: Tedradic
NtMC: Neutral Material Color
CT: Color Temperature
Wr: Warm
Cl: Cool
Nt: Neutral
CP: Color on Plane
W/FrsE: Wall/Freestanding Element
CS: Color and Space
VAC: Volumetric Approach to Color
PAC: Planar Approach to Color
EDE: Emphasizing Design Elements
CPR: Changing the Proportion of a Room
MT: Material
MDB: Material on Design Basis
Tb: Timber
Stl: Steel
Br: Brick
Cr: Concrete

Mtl: Metal/Iron
Gl: Glass
Ps: Plastic
LT: Leather /Textile
MP: Material on Plane
SDM: Steel and other Metal
Pt: Painting
Wp: Wall Paper
Slm: Surface Imaging
HPP: Hand Printed Papers
TWC: Textile Wall Covering
BrW: Brick Wall
PFS: Poured Flooring System
SF: Stone Flooring
WF: Wood Flooring
RF: Resilient Flooring
Cp. Carpet
MP: Metal Panel
AT: Acoustic Tile
WdP: Wood Panel

Pls: Plasterboard
MB: Metal Baffle
FP: Fabric Panel
T: Texture
TDB: Texture on Design Basis
VT: Visual Texture
TT: Tactile Texture
TM: Texture in Material
TCC: Texture Created with Color
WtP: White Palette
NP: Neutral Palette
DP: Dark Palette
PT: Pattern
PDB: Pattern on Design Basis
UR: Uniform Repeat
RR: Rotated Repeat
2DP: 2D Pattern
3DP: 3D Pattern

L: Light
LDB: Light on Design Basis
AtL: Artificial Lighting
LP: Light on Plane
Ab: Ambient
Acc: Accent
Fc: Focal
Ts: Task
NtL: Natural Lighting
Lfrs: Lighting as Freestanding
FR: Form
FDB: Form of Design Basis
Ln: Linear
Clr: Circular
Cln: Curvilinear
Ck: Crack
Org: Organic
FP: Form of Plane

SAr: Space Articulation
CR: Closed Room
FrP: Free Plan
DP: Design Principles
AX: Axis
SmS: Symmetrical System
AsS: Asymmetrical System
B: Balance
Sm: Symmetrical
As: Asymmetrical
Rd: Radial
D: Datum
PS: Point System
CS: Center System
H: Harmony
Sh: Shape
Sz: Size
U: Unity
Lc: Location

E/D: Emphasis/Dominance
R/R: Repetition/Rhythm
Str: Strategy
RI: Responsive Interiors
Int: Intervened
Ins: Inserted
Ist: Installed
AI: Autonomous Interiors
Dis: Disguised
Ass: Assembled
Cmb: Combined

Fictitious user (character) identity

In-depth reading evidently put forward the intimate relationship between the interior space and its user. Therefore, it has been revealed that identity and character of user have a central role on the creation of an interior atmosphere of set-up lofts. Identity of user directly figures the overall expression of the interior atmosphere. And it could be said that interior space atmosphere of these kind of spaces reflects the identity of its user straightforward.

Analytical reading in line with the criteria and sub-criteria listed under the category of fictitious user (character) identity with its sub-criteria has revealed at first '*who*' is the fictitious user of the analyzed set-up lofts. Accordingly, analysis results have clarified the response to this question in a comprehensive point of view by revealing the personal aspects of the users such as gender, age, marital status; quantitative aspects such as user number and sharing status and the innermost aspects such personality and so far that has existed in line with the main theme of the serials which were narrated in the story/scenario.

Results of the analytical reading in due course have revealed that fictitious users of set-up lofts are male by a majority except one; who is the female user of Case 3 known as Meltem Karayel. On the other hand, it has been achieved that ages of set-up loft users range from 17 – 46 and yet set-up lofts users' most common age range was determined as 29-35 that are single users living alone and are not married. Exceptional 3 users among this age range have determined as 17 years old user known as Kerem Sayer-Case 2, 46 years old user known as Haldun Arsoy- Case 5 and 24 years old user known as Gunes Sayer-Case 7. Furthermore, investigation results in terms of analytical framework have set forth that personality of 4 fictitious user in Case 3, Case 4, Case 6

and Case 9 have sanguine character who has social and active personality; 3 fictitious user in Case 1, Case 2 and Case 5 have choleric character who has short-tempered and fast or irritable personality; 2 fictitious user in Case 7 and Case 8 have melancholic character who has wise and quite personality. And the main theme of 8 series has revealed as drama and the other series is action in the investigated set-up loft cases (Figure 52).

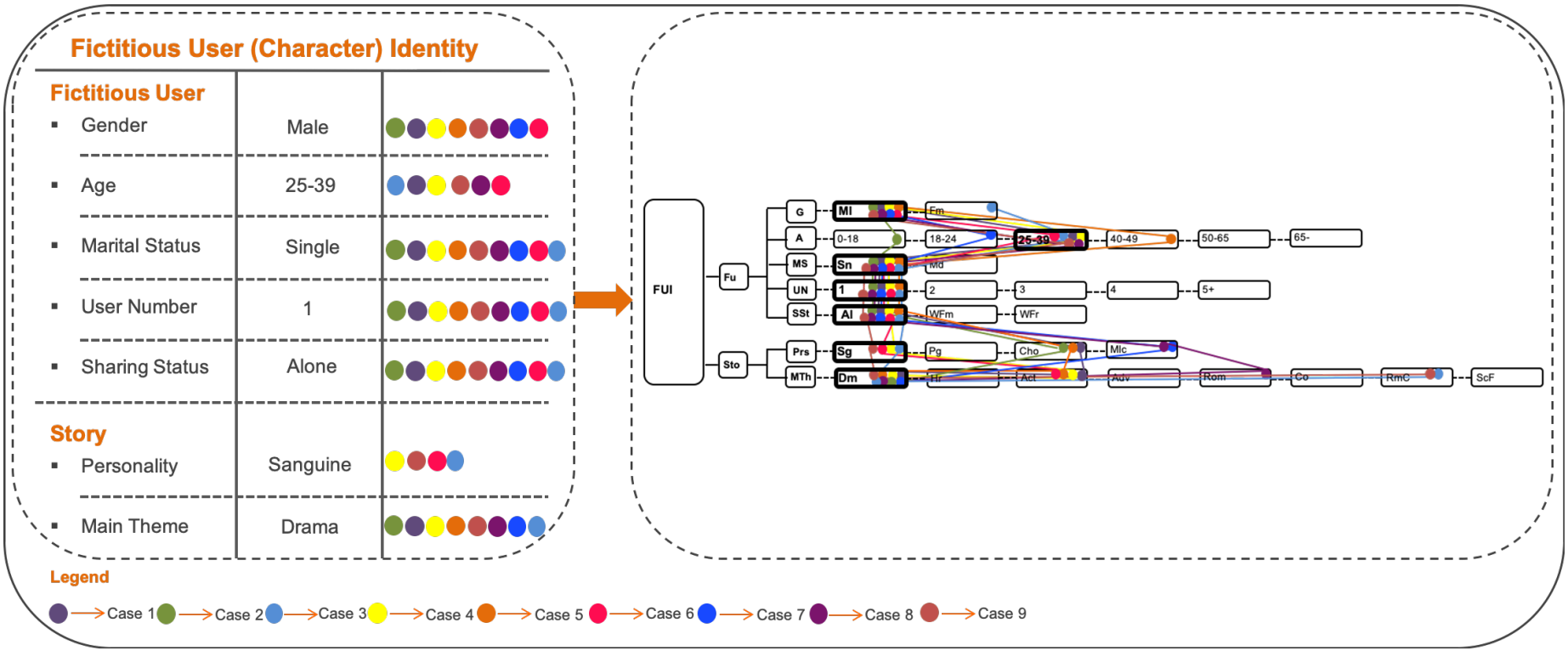


Figure 52: Analytical reading of fictitious user (character) identity

Investigation results upon fictitious user (character) identity have put forward the variety among users of set-up loft cases. This provided the comprehension of how different users with different age, gender and personality affect creation of the interior space atmospheric which is discussed comparatively in the section 5.4.2.

Existing building essence

Existing building has an essence that guides re-functioning approach directly. Building essence is the spirit of space that is molded by the existing building characteristics. Understanding characteristics of the existing building and hence its history besides its value is decidedly significant. This provides the basis of the decisions to employ what sort of association will be provided between the characteristics of the old (existing) and the new (intervened). Therefore, it could be said that existing building essence is an essential aspect of the interior atmosphere creation, and an effective measure while generating a new design approach in set-up loft spaces.

Accordingly, it must be noted that five different existing industrial building stocks as the cases buildings of the study have differing significance and characteristics. Three cases were selected among the very heavily subdivided units of leather and shoe factory context in Beykoz and each separate unit has a fundamental role in its historic significance. The other two cases buildings were selected in Balat and Cibali and each one of them has differing form, spatial organization and architectural characteristics.

Analytical reading results have been revealed that there is no physical change or damage exist in the three historical industrial buildings of Beykoz Leather and Shoe Factory Context, which are significant examples of late 19th Century historical buildings. On the other hand, analysis has revealed that there is minimal change in

Balat and Cibali cases on their facade characteristics. Yet, it is noticed that their re-functioning as film-making thus as set-up loft spaces has enriched the physical, social/cultural and locational/environmental performance of these 19th century and 1950/60's industrial buildings. Additionally, it has been revealed that both functional and physical performance of these buildings as well as other heritage buildings in the factory context has been enhanced as a result of this re-functioning approach (Alpler, Sahin and Dagli, 2020).

Architectural form and old/former function of the existing building are the sub-criteria of building typology criterion. Accordingly, analytical reading has been revealed that form of Building 3 (Former Soap Factory/Cibali) is cube and on the other hand, form of Building 1 (Beykoz Leather and Shoe Factory) and Building 2 (Carbonated Water Warehouse/Balat) is rectangular prism. In addition, former functions of Building 1 and Building 3 have been detected as factory by a majority except one; that former function of Building 2 is warehouse. Moreover, it has been revealed that structural system of all existing industrial building stocks are load-bearing wall. It has been observed that due to the assets of this structural system, a flexible interior space organization (open space approach or closed space) was composed. Construction material of all buildings are stone and brick. Additionally, it has been revealed that exposed brick walls of Building 1 (Leather and Shoe Factory/Beykoz) and Building 3 (Former Soap Factory/Cibali) were preserved and acts as the wall texture as an effective visual quality element in the creation of interior atmosphere of set-up lofts. However, it has been revealed that existing brick material was not preserved at the Building 2 (Carbonated Water Warehouse/Balat). Therefore, it should be noted that role of original construction material as one of the visual quality elements in defining interior space atmosphere was not attained in this case. Furthermore, sub-dividing overall form

in order to create different levels/stories within the existing building is said to be an effective criterion, which plays an effective role on the creation of interior atmosphere. This kind of spatial definition is a significant matter due to the key role it plays on the visual perception of the entire spatial form. Accordingly, analysis results have revealed that there are no multi-storey apartment style lofts among the 9 set-up lofts that have been organized in 5 existing industrial building stocks as case buildings of the study but single and double-storey buildings were determined which have high ceiling with mezzanine floor additions that have created sub-spaces on different levels within the entire spatial form. It has been revealed that interior intervention (sub-division/sub-spacing) has been made with new floor addition by the new construction technique at Building 2 (Carbonated Water Warehouse/Balat) and Building 3 (Former Soap Factory/Cibali) (Alpler, Sahin and Dagli, 2020). Moreover, Leather and Shoe Factory/Beykoz, as of three historical industrial buildings were selected from this factory site were deliberately left as an empty hub during their re-functioning as set-up loft space. General Manager of the factory has been stated that the reason behind this is to "…*give flexibility to the production team to make organization of the interior in line with the scenario and the needs of the character defined in that scenario"* (Semercioglu, 2015). Effect of the stated findings of existing building essence on the interior space atmosphere creation is discussed in the next section intricately (Figure 53).

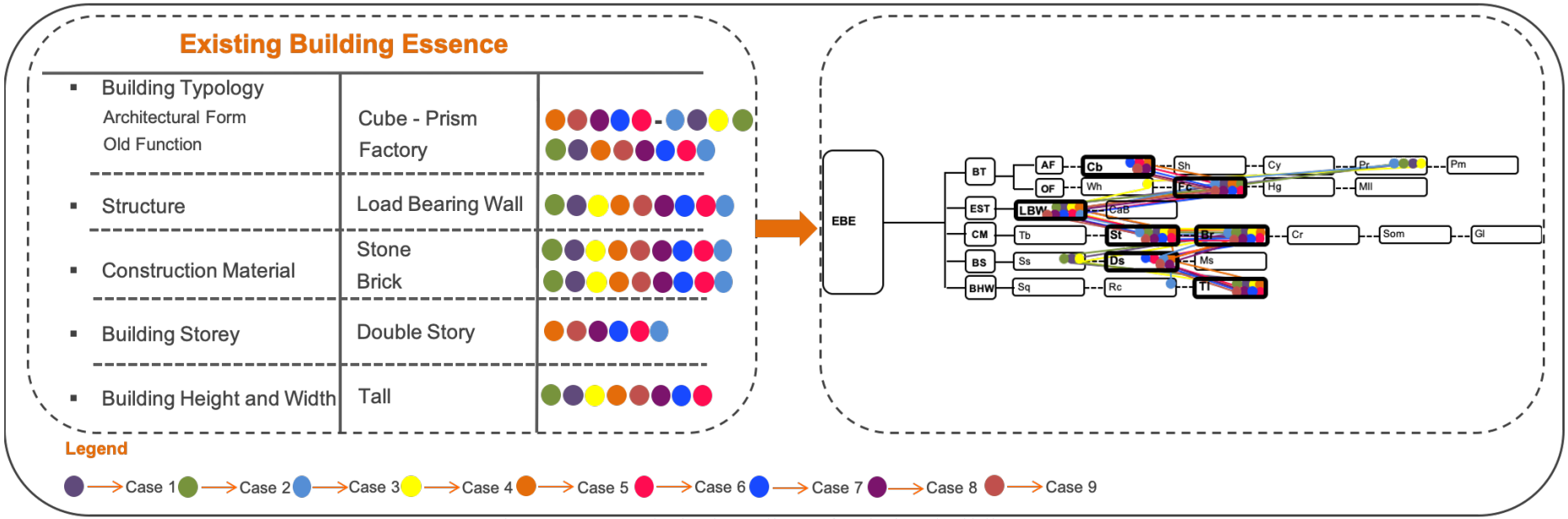


Figure 53: Analytical reading of existing building essence

Anatomy of interior space

Space defining elements affect interior space atmosphere noticeably due their alternate articulations as a part of diverse design approaches. These elements were named in the analytical framework as the 'Anatomy of Interior Space' as it was described in the previous section. As similar to the inherent relationship among human body and its anatomy; elements stand as the integral part of interior space atmosphere creation. Therefore, interior space atmosphere is intrinsically created with the space defining elements. Furthermore, it is a well-known fact that creation of anatomy of interior space is strongly interrelated with different intervention approaches due to re-functioning process of the cases. Analysis results have revealed two different types of processes during film making re-use as *temporary* and *permanent*. Accordingly, analysis results have revealed that Carbonated Water Warehouse/Balat (Case 1) and Former Soap Factory/Cibali (Case 5-9) were re-used as set-up loft spaces with their existing interior organization that was intervened and re-used in their former re-use stage and there are limited temporary interventions/additions which were made during set-up use in order to personalize the set-up loft according to the fictitious user (character) identity which was defined in the scenario. On the other hand, it has been revealed that Beykoz Leather and Shoe Factory/Beykoz (Case1-3) heritage buildings were permanently adapted into film-making use and interior spaces were organized/intervened in line with the scenario in a more liberate/unfettered manner.

Physical interventions in set-up loft spaces were revealed under anatomy of interior space criteria in line with the two pre-determined sub-criteria of the framework that are tactics and strategy. Tactics mainly concerns the detailing of interior space and by focusing on the effective role of these tools/components of set-up lofts on its atmosphere creation. Accordingly, analytical reading of nine set-up lofts has been

revealed that differences in spatial form, building storey and building height and width of different aged buildings have affected their re-use as set-up loft space differently. Rubber Revision Section (Case 1) and Fire Station (Case 2) for factory buildings in Beykoz Leather and Shoe factory/Beykoz context are a bigger space that are single volume space and having dissimilar spatial characteristics/interior space organization from other 7 cases. Old Factory (Case 3) differentiates itself, which is not single volume space, because it is double storey building. Although there is a small differentiation between these historical buildings, same strategy has been applied in keeping them as an empty hub, which has given flexibility for shootings of diverse series. Therefore, this flexibility indeed affects the viability of the building positively. However, when these cases buildings were compared with Carbonated Water Warehouse/Balat (Case 4) and Former Soap Factory/Cibali (Case 5-9) that are smaller spaces and were subdivided through new floor additions; it has been achieved that this horizontal division within the entire spatial form has limited the flexibility of filming and set-up activity yet has created different spaces with different functions in these two industrial building cases. Moreover, it has also been exposed that newly added fixed or freestanding vertical planar elements have divided space into different sub-spaces in Carbonated Water Warehouse/Balat and Former Soap Factory/Cibali industrial buildings, which is not a common way of space organization of, loft interiors.

Design bases involve movement and furniture in interior space. Accordingly, movement encompasses stairs, as one of the effective space criterions of 6 set-up lofts in 2 buildings and freestanding elements are the space criterion of furniture that demonstrates an effective role in all 9 set-up loft spaces formation. Analysis results have revealed effective use of movement and furniture features both at Carbonated

Water Warehouse/Balat and Former Soap Factory/Cibali set-up lofts. However, movement was not revealed as an effective feature of interior formation in the Beykoz Leather and Shoe factory/Beykoz buildings, due to non-existence of new floor addition into entire spatial form. Yet, freestanding furniture usage was revealed commonly while organizing set-up loft spaces in three historical industrial buildings of factory context (Rubber Revision Section, Fire Station for factory buildings and Old Factory) (Figure 54).

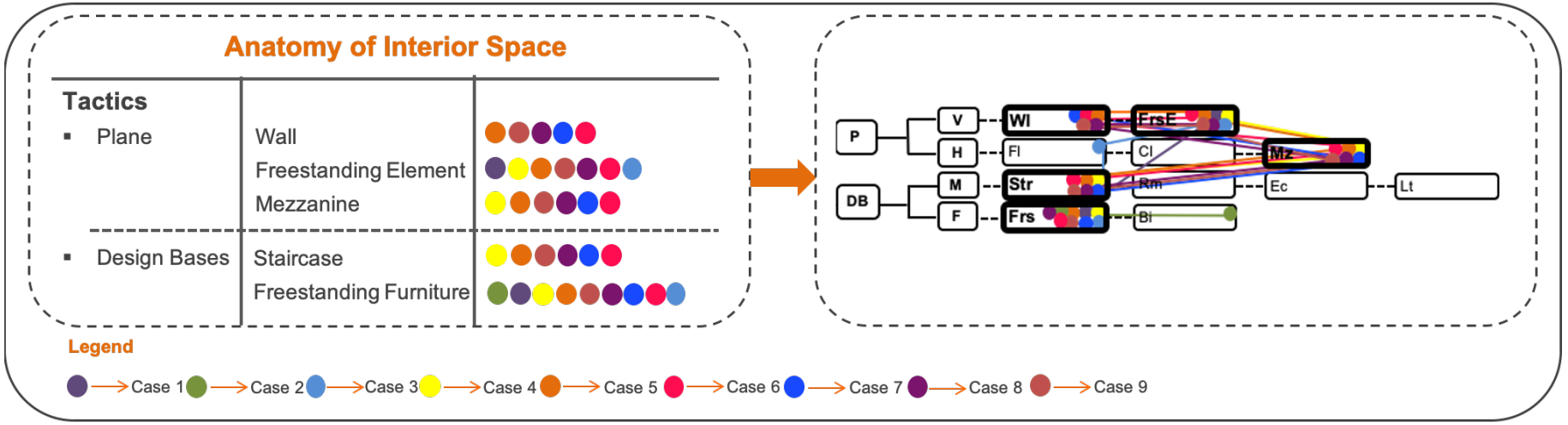


Figure 54: Analytical reading of anatomy of interior space-plane and design bases

Object is an imperious sub-criterion of tactics category that acts as the focal element in interior spaces and embraces an effective role while creating interior space atmosphere of set-up lofts. Accordingly, it has been revealed that the main effective type of objects is displays where accessories and intimate visual details were detected as the efficiently used types as of their articulation in 6 set-up loft interior spaces affected atmosphere creation persuasively. Besides, more specifically it has been exposed that use of wall hanging elements and bicycle as wall hanging accessory as the type of displays have been detected repeatedly at set-up loft interiors. Use of deviant freestanding furniture as the type of object within the interior space detected in 3 set-up lofts; found to be a noteworthy feature contributing to the atmosphere creation of set-up loft interiors on the other hand (Figure 55).

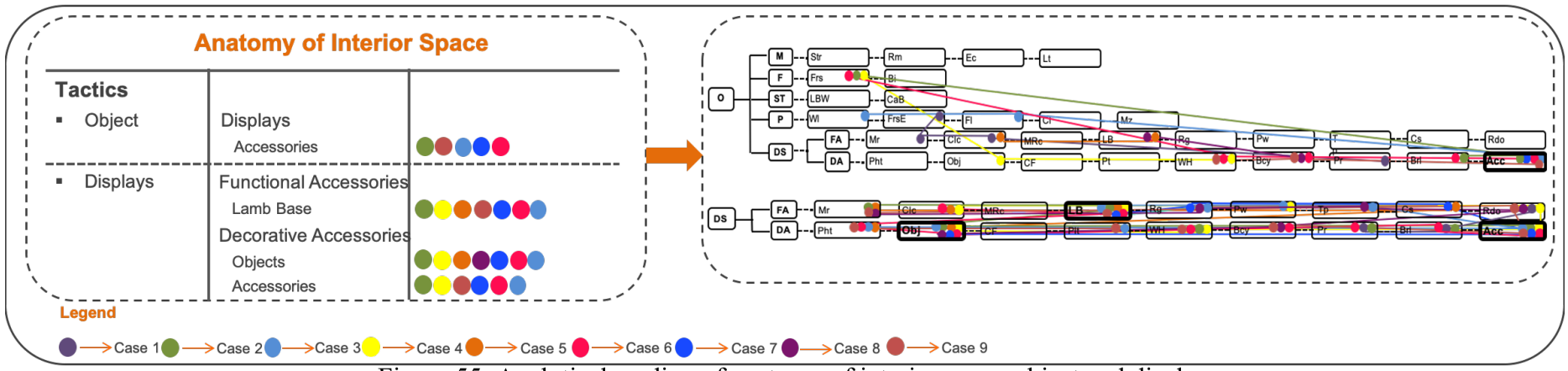


Figure 55: Analytical reading of anatomy of interior space-object and displays

Surface as one of the effective sub-categories of tactics incorporates use or role of color, material, texture and pattern on the creation of interior space atmosphere. In general, it has been revealed that natural material colors in a dark palette were preferred on the space defining elements and natural materials on the furniture of all 9 set-up loft spaces. And use of various materials was determined such as steel, timber, metal, paint, brick wall and leather/textile that have effective use in set-up loft spaces. It could be noted that preserving existing brick walls act as a visual and tactile texture in 8 set-up loft interior spaces surfaces except one; that existing brick wall surfaces have been covered in set-up loft 4 space (Figure 56-59).

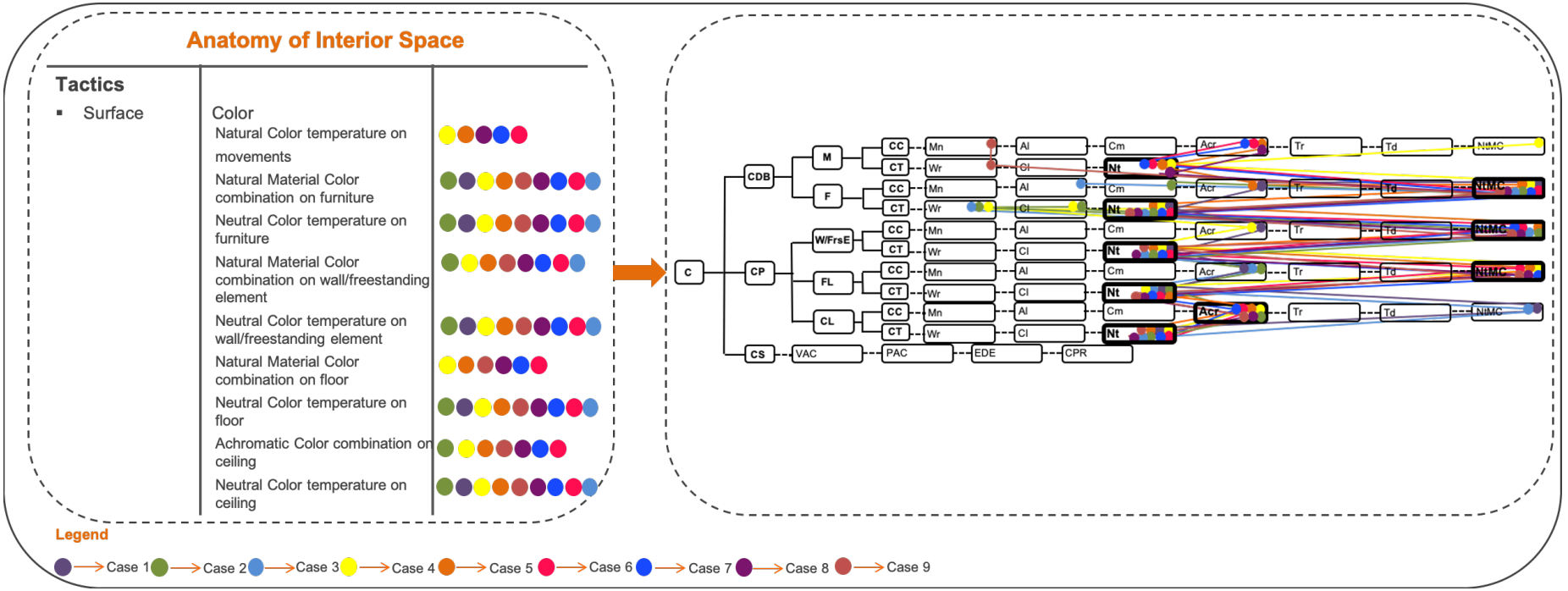


Figure 56: Analytical reading of anatomy of interior space-surface (color)

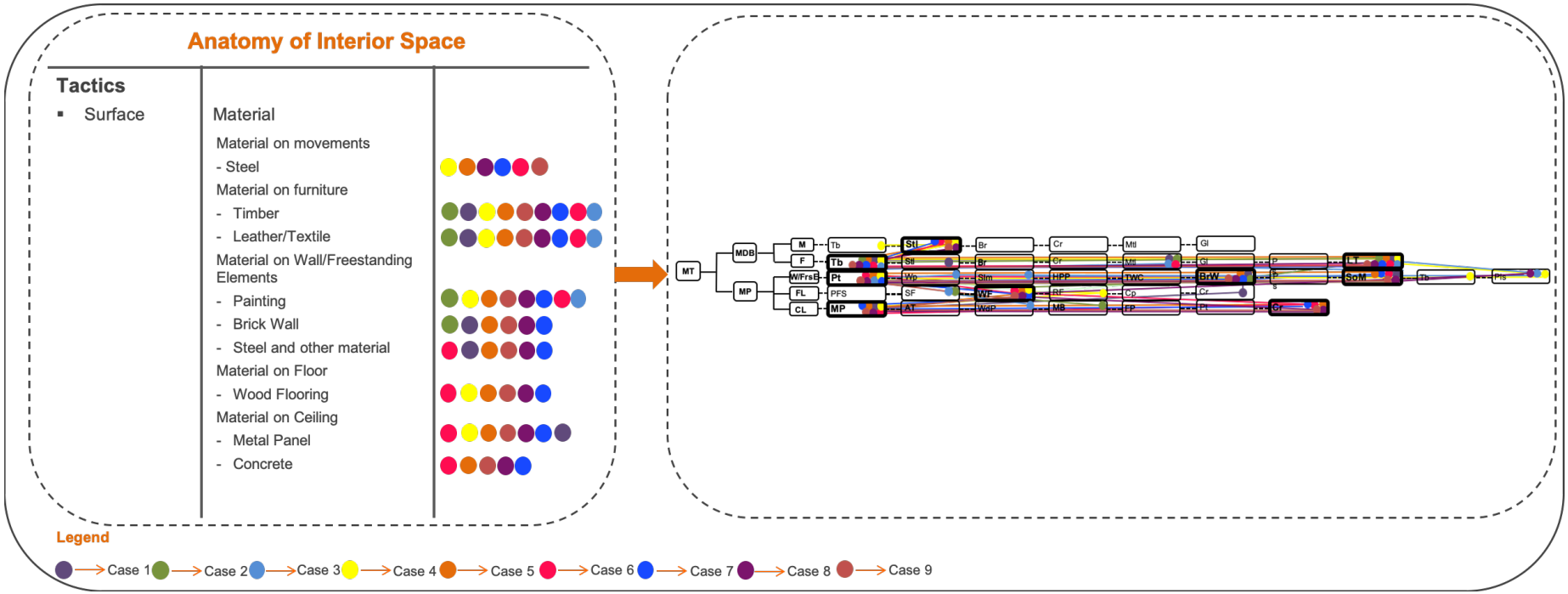


Figure 57: Analytical reading of anatomy of interior space-surface (material)

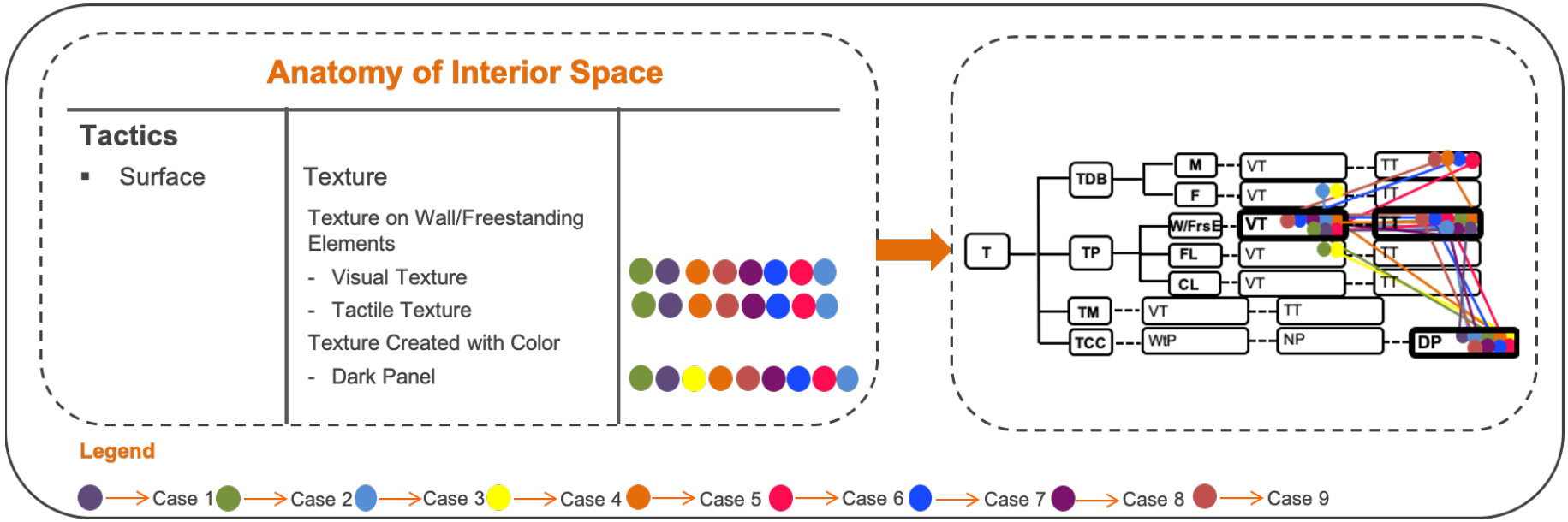


Figure 58: Analytical reading of anatomy of interior space-surface (texture)

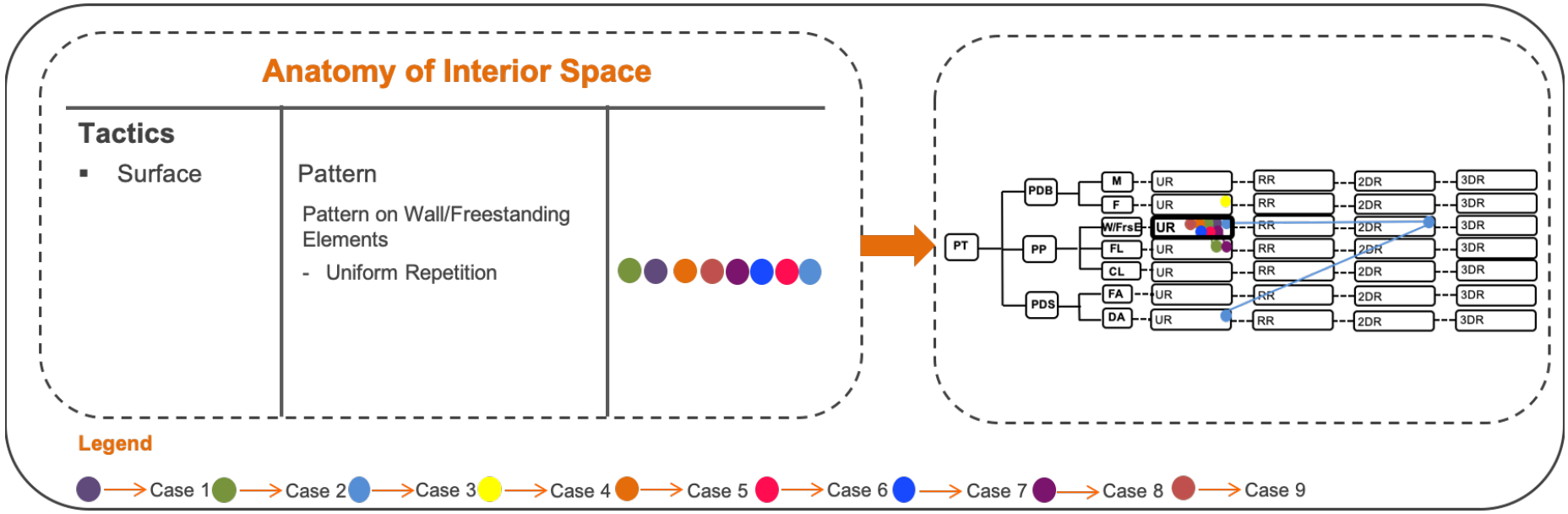


Figure 59: Analytical reading of anatomy of interior space-surface (pattern)

Alongside the use of color, material and texture, analysis results have revealed that both natural and artificial lighting elements were used and contribute to the visual perception of the set-up loft interiors. Particularly, it has been exposed that preserving the big cast-iron windows of existing buildings properly penetrates the natural light inside the spaces splendidly. Moreover, it has been detected that lighting features has been used as significant design elements and are substantial instances of freestanding elements. They were incorporated into the space in a diverse array of usage; such as a floor articulation, over/inside the furniture, as task lighting on furniture for specific activities or as a display that is a functional accessory; are effective factors of visual quality and hence interior atmosphere creation aspect in set-up lofts (Figure 60).

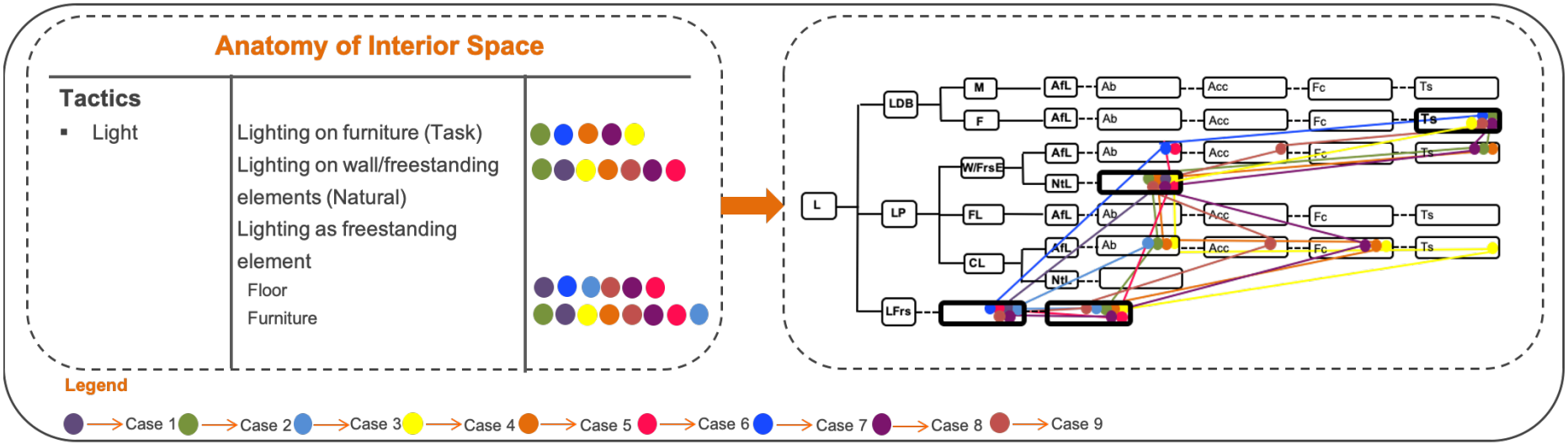


Figure 60: Analytical reading of anatomy of interior space-light

In turn, 3 historical industrial buildings from Beykoz Leather and Shoe factory context, which are single volume spaces and double storey buildings with dissimilar spatial organization, have open plan layout while organizing loft interior spaces.

Organization of all 9 set-up loft interiors has an asymmetrical balance and harmony inside them has achieved with the combination of various natural material colors and being in unity with the preserved brick surfaces of the existing building. It has been determined that the emphasis is principally provided due to the color in set-up loft interiors and size on furniture and displays of set-up lofts. For instance, use of specific elements/furniture or elements of emphasis in some cases (such as green furniture, blue sandbag and long dining table) has been determined as one of the dominating tactical features which then effect the creation of interior space atmosphere particularly (Figure 61).

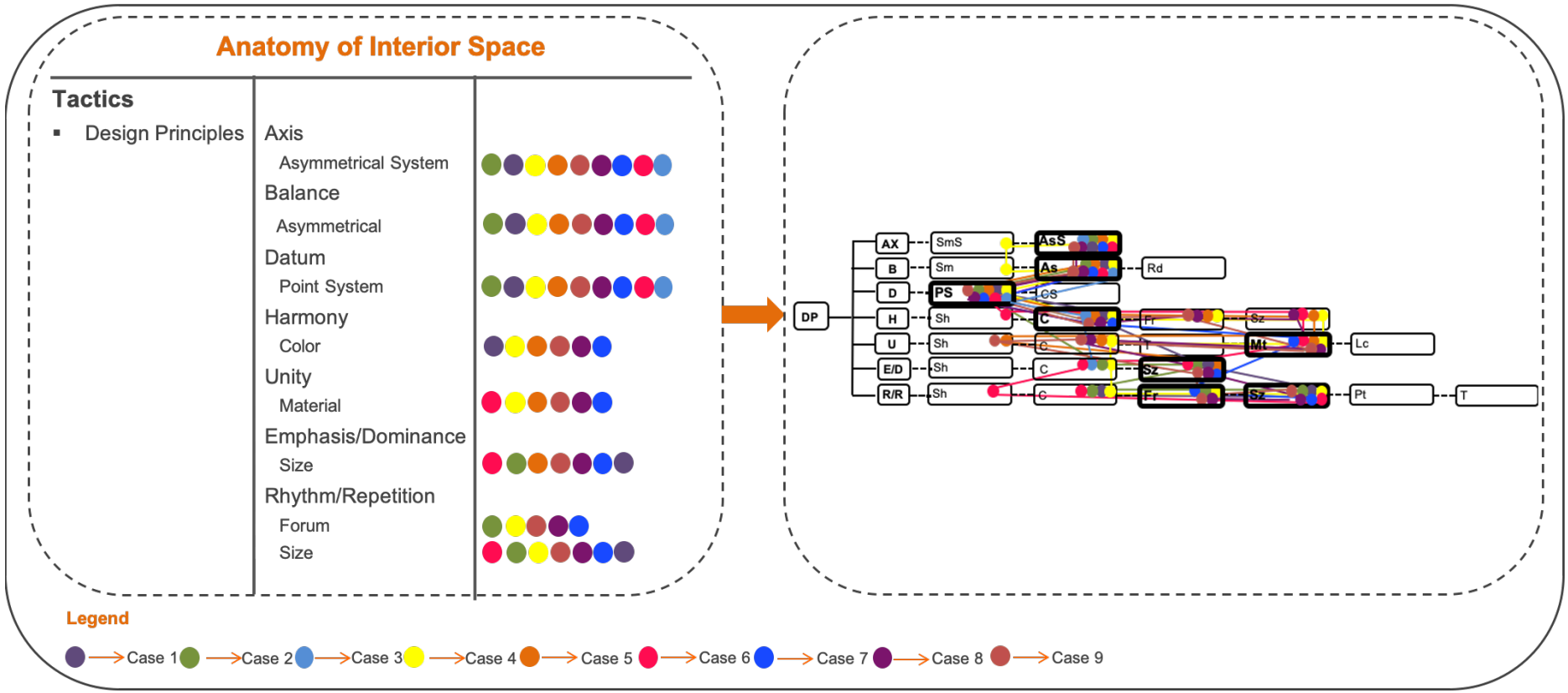


Figure 61: Analytical reading of anatomy of interior space-design principles

Strategy, which was followed at 8 set-up loft spaces, has been determined as the responsive approach. The set-up loft spaces, which have been organized with the responsive interior approach echoes the priority of existing building in its interior design. Moreover, it has been achieved that installed interior sub-category has been preferred while organizing interior of set-up lofts. Yet, there are 2 set-up loft spaces (Case 2 and Case 3), which have been organized by inserted interior approach where it has been revealed that linear and curvilinear elements define the sub-spaces. Although the majority of set-up lofts have been organized with responsive interiors, it has been revealed that Case 4 (Carbonated Water Warehouse/Balat) has been organized with autonomous interior approach's combined interior type where it has been noticed that all of the existing surfaces were covered with the new construction material (Figure 62).

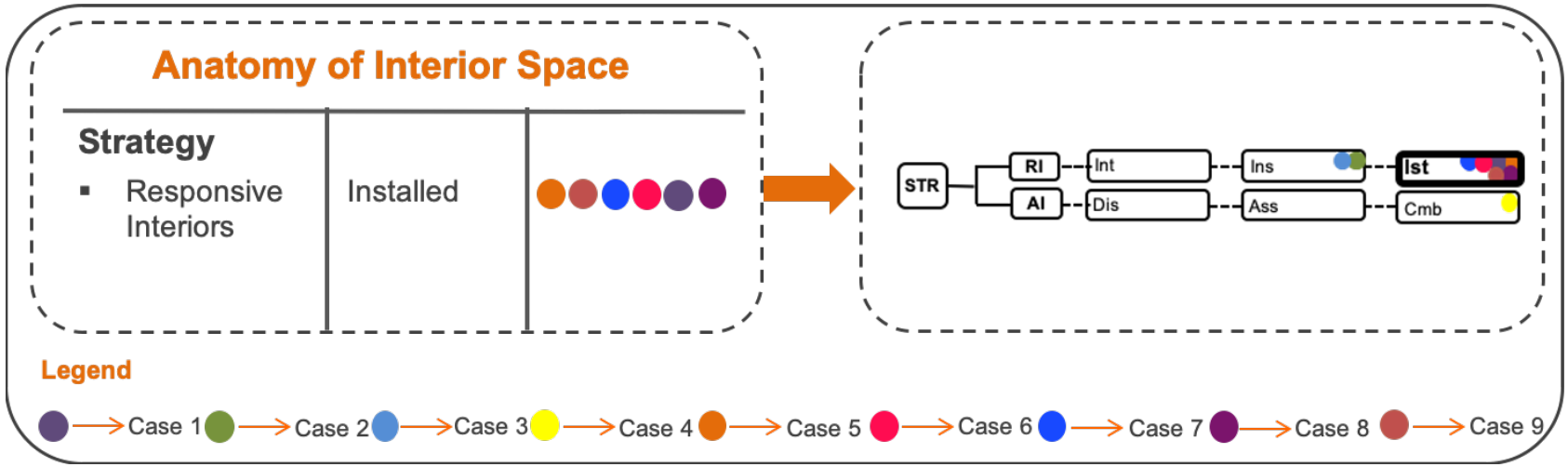


Figure 62: Analytical reading of anatomy of interior space-strategy

Accordingly, Figure 63 collates above stated findings. The findings have clearly indicated the determinants which are effective on the creation of interior space atmosphere of nine set-up loft spaces in five different industrial buildings such as historical industrial buildings and non-historical industrial buildings.

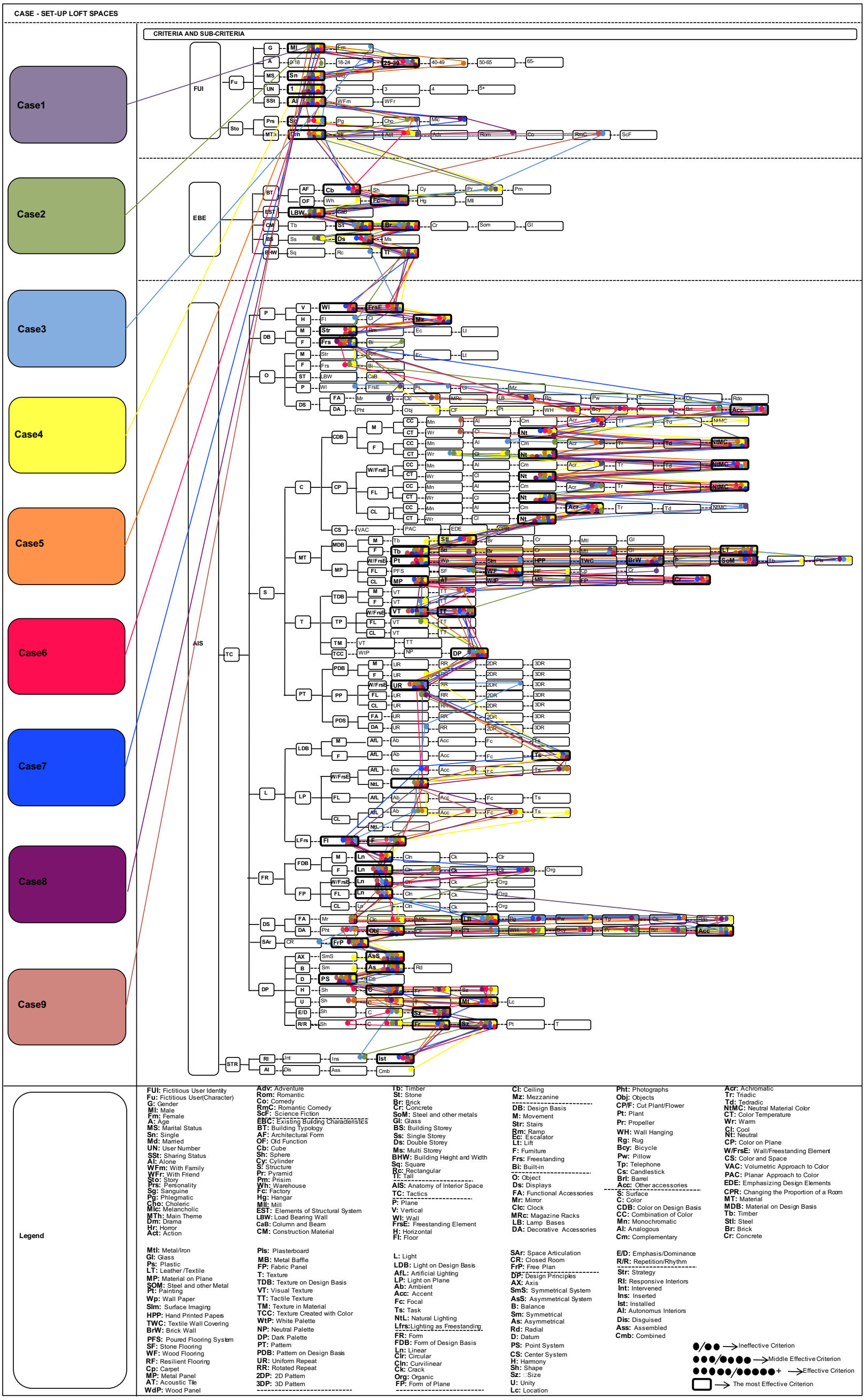


Figure 63: Reading of nine set-up loft spaces-case areas

5.4.2 Discussing the Role of Determinants/Bases on The Creation of Interior Space Atmosphere of Set-Up Lofts

The appearance of a film/series is an image making of the narrative world that was created in a set-up. As it was mentioned by Barnwell (2008), there is a selected space, which should have compatibility with film/series and the fictitious user. Therefore, the designed set-up space needs to expresses the story/scenario and the fictitious user. Interior space atmosphere of set-up lofts that were the cases of this study were created for a fictitious user in line with the story, which was narrated in the scenario. Results of the analytical reading have revealed that fictitious user (character) identity has an imperative role on the anatomy of interior space in the process of set-up lofts' creation.

Accordingly, results have revealed that fictitious user (character) identity has movable features (variable features) and existing building essence that is related/connected with anatomy of interior space has immovable features (constant features) to the creation of interior space atmosphere. The changeable/movable effects are elements/components that depend on fictitious user's character/identity. Therefore, these are components that are related with fictitious user (character) as personality, character, profession, objects of space and special accessories/displays. These components give way to the creation of visual and physical atmosphere. On the other hand, immovable effects are related with elements/components of existing industrial building stocks. Therefore, these are related with the existing building characteristics and anatomy of interior space as building height and width, old function, elements of structural system, building storey, building height and width, planar elements, surface (color, material, texture, pattern), lighting, form, space articulation, design principles and strategy.

Role of User Identity on the Creation of Interior Space Atmosphere through Personalization

User has different characteristics features such as culture, education, profession, age, gender or physical status and these features directly affect creation of the interior space atmosphere (Bozdayi, 2004; Mahmoud, 2014). Anatomy of interior space that has an effective role to create interior atmosphere of set-up loft spaces is directly related with the fictitious user (character) identity. A private interior space could be accepted as the narrative of life and each space has a personality and character whilst design of it represents the image of its user/fictitious user. User and space interact and as a result of this interaction, personalization of interiors occurs.

As a result of the investigation of nine set-up loft cases in the light of theoretical exploration, this thesis put forward that diverse fictitious users (character) of those spaces are people who live alone, not married and the majority are male that their ages generally range between 25-39 who are either businessman, student, hacker, owner of a communication company, architect, advocate or a company owner who has artistic values. Accordingly, it has been determined that each case was personalized distinctly by its fictitious user. One could see that there are certain features in set-up lofts, which characterized the interior atmosphere specifically. There is a common feature, which was observed in all set-up loft cases that is the display elements; which reflect either interest of the users or their profession.

Displays of set-up lofts generate personalization by reflecting the fictitious user identity in the created spaces. One could see that it is the display that essentially defines the character of interior atmosphere of set-up loft spaces either by visual or functional accessories. In addition, displays that have been used as accessories of set-up lofts are

unusual accessories and intimate visual details. There is a special emphasis on the personalization of interiors while imbuing a peculiar meaning to the interior atmosphere of set-up lofts. Furthermore, displays of set-up lofts have been used as an object that reflects dominancy in interior atmosphere. Additionally, it has been revealed that there is a common feature which was determined in all of the nine cases that is the display elements in interiors. They reflect either interest of the fictitious users (character) identity or their profession. This provides unique exemplification between space and user of set-up lofts. Therefore, there are certain displays in the set-up lofts that have been found effective on the creation of interior space atmosphere. For instance, in Case 2 (Kerem Sayer's set-up loft), which belongs to a high school student, there are several objects which reflect user's interests such as a table full of painting/sketching equipment in the middle of the space, boxing machine, sandbox or found objects as furniture or as it was revealed in Case 4 (Hakan Eren's set-up loft) that belongs to the owner of communication company and narrated as a colorful character, repetitive order of display elements on the wall surface have been detected (Figure 64).



Figure 64: Displays in set-up lofts

In Case 1, where a businessman called Ali Sülen lives and does combat sports as a hobby; several found objects or retro objects such as radio as visual/functional objects besides exposition of books and photographs as visual objects and a huge propeller was indicated as the display elements which plays an effective role on the interior atmosphere creation. Moreover, in Case 5, which also belongs to a businessman called Haldun Arsoy, a huge clock on the wall has been determined as the main visual element of interior space which defines the interior atmosphere. In addition, Güneş Sayer is a melancholic character that lives alone in Case 7. In accordance with his character, lots of books on the table, shelves and on the floor acted as the primary visual objects in the space. Case 9 that belongs to a male user called Deniz Kaya who is a talented person interested in different forms of art such as playing drum, making paintings and composing musical work. Interestingly, his personal belongings such as guitars are

being exhibited as displays on the wall or a bicycle has been hanged on the wall within the interior space has created an extraordinary view in his set-up loft. Additionally, in Case 6 where an architect lives called Halil; repetitive order of wall hangings and books on shelves and table as displays have effective role in this space to personalize interior space which reflects fictitious user's character/personality and profession evidently.

Furthermore, it has been determined that, besides displays, freestanding furniture deployed as the object within the interior space in several set-up lofts such as barrel and long dining table; used as a significant character defining ostentatious objects. Accordingly, in Case 6, unusual furniture such as number 6 shape the bedroom and exposition of clothes in an open-type clothing closet act as focal elements in the space (Figure 65).

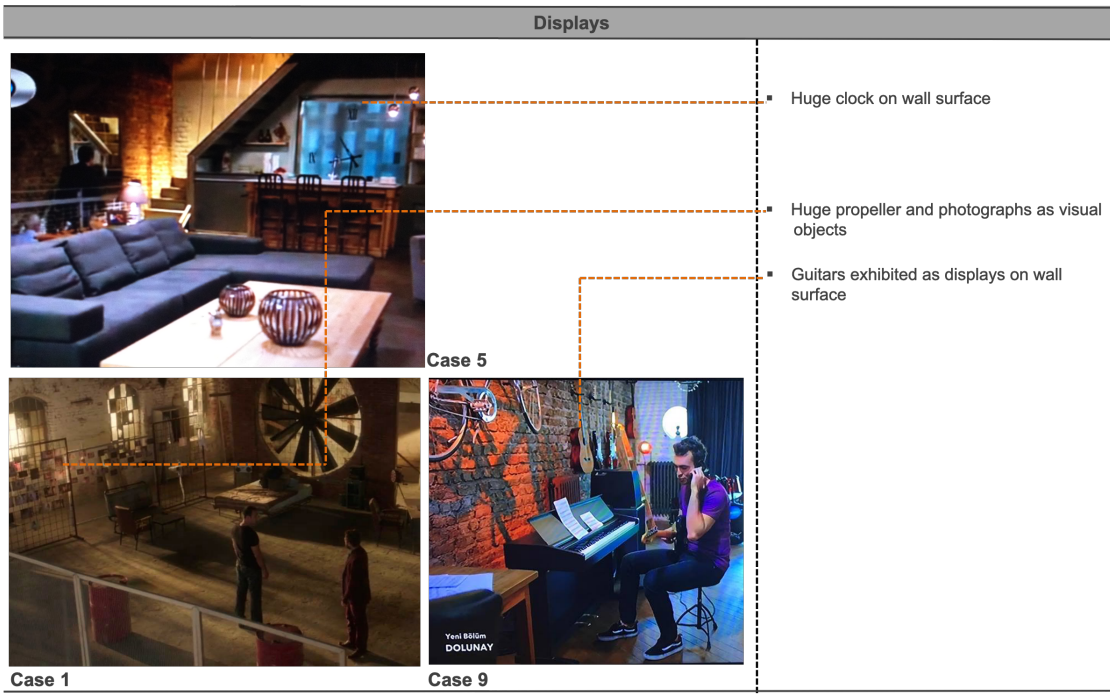


Figure 65: Displays belong to fictitious user (character) identity

Role of Anatomy of Interior Space and Existing Building Essence on the Creation of Interior Space Atmosphere

Interior space atmosphere creation of set-up lofts is directly associated with anatomy of interior space that is related with the characteristics of existing building.

As a result of the investigation of cases this thesis put forward that set-up loft spaces have been organized in line with the responsive interior approach where existing building restrictions were fully embraced and it controls the proposed design; new interventions have strong ties with the existing building's character. In the responsive interiors, new designs do not change the size or structure of the existing spaces. Furthermore, character of the existing building has dominancy in the interior; existing building possibly perceived from planar elements. In general, installed interior has been used as sub-criteria where the new design and existing building is combined and linear, curvilinear and crack forms are used for new elements. Additionally, it combines the new and old without compromising or interfering with each other. However, existing building should be perceived behind new designs. Besides, Case 2 and Case 3 have been organized with another sub-criteria of responsive interior, which is inserted interior where the new design created has a contrasting relationship between new and old. For instance, new inserted space and vertical planar elements create contrast with their texture in the existing building of Case 3 (Figure 66).

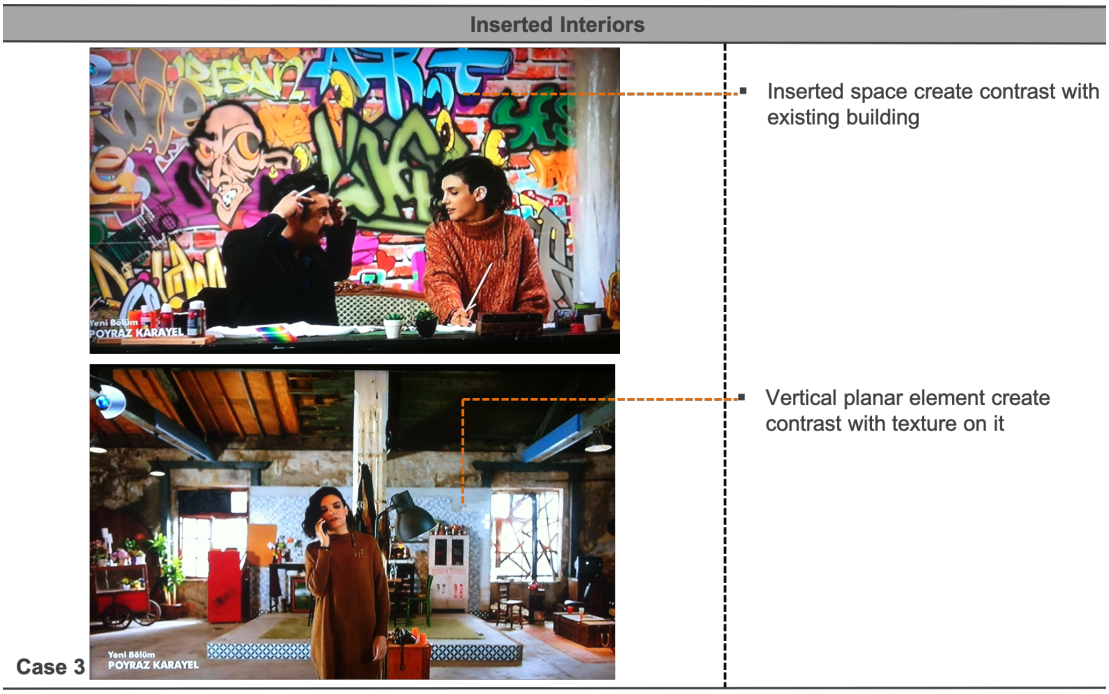


Figure 66: Contrasting with new inserted space and vertical planar elements in the existing building

In addition, historical value of existing building is preserved and used as a part of interior space design repeatedly in set-up loft spaces. Therefore, existing historical texture such as brick material surfaces and cast/iron or timber structure roof were explored in the cases that retain a significant role to connect interior with its situation. For instance, repetition of elements in roof structure provides contrast between new interventions/designs and old existing building in Case 2 and Case 3 (Figure 67).

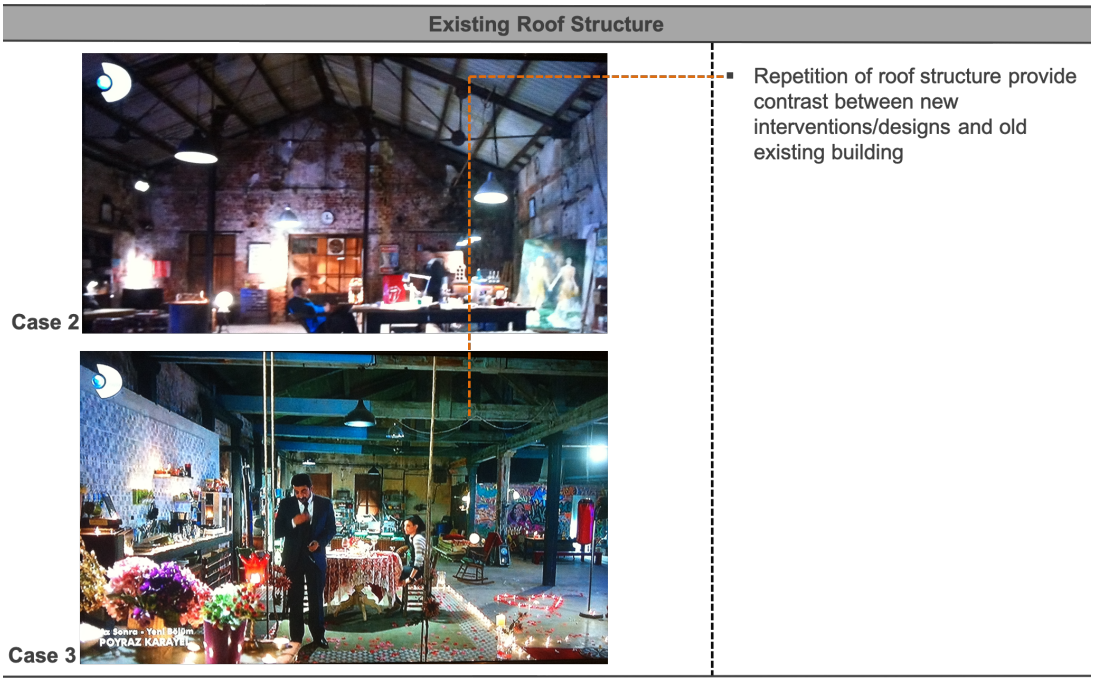


Figure 67: Existing roof structure

Additionally, it has been determined that existing brick wall surfaces that have tactile texture is deployed as a part of design with its original character in set-up lofts. Particularly, original character of Case 1 has been used as an imperative part of interior space design where the new elements are vertical freestanding elements, which create visual connections between spaces (Figure 68).

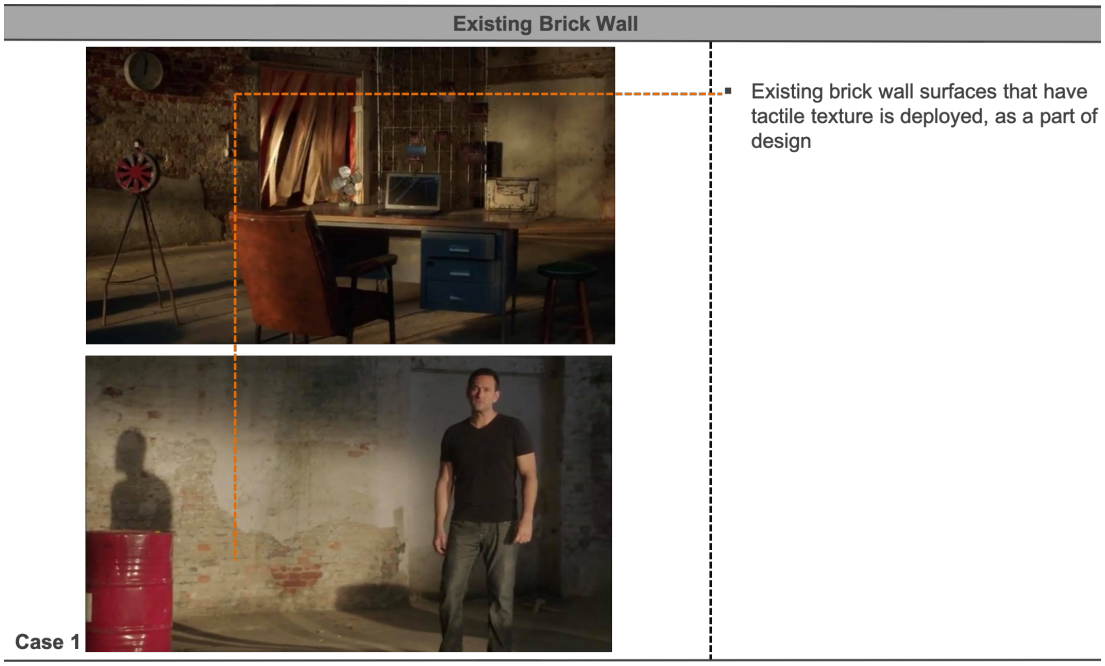


Figure 68: Existing brick wall surface as a part of interior design

Analytical reading has been revealed that characteristic features of existing building have an effective role while intervening interior. Therefore, it has been revealed that former function of the existing building effects spatial organization. For instance it has been indicated that former factory and warehouse buildings were organized in open plan due to their formal characteristics by preserving their spatial volume as single storey (Case 1, Case 2 and Case 4) or divided into different levels in line with the ceiling height (Case 3, Case 5-9) and it has been exposed that division of the form affects spatial perception of the entire space. Therefore, it must be noted that single volume provides a holistic perception of the buildings with uninterrupted spaces/organizations in these set-up lofts. (Figure 69).

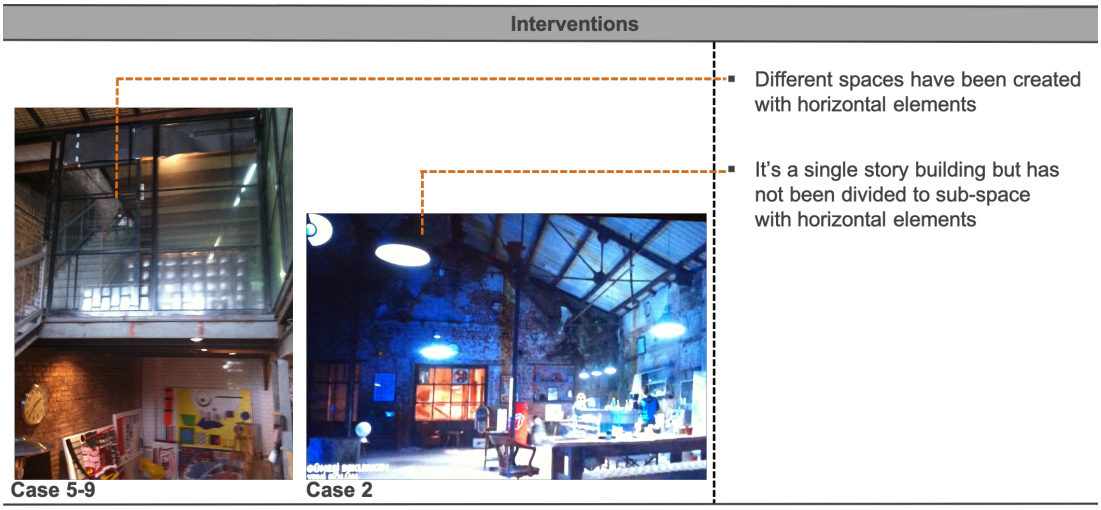


Figure 69: Interventions according to characteristics of existing buildings

In general, it has been revealed that colors of natural material have been provided as a result of preserving existing industrial building stocks brick material with its historical texture. Therefore, existing essence of industrial buildings has priority in the interior space atmosphere creation with its original color, material and texture. Furthermore, it has indicated that existing building and new interventions in interior is in harmony in terms of color composition. Additionally, analytical reading has revealed that color use on displays and furniture of set-up lofts created dominance in the interior. For instance, in Case 2, blue color sandbag, in Case 6 green color furniture, in Case 3 orange color sofa and in Case 8 red and green color chairs created dominance in those set-up loft spaces (Figure 70).

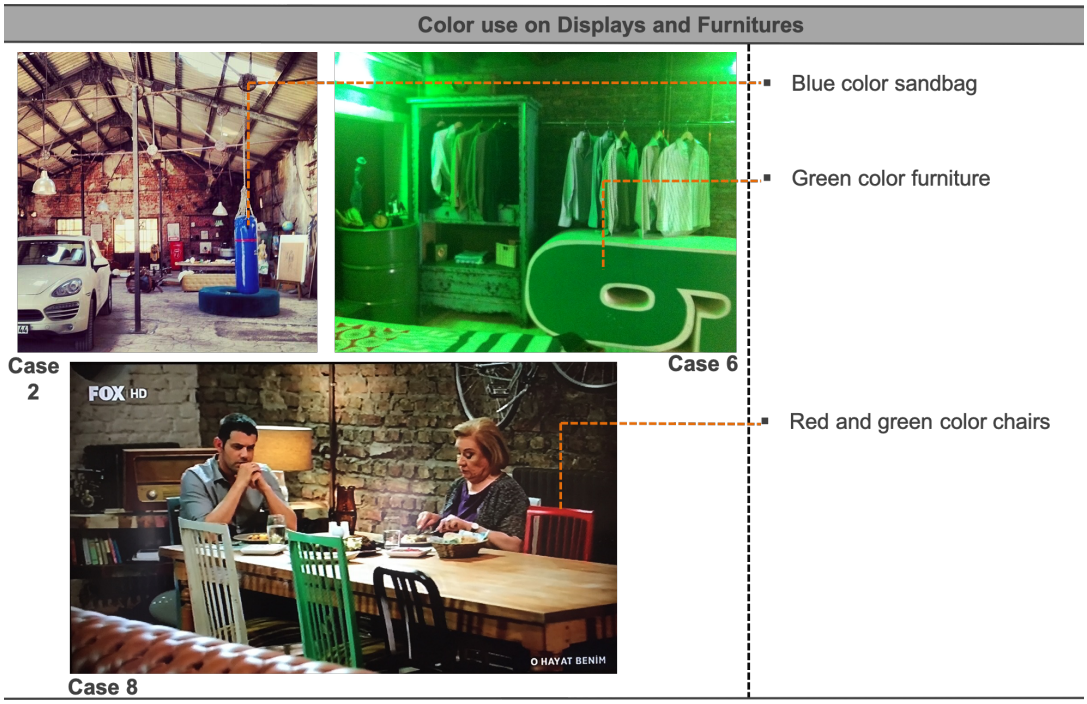


Figure 70: Color use on displays and furnitures created dominance in interior

In addition, it has been revealed that colored lighting has effective role in set-up loft spaces. Therefore, natural material color that has been used in set-up lofts creates stagnation in existing building and this has been changed by using colored light. In Case 9, orange color light has been used on wall surfaces as the accent in the interior. Additionally, ambiance has been created in this set-up loft by using orange colored lighting element. In Case 6, green colored light has been used in the bedroom to change the naturality effect (Figure 71).

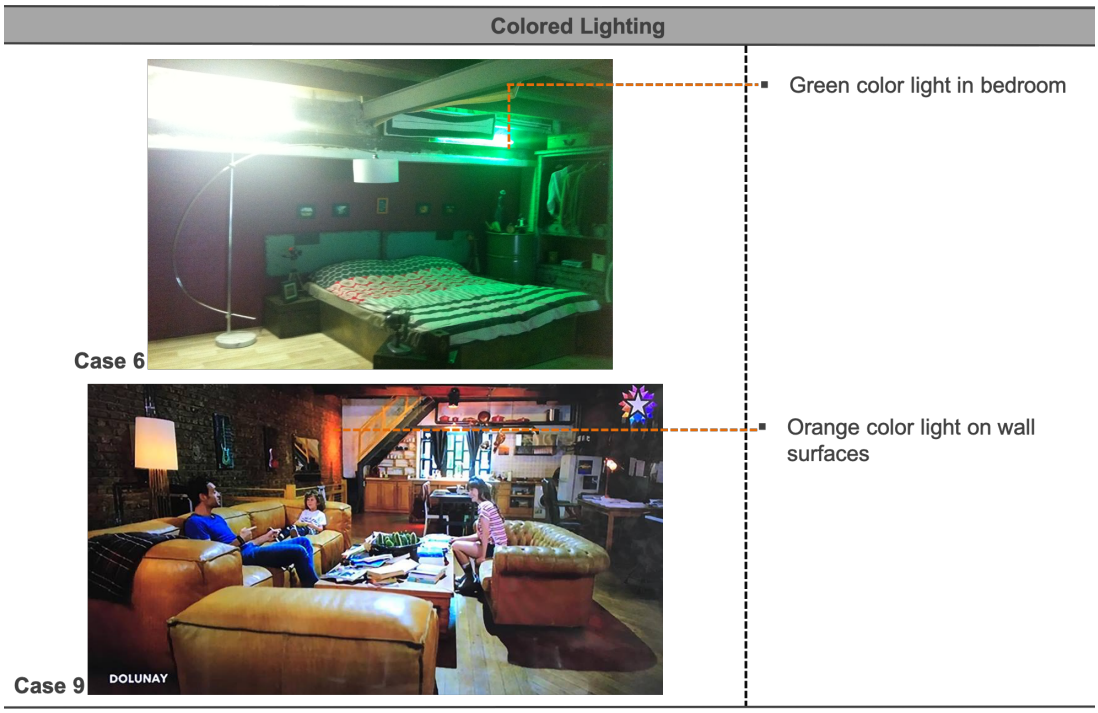


Figure 71: Colored light effect in set-up lofts

Accordingly, it has been revealed that freestanding lighting element or over the furniture have an effective role in set-up lofts. Particularly, task lighting on furniture of set-up space for specific activities indicated as effective feature. In fact, there is not usage of general lighting. Therefore, in set-up loft spaces a darker and dimmer atmosphere has been created due to preservation of the large cast/iron windows. Thus, freestanding lighting elements have been used in an articulation as to avoid additional shiny atmosphere besides large windows.

Chapter 6

CONCLUSION

This study was focused mainly on the development of a new analytical framework, in order to determine the effective criteria, which plays an important role on the formation of interior space/atmosphere during re-functioning of industrial buildings such as historical industrial buildings and non-historical industrial buildings into set-up loft spaces.

This thesis therefore has been achieved that loft spaces are prevalent context for diverse media works nowadays, which were either directly used as set-up spaces (Case 1-3, historical industrial buildings) or as a result of re-functioning existing industrial building stock into film making spaces and then setting them up as lofts (Case 4-9, non-historical industrial buildings).

In addition, this thesis concluded that there are mainly two matters through the determination of the issues on the creation of interior space atmosphere of set-up lofts, adapted in existing industrial buildings stocks. First, a comprehensive analytical framework has been found as a useful method for in-depth investigation of the interior atmosphere of existing buildings. Accordingly, it has been achieved that the developed analytical framework is an essential tool that can be used both for re-functioning approaches of different types of industrial buildings (historical and non-historical). The other has been achieved by the implementation of the developed analytical framework

through in-depth reading of the selected multiple cases such as historical industrial buildings and non-historical industrial buildings in İstanbul/Turkey. In-depth reading has been carried out in accordance with the three key factors, which were stated in the analytical framework. Accordingly; interior atmosphere creation of set-up lofts has been revealed as a result of establishing the user's (fictitious) role; existing building's role and the role of interior space formation.

Therefore, as a result of the in-depth analytical reading which was carried out at 5 different existing industrial building stocks and 9 different set-up lofts that were organized in them; this study has put forward that movable features (variable features) are the most effective features in the formation of set-up lofts. Accordingly, movable features are fictitious user (character) and the features which are related with character of user and anatomy of interior space. Therefore, the interior space atmosphere is changed with the changing of fictitious user (character) as directly. On the other hand, immovable features (constant features) are the existing building that are the structure/character of buildings. These features are not receptive to changes; especially heritage buildings which have architectural heritage values. Thus, historical industrial buildings in Beykoz Leather and Shoe Factory has stronger impact on the interior space atmosphere creation than industrial buildings in Balat and Cibali which are started to have less impact, because, there are more interventions in freedom.

Additionally, this study has put forward that building typology (different types of existing industrial building stocks-factory, warehouse, hangar, mill), building height and width and building storey of the existing buildings is a decisive factor on the interior space atmosphere creation and hence perception. There are different types of industrial buildings (historical and non-historical) such as hangar, warehouse, mills and factories

as single volume or apartment style buildings, which have different building typology in terms of different functions. Therefore, different building typologies have different architectural properties. Furthermore, different existing industrial building stocks is effective to the formation of interior space atmosphere. It has been revealed that the stated criteria (building typology, building storey, building height and width) are effective on the determination of the overall intervention approach (strategy) as well as on the physical intervention such as spatial formation/new additions which plays a significant role on the creation of the interior space atmosphere. Hence, it has been investigated that set-up lofts, which are adaptation of factory or warehouse buildings, have high ceilings that shows effect on the creation of interior space. On the other hand, single volume/double-storey existing industrial building stocks (Case 1-9) which have been organized with an open plan approach are more effective on the creation of interior space. It has been revealed that this building characteristic liberates interior design of the set-up spaces and use of divergent freestanding vertical planar elements besides horizontal planar elements divide existing volume into different sub-spaces. It has been accordingly concluded that both freestanding vertical elements and horizontal elements were used in two industrial buildings which have high ceiling to organize interior space. On the other hand, it has been concluded that only freestanding vertical elements were used in three historical industrial buildings in Beykoz factory. Two of the buildings have single volume and the other is double storey building that have existing floor additions in itself in Beykoz factory. Therefore, it has been achieved that only freestanding vertical elements were used in these three historical industrial buildings and there are not any horizontal floor additions. In addition, it has been achieved that freestanding vertical planar elements texture, color and material reflects fictitious user's personality. Therefore, it could be said that in some situations due to the dominating

identity and character of these new elements existing building characteristic such as brick surfaces were set aside yet new freestanding planar element owns priority in the image making (while watching them on screen). Although new freestanding planar element has priority, it has been seen in set-up lofts that existing building character is predominantly visible due to the organization of new sub-spaces according to the new use as a result of responsive intervention in both types of buildings. In addition, it is revealed that some of the characteristics of existing building as brick surface and cast-iron windows are used as a background in the set-up loft spaces. Large iron windows with grid texture are emphasized as background of some series. Accordingly, results of this thesis put forward that in the responsive interiors, freestanding vertical planes besides horizontal planes organized the interior space in line with the restrictions given by the existing building such as preservation of existing material, texture and structural system. Furthermore, this thesis has revealed that responsive interiors brought either permanency or flexibility into the created interior space due to the manipulation of existing building planes and the organization of space via freestanding elements. Existing building essence in the responsive intervention strategy dictates the interior creation.

The fictitious user – space interaction concluded that users show effectiveness on the achieved interior space atmosphere. It has an organic structure with fictitious user, which personal characteristics act as one of the major driving factors on the created atmospherics. Lofts are living spaces, which fictitious user's character has very strongly been mirrored on the interior atmosphere. Therefore, set-up lofts have a distinctive condition due to an indivisible/inseparable organic relation among the space and the user that depend on each other. Especially, this thesis has revealed that fictitious user's (character) personal objects manipulated specifically and differently that imbues

interior with its personality/character. Therefore, there is a variety in the definition of interior space atmosphere of set-up lofts and fictitious users (character) preferences found very decisive on this variety. Furthermore, it is seen that interior space atmosphere of set-up lofts are emphasized with unusual belongings of fictitious user (character) as accessories and objects. In addition, results put forward that displays are one of the main crucial factors in the created interior atmosphere, that are manipulated ostentatiously when it is compared with another type of living space such as a detached house or an apartment flat that has quite different interior atmosphere when they have been compared with lofts. Thus, displays that are functional and visual accessory of set-up lofts are determined as the most effective criterion of set-up loft interiors. Especially, either the involvement of the preserved industrial utility object within the interior, that belongs to the previous function of the building or handling the selected space objects brought a peculiar essence to the space and makes the interior atmosphere unique compared to the habitual ones. Additionally, this thesis has concluded that qualities/characteristics of the existing building and the identity of fictitious users (character) affected the creation of sole interior atmosphere and hence it could be concluded that the created interior atmosphere is unique, here after marks set-up lofts as the alternative living spaces.

On the other hand, this study concluded that set-up lofts as the popular images on the screen that act as the pull factors. Set-up lofts are started to be spread by television to people. Several studies mention essential pull factors such as social space, cultural elements, events, ambience, physical facilities, and popularity of the area and so forth (Tu, 2020; Li and Lo, 2004). In addition, media storytelling contributes to the creation of space meaning that are imaginary places (Van Laer et.al, 2014). Kim (2010) states, that media play a significant role in shaping imaginary place meaning. Therefore, set-

up loft spaces as imaginary places has acted as the pull factor which have cultural and historical/industrial utility elements, different ambience than regular places, prominent factors, re-functioning type which are adapted from industrial buildings such as historical industrial buildings and non-historical industrial buildings into living spaces with a divergent interior detailing. Accordingly, set-up loft spaces, which are film-making images (while watching them on screen), have different interior atmosphere creation with the existing building elements. History and historical aspects are merged with a new design approach in the existing industrial building stocks that has created atmosphere and differentiates itself from regular interior spaces. Furthermore, interior atmosphere which is created as a result of blending the industrial texture with the new space elements, interior design and space accessories are determined highly for reflecting the preference of the fictitious user (character) dominate themselves in the forefront and become prominent. Therefore, these popular loft spaces have created awareness, took attention of the viewers and aroused curiosity by people through media.

In the investigated cases, created film-making images have expressed how an obsolete existing industrial building stock that is abandoned or unused could turn into a livable space. These buildings have become a driving tool / factor for the new investment in the region as by the help of intriguing icons that have been created in the interior atmosphere. Accordingly, it has been concluded that re-functioning of industrial buildings as film-making spaces which are not listed and built more recently made better impact in the Balat and Cibali region. For instance, the owner of building 3 (Elif Karadayı), in one of her interviews has stated that she has owned one more abandoned building and adapted into a living space (URL 23). On the other hand, it has been concluded that re-functioning of historical industrial buildings which are listed and placed in the factory context did not impact Beykoz region. Beykoz Leather and Shoe

factory is a gated context where three historical industrial buildings have been placed in this context which are directly used as set-up spaces after their re-functioning approaches. Although both different cases have diversified effects, it can be said that media influences the ways in which people derive awareness to these places, within the created images such as unusual and distinctive factors of lofts; existing texture that merge with interior design, existing structural systems that are part of interior design, cast-iron material, single volume that give flexibility for the spatial organization and especially displays as personal/space accessories that are dominating elements in the interior of loft spaces. Thus, re-functioning of existing industrial building stocks as set-up loft spaces increase consciousness on the adaptation of buildings designed/built for various functions such as historical industrial buildings and non-historical industrial buildings into living spaces through TV screen.

In addition, it is seen that existing industrial building stock have been repeatedly in use as set-up spaces in various series, which is a significant factor that is extending the life span of the buildings. Accordingly, this study concluded that adapted set-up loft spaces were unused or abandoned spaces that are brought back to life by using them as set-up spaces, even though it is temporarily. In addition, managerial assistant of 'Son' series (Manolya Şen) stated that these kinds of uses could be either long term or short term uses which is dependent on the scenario (2013). Therefore, as a result of the determinations, this study concluded that these buildings as set-up spaces have been used for a long time. And this pervades new life into these existing industrial buildings (historical and non-historical) by the help of re-functioning through temporary/functions by turning them into livable spaces.

Consequently, this study put forward that the developed analytical framework is to be adapted at different points as architectural and interior architectural fields. It can be implemented while doing an analytical research for a re-functioning project, during design of set-up spaces in order to read and shape different adapted spaces. In addition, the developed analytical framework directs to reveal the building essence during the analysis. Thus, while re-functioning an existing building that have values, interior architects realize these values through analytical framework to be respectful or they can determine the intervention that will be in the interior space of existing building. Therefore, the developed analytical framework raises awareness of the interior architects to be respectful to the existing building. Accordingly, architects, interior architects, art directors and students who are from architectural/media departments can use it to read interior space atmosphere of adapted existing industrial building stocks into loft/set-up loft spaces. Moreover, this study to be further developed by focusing on the re-functioning strategies of industrial heritage buildings particularly by overviewing the regulations of conservation in-depth. In addition, this research to be further developed by designing new tools to study on the positive and negative effects of temporary usage of existing industrial building stock as set-up spaces/lofts on the building itself, environment, district or people who are living in the area of these spaces.

REFERENCES

Ayalp, N. (2012). Environmental Sustainability in Interior Design Elements. In *7th Wseas Conference on Energy and Environment, Kos Island*.

Addi, G., & Lytle, J. (2000). Interior design. *Excerpt from The Architect's Handbook of Professional Practice, Associate AIA.*

Akande, O. K., Odeleye, D., Coday, A., & Jimenezbescos, C. (2016). Performance Evaluation Of Operational Energy Use In Refurbishment, Re-use, And Conservation Of Heritage Buildings For Optimum Sustainability. *Frontiers of Architectural Research*, *5*(3), 371-382.

Asoobar, N. (2009). *A Comparative Assessment of The Design Approaches For The Conversion Of Historic Residential Buildings.* (Master's Dissertation), Eastern Mediterranean University).

Avenell, J. (2008). Gifted By Design: Balancing Technology And Tradition In The Field. *Screen Education*, (50), 28.

Ahunbay, Z. (1999). *Tarihi Çevre Koruma Ve Restorasyon*. İstanbul, Yapi Endustri Merkezi, A.S.

Affron, C., And Affron, M., J., 1995. *Set in Motion: Art Direction and Film Narrative*. Rutgers University Press, Usa.

Alpler, Z.B., Şahin, N. P., & Dağlı, U. U. (2020). A Critical Discussion Of Industrial Heritage Buildings Adaptive Re-Use As Film Spaces, Case Study: Industrial Heritage Buildings At İstanbul. *Journal of Architectural Conservation*, *26*(3), 215-234.Baba, E. C. (2015). *Loft*. Yem Press, İstanbul.

Bozdayi, M. (2004). *Ic Mekan Ve Insan*. Ajansmat, Ankara.

Bassindale, J. (2020). Adaptive Re-use as a Design Process. *Architectural Regeneration*, 227-243.

Bal, E. (2013). "An Evaluation about Television Serials in Turkey in The Context Of Parasocial Interaction". *Journal of Educational and Social Research*, Vol. 3, No.7, P. 767-773.

Baum, M., and Christiaanse, K. (2012). City as Loft. *City as Loft, Adaptive Re-use as a Resource for Sustainable Urban Development. Zurich, Switzerland: Gta Verlag*, 8-13.

Bromley, R., Tallon, A.R. And Thomas, C.J. (2005). "City Centre Regeneration through Residential Development: Contributing To Sustainability." *Urban Studies* 42, No. 13, 2407-2429.

Bottero, M., D'alpaos, C. And Oppio, A. (2019). "Ranking Of Adaptive Re-use Strategies for Abandoned Industrial Heritage in Vulnerable Contexts: A Multiple Criteria Decision Aiding Approach." *Sustainability* 11, No. 3, Pp. 785.

Banks, O.F. And Tanqueray, R. (1999). *Lofts; Living in Space*. Carlton Book Ltd, London.

Bayraktaroğlu, B. And Arabacioğlu, F.P. (2019). "Endüstri Yapılarında Yeni Üretim Biçimi Olarak Kültüre Giden Yol: Buda Fabriek Örneği." *Megaron* 14, No. 1.

Breitling, S. And Cramer, J. 2007. *Architecture in Existing Fabric- Planning Design Building*. Birkhauser Verlag Ag, Germany.

Brooker, G. And Stone, S. 2007. *Basics Interior Architerure 01: Form + Structure*. Ava Publishing, Switzerland.

Brooker, G., & Stone, S. (2004). *Re-Readings: Interior Architecture and The Design Principles Of Remodeling Existing Buildings*. Riba, London.

Brooker, G. And Stone, S. 2008. *Basics Interior Architecture 02: Context + Environment*. Ava Publishing, Switzerland.

Brooker, G. (2009). Infected Interiors: Remodelling Conteminated Buildings. In *Living In The Past: Histories, Heritage And The Interior. 6th Modern Interiors Research Centre Conference, 14 & 15 May* Kingston University London.

Brooker, G. And Stone, S. 2010. *What Is Interior Design?* Rotovision sa, Switzerland.

Barnwell, J. “Between Realism and Visual Concept: The Role of The Production Designer In Contemporary British Cinema”. Journal of British Cinema and Television, Edinburg University Press.

Barnwell, J. (2008). The Fundamentals of Film-Making. Ava Publishing sa, Switzerland.

Bordwell, D. And Thompson, K. (2008). *Film Art: An Introduction*. Mc-Graw Hill, New York.

Bergfelder, T., Harris, S. And Street, S. 2007. *Film Architecture and The Transnational Imagination*. Amsterdam University Press, Amsterdam.

Bullen, P.A., and Love, P.E. (2011). "Adaptive Re-use of Heritage Buildings." *Structural Survey*.

Berry, B. J. (1970). The Geography of The United States In The Year 2000. *Transactions of The Institute Of British Geographers*, 21-53.

Ball, R. (1999). "Developers, Regeneration and Sustainability Issues in The Re-use Of Vacant Industrial Buildings." *Building Research & Information* 27, No. 3, Pp.140-148.

Butler, R. W. (1990). The Influence of The Media In Shaping International Tourist Patterns. *Tourism Recreation Research*, *15*(2), 46-53.

Cakmak, A. (2020). İÇ Mekanda Hamamın Renk, Desen, Doku Olarak İncelenmesi, Çırağan Sarayı Tarihi Hamam ÖrneğI. Master Thesis. İstanbul Culture University.

Chang, Y. C., & Hsieh, C. M. (2018). Filmic Framing in Video Games: A Comparative Analysis of Screen Space Design. *Multimedia Tools and Applications*, *77*(6), 6531-6554.

Ching, F. D., & Juroszek, S. P. (2010). *Design Drawing*. John Wiley & Sons.

Ching, F. D., & Binggeli, C. (2018). *Interior Design Illustrated*. John Wiley & Sons.

Ching, F. D. (2007). Form, Space, Order, „John Wiley & Sons. *Inc. Hoboken, New Jersey*.

Chang, Y. C., & Hsieh, C. M. (2018). Filmic Framing in Video Games: A Comparative Analysis of Screen Space Design. *Multimedia Tools and Applications*, *77*(6), 6531-6554.

Cocen, O.N., and Baniotopoulos, C.C. (2013). Heritage Buildings' Sustainability Assessment Framework. *Proceedings of Cesb13-Central Europe towards Sustainable Building. Prague*.

Cantell, S. F. (2005). The Adaptive Re-use of Historic Industrial Buildings: Regulation Barriers, Best Practices and Case Studies. *Master Thesis, Virginia Polytechnic Institute and State University, Blacksburg*.

Cantacuzino, S. (1975). *New Uses for Old Buildings*. United Kingdom: Architectural Press.

Chen, J., Judd, B. And Hawken, S. (2016). "Adaptive Re-use of Industrial Heritage for Cultural Purposes in Beijing, Shanghai and Chongqing." *Structural Survey* 34, No. 4/5,pp. 331-350.

Chen, C., Chiu, Y. And Tsai, L. (2018). "Evaluating The Adaptive Re-use Of Historic Buildings Through Multicriteria Decision-Making." *Habitat International* 81, Pp. 12-23.

Culto, A. (Editor) 2001. *Lofts*. Grafiques Iberia sa, Spain.

Coles, J. And House, N. (2007). *The Fundamentals of Interior Architecture*. Switzerland: Ava Publishing sa.

Coleman, C. (Editor) (2002). *Handbook of Professional Practice.* United Stated: Mcgraw-Hill Publishing.

Claver, J., Domínguez, A. And Sebastián, M.A. (2018). "Decision-Making Methodologies for Re-use of Industrial Assets." *Contextity* 2018.

Canaran, C. (2009). An Integrated Framework for Sustaining Industrial Beings in The Urban Context. *Un-Published Phd Thesis. Middle East Technical University*.

Crisman, P. (2007). "From Industry to Culture: Leftovers, Time and Material Transformation in Four Contemporary Museums." *The Journal of Architecture* 12, No. 4, Pp.405-421.

Cetin, H. O. (2006). Fundamentals of Architectural Design in Comparison To Filmmaking. *Master of Architecture Thesis, Middle East Technical University*.

Can, M.V. (2016). Loft Yasaminin Olusum Sureci Ve Oernekler Uzerinden Incelenmesi. Ms Thesis. Selcuk University-Hacettepe University.

De Certeau, M. (1984). The Practice of Everyday Life, Trans. *Steven Rendall (Berkeley: University Of California Press, 1984)*, *117*.

De Medici, S., De Toro, P., & Nocca, F. (2019). Cultural Heritage and Sustainable Development: Impact Assessment of Two Adaptive Re-use Projects In Siracusa, Sicily. *Sustainability*, *12*(1), 1-23.

Dinler, M., & Güçhan, N. Ş. (2017). Fener Ve Balat'in Dönüşümü Üzerine: Üç Vizyon/Üç Dönem/Üç Ayri "Koruma" Anlayişi. *Kültür Envanteri*, *14*(14).

Donaldson, L. F. (2014). *Texture in Film*. Basingstoke: Palgrave Macmillan.

Egan, K., 2014. "Film Production Design: Case Study of The Great Gatsby". The Elon Journal of Undergraduate Research in Communications, Vol. 5, No. 1, Spring 2014.

Erdemir, Z. (2016). *Loft Kavramına Farklı Bir Bakış Açısı: Brütalizm* (Doctoral Dissertation, İstanbul Kültür Üniversitesi/Fen Bilimleri Enstitüsü/İç Mimarlık Ve Çevre Tasarımı Anabilim Dalı).

Elmas, S. (2014). Loft Tipi Konutlarda Mekânsal DönüşÜm Süreci: Levent Loft ÖrneğI. Bahçeşehir University, İstanbul.

Eley, P. And Worthington, J. (1976). Industrial Rehabilitation: The Use of Redundant Buildings for Small Enterprises. United Kingdom: Architectural Press.

Eden, A. H. (2005, January). Strategic versus tactical design. In *Proceedings of the 38th Annual Hawaii International Conference on System Sciences* (pp. 313a-313a). IEEE.

Fajardo, J. (Editor) (2008). *Wow! Converted Spaces*. Loft Publication, Spain.

Forster, A.M. (2010). Building Conservation Philosophy for Masonry Repair: Part 2 "Principles". Struct. Surv: J. Build. Pathol. Refurb. 28 (3), 165–188.

Field, M. And Irving, M. (1999). *Lofts*. Singapore: Laurence King Publishing.

Fadli, F., and Alsaeed, M. (2019). A Holistic Overview of Qatar's (Built) Cultural Heritage; Towards an Integrated Sustainable Conservation Strategy. *Sustainability*, *11*(8), 2277.

Forte, B., Cerreta, M., & De Toro, P. (2019). *The Human Sustainable City: Challenges and Perspectives from The Habitat Agenda*. Routledge.

Grimley, C. And Love, M. (2007). *Color, Space and Style*. Uk: Rockport Publishers.

Goodey, B. (1973). Perception of The Environment And A New Way Of Discussing It. *Area*, *5*(4), 287-290.

Gagg, R. (2011). *Basics Interior Architecture 05: Texture+ Materials* (Vol. 5). A&C Black.

Gewirtzman, D. F. (2016). Adaptive Re-Use Architecture Documentation and Analysis. *Journal of Architectural Engineering Technology*, Vol. 5, Issue3.

Gunay, Z., & Dokmeci, V. (2012). Culture-Led Regeneration of İstanbul Waterfront: Golden Horn Cultural Valley Project. *Cities*, *29*(4), 213-222.

Higgins, I. (2015). *Spatial Strategies for Interior Design*. Laurence King.

Hasol, D. (2003). Mimarlık Ve Yapı SözlüğÜ (1. Baskı). İstanbul: Yapı Yayın.

Hutchings, J. (1995). The Continuity of Colour, Design, Art, And Science. I. The Philosophy of The Total Appearance Concept And Image Measurement. *Color Research & Application*, *20*(5), 296-306.

Halligan, J. (2012). *Production Design*. The Illex Press Ltd, Uk.

Hollis, E. (2017). What, Or When, Is Interior? *Interior-Design/Architecture/Culture*, Vol. 8, Issues, 1-2, Pp. 45-52.

Holyoake, K. E. (2006). The Culture of Conservation: An Ethnographic Interpretation of The Re-use Of Historic Urban Industrial Buildings In England. Phd Thesis, De Montford University, Leicester.

Incirlioğlu, E.O. (Editor) (2009). Culture and Space. Ankara: Matsa Press.

Innes, M. (2012). *Lighting For Interior Design*. Laurence King Publishing.

ICOMOS, (2013). "The Burra Charter: The Australia Icomos Charter for Places of Cultural Significance", 31 October, 2013.

ICOMOS, (2011). Joint ICOMOS-TICCIH Principles for The Conservation of Industrial Heritage Sites, Structures, Areas And Landscapes «The Dublin Principles». Adopted by the 17th ICOMOS General Assembly, 28 November, 2011.

ICOMOS, (2003). "The Nizhny Tagil Charter for The Industrial Heritage". Adopted by TICCIH, Moscow, Russia, 17 July 2003.

ICOMOS, (1964). The Venice Charter. International Charter for The Conservation And Restoration Of Monuments And Sites (Venice). Adopted by ICOMOS in 1965.

Ilke, A. "Fener – Balat Yapilarinin Restorasyon Süreçleri Ve Sonuçlari" (2015).

Iidahttp://Www.Ncidqexam.Org/About-Interior-Design/Definition-Of-Interior-Design/ (2016).

Jagor, Frank P. (2010). *Old and New. Design Manual for Revitalizing Existing Buildings*. Switzerland: Birkhauser.

Karagöz, Z. (2007). Tasarimda Loft Anlayisi. İstanbul Kultur University, İstanbul.

Kilmer, R., & Kilmer, W. O. (2014). *Designing Interiors*. John Wiley & Sons.

Kamalzadeh, M. (2014). Use and Creation of Texture In Commercial Interior Space: Case Study Of Istinye Park Shopping Mall-İstanbul/Turkey. Unpublished Master Thesis. Eastern Mediterranean University.

Kim, S. (2010). Extraordinary Experience: Re-Enacting and Photographing At Screen Tourism Locations. *Tourism and Hospitality Planning & Development*, *7*(1), 59-75.

Klingenberg, E. S. (2012). Conservation of Cultural Memories in Interiors-A Challenge for New Use.

Kuter, L.K. (1957). "Films in Review". June-July in Street, S. (2004). "Production/Set Design". Screen 45:4 winter, Oxford University Press, Uk.

Kubba, S. (2003). *Space Planning For Commercial and Residential Interiors*. United States: Mcgraw-Hill Publishing.

Kouzminova, A. (2012). The Adaptive Re-use of Warehouse and Factory Buildings into Residential Living Spaces In Wellinghton Newzealand. Master Thesis, Victoria University Of Wellinghton, Wellinghton.

Lambe, P. (2014). *Organising Knowledge: Taxonomies, Knowledge and Organisational Effectiveness*. Elsevier.

Li, Y., & Lo, R. L. B. (2004). Applicability of the Market Appeal—Robusticity Matrix: A Case Study of Heritage Tourism. *Tourism Management*, *25*(6), 789-800.

Langston, C., Francis, K.W., Eddie C.H. And Li-Yin, S. (2008). "Strategic Assessment of Building Adaptive Re-use Opportunities in Hong Kong." *Building and Environment* 43, No. 10, Pp. 1709-1718.

Latham, D. (2000). *Creative Re-Use of Buildings*. United Kingdom: Donhead Publishing.

Lukas, C., 2001. *Directing for Film and Television*. Allworth Press, New York.

Li, H., and Tsai, T. (2017). "Revitalization Strategies for Abandoned Sugar Factory Sites in Taiwan." *International Journal of Organizational Innovation* 10, No. 1.

Lobrutto, V. (2002). *The Filmmaker's Guide to Production Design*. Allworth Press, New York.

Lynch, N. (2014). Divine Living: Marketing and Selling Churches as Lofts in Toronto, Canada. *Housing, Theory and Society*, *31*(2), 192-212.

Morahan, M., J. (1951). "Modern Trends in Art Direction". British Kinematography, Sound and Television Society, Vol. 18, No.3.

Mahmoud, H.H. (2014). Interior Architectural Elements That Affect Human Psychology and Behaviour. Ierek Press.

Marcus, C.C. (2006). *House as a Mirror of Self.* Usa: Nicolas-Hays, Inc.

Machado, R. (1976). Old Buildings as Palimpsest. Towards A Theory of Remodelling. *Progressive Architecture, 11*. Pp.46-49.

Mckelfresh, D.A., Clemons, S.A. & Banning, J.H. (2006). Residence Hall Room Design: Researching a Sense of Place and a Sense of Self. *Journal of Student Affairs, 15*, Pp. 41-49.

Metcalfe, P. 2014. "Cultural Heritage Practice Through Socially Sustainable, Adaptive Re-Use Of Industrial Buildings: A Western Australian Narrative". *Perspectives on Social Sustainability and Interior Architecture*, Pp.109-127.

Mahon, N. (2010). *Basics Advertising 02: Art Direction* (Vol. 2). Bloomsbury Publishing.

Milligan, A., Fleming, J., Hay, F., Hollis, E., & Plunkett, D. (2011). *Interior Tools Interior Tactics: Debates in Interiors Theory and Practice*. Libri Publishing.

Mileto, C., Vegas López-Manzanares, F., Cristini, V., & Diodato, M. (2011). Learning Based Upon Projects of Architectural Conservation: From University to Real Life.

Moreno, G. (2010). Farewell to Function: Tactical Interiors.

Niu, S., Lau, S.S., Shen, Z. And Lau, S.S. (2018). "Sustainability Issues in The Industrial Heritage Adaptive Re-use: Rethinking Culture-Led Urban Regeneration Through Chinese Case Studies." *Journal of Housing and The Built Environment* 33, No. 3, Pp. 501-518.

Nur Aykaç, G. (2014). İç Mekanda Bir Tasarım Kriteri Olarak Açıklık Kavramının Loft Mekanlarda Analizi Ve Örnekler Üzerinde İnceleme.

O'kelly, E. And Dean, C. (2007). "Conversions". Laurence King Publishing Ltd. London.

Odabaşıoğlu, S. (2015). *Effect of Area on Color Harmony In Interior Spaces* (Doctoral Dissertation, Bilkent University).

Ozik, D. (2006). Reinvention Through Re-use: Strategies For The Adaptive Re-Use Of Large Scale Buildings. Master Thesis. Colombia University.

Okba, E.M. And Embaby, M.E., (2013). Sustainability and Heritage Buildings. *International Journal of Engineering Research & Technology*, *2*(8), Pp.1682-1690.

Oxford Dictionary (2017). Retrieved From (Https://En.Oxforddictionaries.Com/Definition/Strategy).

Oxford Learners Dictionary (2020). Retrieved From Https://Www.Oxfordlearnersdictionaries.Com

Pamukçu, K.O. (2009). Ticari Ve Endustriyel Yer Degistirmenin Sonucu Olarak; ‘‘Loft’’ Mekanlarinin Degerlendirilmesi. Yildiz Technical University, İstanbul.

Plevoets, B., and Cleempoel, K.V. (2013). Adaptive Re-use as an Emerging Discipline: An Historic Survey. *Reinventing Architecture and Interiors: A Socio-Political View an Building Adaptation*, 13-32.

Plevoets, B., and Cleempoel, K.V. (2014). Aemulatio and The Interior Approach Of Adaptive Re-use. *Interiors*, *5*(1), 71-88.

Plevoets, B. (2014). Retail-Re-use: An Interior View on Adaptive Re-use of Buildings. Phd Thesis, University Of Hasselt, Hasselt.

Poore, J., & Ragan, S. L. (1994). *Interior Color ay Design: A Design Tool for Architects, Interior Designers, And Homeowners*. Rockport Pub.

Pimentel, K., & Teixeira, K. (1993). Virtual Reality Through The New Looking Glass.

Rappas, C., Ipek A., & Kayhan, S. (2018). Tv Series Production and The Urban Restructuring Of İstanbul. *Television & New Media*, *19*(1), 3-23.

Rao, M. P. (1998). Interior Design, Principles and Practice.

Riley, R., Baker, D., & Van Doren, C. S. (1998). Movie Induced Tourism. *Annals of Tourism Research*, *25*(4), 919-935.

Richards, I. (2000). *Manhattan Lofts*. United Kingdom: John Wiley and Sons Ltd.

Reddy, S. M., Chakrabarti, D., & Karmakar, S. (2012). Emotion and Interior Space Design: An Ergonomic Perspective. *Work*, *41*(Supplement 1),1072-1078.

Ryan, M. L. (2015). *Narrative as virtual reality 2*. Johns Hopkins University Press.

Robert, P. (1989). *Reconversions= Adaptations, new uses for old buildings*.

Schittich, C. (Ed.). (2012). *Building in Existing Fabric: Refurbishment, Extensions, new Design*. Walter De Gruyter.

Schofield, P. (1996). Cinematographic Images of a City: Alternative Heritage Tourism in Manchester. *Tourism Management*, *17*(5), 333-340.

Spankie, R. (2009). *Basics Interior Architecture 03: Drawing Out the Interior* (Vol. 3). Ava Publishing.

Spankie, R. (2009). *Basics Interior Architecture 03: Drawing Out the Interior* (Vol. 3). Ava Publishing.

Stromberg, P. (2017). “Industrial Chic: Fashion Shows in Readymade Spaces”. Fashion Theory.

Samadzadehyazdi, S., Ansari, M., Mahdavinejad, M. And Bemaninan, M. (2018). "Significance of Authenticity: Learning From Best Practice of Adaptive Re-use in The Industrial Heritage Of Iran." *International Journal of Architectural Heritage*. Pp.1-16.

Schaumburg, Z. E. (2003). *Mill And Mercantile Conversions: A Case Study Analysis Of Residential Adaptive Re-Use Projects*(Doctoral Dissertation, Massachusetts Institute Of Technology).

Sully, A. (2015). *Interior Design: Conceptual Basis*. Switzerland: Springer.

Safavi, S. (2013). Effects of Design Principles On Visitors’ Perception In Museum Spaces. Eastern Mediterranean University. Unpublished Master Thesis.

Snyder, G.H. (2005). Sustainability through Adaptive Re-use The Conversion Of Industrial Buildings. Phd Diss., University Of Cincinnati, Cincinnati.

Slesin, S., Cliff, S. And Rozensztroch, D. (1986). *Lofts*. London: Thames and Hudson Ltd.

Sinclair, J. (1990). Essential English Dictionary. England: Williamcollins.

Street, S. (2004). “Production/Set Design”. Screen 45:4 winter, Oxford University Press, Uk.

Semih, T. And Et. Al (1978). “Halic Ve Cevresi Duzenleme Calismasi”. *Mimarlik*, 78/4, Pp. 28-41.

Sato, Y., & Shingu, K. (2006). A Study on Harmony in Architectural Design. In *Scis & Isis Scis & Isis 2006* (Pp. 1179-1184). Japan Society for Fuzzy Theory and Intelligent Informatics.

Semercioglu, C. (2015). “Beykoz Kundura’da Sanat Devam Edecek” [The Art Will Continue At Beykoz Shoe Factory], Interview with Serpil Yildirim, Hurriyet.

Taner, S. (2013). “ İstanbul Endustri Yapilarinin ‘Loft’ Kavrami Cercevesinde Yeniden Islevlendirilmesi”. Phd Diss., Fen Bilimleri Enstitusu.

Tan, Y., Shuai, C. And Wang, T. (2018). "Critical Success Factors (Csfs) For the Adaptive Re-use of Industrial Buildings in Hong Kong." *International Journal of Environmental Research and Public Health* 15, No. 7, Pp. 1546.

Tam, E. (2009). *Disputed Post-Industrial Landscapes: An Enquiry Into The" Loft-Living" Cultural Model In Montreal's Saint-Henri* (Doctoral Dissertation, Concordia University).

Tashiro, C.S. (1998). *Pretty Pictures: Production Design and the History Film*. Us: University Of Texas Press.

Tu, H. M. (2020). Sustainable Heritage Management: Exploring Dimensions of Pull and Push Factors. *Sustainability*, *12*(19), 8219.

Tran, Ke, L. (2008). Architecture as Palimpsest: A Strategy Of Intermediacy. Master Thesis, Ryerson University.

Tangaz, T. (2006). *The Interior Design Course: Principles, Practices and Techniques for Aspiring Designer.* New York: Thames & Hudson Pub.

TICCIH, P. (2003). The Nizhny Tagil Charter for The Industrial Heritage. In *TICCIH Xii International Congress,* July 2003 (Pp. 169-175).

Theodossopoulos, D. (2012). *Structural Design In Building Conservation*. Routledge.

The International Committee for The Conservation Of The Industrial Heritage (TICCIH), Https://TICCIH.Org (2019).

Ullmann, H.F. (2003). Lofts: Living, Working and Trading. Loft Publications, China.

Van Laer, T., De Ruyter, K., Visconti, L. M., & Wetzels, M. (2014). The Extended Transportation-Imagery Model: A Meta-Analysis of the Antecedents and Consequences of Consumers' Narrative Transportation. *Journal of Consumer Research*, *40*(5), 797-817.

Villarejo, A. 2007. *Film Studies, the Basics*. Usa: Routledge.

Werndorff O., 1933. *World Film Encydopedia*. Amalgamated Press, London In Bergfelder, T., Harris, S. And Street, S. 2007. *Film Architecture and The Transnational Imagination*. Amsterdam University Press, Amsterdam.

Wynveen, C., Kyle, G., Sutton, S. (2012). "Natural Area Visitors' Place Meaning And Place Attachment Ascribed To A Marine Setting". *Journal of Environmental Psycology*, 32 (4), Pp. 287-296.

Wang, J., and Nan, J. (2007). "Conservation and Adaptive-Re-use of Historical Industrial Building In China In The Post-Industrial Era." *Frontiers of Architecture and Civil Engineering in China* 1, No. 4, Pp. 474-480.

Weinthal, L. 2007. "Towards A New Interiors" In Cys, J. And Lawrence, J. 2015. "A Place at The Table: Interiors And The Everyday". Interiors-Design/Architecture/Culture, Vol. 4, Issue 3, Pp. 295-314.

Young, R.A and Monsos M. (1998). Reference Guide to Army Adaptive Re-Use Project. University Of Utah.

Yüceer, H., and İpekoğlu, B. (2012). An Architectural Assessment Method for New Exterior Additions to Historic Buildings. *Journal of Cultural Heritage*, *13*(4), 419-425.

Yi, W. (1998). Interior Display and Its Relation to External Spaces in Traditional Chinese Gardens. *Studies in The History Of Gardens & Designed Landscapes*, *18*(3), 232-247.

Yerlitaş, O. (2013). Osmanlıdan Cumhuriyete Sümerbank Beykoz Deri Kundura Fabrikası.

Zhu, Z. C. (2012). The Appearance and Support of Mind-Style Preference and Social Background Of The Contemporary Interior Design. In *Advanced Materials Research* (Vol. 450, Pp. 917-921). Trans Tech Publications Ltd.

Zukin, S. (1982). *Loft Living-Culture and Capital In Urban Change*. Usa: The Johns Hopkins University Press.

URL 1: https://www.oxfordlearnersdictionaries.com/definition/english/loft_1?q=loft) (2020).

URL 2: http://www.loft-addict.com/91-loft-in-manhattan-by-morris-sato-studio

URL 3: http://www.homeaway.com/vacation-rental/p34211

URL 4: http://www.josephpelllombardi.com/pdfs/Lofts-06.03.12.pdf

URL 5: https://www.pinterest.co.uk/pin/725924033664137905/

URL 6: http://www.udesign.com.tr/portfolio/salute-ofis

URL 7: http://www.mimdap.org/?p=59488

URL 8: http://london.liverpoolstreet.andaz.hyatt.com/en/hotel/activities/area-activities/history-of-shoreditch.html (2020).

URL 9: https://www.oxfordlearnersdictionaries.com/definition/english/set-up_2?q=set-up (2020).

URL 10: https://www.seslisozluk.net/en/what-is-the-meaning-of-setup/ (2020).

URL 11: http://www.dictionary.com/browse/tactic (2016).

URL 12: http://launchpadacademy.in/elements-of-interior-design-2/

URL 13: https://www.pinterest.co.uk/pin/530298924872953564/

URL 14: http://contessanally.blogspot.com/2010/08/venice-12th-biennale-of-architecture_26.html

URL 15: https://www.interiordesign.net/slideshows/detail/8541-the-real-deal/5/

URL 16: http://www.ark.com.hk/en/project/ocean-terminal-extension

URL 17: https://laurafelicity.co.uk/how-to-use-colour-in-your-home/

URL 18: https://wholemood.com/design/pantone-colour-of-the-year-2020/

URL 19: https://buyxmetformin.com/examples-of-texture-in-interior-design/, http://trialandstyle.com/editor/?

URL 20: https://www.seslisozluk.net/en/what-is-the-meaning-of-essence/

URL 21: https://www.seslisozluk.net/en/what-is-the-meaning-of-anatomy/

URL 22: Beykoz Kundura, Web Site, https://beykozkundura.com/about-us (accessed March 27, 2020).

URL 23: https://www.youtube.com/watch?v=9xE7220oTTk, (January 2020).

URL 24: https://design.plyboo.com

URL 25: http://www.modulararts.com

URL 26: https://submaterial.com

URL 27: https://www.pinterest.com/pin/330803535132090968/

URL 28: http://www.marvelbuilding.com/functional-bookcase-unique-curling-shape-bookworm.html

URL 29: https://www.pinterest.co.uk/pin/290060032232680316/?lp=true

URL 30: https://www.pinterest.co.uk/pin/490610953153784354/?lp=true

URL 31: https://www.pinterest.co.uk/DSTLtd/interior-design-home-phones/

URL 32: https://www.goodhomesmagazine.com/living-room/405-top-interior-design-trends-for-2018

URL 33: https://www.ofdesign.net/interior-design/100-decorative-accessories-for-home-of-individuality-in-the-house-3992

URL 34: https://www.surya.com/about-us/

URL 35: https://www.pinterest.co.uk/cycloc/bike-storage-with-style/

URL 36: https://www.telegraph.co.uk/luxury/travel/incredible-restaurant-interiors/incredible-restaurant-interiors-les-haras/, http://launchpadacademy.in/principles-interior-design/, https://freshome.com/2014/01/29/rotterdam-villa-displaying-sophisticated-eco-chic-design-kolenik/

URL 37: https://www.vivadecora.com.br/revista/modelos-de-lustres/

URL 38: https://arktura.com/product/starbuck-canopy/

URL 39: http://www.udesign.com.tr/portfolio/salute-ofis

URL 40: http://santabarbaradirectory.biz/hnzofx14254/14322HzjtnD/

URL 41: https://bosidolot.com/2018/02/11/25-impressive-asymmetrical-interior-design-to-make-your-home-more-beautiful/asymmetrical-balance-interior-design-2/

URL 42: https://www.apartmenttherapy.com/ikea-table-hacks-259846?utm_source=at_daily&utm_medium=email&utm_campaign=06262018&recip_id=1911674

URL 43: https://www.pinterest.at/pin/186477240790905822/

URL 44: http://www.harmonyanddesign.com/2017/06/estilo-relax-chic.html?m=1

URL 45: http://www.coordination.asia/portfolio/gaga-coastal-city/

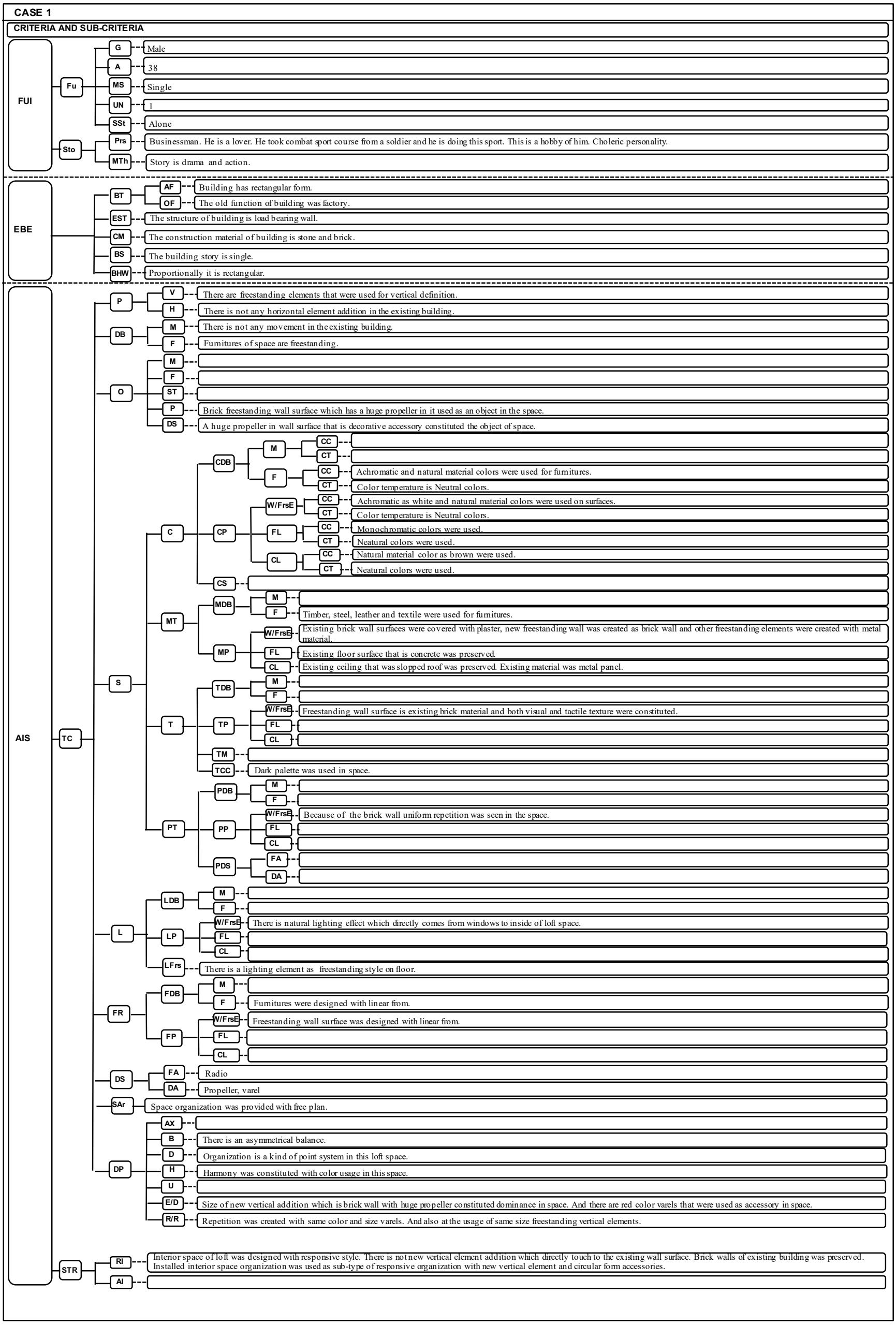
URL 46: https://www.archdaily.com/797454/light-tamen-arq/5800faede58ecee15200000f-light-tamen-arq-photo?next_project=no

URL 47: https://www.contemporist.com/kawi-ny/

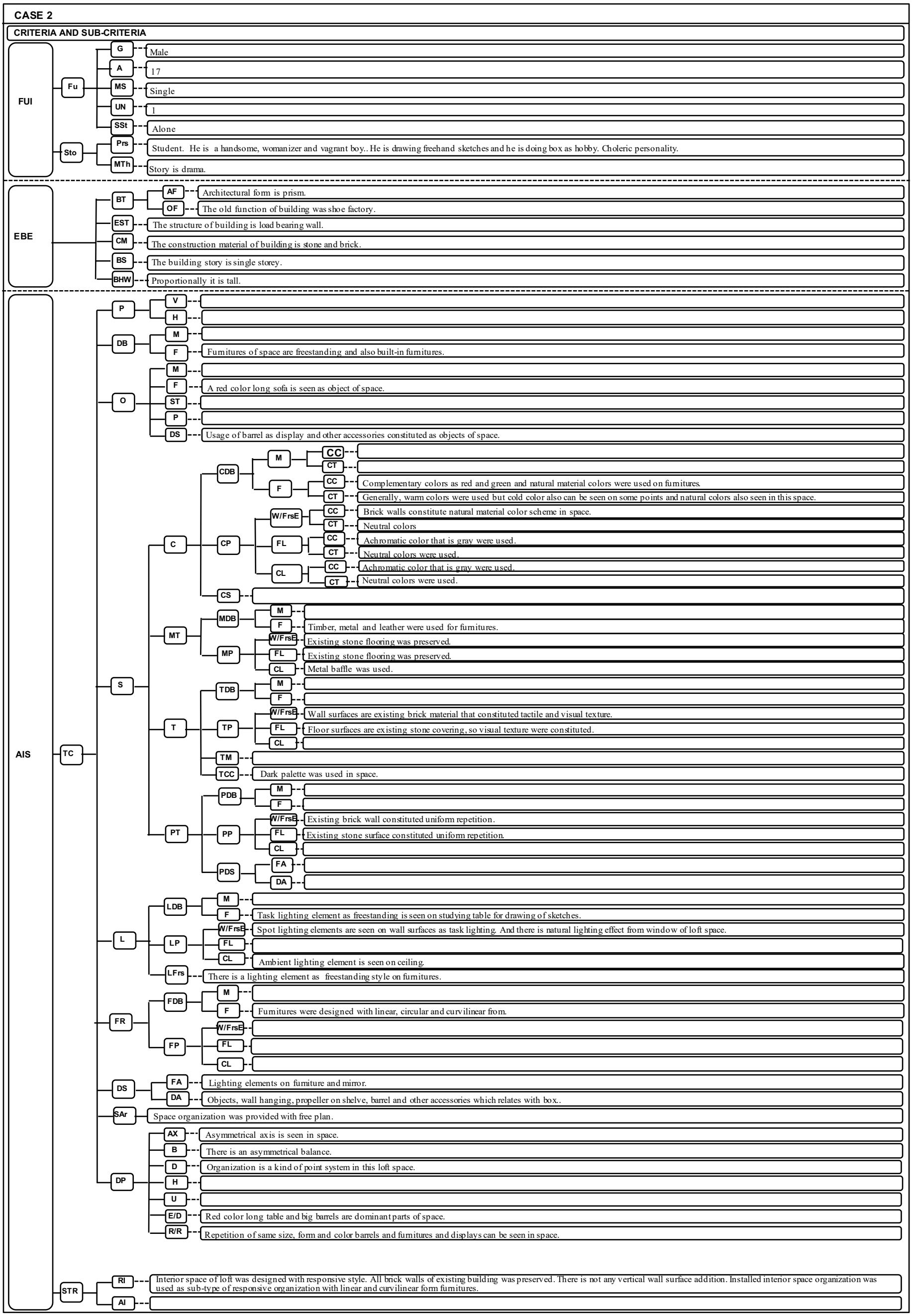
APPENDICES

Appendix A: Reading of Cases-Nine Set-up Loft Spaces

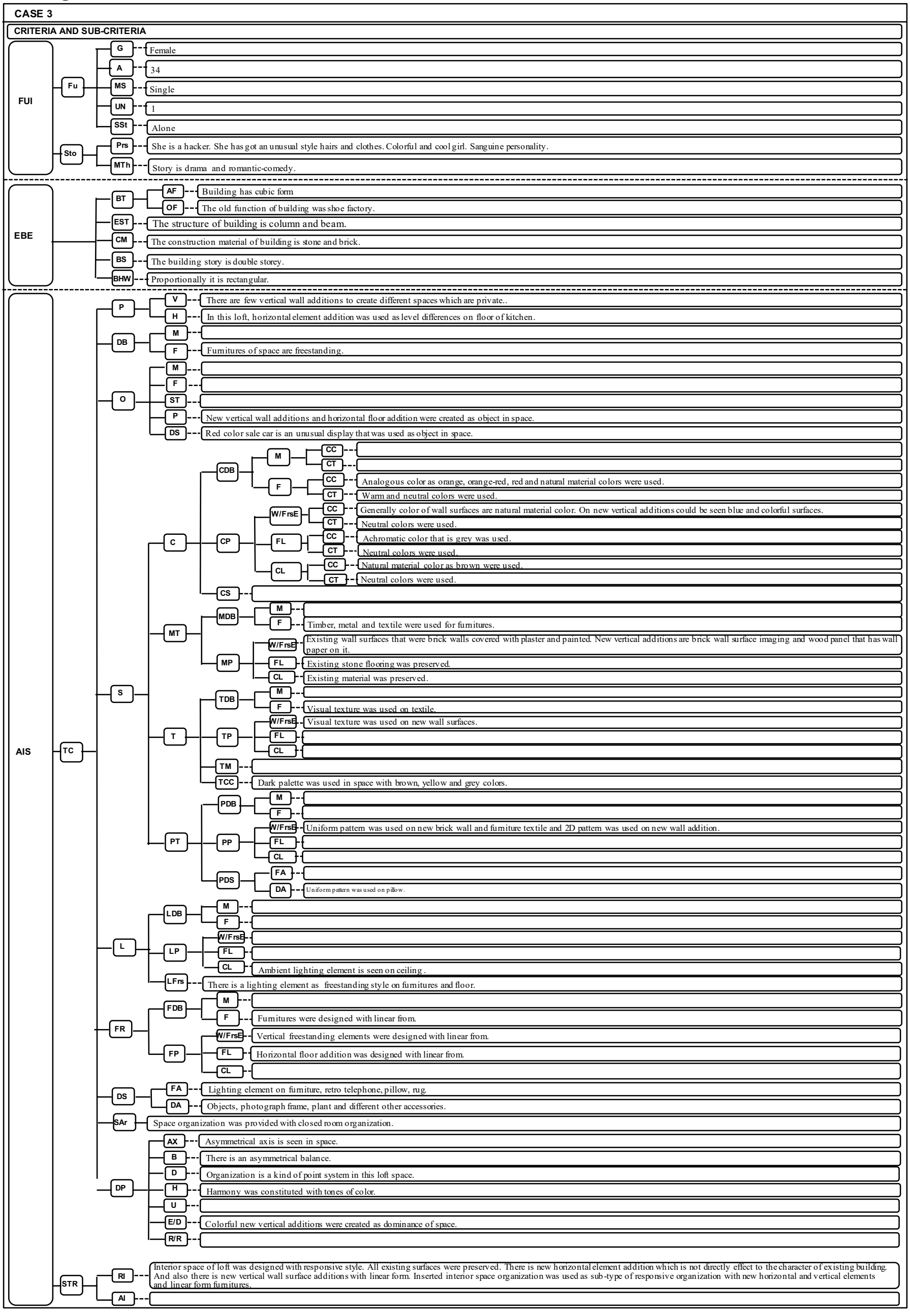
Reading of Case 1



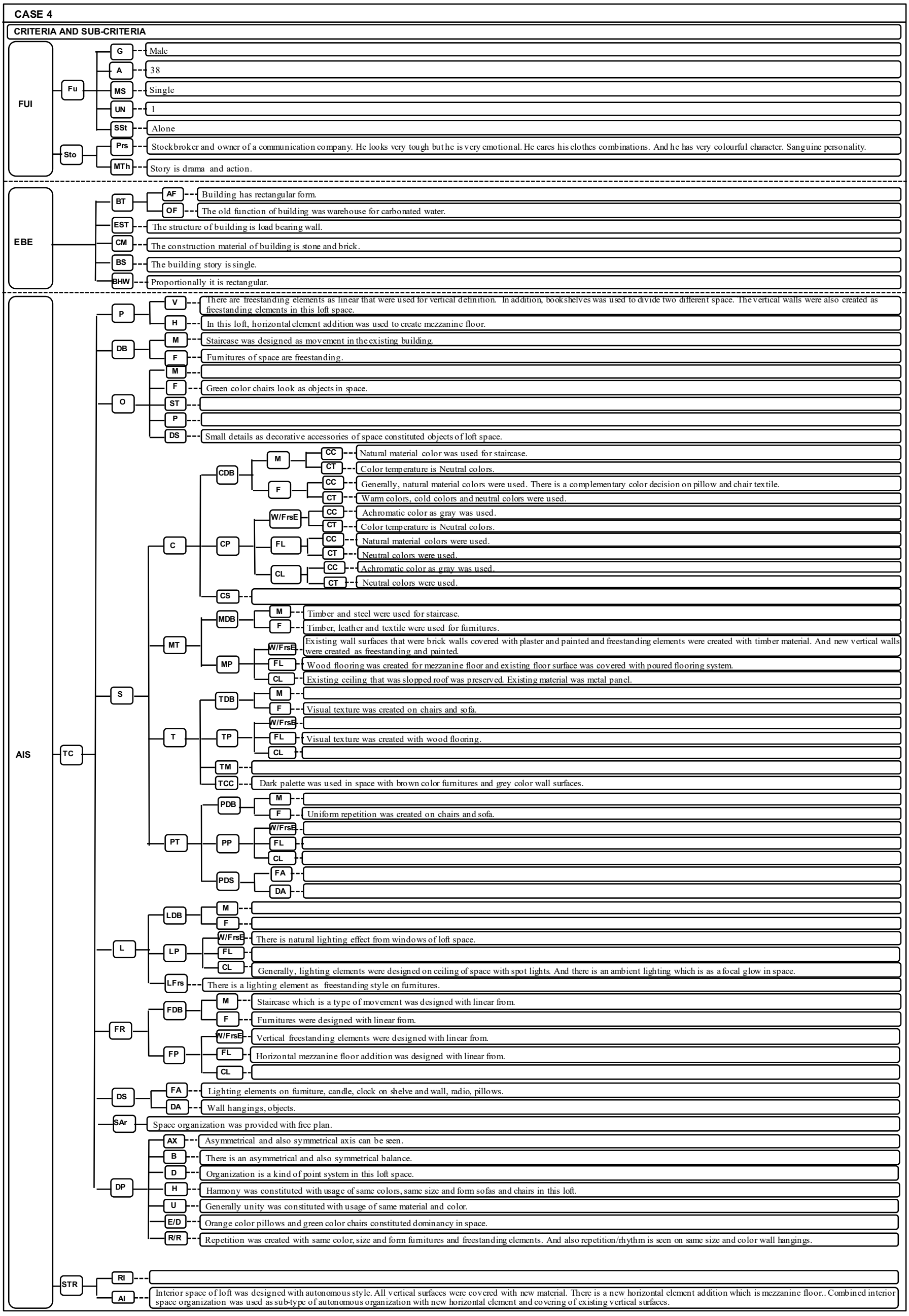
Reading of Case 2



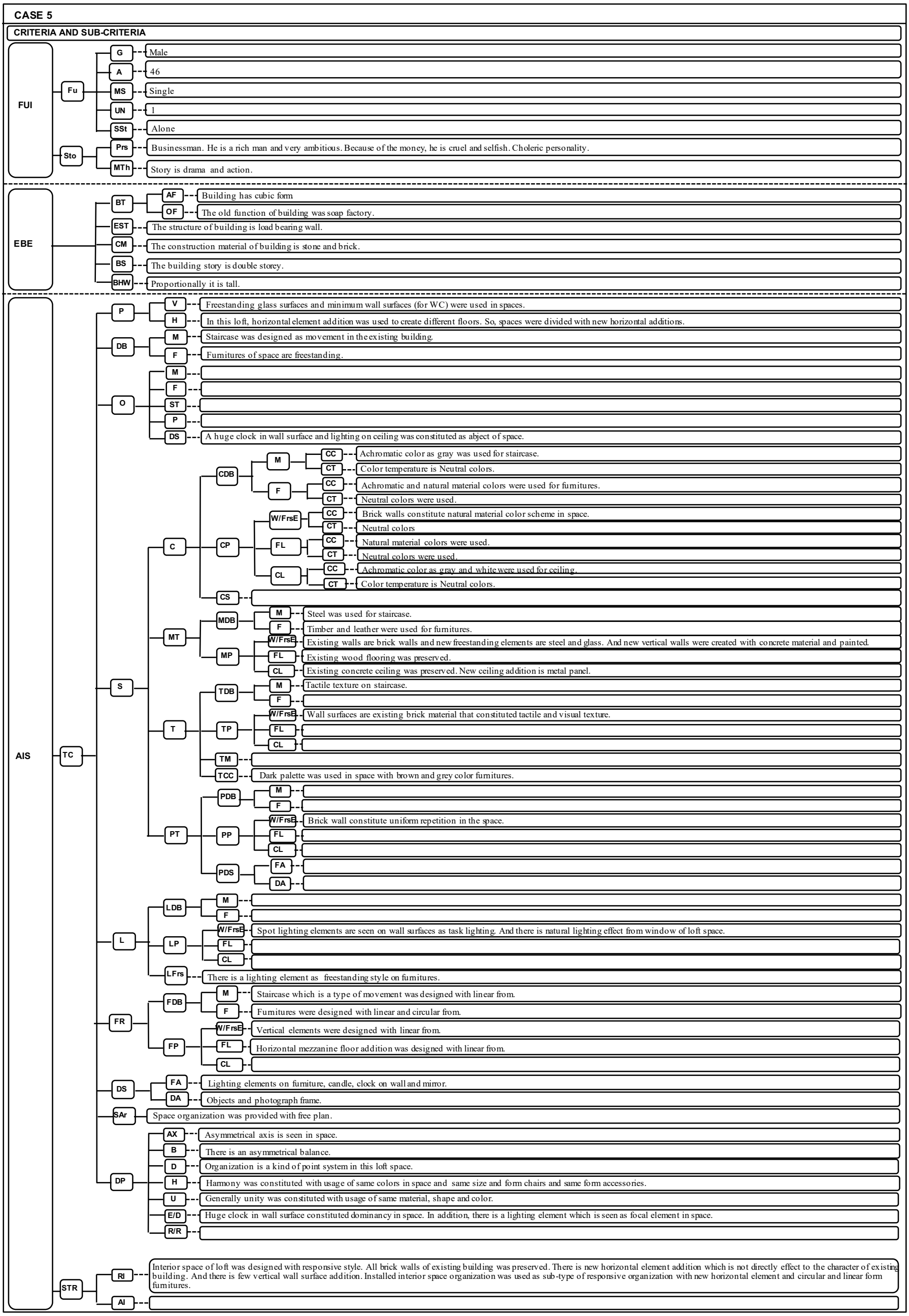
Reading of Case 3



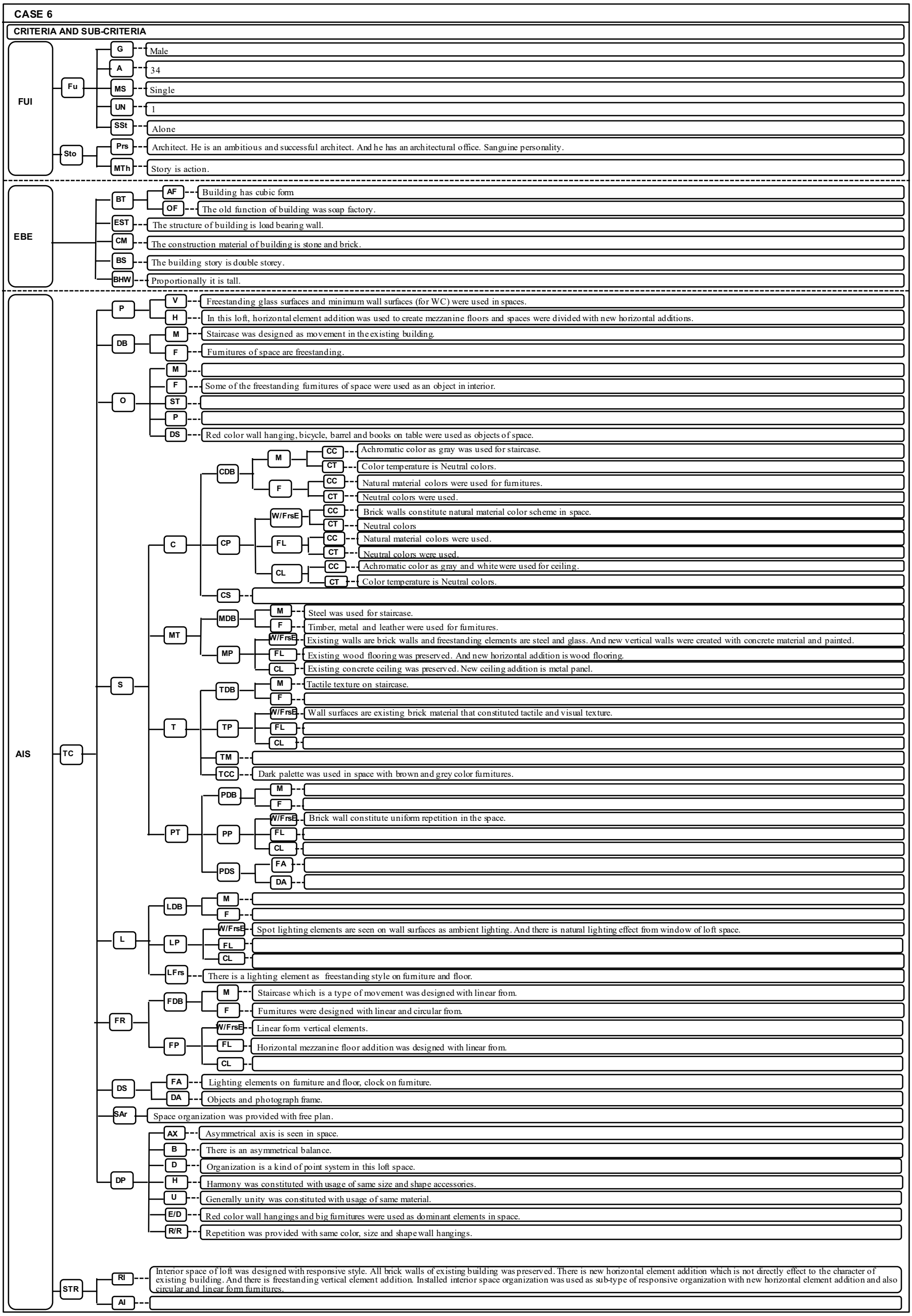
Reading of Case 4



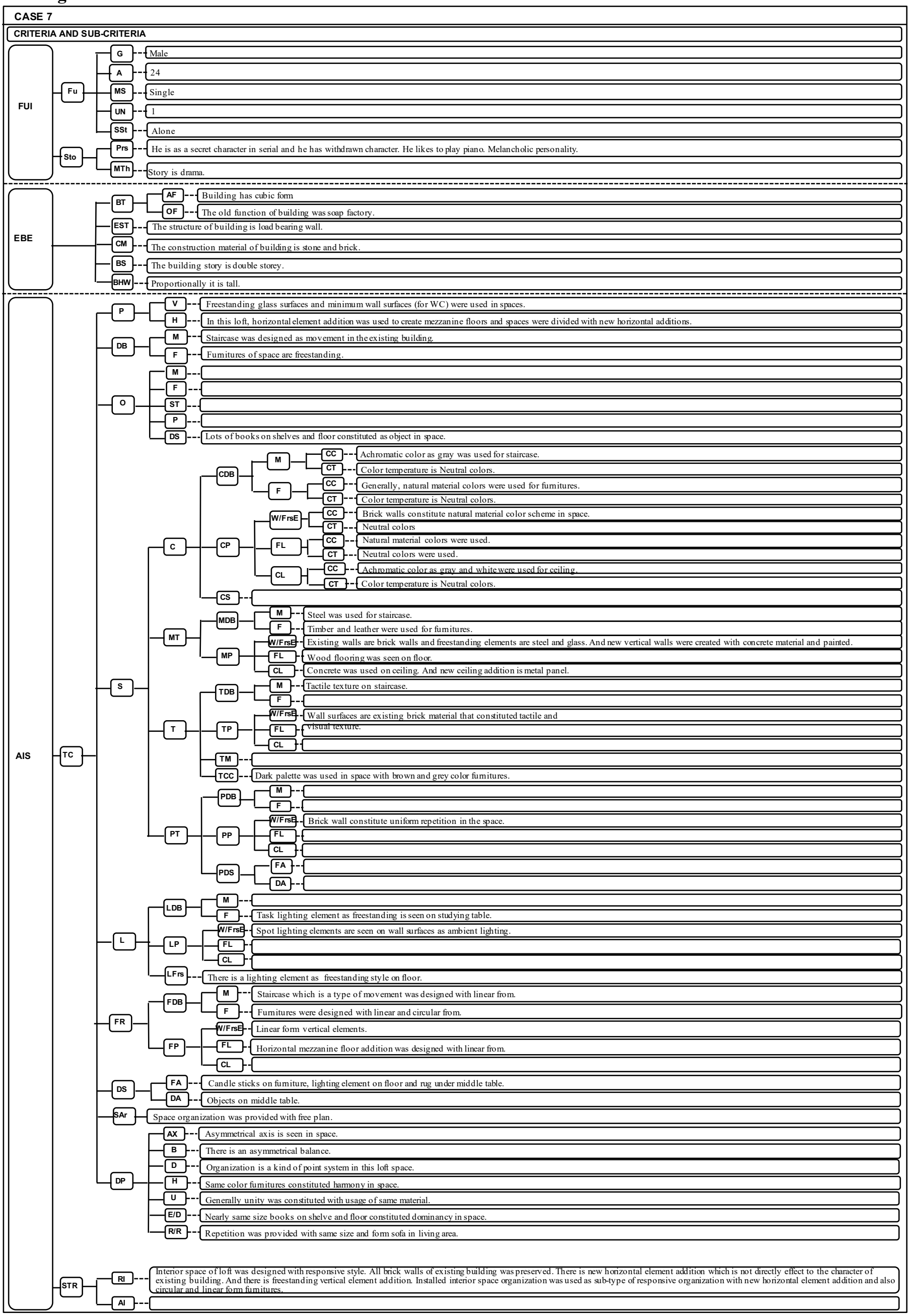
Reading of Case 5



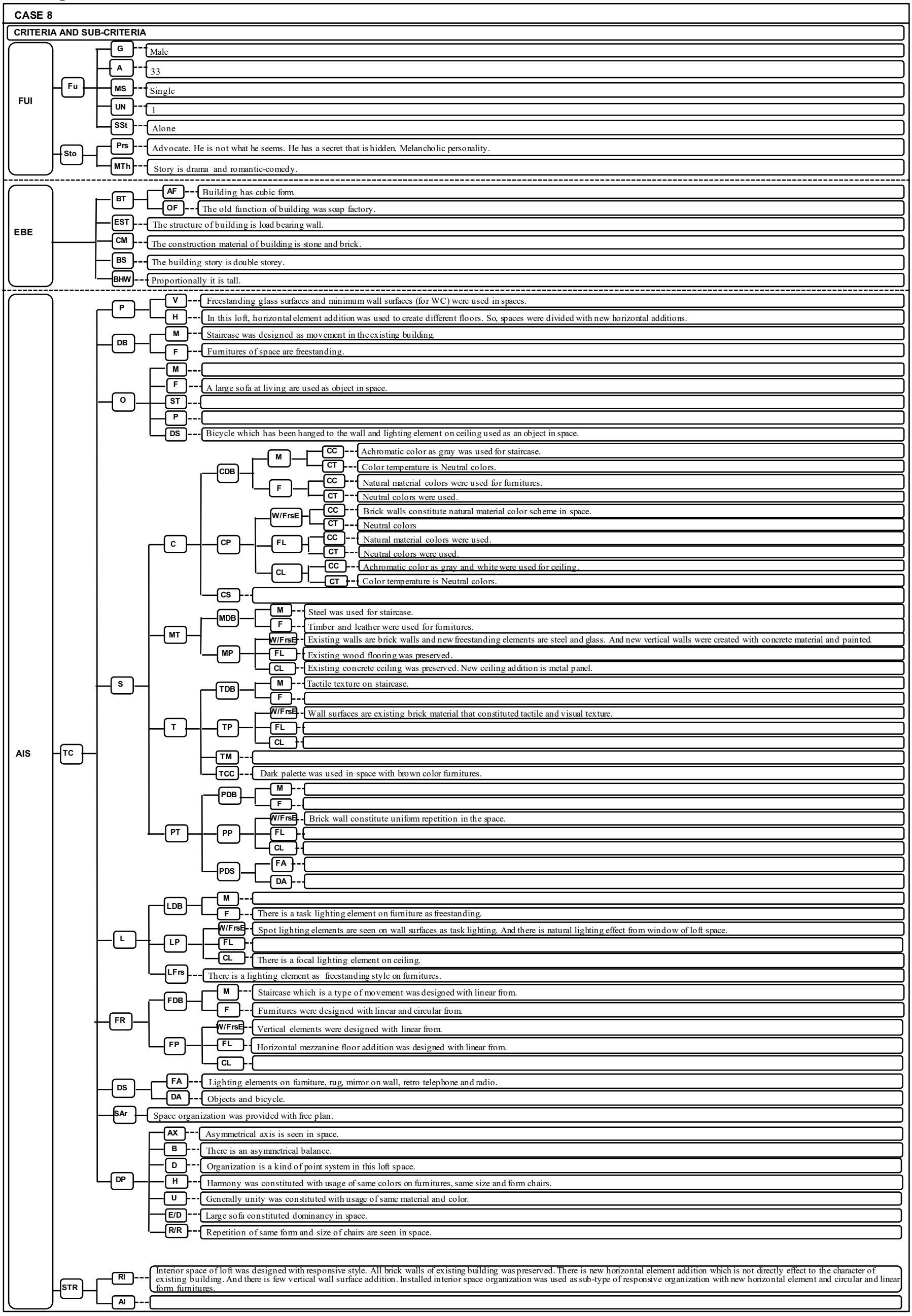
Reading of Case 6



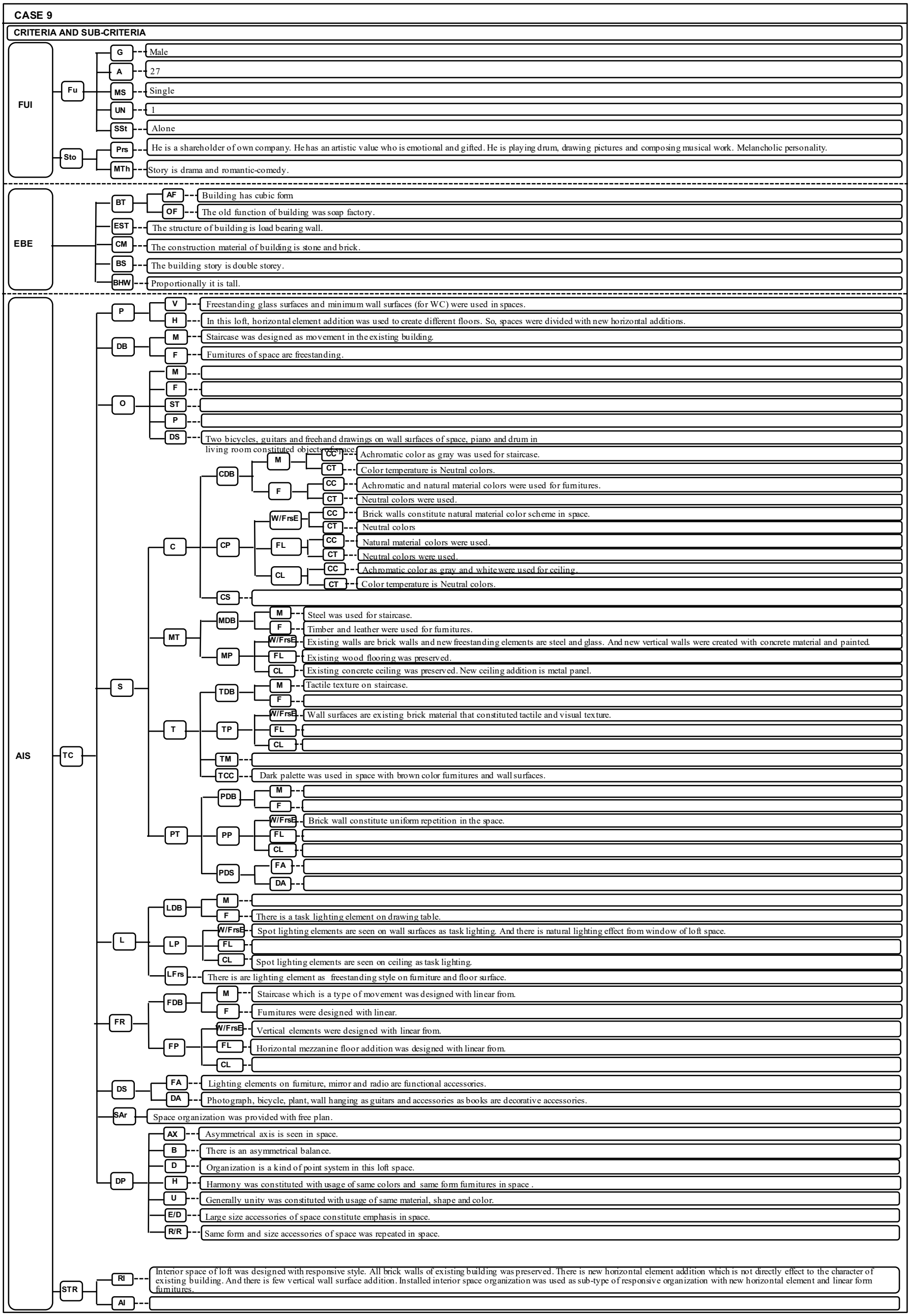
Reading of Case 7



Reading of Case 8



Reading of Case 9



Appendix B: Interview with Art Directors and Producer Chief

Date: 11.12.2013

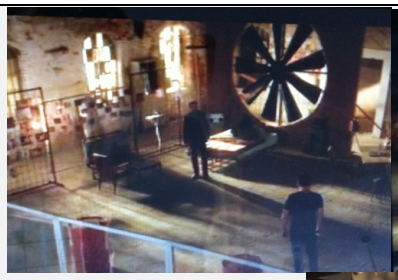
Interview with İsmail Çıvgın (Producer Chief at Merhamet Series)

Photographs	

Q. 1 You selected a different style house for character of series. These spaces are called lofts. Why did you do relation between character of series with this type house and why you didn't select regular house?	User character is a painter and we want to reflect painter character as one to one. Painters do not live as a regular person. And we are thinking dialogs at the series that should be overlapped with the spaces. So, this kind of building was selected to reflect all of these.
Q. 2 Who is selecting this loft space for series? How is the process?	A research is done according to feature of character at scenario and buildings are found with alternatives. Then, most suitable building is selected.
Q. 3 Do architect design interior space of lofts?	Art directors of series design interior of lofts.
Q. 4 Do you design interior of the lofts according to user's character of series?	Yes. Space is supported with objects that overlap with user's characters.

Date: 11.12.2013

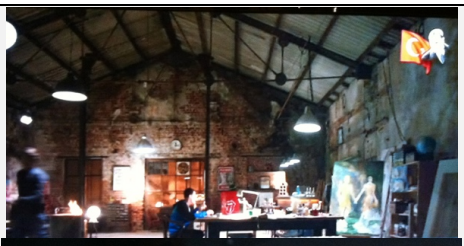
Interview with İbrahim İldem (Art Director of İntikam Series)

Photographs	   

Q. 1 You selected a different style house for character of series. These spaces are called lofts. Why did you do relation between character of series with this type house and why you didn't select regular house?	Firstly, spaces are decided according to user's character. Nowadays, lofts are popular spaces. For example, Hakan's space is a loft and it provides suitability with user characters. We select these kind of spaces, because, they have some advantages like wide space to study and they give a nice Picture/composition. And, whole interior space of lofts can be used, angles provide depth and lofts provide advantages to expose artist.
Q. 2 Who is selecting this loft space for series? How is the process?	If scriptwriters give a suggestion according to story; director, producer and art director look to find a space according to character and story.
Q. 3 Do architect design interior space of lofts?	Interior design of spaces at the films and series are designed by art director according to story. Generally, spaces are selected which are as a ready space. Then, special design is done by art director of series or film. Before shots, it is shown to director as finally and If he/she will change something, they do to be ready for shots.
Q. 4 Do you design interior of the lofts according to user's character of series?	Yes. Because, spaces explain characters' life and style. So, they are designed according to characters. Note: Design of the spaces are done by art directors in the films and series, because, this is like a technical work. We should think/consider that where should we put camera and lights. In addition, angles of cameras and act roads of camera should be though at the films and series' spaces. (An architect can design a space that we can only live and space is like an inactive. Spaces stay that they designed). However, art directors prepare spaces to use at the every condition.

Date: 11.12.2013

Interview with Nilüfer Uzun Deveci
(Art Director of Güneşi Beklerken Series)

Photographs	 

Q. 1 You selected a different style house for character of series. These spaces are called lofts. Why did you do relation between character of series with this type house and why you didn't select regular house?	A new idea was improved for Kerem character to find new place for him, because, he has a house that live with his parents. We prefered to rent an old and empty space instead of a ready space to design it according to Kerem character of series.
Q. 2 Who is selecting this loft space for series? How is the process?	When space is decided at the scenario, we talk with director for spaces that have possibility to be. A space researcher gives alternatives about buildings that can be suitable for character. Then, it decides with director to start works.
Q. 3 Do architect design interior space of lofts?	Generally interior design of spaces is done by art director at the series. An architect can be as an art director at the series or an art director can get help from an architect, when he/she require any help about architectural points.
Q. 4 Do you design interior of the lofts according to user's character of series?	Kerem has a loft space in this series. We try to select some objects, furniture and accessories according to his character. For example, generally, Kerem is doing box. So, box machine and sandbox were used at the Kerem's loft to reflect his character to the interior space.

Appendix C: List of Films/Series that Shot in Loft Spaces

FOREIGN FILMS			
Name	**Year**	**Director and Producer**	**Country**
Rofuto (Loft)	2005	Kiyoshi Kurosawa	Japan/Korea
Loft	2008	Eric Van Looy	Belgium
Unfaithful	2002	Adrian Lyne	America
Contempt	1963	Jean-Luc Godard (Carlo Ponti Georges de Beauregard Joseph E. Levine)	America
Bottle Rocket	1996	Wes Anderson	America
When Harry Met Sally	1989	Rob Reiner (Rob Reiner Andrew Scheinman Nora Ephron)	America
Down with Love	2003	Peyton Reed (Dan Jinks Bruce Cohen)	America
Flashdance	1983	Adrian Lyne	America
Fatal Attraction	1987	Adrian Lyne	America
Interview	2007	Steve Buscemi	America
Zoolander	2001	Ben Stiller	America
Two Girls and a Guy	1997	James Toback	America
Party Girl	1995	Daisy von Scherler Mayer	America
About a Boy	2002	Chris Weitz Paul Weitz	United Kingdom United States France
Wicker Park Trailer	2004	Paul McGuigan	America
Three Men and a Baby	1987	Leonard Nimoy (Ted Field Robert W. Cort)	America
A Perfect Murder	1998	Andrew Davis	America
Cruel Intentions	1999	Roger Kumble	America
Eyes Wide Shot	1999	Stanley Kubrick	America

Big	1988	Penny Marshall (James L. Brooks Robert Greenhut)	America
He's Just Not That Into You (*2 lofts)	2009	Ken Kwapis	America Germany Netherlands
Love and Other Drugs	2010	Edward Zwick	America
The Vow	2012	Michael Sucsy	America
Big Daddy	1999	Dennis Dugan	America
Quiet City	2007	Aaron Katz	America
Short bus	2006	John Cameron Mitchell	America
Ghost	1990	Jerry Zucker	America
Hannah and Her Sisters	1986	Woody Allen	America
The Big Lebowski	1998	Joel Coen	America England
New York Stories	1989	Woody Allen Francis Ford Coppola Martin Scorsese	America
Blade Runner	1982	Ridley Scott	America
American Psycho	2000	Mary Harron	America
Vertigo	1958	Alfred Hitchcock	America
Breakfast at Tiffany's	1961	Blake Edwards	America
LOCAL FILMS			
Name	**Year**	**Director and Producer**	**Country**
Ask Tesadufleri Sever	2010	Omer Faruk Sorak	Turkey

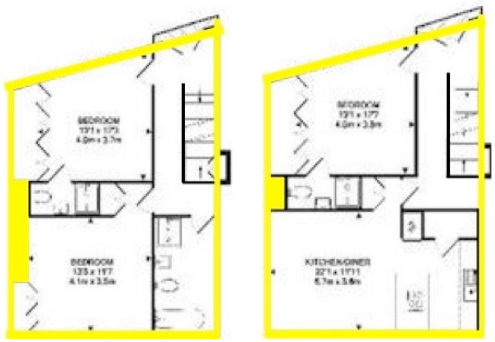
LOCAL SERIALS			
Name	**Year**	**Director and Producer**	**Country**
Son	2012	Uluc Bayraktar (Ay Yapim)	Turkey
Suskunlar	2012	Çağrı Lostuvalı ve Hatice Memiş (Tims Production)	Turkey
İntikam (*3 lofts)	2013	Mesude Erarslan (In D House Disney)	Turkey
Merhamet	2013	Cagatay Tosun (Gül Oğuz)	Turkey
Güneşi Beklerken (*2 lofts)	2013-14	Altan Donmez (D production)	Turkey
O Hayat Benim	2014-17	Hamdi Alkan (Pastel Film)	Turkey
Poyraz Karayel	2015-17	Osman Taşcı (Limon Film)	Turkey
Dolunay	07-12/2017	Tolga Coşkuntunay (19 Dokuz Production)	Turkey
Kiralıl Aşk	2014-17	Metin Balekoğlu (Ortaks Production)	Turkey

Appendix D: Reading of Nine Loft Examples from London

▪ GENERAL INFORMATION

Year of Construction	Year of Conservation	Name of the building	Old Function	New Function	Region	Address	Name of Designer	Gender
1840's	1990's	Cotton's Garden	Clothing/ Furniture/ Printing Warehouse	Loft Apartment	Shoreditch	6, Cotton's Gardens, London, E2 8DN	-	Male

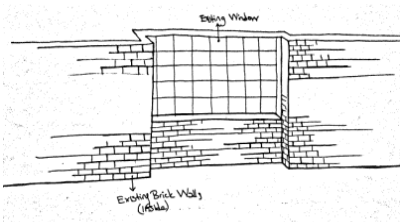
▪ SCHEMATIC PLAN and SKETCHES from INTERIOR SPACE

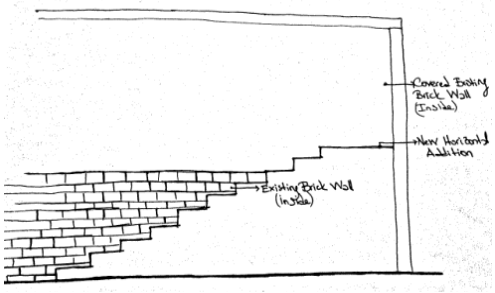












LEGEND: Existing Walls | New Vertical Addition and Covered Walls | New Horizontal Addition

▪ INTERIOR SPACE ORGANIZATION

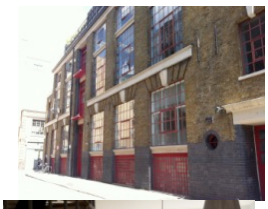
Responsive Interiors		Autonomous Interiors	
Intervened Interior Spaces	☐	Disguised Interior Spaces	☐
Inserted Interior Spaces	☐	Assembled Interior Spaces	☐
Installed Interior Spaces	☐	Combined Interior Spaces	■

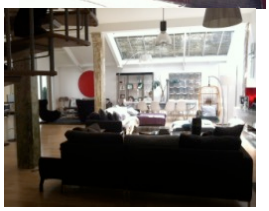
- **GENERAL INFORMATION**

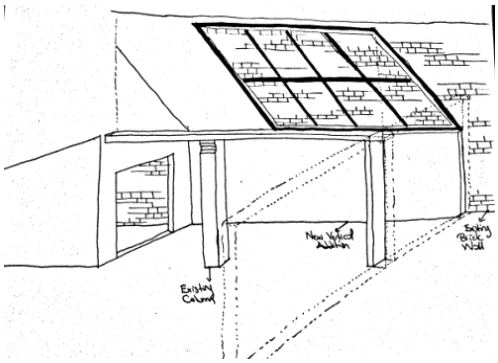
Year of Construction	Year of Conservation	Name of the building	Old Function	New Function	Region	Address	Name of Designer	Gender
1840's	1990's	-	Clothing/ Furniture/ Printing Warehouse	Loft Apartment	Shoreditch	40, Greate Eastern Street, London, EC2A 3EP	-	Family

- **SCHEMATIC PLAN and SKETCHES from INTERIOR SPACE**









LEGEND: Existing Walls | New Vertical Addition and Covered Walls | New Horizontal Addition

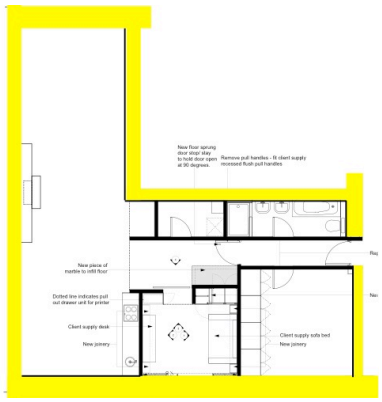
- **INTERIOR SPACE ORGANIZATION**

Responsive Interiors		Autonomous Interiors	
Intervened Interior Spaces	☐	Disguised Interior Spaces	☐
Inserted Interior Spaces	☐	Assembled Interior Spaces	☐
Installed Interior Spaces	☐	Combined Interior Spaces	■

- **GENERAL INFORMATION**

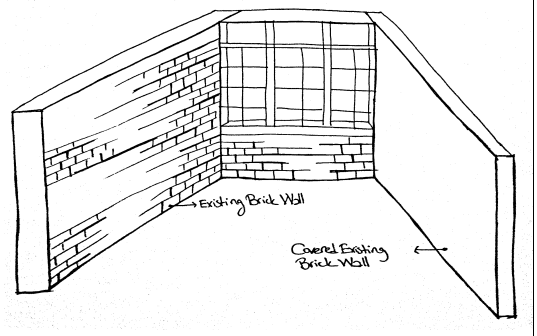
Year of Construction	Year of Conservation	Name of the building	Old Function	New Function	Region	Address	Name of Designer	Gender
1840's	1996	Banner Building	Glue Factory	Loft Apartment	Shoreditch	74-84, Banner Street, London, EC 1Y	James Soane Christopher Ash	Male

- **SCHEMATIC PLAN and SKETCHES from INTERIOR SPACE**









LEGEND: Existing Walls; New Vertical Addition and Covered Walls; New Horizontal Addition

- **INTERIOR SPACE ORGANIZATION**

Responsive Interiors		Autonomous Interiors	
Intervened Interior Spaces	☐	Disguised Interior Spaces	☐
Inserted Interior Spaces	☐	Assembled Interior Spaces	☐
Installed Interior Spaces	☐	Combined Interior Spaces	■

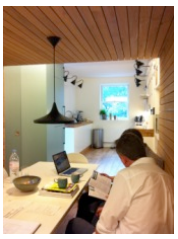
- **GENERAL INFORMATION**

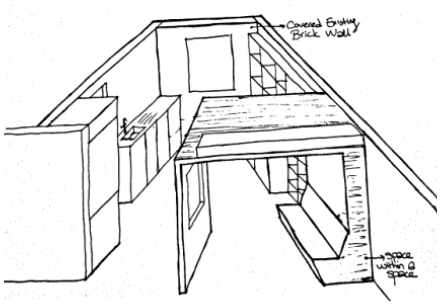
Year of Construction	Year of Conservation	Name of the building	Old Function	New Function	Region	Address	Name of Designer	Gender
1930's	2009	Two Hundred & Eighty	Traditional Shop	Loft	Kings Cross	280, Grays Inn Road, London, WC1X 8EB	James Daykin Mark Marshall	-

- **SCHEMATIC PLAN and SKETCHES from INTERIOR SPACE**









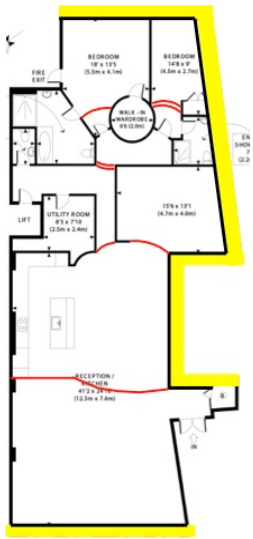
- **INTERIOR SPACE ORGANIZATION**

Responsive Interiors		Autonomous Interiors	
Intervened Interior Spaces	☐	Disguised Interior Spaces	☐
Inserted Interior Spaces	☐	Assembled Interior Spaces	☐
Installed Interior Spaces	☐	Combined Interior Spaces	■

- **GENERAL INFORMATION**

Year of Construction	Year of Conservation	Name of the building	Old Function	New Function	Region	Address	Name of Designer	Gender
1840's	1990's	Harbour House	Clothing/ Furniture/ Printing Warehouse	Loft Apartment	Shoreditch	70-72, Kingsland Road, London, E2 8DP	-	-

- **SCHEMATIC PLAN and SKETCHES from INTERIOR SPACE**



LEGEND: Existing Walls | New Vertical Addition and Covered Walls | New Horizontal Addition





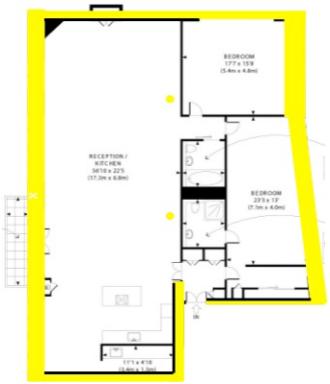
- **INTERIOR SPACE ORGANIZATION**

Responsive Interiors		Autonomous Interiors	
Intervened Interior Spaces	☐	Disguised Interior Spaces	☐
Inserted Interior Spaces	☐	Assembled Interior Spaces	☐
Installed Interior Spaces	☐	Combined Interior Spaces	■

▪ GENERAL INFORMATION

Year of Construction	Year of Conservation	Name of the building	Old Function	New Function	Region	Address	Name of Designer	Gender
1840's	1980's	Shepherdess Walk Building	Clothing/ Furniture/ Printing Warehouse	Loft Apartment	Shoreditch	Underwood Row, London, N1	-	-

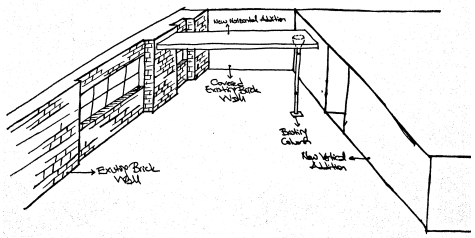
▪ SCHEMATIC PLAN and SKETCHES from INTERIOR SPACE

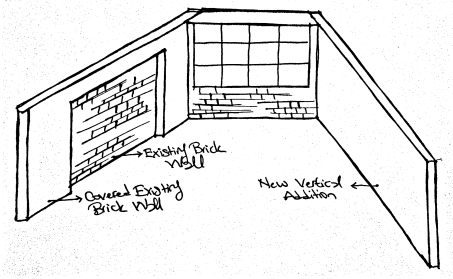


LEGEND: Existing Walls | New Vertical Addition and Covered Walls | New Horizontal Addition









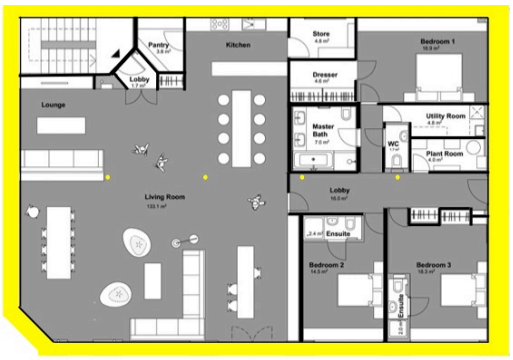
▪ INTERIOR SPACE ORGANIZATION

Responsive Interiors		Autonomous Interiors	
Intervened Interior Spaces	☐	Disguised Interior Spaces	☐
Inserted Interior Spaces	☐	Assembled Interior Spaces	☐
Installed Interior Spaces	☐	Combined Interior Spaces	■

▪ GENERAL INFORMATION

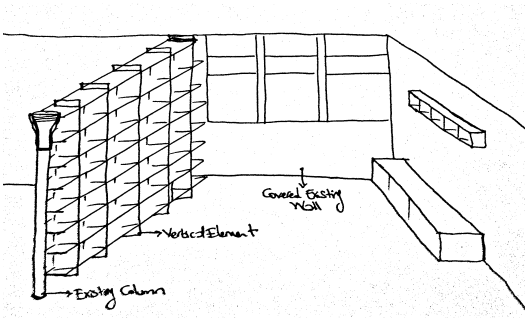
Year of Construction	Year of Conservation	Name of the building	Old Function	New Function	Region	Address	Name of Designer	Gender
1840's	1980's + 2013	Shepherdess Walk Building	Clothing/ Furniture/ Printing Warehouse	Loft Apartment	Shoreditch	Underwood Row, London, N1	Sirs Company Manuel Irsara	-

▪ SCHEMATIC PLAN and SKETCHES from INTERIOR SPACE









LEGEND: Existing Walls | New Vertical Addition and Covered Walls | New Horizontal Addition

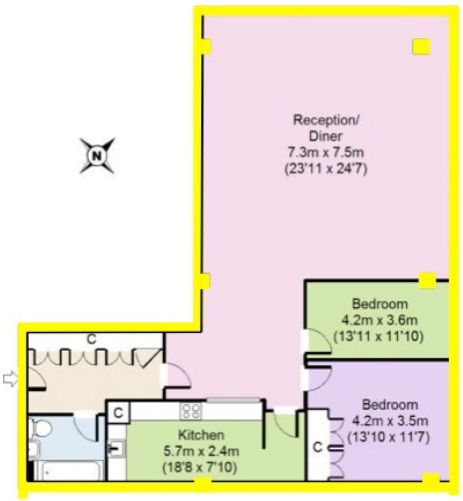
▪ INTERIOR SPACE ORGANIZATION

Responsive Interiors		Autonomous Interiors	
Intervened Interior Spaces	☐	Disguised Interior Spaces	☐
Inserted Interior Spaces	☐	Assembled Interior Spaces	☐
Installed Interior Spaces	☐	Combined Interior Spaces	■

- **GENERAL INFORMATION**

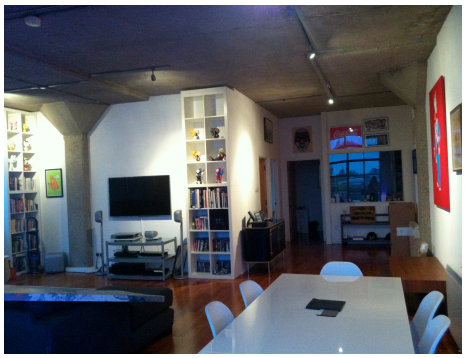
Year of Construction	Year of Conservation	Name of the building	Old Function	New Function	Region	Address	Name of Designer	Gender
1826 + 1832 (Extented)	1997-2000	Royle Building	Printing Warehouse	Loft Apartment	Islington	Wenlock Road, London N1 7SH	-	Family

- **SCHEMATIC PLAN and SKETCHES from INTERIOR SPACE**



LEGEND: Existing Walls | New Vertical Addition and Covered Walls | New Horizontal Addition





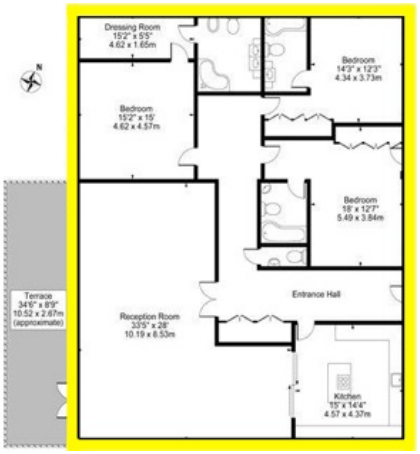
- **INTERIOR SPACE ORGANIZATION**

Responsive Interiors		Autonomous Interiors	
Intervened Interior Spaces	☐	Disguised Interior Spaces	☐
Inserted Interior Spaces	☐	Assembled Interior Spaces	☐
Installed Interior Spaces	☐	Combined Interior Spaces	■

▪ GENERAL INFORMATION

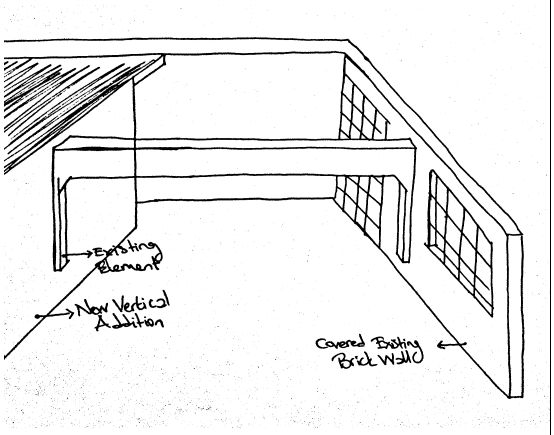
Year of Construction	Year of Conservation	Name of the building	Old Function	New Function	Region	Address	Name of Designer	Gender
1840's	1990's	Chocolate Studios	Warehouse	Loft Apartment	Islington	7 Shepherdess Place, Old Street, London N1 7LJ	-	-

▪ SCHEMATIC PLAN and SKETCHES from INTERIOR SPACE









LEGEND: Existing Walls | New Vertical Addition and Covered Walls | New Horizontal Addition

▪ INTERIOR SPACE ORGANIZATION

Responsive Interiors		Autonomous Interiors	
Intervened Interior Spaces	☐	Disguised Interior Spaces	☐
Inserted Interior Spaces	☐	Assembled Interior Spaces	☐
Installed Interior Spaces	☐	Combined Interior Spaces	■