AN INQUIRY INTO "ARCHITECTURAL SCENARIO"

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ABSTRACT

AN INQUIRY INTO "ARCHITECTURAL SCENARIO"

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This study is an inquiry into the phenomenon of 'architectural scenario' generally understood as architect's temporal projections about his/her real product: the edifice. The means of architectural representation are utilized to display the architect's projections in advance of the realization of an edifice. They can also be considered as tangible products to reveal the 'architectural scenario'. The aim of this study is to examine verbal/written and visual modes of 'architectural scenario' through a historical survey and to uncover its various definitions and interpretations. While elaborating on this issue cinema/filmmaking is used as a paradigm for comprehending the architectural scenario as the process of image construction. 'Architectural scenario' is explored in the frame of architectural representation.

This thesis is a reconsideration of the architectural production in terms of conceptualizing 'AS', which is inherently valid in the form making processes.

Keywords: scenario, architectural scenario, image construction, projection, architectural representation, and narration.

ÖZ

'MİMARİ SENARYO' ÜZERİNE BİR İNCELEME

Ertuğrul, Elçin

Yüksek Lisans, Mimarlık Bölümü Bina Bilgisi Anabilim Dalı

Tez Yöneticisi: Dr. Tuğyan Aytaç-Dural

Eylül 2005, 90 sayfa

Bu çalışma, genellikle mimarın somut ürünü olan binaya ilişkin zamansal/geçici öngörüleri olarak anlaşılan 'mimari senaryo' olgusu üzerine bir sorgulamadır. Mimari temsil araçları, binanın gerçekleştirilmesinden önce mimarın öngörülerini sergilemek için kullanılırlar. Bunların aynı zamanda 'mimari senaryo'ya açıklık getiren somut ürünler oldukları da düşünülebilir. Bu çalışmanın amacı mimari senaryonun yazılı /sözel ve görsel biçimlerini tarihsel bir araştırma ile incelemek ve onun kapsamlı tanımlarını ve yorumlarını ortaya çıkarmaktır. Konu farklı açılımlarıyla ele alınırken, sinema ve film yapımı mimari senaryoyu imge üretim süreci olarak kavramak doğrultusunda bir model/paradigma olarak kullanılmaktadır. 'Mimari senaryo' mimari temsil çerçevesinde irdelenmektedir.

Bu tez mimari üretimin biçim üretme sürecinde zaten var olan 'mimari senaryo'nun kavramsallaştırılarak yeniden gözden geçirilmesidir.

Anahtar Kelimeler: senaryo, mimari senaryo, imge üretimi, izdüşüm/öngörü, mimari temsil, ve anlatı.

To My Family

ACKNOWLEDGEMENTS

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CHAPTER 1

INTRODUCTION

A spider conducts operations that resemble those of a weaver, and a bee puts to shame many an architect in the construction of her cells. But what distinguishes the worst architect from the best of bees is this, that the architect raises his structure in imagination before he erects it in reality. At the end of every labour-process, we get a result that already existed in the imagination of the labourer at its commencement. He not only effects a change of form in the material on which he works, but he also realizes a purpose of his own that gives the law to his modus operandi, and to which he must subordinate his will.[1]

Karl Marx

This study will examine architect's form making process as a cognitive process. During the re-production of the built environment, architect can structure (organize) his ideas and imagination with respect to the representation techniques, conventions, and construction technology. As Marx states, the difference of an architect from a spider is having the capability of understanding the process of making and capability of making decisions.

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[1] Karl Marx. Capital, volume 1: 174

Why do architects need to represent their ideas? The question 'why do architects use drawings or other representative means before the realization of the built environment?' has an obvious answer. It is still impossible to realize built structures immediately following its imagination in the mind or creation by devices of artificial intelligence. The representation is in between the mental conception and its material construction. It is well-known that historically the mode of representation has affected architectural ideas and their expression[2]. Architectural Scenario[3] is inherently in the process of mental conception.

This thesis is a reconsideration of the architectural production in terms of conceptualizing 'AS', which is inherently valid in the design process. As it is ambiguous phenomenon, there is no exact definition: it can be the interpretation of the program that is already given, or is needed by the architect in creating his/her idea of form. It may be in the mode of narrative that is used by the architect to legitimize or decide the ultimate form, or it may be reflected on the representation by emphasizing the idea.

Simply 'AS' can be defined as a *structure of the ideas,* it is the construction of architect's intentions (decisions) about the abstract form-or architecturally conceived space. The significant attribute projected in the architectural representation may be the synthesis of architect's own understanding of the problem and its solution in architectural terms.

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[2] In the searches on the architectural representations, it is generally agreement that changing of architectural conception can be explained by history of the representation. See Frascari, Marco. "A New Angel/Angle in Architectural Research: The Ideas of Demonstration." JAE, Vol. 44, Issue: 1, 1990: 11-19. And See Erwin Panofsky, Perspective as Symbolic Form. New York: Zone Books, 1991. Also see Alberto Pérez-Gómez and Louise Pelletier, Architectural Representation and the Perspective Hinge. Campridge, Mass. : MIT Press, 1997.

[3] Hereafter 'AS'

Architectural scenario appears in different meanings in different written sources and also in different architectural projections[4] depending on the usage. We, as architects, may use the term scenario sometimes in clearing out our ideas about the form and sometimes in legitimizing our abstract forms that is surrounded by conceptual life. Actually, in spite of its widespread usage, we do not know the exact definition of AS that is definitely valid in the design process. In order to elaborate on the concept of AS it is necessary to distinguish between different usages; *client's scenario*, *building scenario* and *architectural scenario*. It is agreed that all these terms refer to different situations.

Client's scenario- It is usually numerical and concrete (solid) inputs of requirements of the client. In many cases it is also considered as the architectural program itself. Apart from function and utility, sometimes these requirements are related to abstract feelings or ideological concerns. Usually client expresses his/her imagined environment through words not images.

Let see an example for exploring the client's scenario. This is a quotation from the written report of Swiss Committee about the project, Le Corbusier's Pavilion Suisse, 1930-31. Le Corbusier was tasked by the Committee to design the environment explained below:

> *This institution is put forward to provide students with foyer, where, for a*
> *reasonable fee, they may find a moral, safe and reassuring atmosphere, and*
> *agreeable place to stay, and good food, all in the best conditions of hygiene and*

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[4] By 'architectural projection' we refer to the definition by Robin Evans' in his essay: "Projections – the invisible lines that relate pictures to things – are always directional. Drawings arrest and freeze these vectors, but even in this fixed state, projected information can be mobilized by the imagination of the observer." The issue will be elaborated in the Second Chapter.

Robin Evans, "Architectural Projection." Architecture and Its Image: Four Centuries of Architectural Representation: Works from the Collection of the Canadian Centre for Architecture Material. Eve Blau and Edward Kaufman, Eds. Montreal: Centre Canadien d'Architecture/ Canadian Centre for Architecture (distributed by the MIT Press), 1989: 18-35

well being. The Cité already includes a number of residences set about with gardens and all sorts of other facilities, such as lecture halls, playing fields, etc. … It is really a sort of little cosmopolitan city which is coming into existence behind the Montsourris park.[5] *(5 December 1929)*

The committee was glad to play its part in such a scenario. It emphasized the stimulating role of Paris as a cultural center and the importance of friendships for young Swiss, as these might later bloom into idealistic and commercial alliances. The eventual building should provide a suitable setting for these noble aims and do "honor to our country."

The committee wanted that the environment should be suitable for such requests: having 'a moral, safe and reassuring atmosphere … best condition of hygiene' etc. The committee's wish is that the building should provide their "noble aims and do honor to our country." It can be seen in the example that the client's scenario may be more qualitative rather than quantitative. Client's scenario may present the feelings, perceptions, life styles or daily life habits etc., or numerical costs.

Building scenario – sometimes has similar aspects of client's scenario in respect of functional intentions, for example hospital, school etc. It can be said that it is like a theme which determines basic decisions of design.

Architectural scenario can be considered as a method of structuring the ideas, receptions, and conceptions. It may belong to one architect or it may also belong to one period or style.

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[5] As quoted in William Curtis, "Ideas of structure and structure of ideas: Le Corbusier's Pavilion Suisse, 1930-31", JSAH, vol.40, no: 4, 1981: 298. Text is originally quoted by William Curtis from a report written in December 1929 by the "Comité de la Colonie Suisse de Paris pour la Fondation d'une Maison à la Cité Universitare."

It is an interpretation of the architectural program. But sometimes it can be seen that it is used instead of their – client's scenario and building scenario.

It is obvious that there is difference between the architecture and its representation in various media. It is impossible that the architect foresees all possible proceedings that will occur. But during the creation process all limitations and decisions given by the architect, shape architect's scenario about the form. Architect seeks the 'ideal'. And he/she wants to create the ideal environment that is projected, envisioned by him/her during the design process. We know that the designed – conceived, imagined – space and the experienced – real – space are different.[6] When we think of the conceived space, there are ideas that are ordered by the architect. It is all about the architect's sphere of imagination. In this regard, all of these in generating or speculating the final form can be considered as 'Architectural Scenario'.

We attempt to dissect AS, retracing the processes that are sometimes hidden – only mode of narrative is thought – and sometimes intentionally explicit –represented –. The question of the thesis is 'does AS illustrate or generate the architectural space?' We will try to find the answer to this question by scrutinizing the use of architectural representations. We believe that an investigation into the concept of AS is crucial in assessing the role of technological developments and understanding the variety of individual conceptions in architectural thinking and ways of architectural representation. Therefore, it is important to examine the historical trajectory of architectural thinking and representation.

The process of reproduction of the built environment (drawings, other modes of representations and also may be a film) is a 'structuring of the architectural knowledge'.[7]

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[6] Colomina points out that despite the architect can envisage the space, his/her authority on the built space is not more than on drawings, photographs and descriptions.

Beatriz Colomina, "The Split wall Domestic Voyeurism," <u>Sexuality and Space.</u> 1992: 73-128

The orthographic set which is accepted as conventional standard of presenting that also has been changing over time, determines the conception of architecture and the changing of the standards yields new ways of conceiving space.[8] Drawings have standards that must be intelligible for the agents of the construction process. Despite the pragmatic function of drawings for construction, they have also speculative character or generative character defining the conceived space.

Pierce, in his essay, aims to explore that different modes of graphic representation techniques developed or used by the architect are evidences of his/her aims and assumptions.

> Consideration of the particular subject-matter of the drawings for a project may enable us to determine the relative importance of functional, structural, or expressive requirements. Consideration of the graphic modes favored by the architect in developing and presenting his ideas and consideration of the medium selected and the particular way in which it is handled may be especially helpful in arriving at an idea of the intended effect of a building, *enabling us*, in some measure, *to see the building as the architect himself saw it.* [9]

Now let us consider the ways in which an architectural idea could be developed through graphic representations. Drawing techniques, use of human figures and expression of environment that are indicated in the drawings are guidelines in grasping architectural thinking. They can be indicators of both the contemporary conventions of the architect's

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[7] Andrea Kahn, "Disclosure: Approaching Architecture", <u>Harvard Architectural Review</u>, no.8, 1992: 15.

[8] Mark, Hewitt. "Representational Forms and Modes of Conception; An Approach to the History of Architectural Drawing." <u>JAE,</u> Vol. 39 Issue: 2, Winter 1985: 2-9

[9] Italics are the author's accentuates. James Smith Pierce, "Architectural Drawings and the Intent of the Architect," <u>Art Journal</u>, vol.42, no: 1, 1967: 48-49.

time and individual inventions. Therefore, to a considerable degree architect's choice in graphical representation reveals the intentions behind.

1.1. Aims and Objectives

Architects generally use the terms 'AS' to explain his/her assumptions about his/her final product. As it is mentioned before, it comes out to explain the architect's intentions; his/her projection for the course of actions that are supposed to be and spatial experience or perception. It can also be conceived as a theme for the configuration of the formal elements. In short, AS can be understood as temporal projections of the architect about the end product that may or not turn out to be the edifice and can be examined as a mode of architectural representation.

It is important to note that the agents used for the presentation of projections not only represent the products but also perform as products; this is also an important concern for this study. Revealing the meaning of 'AS' and discerning how and/or why architects refer to this phenomenon during the process of creation constitute our main objectives.

The aim is not to delineate 'AS' as a design 'device' (method), but to disclose its significance to architectural design. The aim of this thesis is to (re)conceptualize the notion of the AS and to reveal its illustrative or generative character of architectural space.

1.2. Scope

While looking at the validity of 'AS' and the possibilities of making use of 'AS' embodying through different media of architectural representations, the changes in architectural thinking because of the technical developments and variety of individual conceptions will be taken

into consideration to elaborate on the phenomenon.[10] Consequently, the subject should not be dealt with only one exact stable fact. Developments in various fields of knowledge that influenced and changed architectural thinking thus affected the AS and the way it is expressed should be referred.

In this study, the questions, for the answers which we intend to search are;

- What is specific about scenario?

- How 'AS' represented in architectural drawings and sketches or is it valid inherently?

- Is 'AS' valid for the process of creation?

- What is the role of 'AS' in the form production processes?

- Is it possible to define architectural space in terms of 'AS'?

- Does 'AS' affect the architectural production as a narrative device?

-Why do architects need such narratives during the form making process?

-Is 'AS' illustrative, speculative or generative?

Actually, this thesis is composed of two main parts to elaborate the different aspects of AS. In the following (Second) chapter, the process of image construction will be reconsidered, and the relationship between the text and the image will be scrutinized. The increasing importance of the images for architectural production makes us further investigate the architectural representation for understanding AS. For clarifying the significance of the AS, it will be referred to the art of cinema and dealt with the relationship between film script and film. Using paradigms is important to grasp the specifics about AS in the process of design from detached perspective.

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[10] Hewitt suggests that history of the architectural drawings should be handled as history of the image theory. Mark Hewitt. "Representational Forms and Modes of Conception; An Approach to the History of Architectural Drawing." JAE, Vol. 39 Issue: 2, Winter 1985: 6.

In the third chapter, we will investigate various cases for conceptualization of AS. Since the attributes of the subject-matter require a thorough examination we will not able to focus on a single example, but will search for diversity. The study should be conceived as a whole to understand the concept. The examples are significant in their own contextual framework. We do not aim to present a spacious historical review but we will stick to the historical framework of the cases selected. These examples will be peculiarly employed to show how architectural scenario is concerned in the process of design rather to give the chronological succession of history of representation. The choices have been made with the view to discern different anticipations of architectural scenario. We believe that the subject-matter of the thesis is much related with the architectural representation and it is necessary to be familiar with the history of architectural representation. The textual and visual evidence of AS will be examined across a broad historical period, focusing on the relationship between representation and architectural space.

Architectural scenario will be investigated in different forms of architectural projections. Relations between the form and AS are outside the scope of this study, in other words, relation between the form and scenario will not be judged. Our intention is to understand the form making process intrinsic to architecture; it is not to criticize architect's formal decisions about end form in relation to his scenario.

1.3. Methodology

The term 'scenario[11]' is mostly associated with the art of cinema. Scenario can be defined roughly as an outline for making a film. For scrutinizing AS, it can be utilized with reference to its different aspects and may serve to provide a distance with the subject under investigation. This process of 'alienation' thus may prepare the ground to review the 'AS' from a detached perspective. In this respect, we will make use of an allusion to commonsense use of scenario especially in cinema. Cinematic paradigms will be used for understanding the 'AS' as a process of image production. The tools for architectural representation, on the other hand, will also be utilized to draw the outlines of the main debate since they offer the insight to probe into the subject matter.

Undoubtedly scenario as a representational tool is used in a variety of performance arts, yet since we believe that the image production processes in cinema can be considered similar to that of architectural representation we will concentrate on cinema in establishing analogies. It will be useful to define the similarities and differences between the two cases: scenario in filmmaking and scenario in architectural design thus can further our research by means of this comparison.

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[11] "scenario." <u>Oxford English Dictionary</u>. 2005. Oxford English Dictionary Online. [last accessed 21 July 2005]
< http://dictionary.oed.com.floyd.lib.umn.edu/cgi/findword?query_type=word&queryword=scenario>

1. **a.** A sketch or outline of the plot of a play, ballet, novel, opera, story, etc., giving particulars of the scenes, situations, etc. Also *transf.* and *fig.*
   b. *Cinemat.* A film script with all the details of scenes, appearances of characters, stage-directions, etc., necessary for shooting the film.
2. A sketch, outline, or description of an imagined situation or sequence of events; esp. (*a*) a synopsis of the development of a hypothetical future world war, and hence an outline of any possible sequence of future events; (*b*) an outline of an intended course of action; (*c*) a scientific model or description intended to account for observable facts. Hence, in weakened senses (not easily distinguishable from sense 1a *transf.* and *fig.*): a circumstance, situation, scene, sequence of events, etc. The over-use of this word in various loose senses has attracted frequent hostile comment.— R.W.B.
3. *attrib.* and *Comb.* in sense 1, as **scenario department**, **editor**, **picture**, **production**, **sketch**, **writer**, **writing**.

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The different forms of architectural representation as tangible products of 'AS' will be compared to different forms of scenarios produced for filmmaking; the methods used during the process of constructing the scenario in cinema will be studied. Although each represents the final product of a different medium, they both inherently accommodate the knowledge of their own field and their final product's medium. Scenario is written only for people who can understand it; it is not only the outline of the final product as a film, but also accommodates technical knowledge of making a film. The same is true for architecture and in the following chapter we will approach this initial process as a process of "image construction" in both realms.

For the third chapter, architectural representations, which should be considered as artifacts, will be investigated. There will be historical succession in regard to architectural conceptions which may belong to one architect or a group of architects or a specific epoch. The question is related to the illustrative and generative character of the AS.

CHAPTER 2

UNDERSTANDING PROCESS OF 'IMAGE CONSTRUCTION'

2.1. Emergent of 'Architectural Image'

In this part, we will examine 'Architectural Scenario' as a process of 'image construction.' The focus of this part is to explore if Architectural Scenario as a process of image construction is hidden in the architectural representation. An approach to search the history of architectural representation would be found in the relationship among representation, conception and perception.[1] Through architectural drawings we can deduce three implications that are superimposed. One is the expression of the architectural object designed; the other is the 'thought', in other words 'mental process of the designer,' engaged by the way of representation technique; and the last is 'visual thinking.'

It is crucial to elaborate the transformation in transmitting the architectural knowledge after the invention of printing. Mario Carpo states that architecture couldn't be out of the consequences of this invention. He says, "[t]he mechanical reproduction of images was to have important and long-lasting consequences for the transmission of scientific knowledge,

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[1] Mark Hewitt. "Representational Forms and Modes of Conception; An Approach to the History of Architectural Drawing." <u>JAE,</u> Vol. 39 Issue: 2, Winter 1985

and even more for technical subjects and the visual arts. Architecture was no exception."[2] Until that time, architectural knowledge was transmitted verbally. Drawings were incomplete and used solely in construction site for production. They were viewed merely as instrumental representation. Mechanical reproduction of the images had affected transmitting architectural knowledge, which belonged to professions. They were deployed exclusively as verbal communications, while keeping the data clandestine. Apprenticeship and training were the sole ways for learning construction techniques. Carpo also notes that, there was an obvious change to reproduce the image and text in the treatises of Renaissance. The communication means were more predominantly oral in ancient times, and gradually knowledge begun to be transmitted by the deployment of image.

It is significant to scrutinize the consequences of the invention of printing for understanding the separation between execution and conception of architectural space. Usage of drawings had changed by the help of publishing books that were becoming widespread.[3] At the outset, the transmission of architectural knowledge was only in oral and written form as mentioned above. After the succession of copying the images in treatises, drawings of buildings that already being were also reproduced by means of transmission of architectural knowledge. It was easier to copy (reproduce) the images of buildings, i.e. the drawings, rather than transmitting the knowledge through traveling. At first, only drawings of edifices already built were reproduced, and even than, they were only partial presentations. After that point, drawings reproduced were used to represent appearance of building in architect's mind. They were begun to become images of projections. The process of visualization of the unrealized buildings during the design process, architect had to develop these interfaces both to

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[2] Mario Carpo. "Prologue: Architectural Culture and Technological Context," <u>Architecture in the Age of Printing</u>, 2001: 6

[3] Ibid. Carpo. 2001

communicate with other people and for designing a building.[4] It can be argued that at the point the separation between the act of constructing physical environments – execution – and act of designing – conception – was generated.

In ancient times architectural practice was conducted *in situ*. Drawings, which were uncompleted and used by the architects or builders to communicate with the construction workers to elucidate their intention, were insufficient representative devices. In the Middle Ages, architects designed and executed their buildings without formalization in visual techniques prior to construction. Medieval master masons used plan drawings that "played a much less significant role in design and construction than they do today."[5] Communication means which were used to be more verbal at the beginning turned out to be visual in time. The modern architectural practice of designing a building was mostly founded by the Renaissance architects. Despite the fact that there were no innovations in construction techniques during the Renaissance period, there was a change in perception and conception of space consequent to innovations in techniques of representation. This change also affected architect's status and borders of his/her task.[6] Mario Carpo also indicates being significance of images in architectural discourse as;

> The intellectual need for a means of replicating visual example of ancient architecture arose almost simultaneously with the diffusion of woodcut printing. Around 1450, Leon Battista Alberti was still based with the challenge of describing ancient and modern architectural forms in words alone, without the aid of images. The results were sometimes unexpected. Two or three generations later, with the universalizing

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[4] Ibid. Carpo. 2001

[5] Mark Hewitt. "Representational Forms and Modes of Conception; An Approach to the History of Architectural Drawing." JAE, Vol. 39 Issue: 2, Winter 1985: 2.

[6] James S. Ackerman. "Architectural Practice in the Italian Renaissance," JSAH, Vol.13, No.3, Oct. 1954: 3-11

of the mechanical production of images, architectural theorist could finally undertake a systematic visual documentation of great works of ancient architecture. After centuries of the primacy of the word, architectural discourse could at last put its trust in images, be composed in images, and make use of images that faithfully reproduced and transmitted the appearance of original archetypes.[7]

As mentioned before, Carpo states that the transmission of architectural knowledge was in a verbal mode, as a result of developments in printing, there was no need for the traveling man; instead it becomes architectural knowledge to be transmitted was easier. He emphasizes that the specific forms of architectural thinking changed in response to the developments in printing and communication technology. The transmission of architectural knowledge that was oral in the Middle Ages, changed from oral to written format in the fifteenth century. He indicates the documentation and mechanical reproduction of the architectural images that altered the course of architecture.

Carpo states that there is a shift in the role of the imitation during the Middle Ages and Renaissance Period by the help of the diffusion of 'new graphic format'. He mentions that in the renaissance architectural practice, there is increased success in standardization of drawings and design, but not in manufacturing and construction.

> The individual displaced the universal, and models become more important than rules. The shift from the formalism of medieval architectural thought to Renaissance exemplarism is also a shift from a method that defined structural relationships destined to remain hidden to one that exerted visual control over the outward and visible signs of the built environment.[8]

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[7] Mario Carpo. "Architectural Knowledge in the Middle Ages: Orality and Memory Versus Script and Image," <u>Architecture in the Age of Printing</u>, 2001: 45

[8] Ibid. Carpo. 2001: 45

Architecture in drawings comes prior to construction. Architectural drawings as reflections of reality outside them have illuminated another reality.[9] The architect produces first images of architectural environment. The process of image construction has been transformed by the technical developments and individual inventions in architectural conceptions. It can be said that vice-verso is also true. Frascari, in his article 'A New Angel/Angle in Architectural Research: The Ideas of Demonstration', suggests critical approach to architectural research considering architectural drawings as a 'product of imaginative universals.' According to him, theory of image construction should be founded on such an approach:

> The theory of image construction, which proposes an understanding of architecture as a system of a representational knowledge, emerges from a technological understanding of images. … A technological image is a reproduction in the mind of a sensation produced by a perception emerging from a critical system, which is not separate instrumental from symbolic representation.[10]

Technological image in addition to being instrumental representations, as pointed out by Frascari, should also reveal meanings or conceptions that everybody accepted of its time, symbolic representation. What architectural projections demonstrate is the critical question. He claims:

> …, I ask the rhetorical question: what should architect's drawings demonstrate? The answer: the technological image. This image should be read as a palimpsest displaying three overlapping relationships: (1) between a real architectural artifact

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[9] Robin Evans. Translations from Drawing to Building and Other Essays. Architectural Association Publication, London, 1997.

[10] Marco Frascari. "A New Angel/Angle in Architectural Research: The Ideas of Demonstration." JAE, Vol. 44, Issue: 1, 1990: 11.

and a reflected or projected image of it; (2) between the real artifact and the instrumental image in the mind of someone involved in a building trade related with its construction; and (3) between the instrumental image devised by the architect and symbolic image that rests in the collective memory of a culture.[11]

The first relationship making a technological image is a direct projection, 'orthography of project.' The second relationship making a drawing is a project of communication which is needed for construction. The last relationship within a drawing is in between instrumental representation and symbolic representation.

Beside the personal projections of the architect, the product is realized also by the collective reception of others. With this perspective provided by Frascari above, we may examine concerns of architectural representation in order to comprehend 'AS'. In this regard, we will analyze the phenomena in terms of architectural images as both products and depictions of the final product.

We can treat architectural scenario as an apparatus for design. Architectural scenario cannot be explained only by the terms such as technique, method, discourse, rules, ideas, ideology, etc.; at the most, it includes all of them. So it is crucial for the process of design.

> The modern idea of a project conceived in its entirely prior to construction-visualized in the form of a drawing or a model' and than realized without any deviations- is not a Renaissance invention. But with Alberti the principle behind this practice was first enunciated and formalized. One of the first-known cases in which drawings of the plan, elevation and section were made as a set, all in the same scale, is Bramente's project design for the cupola of Saint Peter's published by Serlio (Third book, 1540),

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[11] Ibid. Frascari:16

probably copied after the original drawings. A similar drawing (plan, section, and elevation of military bastion) had already been published in 1527 in Albrecht Durer's treatise on fortifications.[12]

Making use of visuality – images – in process of design gives rise to ways that may change and diversify the form of architect expression of her/him. In addition to having opportunity to different projections of architectural image, in other words other than the properties of the architectural artifact depicted, it should be noted that architectural image can be dealt solely as object to provide the clues of thoughts, ideas, individual innovations, and changing receptions from specific epoch to another epoch.

2.2. Cinema as a Paradigm for Understanding Architectural Scenario

How important are scenarios in the cinema?

Fellini: You know cinema is image … words![13]

When we define architectural scenario as process of "image construction" to understand its significance during the process of design and clarify the meaning of "image" to discuss the issue, we may refer to the art of cinema. We believe that the alienation of the subject-matter may help to construe the phenomenon in architecture better. The aim is not to make a deep investigation on the relationship between cinema and architecture. But, due to the fact that the terms 'projected image' and 'scenario' are also employed in cinema, we may attempt to

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[12] Mario Carpo. "Architectural Drawing in the Age of its Mechanical Production," Architecture in the Age of Printing, 2001: Look footnote 82.

[13] As quoted in Francesca Hughes. Architect: Reconstructing Her Practice, MIT Press, 1996:130. Originally in television interview with Federico Fellini. Broadcast Autumn 1992 in France on France 2, then Antenne 2.

establish an analogy between cinema and architecture in terms of both process of image construction and mode of representation.

It is known that the connection between cinema and architecture has been investigated in different contexts.[14] For example, Aytaç-Dural elaborates the object of cinema and the object of architecture as compositions. It is claimed that the fundamental principles of design[15] can be operated in both cases. She affirms the products of two similar processes have traces of the process of creation and creators' ability to engage similar ordering principles as well, "In the case of architecture it is the spaces to be organized with respect to their properties, whereas in cinema organization of images comes into scene. In both cases rendering of elements and their orchestration requires an underlying system of rules to integrate all sorts of complex relations into a unified whole; the final form of a building or a films owes its quality to the designer(s)' concern for this."[16] On the other hand, in addition to concepts of spatiality and temporality, Pallasmaa conceives the relation between architecture and cinema with respect to both 'arcticulat[ing] lived space and mediat[ing] comprehensive images of life'. He claims lived space which is inherently projected image in both cinema and architecture, unlike built environment in the world of matter, is not ruled by the physics and geometry, it is considered as 'space that is inseparably integrated with the subject's concurrent life situation.'[17] We will be dealing with mental construction of image and its

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[14] For further investigation on cinema and architecture see "Architecture + film II", <u>AD. Architectural Design</u>, Jan., v.70, no.1, 2000

[15] Tugyan Aytaç-Dural has been moderator of the elective course named "ARCH 445 Fundamental Principles of Design in Works of Art" in Department of Architecture at METU since 1998. The basic principles of design are examined in different modes of art work. 'Composition' and 'principles of organization' in respect of products of different media are scrutinized, and attendants are asked to produce 'ordering principles' in written or/and visual form.

[16] Tugyan Aytaç-Dural. "When Film Follows Form: Cinema as Composition," <u>Design and Cinema: Form Follows Film</u>, Second Design and Cinema Conference, Held on 6-9 April 2005: To be published.

[17] Juhani Uolevi Pallasmaa. "Existential Space in Architecture and Cinema," <u>Design and Cinema: Form Follows Film</u>, Second Design and Cinema Conference, Held on 6-9 April 2005: To be published.

modes of representation such as architectural projected image and the projected image on the cinematic screen. Before this, some key terms such as projection, planning and fiction used in both realms should be elaborated.

- **Concept of "PROJECT-ion"**

> **Projection:** … **II. 3.** The forming of mental projects or plans; scheming, planning. **4.** That which is projected or planned; a project, plan, design, scheme; a proposal. *Obs.* **III. 5.** … **b.** The representation of an object in a picture in such a way as to make it appear to stand out in relief. … **IV. 6. a.** *Geom.* The drawing of straight lines or 'rays' according to some particular method through every point of a given figure, usually so as to fall upon or intersect a surface and produce upon it a new figure each point of which corresponds to a point of the original figure. Hence, each of such rays, or of such points of the resulting figure, is said to be the *projection* of a point of the original one; or the whole resulting figure is said to be the *projection* of the original. … **7.** …**b.**Chartography. A representation on a plane surface, on any system, geometrical or other, of the whole or any part of the surface of the earth, or of the celestial sphere; any one of the many modes in which this is done. … The earlier modes were actually the result of geometrical projection; but the name has been extended to representations which lie quite outside the etymological sense. …[18]

As 'projection' has specific definitions in both realms, it can be used as the key term to make comparison between cinema and architecture. The term projection is generally used in three different meanings. First, projection is a method of displaying images on white plane. In the

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[18] "*projection.*" Oxford English Dictionary, 2005. Oxford English Dictionary Online. [last accessed 30 November 2005] Look for other meanings or usages in different disciplines such as Economy, Music, Psychoanalyze, and Physiology.

<http://dictionary.oed.com.floyd.lib.umn.edu/cgi/entry/50189697?query_type=word&queryword=projection&first=1&max_to_show=10&sort_type=alpha&result_place=1&search_id=z93Y-49FAzk-177&hilite=50189697>.

art of cinema, projection machine is used for displaying frozen images on the scene that were designed during the creation process. (24 image per second) Second, projection is understood as putting forward the idea of future situations. In addition to this, architectural drawings as projections refer to 'organized arrays of imaginary straight lines pass through the drawing to corresponding parts of the thing represented by the drawing.'[19] It provides dilemmas through abundance of its meanings. Making a film and designing an edifice have similar processes of production of images in terms of projecting the images on two-dimensional plane. Although in architecture projected image is a representative product, projected image on the screen is a final product in the art of cinema. Despite of this, both are still representations of the real. Distinct difference of both realms is their end products, one is still representation of real, and the other – edifice – must be real. We use the term of projection in both cases for establishing the idea of images, in other words structuring of thoughts. Projected image on the flat surface which may be the precursor of an edifice likewise scenario of a film might be considered as mental image of designer despite of their different modes of representation.

The concept of architectural projection is scrutinized widely by Robin Evans (1944-1993). According to Evans, word of projection refers completely to a different thing than it does in architectural presentation. Presentation drawings can be considered as records to display the object designed. Presentation drawings have no powers to transform or to modify the definite idea that is set. But yet what they record and display may not be real or not being yet. He continues "… they are projections of plausible outcome for a set of instructions and proposals already defined else where but not yet accomplished. Their status is unclear because they are neither impressions received from a real object, as would be a perspective

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[19] Robin Evans, "Architectural Projection", <u>Architecture and Its Image: Four Centuries of Architectural Representation: Works from the Collection of the Canadian Centre for Architecture Material.</u> Eve Blau and Edward Kaufman, Eds. Montreal: Centre Canadien d'Architecture / Canadian Centre of Architecture, 1989: 19.

from life or a photograph, or are they directly instrumental in the making of what they represent." [20] Although architectural projections seem to be static in respect of arresting and freezing the invisible lines in a plane, they can be considered as a place of imagination represented. It can be provided by the imagination of the observer too. If the drawing without 'activating imagination' easily, it becomes a technical tool. As it is, Evans says '…, these results in two illusions: first, that makes no difference to what is drawn (unless done incorrectly); second, that drawing can propagate things, but never generate them".[21] Projections should have competence of mobilizing the imagination of observer.

Operations of projection necessitate being technical, scientific and objective practice; on the other hand Stan Allen argues, like Evans, that projections should be understood as 'the product[s] of active subjectivity.'[22] Architectural representation conveys mental construction and imagination besides geometrical objectivity. Architect uses drawings not only to display how the designed building is erected correctly, but also s/he tests her/his mental imagination by utilizing the power of visual impression of the drawings – or images.

Architectural projections are composed of visual notations which present things both already exist and not real yet. Nalbantoğlu, in her article titled "Project (ion) s", claims that architectural projects accommodate both the future projections and conventions:

> The project of architecture involves temporal projections. The architectural gaze
> tirelessly sways between an unattainable past and an unknowable future. In search of
> an ideal past or a unique future, it either rebuilds or projects. Architecture is caught
> between a "compulsive urge to return" and a "single-minded valorization of

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[20] Ibid. Robin Evans, 1989: 19

[21] Ibid. Robin Evans, 1989: 22

[22] Stan Allen. "On Projection," Harward Architectural Review, v.9, 1993: 132

uniqueness". Yet to some extent, every projection involves rebuilding. In order to project, architecture needs to recollect and repeat what it identified as "architectural." In this act of recollection, the architectural look relentlessly records, photographs, and documents as if were possible for it to see what is "really" there; as if the look were not always already a function of desire.[23]

Nalbantoğlu makes us notice that architect's projections oscillate between the past and the future. Architect seeks a common place between the individual character of process of design and the social aspects of the phase of building. Every projection contains conventions, rules and etc. that for presenting commonness of the past and projection of uniqueness that belong to future.

In architecture as opposed to other modes of projections, especially in the art of cinema, plane, where images captured and generated, is a flat surface that gathers 2-D information to be transformed into 3-D built-space. Information is taken from flat representation to create object.[24] Oppositely, in cinematic projection, 3-D object is merged into the 2-D information on plane.

- **PLAN (ning) : Mapping* the Conception**

Seraji-Bozorgzad believes that the simulations and new modes of representation imported from other fields cannot replace the conventional productions of architectural images. Especially the formers have limitations of interpretation of reality. Architectural image that does not come to real yet, has traces of how its creator sees the reality and his/her

[23] Gülsüm Baydar Nalbantoğlu. "Project (ion) s," Assemblage, Issue 41, April 2000: 58.

[24] Robin Evans. "Architectural Projections," 1989

* 'A form of symbolic representation thought to describe the cognitive relationship between the physical and conceptual world.'

imagination. It is a field not only to convey the ideas of architect to viewer but also to generate and develop his/her ideas.

> What is challenging about the plan is its capacity to tell different stories, to generate readings, and to confer an active role on its viewer. As a composed and measured act of drawing, it becomes a free way of reading architecture; as it never renders the architectural object in its totality, it must be interpreted to be understood. It is therefore a device for creation, not for illustration. The plan is a field of experimentation: a complex tool of representation, a totality in itself that can encapsulate all other dimensions of a project. It contains the section and elevation and it allows the space to take shape. The plan is an intellectual construct that allows for questions to be asked and thoughts to be affirmed.[25]

Apart from the reading we can say that the word 'planning' is used to state the way of setting of the ideas and how the decisions (intentions) are formulated. Plan is accepted a footprint of the edifice, is also considered as 'generator' by Le Corbusier. Plan projection apart from its normative character, is the most abstract way to present things. In addition to this, architectural knowledge is acknowledged and developed easily in plan projection.

- **Fiction i.e. Configuration***

The sequential order of the images is a fundamental issue in filmmaking. How scenes come together, and the hierarchy between the images must be well thought. In architecture it is also important to arrange the parts or elements that compose the whole. Architect organizes the architectural elements by means of conventional triadic presentation, plan-section-and

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[25] Nasrine Seraji-Bozorgzad. "The Plan as a Tool," <u>Assemblage</u>, Issue 41, Apr 2000: 74.

* It should be noted here the term 'fiction' is not used as imaginary tale. It will be examined the following chapter. Look "Architectural Scenario as a Story."

elevation. The arrangement of the parts is called fiction i.e. configuration. Film is generated by composing of diversity elements. Aytaç-Dural discusses the structure of film within the context of three systems of relations: design of character, design of scene and design of film, each of which establishing a ground for the design of the other. The consecutive relations engender the form of the film as a whole.

> The configuration of all the elements built upon certain relations establishes one scene as a sequence of frames and each scene acts as a new element in the accomplishment of whole film. The cinematographic properties, such as use of light and movement of camera plus arrangement of the setting, use of sound effects and music determine the properties of this new element. The sequential organization of these scenes gives its *form* to the film. [26]

Scenario for the film and means of architectural representation for the edifice are similar in respect of outlining the final product. They represent final product, which will be realized in a different medium. Scenario for film is the mode of representing what one imagines through visual and written material; architectural representations are not much different than this. The importance of "scenario" for the process of filmmaking is no less important than the process of design in architecture, and they are both complicated processes, which include a profound study for future projections. In cinema screenplay is used instead of scenario. In the "Film Studies Dictionary" screenplay is defined as:

> … [t]he finished script for a film, containing dialogue and explicit descriptions of significant action. The degree to which screenplays include camera instructions varies markedly: a script with full information about camera work may need little work to be

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[26] Tugyan Aytaç-Dural. "When Film Follows Form: Cinema as Composition," <u>Design and Cinema: Form Follows Film</u>, Second Design and Cinema Conference, Held on 6-9 April 2005: To be published.

turned into the shooting script. If the writer is also the director the screenplay is likely

to be very explicit about the way each scene will be shot.[27]

Both the *scenario* during the process of filmmaking and architectural representation during the process of building/constructing draw the outlines of the final product. Therefore studying the analogy between cinema and architecture with reference to "process of design," thus highlighting the concept of 'projection' and other key terms mentioned above will clarify the subject under investigation. In this respect we will elaborate the issue in three parts; first, scenario for film and as the means of architectural representation for the edifice will be considered similarly both as the product and the outlines of the end product, second we will focus on their creation processes and finally the relation between the processes and the representative products will be examined.

2.2.1. The Product: Mode of Representation

Architectural representations and film scenario can similarly be considered as the frameworks for the end product but they can be considered as artifacts as well. When film script – or screenplay – and architectural representation are considered as products and we examine their properties as themselves we come across with new keywords to be clarified. Fiction, synopsis, storyboard, story, treatment, narration, and sketch, orthographic drawings, perspective, model, computer animation, or even film can be listed as some of these keywords. The process of constituting a film scenario follows these stages: theme, synopsis, story, story boards, treatment and finally shooting-script. Michael Graves classifies architectural drawings in three parts in terms of their process of conceptualization: the

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[27] Steve Blanford, Barry Keith Grant, Jim Hillier. The Film Studies Dictionary, Londra: Arnold, 2001: 207

referential sketch, the preparatory study and the definite drawings thus depicts the process of design through this classification.

Theme for a film may be love, war, or peace or any other universal subject. By itself it can hardly give any clue about the full image of the film, neither can help to read story. Two films having the same theme may not have anything in common when the story is concerned. DeNitto explained theme of a film as "when expressed verbally [is] an abstraction."

> In this context Idea has a broad range of referents. It could be a moral principle, an emotional situation, or an intellectual concept. A theme is not a summary of a story. A summary encapsulates a sequence of events dealing with specific people in specific situations. A theme is a generalization, a universalizing of the specific.[28]

Synopsis is a further step; it is the short text to explain the film's main point. It includes the issues and inspirations to be elaborated. Story is kind of narration that develops around theme. Two types of screenplay are valid; one may be an adaptation of a novel or a play that is already being in other forms, one can be written originally for a film.[29] Treatment is "a full account of a film's narrative written in continuous prose, which also gives a strong sense of how the film might look." [30] It contains specific ideas about the characters, actions and settings etc. for especially using for sell the idea to executive producers. Storyboards are the series of drawings to study visual characteristics of scenes and their sequential positions in the film. Shooting script is the text that reveals the technical properties. It has a special form

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[28] Dennis DeNitto. Film: Form & Feeling, New York: Harper & Row, Publishers, 1985: 4

[29] Ibid. DeNitto. 1985:66

[30] Steve Blanford, Barry Keith Grant, Jim Hillier. The Film Studies Dictionary, Londra: Arnold, 2001: 212

and certain rules to coordinate the process of shooting the scenes.[31] Film scenario sums up all those mentioned above. All the stages that compose the scenario have specific form of conceptualization.

[31] Önder Şenyapılı. "Senaryo (Scenario/Script)." <u>Bir Yığın İletişim Aracı Olrak Sinema: Sinema ve Tasarım</u>, Boyut Yayınları,1998
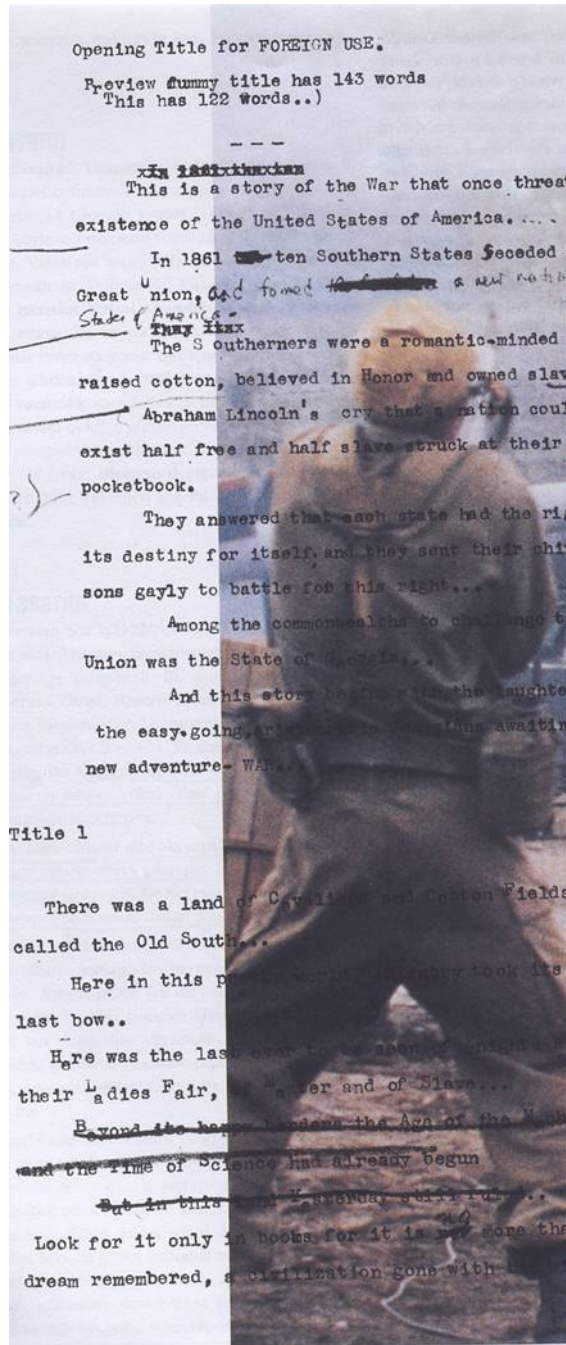
2.1 Scenario/script

(Source: Şenyapılı, Önder. "Senaryo (Scenario/Script)." <u>Bir Yığın İletişim Aracı</u>

<u>Olarak Sinema: Sinema ve Tasarım</u>, Boyut Y.1998:52)

In spite of several types of architectural drawings, Graves deals with the speculative aspects

of drawings in his essay and classifies them into three. The referential sketch is 'the

architect's diary or record of discovery.' These kinds of drawings serve as symbolic

notations of the architectural 'theme'. The preparatory drawings are documents of different experiments around the architectural theme. They do not have to develop in a linear order. The definite drawings as the final phase have necessary measurements and details to build. [32]

It is accepted that the initial film scenario is the backbone of a film. It generally is a concrete product with the main emphasis on words – screenplays –. Motion pictures generally based on screenplays. But there are exceptions. It is known some author directors didn't use any writing material or in other words scenario for making a film, such as Hitchock. It is said Hitchock was thinking much every single scene before shooting and imagining in his mind because of that he didn't need screenplay during the shooting.[33] And it is said that also films of Andy Warhol are shooting without assistance of screenplays. DeNitto says: "Exceptions, such as the films of Andy Warhol, usually can be cited as evidence of how a screenplay is necessary if a film is not to be diffuse and haphazard in development."[34] Film script defines the frames in a written format and gives technical and visual information for producing a film. Director translates this written form into audio-visual form. Film scenario is the representation of the film and similarly architectural projection is the representation of the building.

Architectural drawing is for representing the edifice as it is projected to be in a different medium and scale, but no single drawing is able to serve for delineating all aspects of the end product. This fragmentary approach is similar to film scenario; neither one never is the full representation of the end product. One can never visualize the architectural space that architect wants him/her to see completely and/or one cannot visualize the film as it appears

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[32] Michael Graves. "The Necessity for Drawing: Tangible Speculation," Architectural Design, Vol. 6, 1977: 384

[33] It was discussed in the course "Cinema and Design" in 2003-2004, spring semester, moderator is Önder Şenyapılı.

[34] Dennis DeNitto. Film: Form & Feeling, New York: Harper & Row, Publishers, 1985: 65

in the mind of the director on reading the scenario. Who will be the players? It makes a great difference when an actor or another performs one role. Who will be the one to imagine?

2.2.2. The Process

Mechanical processes of representative productions such as storyboards, orthographic drawings or perspectives should be compared. We mentioned that different forms of presentation display different aspects of end products. It can be said that it is valid for both processes. For example, the shooting of one scene from different viewpoints can be considered as presenting an edifice in plan, section, elevation or even perspective.
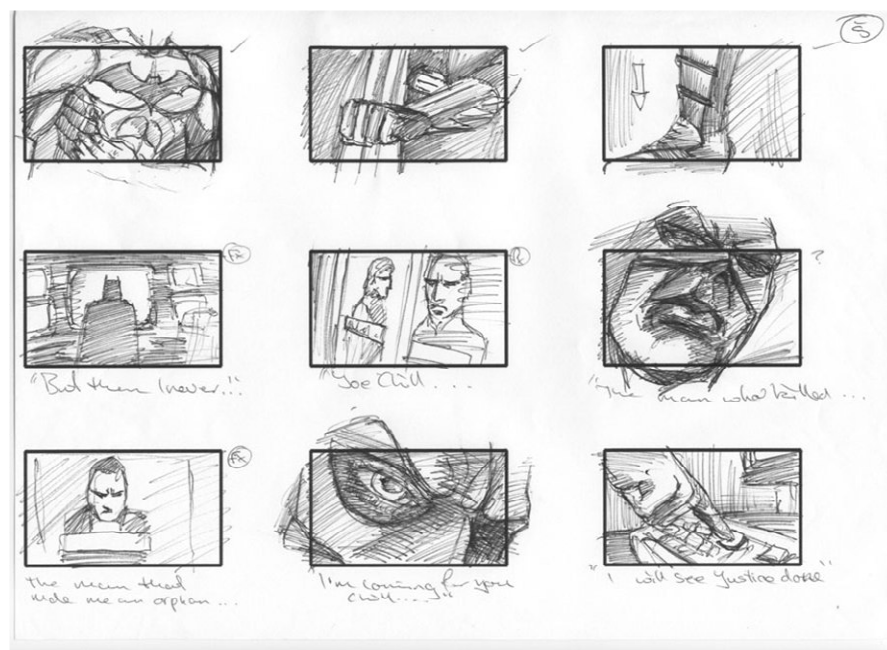
2.2 Storyboards of the film 'Batman'

(Source: [INTERNET, WWW], Address: http://www.batfilms.com/Storyboards.htm,

[last accessed 15 August 2005])

The way of displaying the idea and orchestration of different elements which compose the whole affects the product. The series of the drawings with descriptive texts by Le Corbusier

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are like filmmaker's studies of storyboards. **(Figure 2.3)** Choreographing series of views of an edifice looks like cinematic way of representation.

> The mental task of real buildings and cities is to structure our being-in-the-world and to articulate the surface between the experiencing self and the world. But doesn't the film director do exactly the same with his projected images? Cinema constructs spaces in the mind and projects architecture of mental imagery and memory reflecting thus the inherent archetypal architecture of the human mind, thought and emotion.[35]

2.2.3.   The Relation Between Product and Process

It is obvious that perceiving the 2D image of an edifice or understanding the space through the 3D model is different than experiencing real object. Mental imagination is activated parallel to the power of the image plus the memory. This regards remembering the real experiences and making relations between the images and the real world. This brings fore the dynamism in the real world hence makes us utilize the 'moving image' as a tool for representing architectural space during the process of production. On the other hand architecture has always been in the service of cinema with its real objects or constructed models. In both cases neither the virtual experience in architecture nor the constructed scenes in cinema can be compared to the real ones. Actually we are surrounded with the real space even when we are looking at the projected space on the flat surface. There is a surface between the real space we are in and projected space that we perceive. Architectural projections and projection screen are similar in this respect. On the contrary, from Pallasmaa's point of view, there is no difference between real experience and ideated experience in our mental faculty, '[a]n actual touch and ideated touch are experientially equal.' According to him architecture and cinema are similar in case of implying the

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[35] Juhani Uolevi Pallasmaa. "Existential Space in Architecture and Cinema," April 2005.

'kinesthetic way of experiencing space.' He continues '[t]he first [architecture] takes place through actual embodied movement, the second [cinema] through ideated action.'[36]

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[36] Ibid. Pallasmaa. 2005.
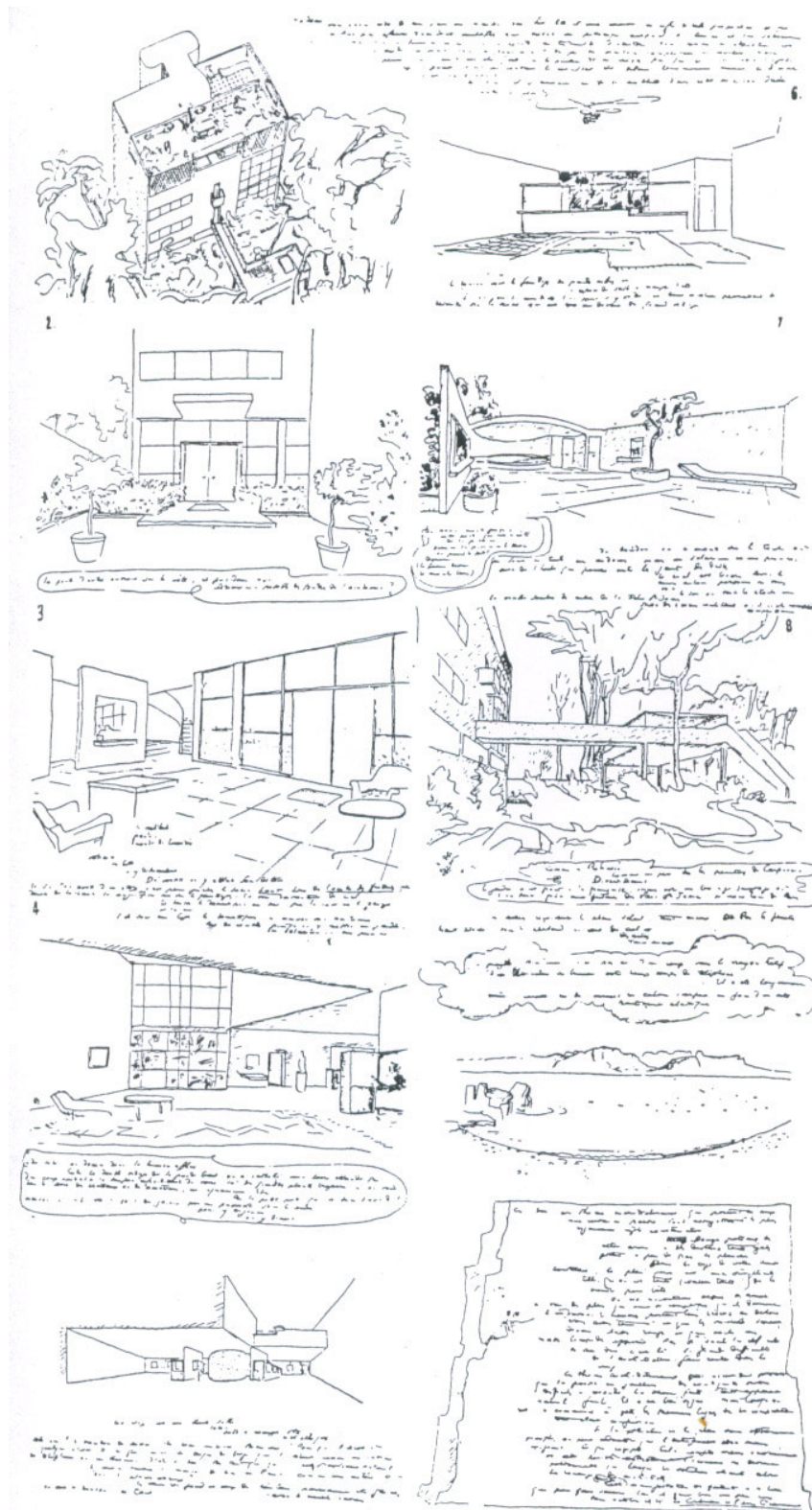
2.3 A Series of drawings by Le Corbusier

(Source: Lawrence Wright, Perspective in Perspective, London Routledge and Kegan

Paul, 1983: 241)

To reveal the relation between products as tools for representation and processes of production, we will refer to two different reproductions of architectural space concerning same concept. The processes of image construction are dissimilar in respect of their representational products: the drawing and the film. The idea of architectural promenade was formulated by Le Corbusier and was used to express architectural space in architectural drawings by moving image terms. **(Figure 2.3)** The images are displayed as framed and in sequential drawings. It allows perceiving the space by means of moving images; likewise it is real experiencing material space. It isn't only utilized for integrating abstract forms; voids and solids, but also integrates spaces with respect of narrating the human movement. And then, architectural promenade was examined in a different mode of representation in *L'architecture d'aujourd'hui.*[37] 'Architecture Today' is a film that was made by Pierre Chenal collaborated with Le Corbusier in 1930-31. The film emerged as a complementary tool in representing the concept of architectural promenade. Penz states that 'architectural promenade' was shown on film inspired narrative expression of space.
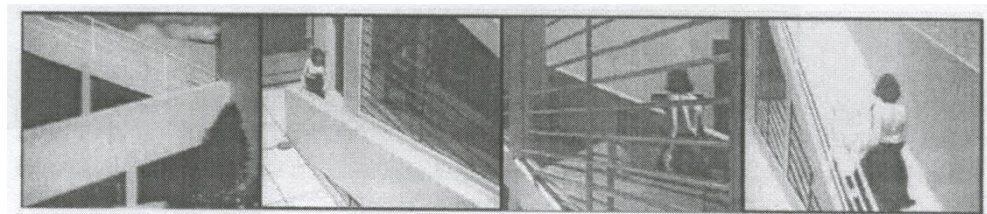
2.4 The Ramp Scene of the Villa Savoye (Chenal, 1930)

(Source: Penz, François. "The Architectural Promenade as Narrative Device:

Practiced Based Research in Architecture and Moving Image" <u>Digital Creativity</u>, Vol.

15 Issue 1, March 2004: 43)

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[37] http://www2.uni-jena.de/philosophie/medien/Vortraege/Amsterdam/architecture_and_film.htm [last accessed 25 May 2005] Go for seeing the abbreviated version of the film.

The ramp is indicated as an architectural path that is designed to follow. It is exaggerated in the drawings of Villa Savoye as well. The woman character is seen ascending the ramp. There is also spectacle eye; we are the eye of the camera. In the film, experience is constituted as spectator identifying himself/herself with the character; on the other hand, in the architectural drawings scenes which are indented to be perceived by the spectator are framed. Penz says "Architectural promenade is a simple narrative device, probably the most 'affordable' to express spaces. It allows viewers to understand spatial relationships through identification with a character's point of view and adherence to screen language rules."[38] As Penz indicates architectural promenade is a narrative devise in screen and in the drawings as well, but it is set differently in the drawings. The idea is more generative aspect to production of architectural space in the drawings.

The sense of autonomy with regard to projecting image is different in architecture and cinema. When we compare the final products of them, an edifice and a film, when the conceptual space transform into the built space, architect is not able to keep his/her autonomy as director does. In a film, we see or perceive things through the director's eyes. Film is experienced as director's seeing, and thinking. But in the case of architecture, built space may not be experienced as architect conceives. An edifice is composed of series of spaces; textures and effects. Solely architectural projective images are the place of the authority of its creator. It is evident that the sense of space or the perception of space in the drawings is not the space that is experienced; it is one of its representations. The projected image on the screen is the representation of real life as well.

Mode of representation affects the process of conceptualization. As it is seen these two different processes of image construction produce different representative products. This

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[38] François Penz. "The Architectural Promenade as Narrative Device: Practiced Based Research in Architecture and Moving Image" Digital Creativity, Vol. 15 Issue 1, March 2004: 43.

result can only be explained as: the different way of conceptualization leads to different mode of representation. Architectural scenario will be reviewed once more in the following chapter as an outcome of the relationship between representative product and its production process and will be investigated through the examples in a wide historical period.

CHAPTER 3

AN ATTEMPT TO (RE)CONCEPTUALIZE 'ARCHITECTURAL SCENARIO'

Following the previous chapter in which architectural scenario has been examined as the construction of architectural image; it becomes necessary to conceptualize architectural scenario through architectural representations. The textual or verbal and visual evidences of architectural scenario will be examined across a broad historical period, focusing on the relationship between representation and conception of architectural space. Contrary to conventions of scenario writing, architectural scenario will be examined in different modes of architectural representations as places of displaying architectural conceptions rather than in its textual form.

In placing architectural scenario in its historical framework, the chapter will be divided into five sections: Architectural scenario as a story; as a tool for structuring experience; as a tool to determine an abstract theme and the process of design; as an utopia: projection of architectural fantasy and finally the epilogue in which the validity or form of AS will be discussed in the computer based productions of architectural space.

The architectural representations will be scrutinized because the way of architect's choice of projection of the idea influences his intent. As Pierce argues that the medium that architect selects is the indicator of his/her approach. He claims that "the particular medium he selects

and the way in which he handles it may tell us as much about his approach to design as the subject of drawing or the method of projection." He argues that architect's selection of the way of graphic representation determines the formal appearances of the final product, because the idea keeps on developing usually during the design process. In other words, architect's method of form-making affects the materialization of the form. "Certain ideas may come more readily in one medium than another. Ideas generated with the brush, we have seen, may be different from those developed with the pen."[1]

Although architectural drawings have appeared with restrictive visual language and rules (standards) to ensure efficient communication and construction, they present the opportunity for subjective interventions. As Pierce argues, in his article "Architectural Drawings and the Intent of the Architect", "certain accents or exaggerations in an architect's drawing help us determine his special concerns."[2] Hence, the intent of the architect can be revealed from his representations. The hidden is also as important as the accent. Pierce suggests;

> Ones we have determined what an architect intended to do and what he did not intend
> to do, we may choose to judge his buildings according to our own absolutes, but it is
> only fair to consider first his most conspicuous intentions and tacit assumptions. If he
> has not set down his purpose in writing and his age has left no substantial body of
> theoretical writing or criticism to help us gauge his intent, we must follow the traces
> of his hand preserved in those drawings that are record of his mind and spirit.[3]

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[1] James Smith Pierce, "Architectural Drawings and the Intent of the Architect," Art Journal, vol.42, no: 1, 1967: 57.

[2] Ibid. Pierce.1967: 59

[3] Ibid. Pierce.1967: 59

If there is missing any verbal explanation or theoretical works about his/her design, searching on the drawings is solely way to understand the architect's design idea. Drawings preserve the traces of intentions, ideas and assumptions about the conceived space.

We argue that during the design process, architectural scenario may emphasize architectural space in two different ways. First, AS may illustrate the architectural space, when it is more descriptive rather than productive. Second, it may generate the architectural space, when it is imaginative and productive. While examining the subject matter, the crucial question that will be: does architectural scenario illustrate or generate the architectural space? Indications of verbal and visual modes of Architectural Scenario will be scrutinized.

3.1. 'Architectural Scenario' as a Story

Because of its nature, architectural representation, which is visualization about the real product, is precursor to things yet to come. Its task is representing the end product that is not realized yet. Michael Graves explores its speculative nature;

> In exploring a thought through drawing, the aspect which is so intriguing to our minds, I suspect, is what might be regarded as the speculative act. Because the drawing as an artifact is generally thought of as somewhat more tentative than other representational devices, it is perhaps a more fragmentary or open notation. It is this very lack of completion or finality which contributes to its speculative nature. [4]

As Graves explores, architectural drawings have open notation or subjective details because of its speculative nature. But it does not occur arbitrarily. Drawings are the place for the

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[4] Michael Graves. "The Necessity for Drawings: Tangible Speculation." <u>Architectural Design,</u> Vol. 6, 1977: 384.

framing of expression and improvement of the architectural ideation. Sometimes it is more used for expression -illustration- of something rather than for producing it. Architectural drawings may intentionally illustrate daily life or meta-narratives.

Like a stage, architect, makes *Mise-en scène*[5] of his/her script (narrative) for displaying the idea of the conceived space. *Mise-en scène* means 'staging.' It literally means 'the putting into the scene', or 'on stage'. It is described as '… director's text; specific arrangements of space and time on stage, to control actors, play script and public'.[6] Architectural representation may intentionally be used as a frame of displaying designated situations.

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[5] *Mise-en scène.* [INTERNET, WWW], Address: Oxford English Dictionary. 2005. Oxford English Dictionary Online.
[last accessed 19 May 2005] <http://dictionary.oed.com.floyd.lib.umn.edu/cgi/entry/00311302?single=1&query_type=word&queryword=Mise-en+scene+&first=1&max_to_show=10>.

  1. *Theatre*. The staging of a play; the scenery and properties of a stage production; the stage setting.
  2. The setting, surroundings, or background of any event or action.

[6] [INTERNET, WWW], Address: http://filmplus.org/biomx/mise.html [last accessed 19 May 2005]
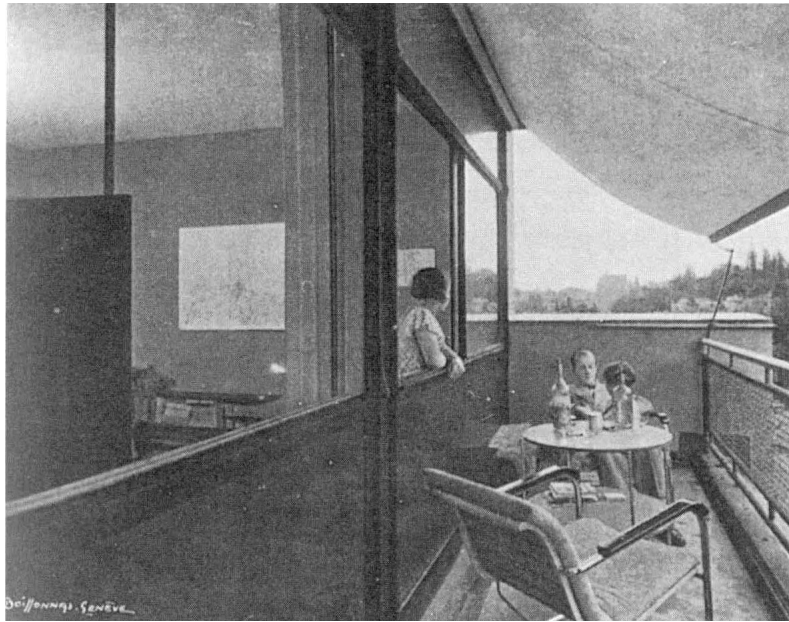
3.1 View from the terrace, Immeuble Clarté, Ginebra, 1930-32

(Source: Beatriz Colomina. "The Split wall Domestic Voyeurism," <u>Sexuality and Space,</u> ed. Beatriz Colomina, 1992: 104)

Le Corbusier used not only drawings but also other modes of representation like photograph to project his intentions. He uses photographs not as objective presentations and he makes modification on the original photographs before their publication for exploring his conception.[7] Colomina, in her article, interprets the photographs of Le Corbusier. She puts the evidences of the spatial and social structure that emerges from the habitants' intentional placement.[8] The poses of the woman and man figures that shot in the photographs are arranged intentionally according to architect's eye. Woman figures shot from the back, looking inside, contrary to the man figures looking outside. Colomina states that this kind of spatial arrangement is not only perceived in the photographs, but also is repeated in the drawings of Le Corbusier's projects. Colomina's interpretation for the drawings of Wanner project:

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[7] Beatriz Colomina. "Le Corbusier and Photography," <u>Assemblage,</u> No. 4, Oct. 1987.

[8] Beatriz Colomina. "The Split wall Domestic Voyeurism," <u>Sexuality and Space,</u> ed. Beatriz Colomina, 1992:105

In a drawing of the Wanner project [shown below] …, the woman in the upper floor is leaning against the veranda, looking down at her hero, the boxer, who is occupying the *jardin suspendu*. He looks at his punching bag. And in the drawing *Ferme radieuse*, the woman in the kitchen looks over the counter toward the man sitting at the dining room table. He is reading the newspaper. Here again the woman is placed 'inside,' the man 'outside,' the woman looks at the man, the man looks at the 'world.'[9]
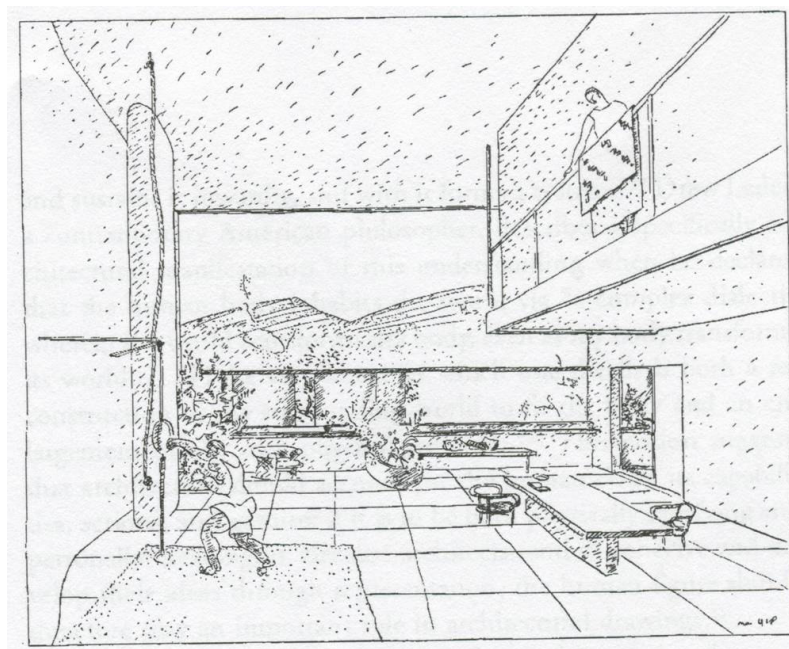
3.2 The drawing demonstrates the suspended garden of an apartment. Wanner Project, Le Corbusier.

(Source: Anderson, Alex T. "On the Human Figure in Architectural Representation."

JAE, Vol. 55 Issue4, May 2002: 241)

Stanford claims that the concept of 'function' in Modernism should be tackled as the 'fiction of function' rather than the literal meaning of function. He says that "… modern architecture,

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[9] Ibid. Colomina. 1992:104

more than of any other time, emphasized stories about function"[10]. He gives two convincing examples of 'demonstration of the functionalist thesis.' These are kitchens; one is in a social housing in Frankfurt, the other is the kitchen of Villa Savoye. Architects' envisions support the 'life' in political and social context. Their visions are supported by a concrete story. [11]

Sometimes visual forms are supplemented with verbal explanations. This collaboration of image and its explanation in terms of text can be considered as AS. For instance, the series of the drawings with descriptive texts called *vignette*[12] by Le Corbusier are similar to a filmmaker's studies in story boards. Each view is choreographed by the architect with descriptive texts.[13] In addition to the visual explanation, texts help to express the idea and illustrate the world or life that is imagined by the architect. On the other hand, textual adding may deprive architectural imagery of its productivity. The power of the image may diminish

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[10] Stanford Anderson, "The Fiction of Function." Assemblage no: 2 February 1987: 24.

[11] In this sense, critic Karel Tiege can be helpful to understand the situation. *Look :machine à habiter* 'machine to live in', *machine à écrire* machine to write. Look Karel Tiege. Oppositions 4 ,October 1974: 79-108

[12] "vignette," Oxford English Dictionary. 2005. Oxford English Dictionary Online. [Last accessed 19 May 2005] <http://dictionary.oed.com.floyd.lib.umn.edu/cgi/entry/50277479?query_type=word&queryword=vignette&first=1&max_to_show=10&sort_type=alpha&result_place=1&search_id=XTIo-qRzAqD-5356&hilite=50277479>

> **1. a.** An ornamental or decorative design on a blank space in a book or among printed matter, esp. at the beginning or end of a chapter or other division, usually one of small size or occupying a small proportion of the space; *spec.* any embellishment, illustration, or picture unclosed in a border, or having the edges shading off into the surrounding paper; a head-piece or tail-piece. Cf.
> **b.** An ornamental design, drawing, or picture in a manuscript or written document.
> **2. a.** A photographic portrait, showing only the head or the head and shoulders, with the edges of the print shading off into the background.
> **b.** A brief verbal description of a person, place, etc.; a short descriptive or evocative episode in a play, etc.

[13] This topic will also be discussed while elaborating the concept of 'architectural promenade.' Look "Architect's Route: Describing the Course of Action."

by verbalizing. It can be said that this form of architectural scenario as a story more illustrates the architectural space rather than generates it.[14]

The similarity with the storyboards in film making process has been already elaborated in Chapter Two. What is interesting here is that architect presents visuality perfectly bounded with – or is supported by – a fiction.[15] Following these examples, the implications of narration in architectural representation will be pointed out.

Lily H. Chi[16], in her essay, "Plots and Plans: Implications of Narration in the Architectural Project," examines two projects which are 'House of Representation' by Sven Tonsager and 'Berlin Masque' by John Hejduk in terms of using textual narration in the space of architectural drawing. She argues that using narratives delimits drawings projectibility and causes it to be descriptive and speculative, especially in the case of the drawings of these projects. So this kind of rendering of architectural mode of thinking has unconstructive and unrealizable character.

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[14] For understanding the example look Figure 2.3 "A Series of Drawings by Le Corbusier" in Chapter Two.

[15] Here it is meant by the term 'fiction' not imaginary tale, story creative by the architect that can be conventionally readable.

[16] Lily H. Chi, "Plots and Plans: Implications of Narration in the Architectural Project," <u>Reflections on Representation</u>, Conference held on September 27-29, School of Architecture & Planning, University at Buffalo, New York.1991: 73-89

The term of "plot" is defined by Bordwell and Thompson as "In a narrative film, all the events that are directly presented to us, including their casual relations, chronological order, duration, frequency, and spatial locations. Opposed to story, which is the viewer's imaginary construction of all the events in the narrative."
David Bordwell and Kristin Thompson <u>Film Art: An Introduction</u>, New York: McGraw-Hill Companies, 2001 [1979]:433
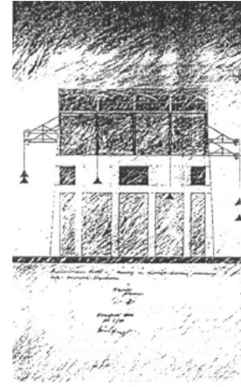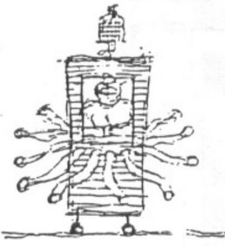
3.3 (left) **Lottery Woman, Structure 19 of the *Berlin Masque* by Hejduk**

(Source: Lily H. Chi, "Plots and Plans: Implications of Narration in the Architectural

Project," <u>Reflections on Representation</u>, Conference held on September 27-29, 1991:

75)

3.4 (right) **House of Representations' elevation, Sven Tonsager**

(Source: Ibid. Chi.1991: 75)

According to Chi, these two projects provide two important observations. One of the

observations is that techniques of modern drawings have more projective character in terms

of being 'habitable.' The 'idea' emerges from construction. But with regards to these

projects exemplified, there is a different projection than our expectations of modern

drawings. Another observation is that the projects prevent us from any visual reading

because descriptive text of the Masque project and name of the other make projects

'speculative.'

> The apparent tension between these projects and our expectations of drawing and
>
> notation in architectural work provokes two observations. First, it draws attention to
>
> the question of what *is* intended and, moreover, what is occluded in modern drawing
>
> practices- especially if drawing is understood more broadly as mode of constructing
>
> and, concordantly, of construing reality. Second, both name and text effectively
>
> render the projects 'speculative' in status. While the drawings bespeak prospective
>
> construction, it is questionable whether something of the names and the narrative

fragments would survive translation from drawing to building. Hejduk's constructions resist 'visual' reading even as built works and necessitate recourse to the poem and stories alongside of which they had been conceived. Considered on their own-that is, as a projection of possible object realities-the drawings would not describe what the text narrate. If orthographic projection describes an atemporal but imminent construction, narration here tends alternately towards an 'already', and a 'will be'.[17]

In the drawings of *Berlin Masque*, the collaboration of text and image describes 'one day of lottery woman' with unit, however visual notation is not preferred and the idea is founded as a narrative. There is a controversy between visual and textual structure as to which one illustrates the other. It does not convey any information regarding the construction phase. Like *Berlin Masque*, the drawing of *House of Representation* establishes architectural space by means of textual rather than visual reading. The other specific concern that Chi discusses is 'the implications of textural narration in the architectural project.'

…, it is the quasi narrative textuality of the works such as the Hejduk Masques which comprise the truly disruptive element in the drawings' representational space. Appearing as much characterization of the 'contained' as a proposal for the container, these projects seem much less an imminent building enterprise than a story *already* unfolded. In that respect, they would appear to collapse architectural experience to a non-corporeal engagement: that of reading. If, on the other hand, the projects are taken as proportions for prospective buildings, textuality takes on even more disconcerting sonority as a *scripting* of lived experience. Inscription thus infers prescription, immediately insinuating pro-scription. Stage-direction suggests an

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[17] Ibid. Chi. 1991: 75-76

incompatibility with participatory experience, with the self-expression of individuals, with freedom.[18]

Stage-direction and descriptive narration of experience in the drawings make the projective space have so definite rules to live in (habitation). Conceived space demonstrated in the drawings is limited by the prescriptions.

> My intent here is not to prescribe narration as yet another design 'devise', but to point out the kind of 'lens' which certain terms and techniques of modern architecture provide upon the world: what they reveal, what they occult. Indeed, one very clear, indismissible characteristic of the narrated architectural work is that they radicalize projection to the point of fictionality. Working on the same conceptual capacity, (Ricour, following Kant, characterizes imagination as a 'seeing-as' which is already productive of a 'being-as')these works yet push 'projection' to such a degree as to display, in all prominence, its hidden heart of 'otherness'. This is the most subtle irony: fictional emplotment is the work of non-productive production. Narration limits the plan's projectibility, brackets the program's objectivity by displaying human fortitude in all its ambivalence, pathos, irony. [19]

In this part we focused on some examples in which story or fiction is the main concern to construct the architectural space. With all these examples, it has been seen that architectural space is already surrounded by defined story or probable story. The supplemented text with visual descriptions makes the architectural scenario more illustrative rather than productive. The inscriptions do not assist to generate architectural space just narrate it.

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[18] Ibid. Chi. 1991: 80

[19] Ibid. Chi. 1991: 86

In the following section Architectural Scenario will be dealt as a tool for structuring experience. In our usage it is necessary to distinguish between 'scripting the lived experience' and 'structuring experience'. While the former is basically the pro-scripting of the life that is already or may be experienced and is used as a supplementary to define architectural space, the latter which is about the design of perception of experience or conception.

3.2. 'Architectural Scenario' as a Tool for Structuring Experience

Architectural scenario sometimes is understood by the architect as the visualization of 'life' bounded by the projected space. The architect constructs spatial experience, perception of the user, and the relation(s) between the user(s) and the projected space during design process. Architectural scenario as planning – or structuring – the 'experience' defines the space by means of narrative apparatuses of design.

Croset, in his article "The Narration of Architecture", point out the forms of narrative in architectural magazines, he claims that architect determines the experience and he considers it as a design input. [20]

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[20] Pierre-Alain Croset, "The Narration of Architecture." <u>Architecture and Production,</u> Ed. by Joan Ockman, trans. by Sebastiano Brandolini and Francesco Garofalo, Princeton Architectural Press, 1988: 201-211

Croset mentions the narratives used as a technique of representing architectural quality in architectural magazines. He believes that while publishing the architectural images, emphasizing spatial experience rather than the visuality is important. He claims that "… the form of narration not only allows the reader to imagine an experience inside the building, but puts him in a condition mentally to connect this imaginative experience to the design work of architect." Colomina, in introductory article of the book, states that Croset, in his essay on architectural narration brings Benjaminian narration and Barthesian desire together. Sometimes narration never implies the real life, but could imply people's desire such as consumption. He argues that narration in the architectural magazines do not involve the sensual experience of the object in its original place.

Also See, Beatriz Colomina, "Introduction: On Architecture, Production, and Reproduction". <u>Architecture Production,</u> Ed. Joan Ockman, trans. by Sebastiano Brandolini and Francesco Garofalo, Princeton Architectural Press, 1988.

…, the architect too must imagine the experience of the space that he is designing, using his own imaginative powers to overcome the abstraction of his drawings and to control the formal definition of the building.…What is of determining value in architecture is that the experience one lives corresponds to the intentional decisions of the architect; by designing, the architect structures the experience.[21]

'Structures of experience' that is defined in Croset's statement as 'a world put forward by the architect' which is engendered by fundamental decisions of the architect about one's experience which may be already constituted or may be projected. For Croset, it is also necessary for an architect to imagine the experience in order to overcome the abstraction of the drawings. Architect must be able to project his/her spatial experience in the frame of drawing's convention (standard notation). And it should be kept in mind that the conventions reconstitute the architect's aspirations.

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[21] Ibid. Croset. 1988: 205-206

3.5 Sketch. Cabonon, Le Corbusier.

(Source: Hughes, Francesca. Architect: Reconstructing Her Practice, MIT Press, 1996: 16)

Although the triadic system of projection (plan, section and elevation) is the most abstract level in architectural projections, it is the easiest way to grasp and demonstrate the idea. Despite its simplicity, it let the architect produce complex forms and demonstrates his/her thoughts. Colomina's observation about the drawings' of Le Corbusier:

> Drawing, as has often been noted, plays an essential part in Le Corbusier's process of the 'appropriation' of the exterior world. "By working with our hands, by drawing," Le Corbusier writes, "we enter the house of stranger, we are enriched by the experience, we learn."[22]

In architectural drawings, especially to gauge structure of experience, human figure may be used to depict the architect's visualization. According to Alex Anderson, human figure is

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[22] Beatriz Colomina, Le Corbusier and Photography, Harvard University Press, 1987: 8.

Also See: Le Corbusier, Creation is a Patient Search, New York: Frederic Praeger, 1960; English Trans. of L'Atelier de la recherché patiente (Paris: Vincent & Freal), 1960

used in two ways, in architectural drawings.[23] One is for giving sense of scale or strengthening the notion of 'depth' in which the figures are arbitrarily chosen from the figure catalog; in the other way it is not used as a complementary element, it is a compulsory element of demonstration in the design idea. Human figure is the important clue to understand the architect's ideation about the experimental space.
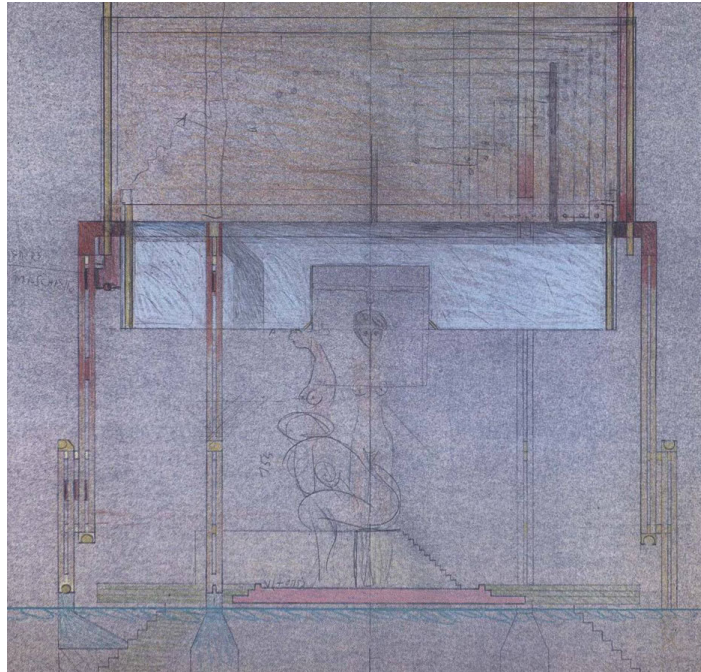
3.6 Pavilion, Brion Cemetery at San Vito d'Altivole,Scarpa.

(Source: Hubert Damisch, "The Drawings of Carlo Scarpa," Carlo Scarpa: The

Complete Works, ed. by Francesco Dal Co and Giuseppe Mazzariol, New York:

Electa/Rizzoli, 1985)

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[23] Alex Anderson. "On the Human Figure in Architectural Representation," JAE, Vol. 55 Issue: 4, May 2002: 238-246
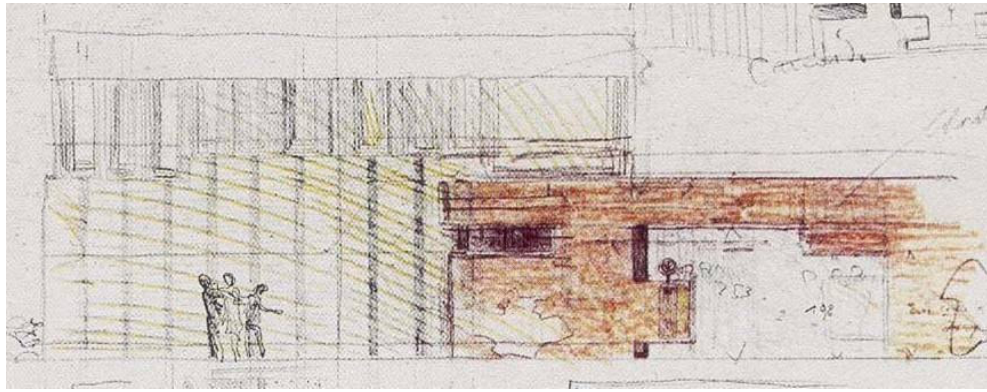
3.7 Sketch by Scarpa

(Source: Ibid. Hubert Damisch, 1985)

In what follows, the construction of the spatial experience and its display in architectural projections will be examined in three ways in regards of historical succession. The changing of the representation of the experience (human body) will be investigated by means of shifting the focus from the observer to the participant of the architectural space. This classification is made to differentiate the conception of space.

3.2.1 'Momentary Drama': Describing the Imaged Situation

- **The 'Scene' ; Importance of Theatre**

In the paintings of antiquity, there is no one single and definite viewpoint. There are many viewpoints that are arrays as if the observer's standing points and his/her movement was foreseen before. It can be said that the orthographic drawings similar in respect of absence of viewpoint.

Almost always they are commissioned by the people to design buildings which the architect himself will neither pay for nor inhabit, and may seldom or never see, but they create the environment, set the stage, for other people's lives. [24]

In the part named 'Accumulated Lore', Allsopp deals with the 'scenic architecture' that presents the architecture of "the scenery and sets the stage for living." He declares that the idea of scenic architecture is valid from ancient Greece, to the Agora and the Acropolis.

People of the Middle Ages had a great sense of pageantry not only in regal and military settings but, as can still be seen in such cities as Siena, in the festivals and junketing of citizen-craftsmen and merchants. The village green or open space, the world over, is likewise the setting for a way of life. Some of the most splendid 'theatres for living' were created under the influence of the European Renaissance, the Piazza di San Marco at Venice, the Piazza at Vicenza with its Loggia del Capitano by Pallodio, the Scala di Spagna in Rome and that most theatrical of settings, the Piazza di San Pietro in front of St. Peter's in Rome.[25]

Architectural projection was produced like a theater scene. In the projections, the life-styles are also presented. Scene produced by the architect, besides his/her imagination, provides clues about the daily-life. It is used for expressing the thought rather than for production new forms.

In Lessons of 'scenic architecture,' which is developed by Allsopp it is stated that:

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[24] Bruce Allsopp, "Scenic Architecture," <u>Modern Theory of Architecture</u>. London: Boston: Routledge & K.Paul, 1997: 25

[25] Ibid. Bruce.1997: 75

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-Architecture does provide the scenery for our lives, and scenery affects the way we live.

-Scenery helps to create an atmosphere. It may be respectful or frenetic, cowed or complaisant, but what architects design does affect the way people can live and feel.

-Under modern conditions, with an expending population and a diminishing need for people as functionaries, the quality of living of those who are not necessary becomes increasingly dependent upon the quality of the environment, upon the nature of the stage on which we play our parts.[26]

Idea of the scene was interpreted differently in various architectural periods. He explains how the using of the idea of scene changed after the period of Baroque.

The scenic attitude to architecture split in two after the decline of the Baroque. One was towards elegance and prettiness, sensibility, charm and delicate delight, the other was towards romanticism, and both ways paid a great deal of attention to the growing fashion for what we now call casel pictures. (Look Claude de Lorraine)… In England especially, Gothic architecture was looked at a fresh with romantic eyes. But far from being, as is often suggested, an aberration, gothic Revival architecture was a logical development of the idea that a scene could be conveyed a picture. People began to see architecture and landscape in terms of pictures rather than in terms parade of grounds.[27]

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[26] Ibid. Bruce.1997: 76

[27] Bruce Allsopp, "Scenic Architecture," <u>Modern Theory of Architecture</u>. 1997: 75-76.

"Baroque architecture did not abandon geometry: it made it three and four-dimensional to create scenic effects of great depth and complexity." Bruce.1997: 75

* Scenography derives from the Greek, and translates in common understanding as 'the writing the stage space.'

The eighteenth-century picture had a frame. People began to look at nature in terms of framed pictures.

- **'Scenography'***

According to Alex Anderson, before the Renaissance, human figures in orthographic drawings were utilized, in addition to sense of scale, form, order and proportion. Although orthographic drawings, which are two dimensional, have no sense of depth, they propose multiple viewpoints rather than a single viewpoint. By the invention of perspective during the Renaissance, human figures were set at different heights for expressing the depth. They were used by the architect to describe **'momentary drama'** which means describing the space scenographically. The demonstration of 'momentary drama' proposed by Anderson, served the architect to depict a moment of use or experience and sense of mobility. Invention of linear perspective brought dramatic change both in architectural thinking and image construction. As perspective represents the space better than any other kind of architectural drawing in terms of visualization; understanding architecture, its meanings and purposes and intentions of architects became much easier for viewer.
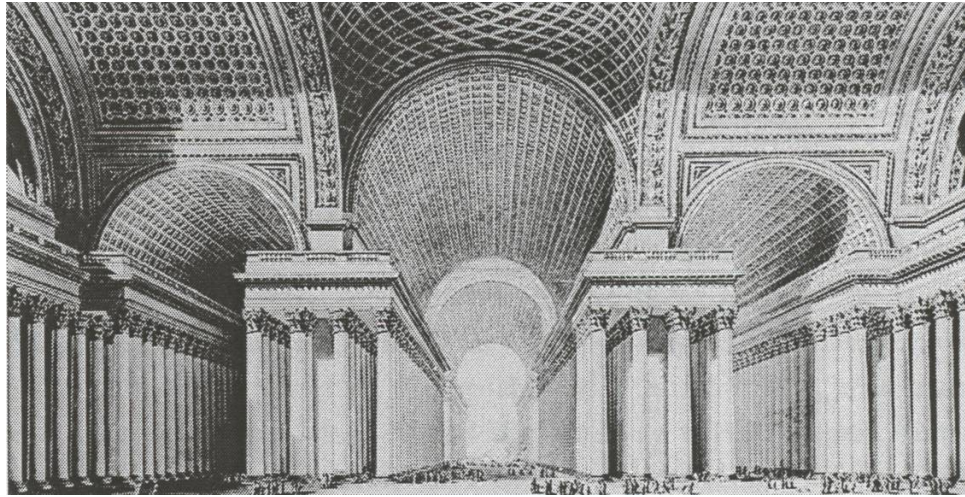
3.8 A Metropalitan Cathedral, Etienne-Louis Boullée.

(Source: Anderson, Alex T. "On the Human Figure in Architectural Representation,"

JAE, Vol. 55, Issue 4, May 2002: 241. (Original Source: British Architetural Library,

RIBA Drawings Collection)

Renaissance architects have a 'painter concept of architecture.'[28] No doubt, there is a parallelism between the egocentric thinking of the architects and their representation technique of *sceno-grafika*. They located themselves at the center of everything. They made the perception of environment at a single view point possible.

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[28] James S, Ackerman, "Architectural Practice in the Italian Renaissance," JSAH, Vol. 13, No. 3, Oct. 1954: 3-11
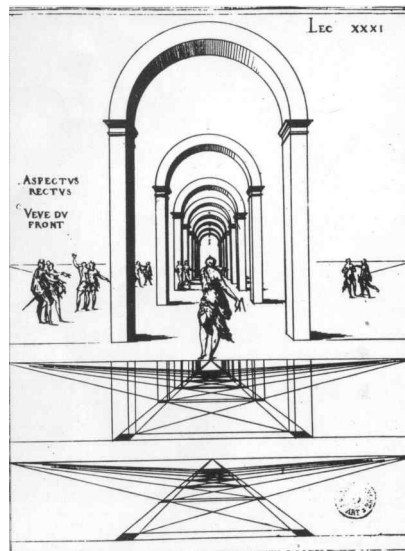
3.9 One point perspective: the position of man deliberately is center.

(Source: Steven Kent Peterson. "Space and Anti-Space," <u>Harward Arch. Review</u>, vol.

1, 1980: 96)

Architectural drawings, as well as their objective character, are the mirror of the architect's mind.[29] In High Renaissance drawings, as James Ackerman pointed out, what is not presented is as significant as what is presented. 'How it is presented' (its particular form) is important as well as 'what is presented' (the subject of the drawing) Plan is the dominant feature of the representation during the High Renaissance. Despite its importance, plan drawings are generally left incomplete; outer walls were intentionally not indicated. They solely indicated the abstract forms, free from any clue of environment and context. This could be considered as a sign of the centrifugal tendency. According to Ackerman:

> …the centrifugal character all comes from the tendency of these architects to
> visualize themselves in the center of a given space, looking outwards. This is why

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[29] See Erwin Panofsky, <u>Perspective as Symbolic Form</u>. New York: Zone Books, 1991.

they were so attached to the central plan and, to go step farther, to *scenografia*; two ways of making it possible to view the whole environment from a single point.[30]
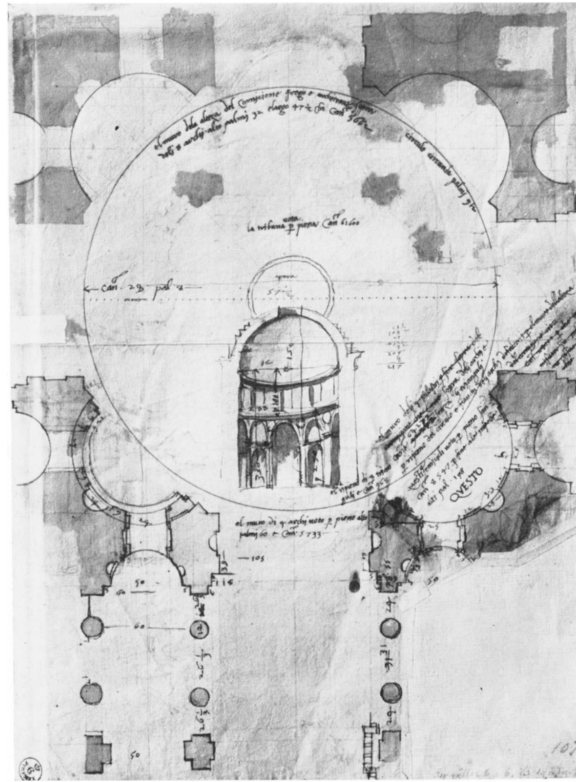
3.10 Baldassare Peruzzi, plan-project for the crossing of St. Peter's, Vatican. *c*. **1530**

(Source: James S, Ackerman, "Architectural Practice in the Italian Renaissance," JSAH, Vol. 13, No. 3, Oct., 1954: 7)

The strong link between architectural form and spatial conception can be seen in this plan drawing. The architectural form is represented by the centralized figures, while the space conception is symbolized by the central perspective. Architectural form is much related to conception of space.

In Renaissance there was nothing new in the construction techniques, but there was change in the perception of space.[31] The space that the architect represents in this drawing is a

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[30] Op.cit. Ackerman. 1954: 9

conventional longitudinal space. In this regard, there is no innovation in conception of space. The novelty lies in the use of perspective drawing as a design technique, to control the shape of the inner space. Something similar can be said about the spaces created by Brunelleschi. As spatial schemes, the centralized plan and the longitudinal nave were already known in Antiquity, but Brunelleschi systematized the space, giving it a mathematical character that was not known in the past. It is known that perspective projections are more utilized to perception of space, because it is more close to seeing, on the other, orthographic projections are used more to produce the space, because it is easy to give scale and dimensions, and to construct as well.

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[31] James S, Ackerman, "Architectural Practice in the Italian Renaissance," <u>JSAH</u>, Vol. 13, No. 3, Oct. 1954
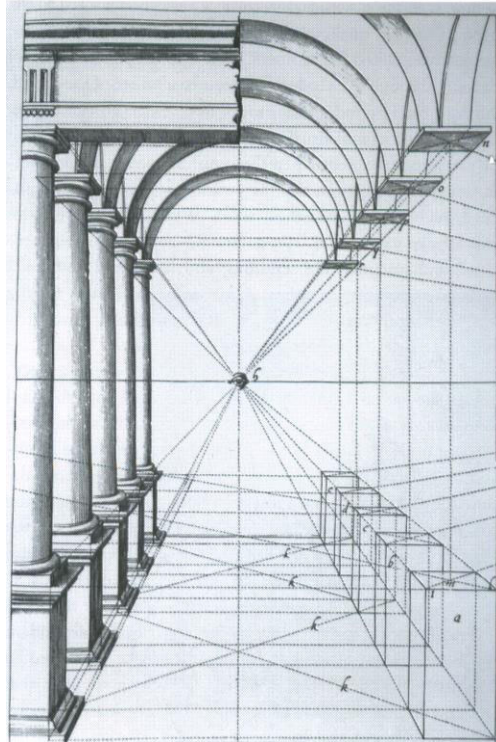
3.11 The image delineates the 'vanishing point' as the eye of the observer. Hendrick Hondius, 1625.

(Source: Alberto Pérez Gómez and Louise Pelletier. <u>Architectural Representation and Perspective Hinge,</u> the MIT Press Cambridge, Massachusetts, London, 1997: 66)

Other clue to gauge the experimental reading of architectural projections is the expression of the environment. With the Picturesque approach to painting buildings were drawn within the surroundings, this is also seen in the seventeenth-century drawings.[32] It was not used only to give sense of scale, proportion but also to express the ideal environment that is imagined. Modernism leads to an opposite approach from the Picturesque.

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[32] James Smith Pierce, "Architectural Drawings and the Intent of the Architect," <u>Art Journal</u>, vol.42, no: 1, 1967: 50

Le Corbusier disregarded everything that was picturesque and contextual in this house[33], concentrating on the formal qualities in this house, concentrating on the formal qualities of the object itself. But the most striking modification in the photographs of the front and the back facades is the elimination of any reference to the actual site, which is, in fact, a steep terrain. By eliminating the site, he makes architecture into an object relatively independent of place. This relationship between an ideal object and an ideal site is a constant in Le Corbusier's architecture of the twenties.[34]

He made the reduction in 'the space in the page' in order to facilitate the 'experiential reading.' It is intentionally made and it should be read in this way.

… Interestingly, the published section of the Villa Savoye corresponds to an earlier version of the project rather than to the one that was built. It becomes evident that for Le Corbusier any document from the process, which better reflects the concept of the house, takes precedence over the faithful representation of the actual work. Further more the distinction he makes between real space and the space in the page is equally clear.[35]

Another point is to be said that the station point plays an important role to demonstrate what the architect wants to indicate as the main concern. It indicates the experience, movement and the perception of the user that is designed.

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[33] The picture image of *Villa Schwob* is referred here, published in the *L'Esprit Nouveau* 6, 1921.

[34] Beatriz Colomina, "Le Corbusier and Photography," Assemblage, No. 4, Oct. 1987: 12.

[35] Ibid. Colomina.1987: 14.

Perspective views showing the building at eye-level or as normally seen from the ground below, however, stress the relation of the building to the perceiver, especially views in which the building is set at an angle rather than presented frontally and symmetrically.[36]

Loos created architectural space (sequence of spaces) by referring to the idea of *theatre box* that is designing the gaze, movement and perception of the actor (user) observed by the spectator (habitants). Colomina investigated the space that is designed in terms of the perception, and compared Loos and Le Corbusier in their use of the windowed space. Contrary to Le Corbusier, Loos aimed at a perception in which eye is turned towards the inside not outside.[37] Architect creates a space intentionally taking into consideration the perception and movement of the habitant.

Architecture is not simply a platform that accommodates the viewing subjects. It is a viewing mechanism that produces the subject. It precedes and frames its occupant.[38]

The house is the stage for the theatre of the family, a place where people are born and live and die. Whereas a work of art, a painting, presents itself to critical attention as an object, the house is received as an environment, as a stage.[39]

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[36] James Smith Pierce, "Architectural Drawings and the Intent of the Architect," <u>Art Journal</u>, vol.42, no: 1, 1967: 54.

[37] Look Moller House and Muller House.

[38] Beatriz Colomina, "The Split wall Domestic Voyeurism," <u>Sexuality and Space.</u> 1992: 83

[39] Ibid. Colomina. 1992: 85
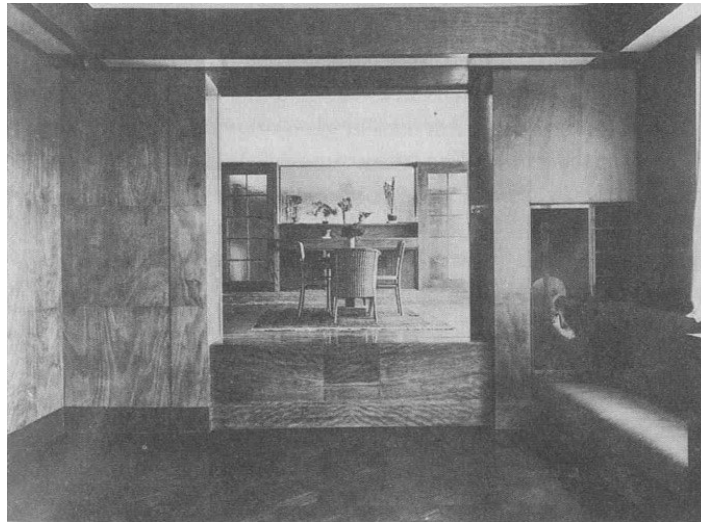
3.12 Moller House, View from the music room to the dining room.

(Source: Beatriz Colomina. "The Split wall Domestic Voyeurism," Sexuality and Space ed. Beatriz Colomina, 1992: 86)

Loos aimed to separate physical and visual connections between spaces. This kind of experience of space is very similar to relationship between the audience and the stage in theatre.[40]

> In the Ruffer house, a wide opening establishes between the raised dining room and the music room a visual connection which does not correspond to the physical connection. Similarly, in the Moller house there appears to be no way of entering the dining room from the music room, which is 70 centimeters below; the only means of access is by unfolding steps which are hidden in the timber base of the dining room. This strategy of physical separation and visual connection, of 'framing,' is repeated in many others Loos interiors. Openings are often screened by curtains, enhancing the stagelike effect. It should also be noted that it is usually the dining room which acts

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[40] For the codification the theatrical practice and the construction of two-dimensional perspective look Book II, *Libri d'architettura* of Sebastiono Serlio.

as a stage, and the music room as the space of spectator. What is being framed is the

traditional scene of everyday domestic life.[41]

3.2.2 'Architect's Route': Describing the Course of Action

- **Movement, Sequence, Continuity; Birth of Cinema**

After the industrial revolution, the studies on efficiency had shifted from the machine to

human body. The subject-matter of the "scientific management" [42] had become human

motion.

> Though the diagram was certainly not the "invention" of scientific management, in its
>
> attempt to shift the object of the diagram from nature to society, from machine to
>
> human body, we begin to discover the central issues of the architectural diagram.[43]

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[41] Ibid. Colomina. 1992: 86

[42] The founder of the scientific management is Taylor. Lillian M. Gilbert as an efficiency engineer made motion diagrams. She had motion studies on the kitchen as an 'industrial production problem'. According to Pai, there are two conceptual formations between the scientific management and the birth of the diagram. First of all, scientific management is operated on the separation of the object and the subject.

For the best critiques see the movie "Kitchen Stories", original name *Salmer fra kjøkkenet* (Sweden), directed by Bent Hamer, Color, 95 min., 2003. Also see feminists discourse.

[43] Hyungmin Pai. "Scientific Management and the Birth of the Functional Diagram," The Portfolio and the Diagram:Orality, Writing, Thpography, and Printed Images in the History of Architectural Theory, Cambridge, Mass., MIT Press, 2002 :163.

The book explores the transformation in the role and status of architects and their images in America during the twentieth century, by examining transformations in architectural publications. The changes occurred in the ways of practicing architecture from the academic practice of the 'portfolio' to the diagram that is considered as a complex formation of texts, concepts, and modes of representation. "The Beaux-Arts-trained architect fashioned the discipline through the portfolio, the discourse of the diagram provides a new range of possibility in the architect's relation to words, images, and buildings".

Motion studies were made displaying diagrams of the woman in the kitchen. Diagram using the architectural representation started. It influenced the conception and the representation of architectural space.

> The diagram is an essentially modern mode of representation because it presumes that "discourse represents not the object itself but the distance between the object and the mind perceiving and the conceiving it."[44]
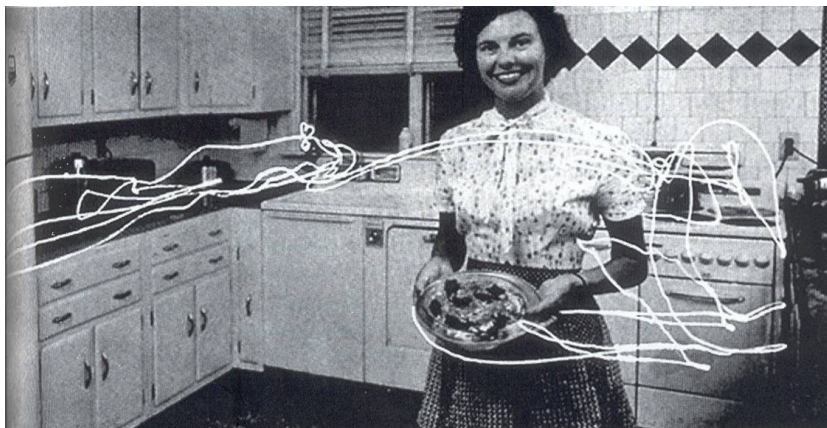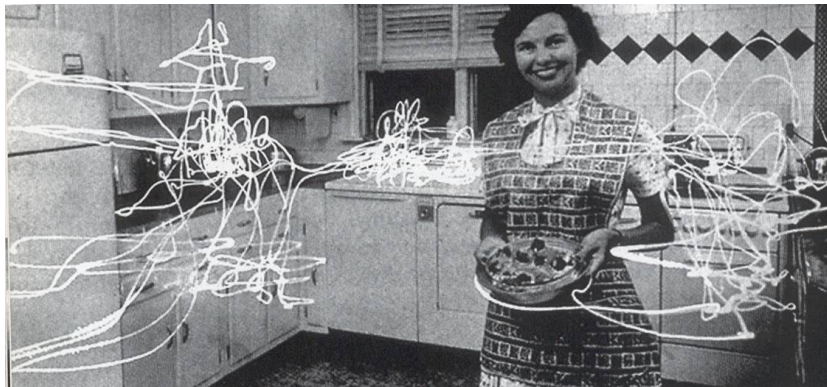
3.13 (top) Studies on Movement: Designing 'ideal shapes of movement'

3.14 (bottom) Studies on Movement: Designing 'ideal shapes of movement'

(Source: Hughes, Francesca. Architect: Reconstructing Her Practice, MIT Press, 1996)

[Top: 78, bottom: 79]

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[44] Ibid. Pai. 2002:163

These pictures display the motion studies in a kitchen that aim to find ideal shapes of 'making a cake.' After the analysis of the process, the new route is designed for the least effort.[45]

Another important thing that affected the architectural conception is the birth of cinema. Around the end of the 19th century, all around the world studies on movement increased. Researchers tried to be successful in passing from the static image to lively image. Studies on recording and projecting the lively image helped the art of cinema to emerge. Cinema is based on the mechanism of perception of the human eye. The movement in a definite speed of a series of static images is perceived as if there are continuous.

19th century stressed the importance of the tactile senses in the perception of space. It was thought that the projected image in the retina did not suffice to derive the spatial depth from it, and that this could be achieved by the motion of the body in space. Now the time concern is taken into consideration in the design process. And its representation in the drawings is very similar to story-boards in film making.

Transformation in architectural thinking about spatial experience has affected how this conception is represented. At the same time the opposite is also valid. Birth of the cinema helped to change conceptions of spatial experience. Movement is the key word in the design process. Architect uses the temporal experience as a guide to design; Le Corbusier said that "Arab architecture teaches us a precious lesson. It is best appreciated walking, on foot. It is

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[45] Also see for the improvements on the kitchen plan layouts …, "Efficiency Methods Applied to Kitchen Design," <u>Architectural Record</u>, March 67, 1930: 291-297

when walking, when moving, that one sees the ordering principles of architecture unfold." [46] Architectural space is begun to concern by a course of action and movement.

Architect imagines/construct the experience of space first in his mind then visualizes it. Colomina states that "Loos privileges the bodily experience of space over its mental construction: the architect first senses the space, and then he visualizes it."[47]

Le Corbusier, in Villa Savoye and also in Villa Myme offers a route for experiencing the space that is designed by him. Undoubtedly, the studies on movement, inventions of different perceptions of movement by getting images one after another by definite speed, influence the architectural conceptions as well. Space is concerned by a course of action and movement.

This kind of reproduction of architectural space is not seen in only architectural drawings but also in photographs. Another inspiration that Le Corbusier got from cinema and of course photography is the idea of framing. But now it has the temporal dimension as well.

> The look is directed to the exterior in such deliberate manner as to suggest the reading of these houses as frames for a view. Even when actually in an "exterior," in a terrace or in a "roof garden," walls are constructed to frame the landscape, and a view from there to the interior, as in canonic photograph of Villa Savoye, passes right through it to the farmed landscape. These frames are given temporality through the *promenade*. Unlike Adolf Loos' houses, perception here occurs in motion. It is hard to think of oneself in static positions. If the photographs of Loos's interiors give the

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[46] As quoted in Pierre-Alain Croset, "The Narration of Architecture." Architecture Production, Ed. by Joan Ockman, trans. by Sebastiano Brandolini and Francesco Garofalo. (Originally cited in Le Corbusier and Pierre Jeanneret, Oeuvre compléte de 1929-1934, 5th ed., Zurich: Girsberger, 1952: 24.)

[47] Beatriz Colomina. "The Split wall Domestic Voyeurism," Sexuality and Space, ed. Beatriz Colomina, 1992: 91

impression that somebody is about to enter the room, in Le Corbusier's the

impression is that some body was just there …[48]
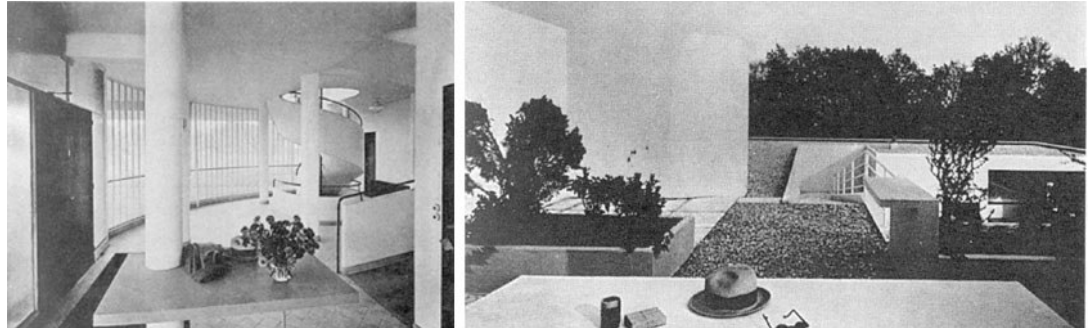
3.15 (left) Villa Savoye, view of the entrance hall,

(Source: Beatriz Colomina. "The Split wall Domestic Voyeurism," Sexuality and Space ed.

Beatriz Colomina, 1992: 98)

3.16 (right) view of the roof garden

(Source: Ibid. Colomina. 1992:100)

– Le Corbusier's Concept of '*Architectural Promenade*' [49]

In modern architecture, the notion of a dynamic space found its clearest expression in the

designs of Le Corbusier. The projects for houses made by Le Corbusier's in the twenties

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[48] Ibid. Colomina. 1992: 98

[49] For the extent investigations on the concept *la promenade architecturale* see,

François Penz. "The Architectural Promenade as Narrative Device: Practiced Based Research in Architecture and Moving Image" Digital Creativity, Vol. 15 Issue 1, March 2004: 39-51

Geoffrey Baker. "James Stirling and the *promenade architecturale,*" Architectural Review, Dec. v. 191 n. 1150, 1991: 72-75

Marcel Ferrier. "Promenade Architecturale," Work,Bauen+Wohnen, May no.5, 1988: 18-19

Jürgen Joedicke. "The Ramp as Architectonic Promenade in Le Corbusier's Work," Daidalos, n. 12, 1984: 104-108

Yuzuru Tominaga. "The Houses of Le Corbusier and the Image of Movement: Part 1. The Promenade Architecturale as a Means of Regeneration," GA Houses, no:38, 1993: [10]-19

Yuzuru Tominaga. "The Houses of Le Corbusier and the Image of Movement: Part 2. The Image of the Movement and the Image of the Time," GA Houses, no:39, 1993: 12-23

need to be understood from the point of view of the moving body. The movement through the building is channeled through architectural elements, like the ramps in the Villa Roche and Villa Savoye. Other elements, like the spiral stair in the Villa Savoye, express in their forms the idea of dynamism and movement. The forms give expression to the new spatial concept: a space that flows continuously throughout the house, from the inside to the outside, i.e. *la promenade architecturale.*

Although movement is the key term throughout the 20th century architecture; *architectural promenade* is known distinctively as a *modus operandi* of Corbusian architecture. Le Corbusier used the concept of 'promenade' to connect abstract forms for example *plant libres*. Soriano claims that "…, he introduced the concept of the architectural promenade- a fixed, single- file itinerary that would link the spaces in a narrative manner." [50] In his investigations about *plant libres* by using superimposition of slabs, he also tried to establish continuity between the spaces by developing the concept of 'architectural promenade'.

> We may replace 'voids that connect' with 'ramps and planes' that bond. The result is the production of spaces that are continuous in their connections but discontinuous in their form and scale: continuities over distal points and diversities over contiguous points. We produce a temporal dimension without the need for narrative itineraries. The space is also read as an event and not as a place it can be defined by an action.[51]

The sequences of the spaces are planned with regard to the shifting or changing of the place of the viewpoint. This kind of temporality that is experienced by the observer is designed and incorporated during the design process. It is a temporal order that is intended to be expressed.

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[50] Frederic Soriano, "Towards the Definition of Deep Plan, the Anamorphic Plan and the Fluctuating Plan," El Criquois, issue 81-82, 1996: 7

[51] Ibid. Soriano. 1996:12

Villa Savoye in Poissy
Maßstab 1:500/Scale 1/500

Dachgeschoß/attic

1. Obergeschoß/upper story

Erdgeschoß/ground floor
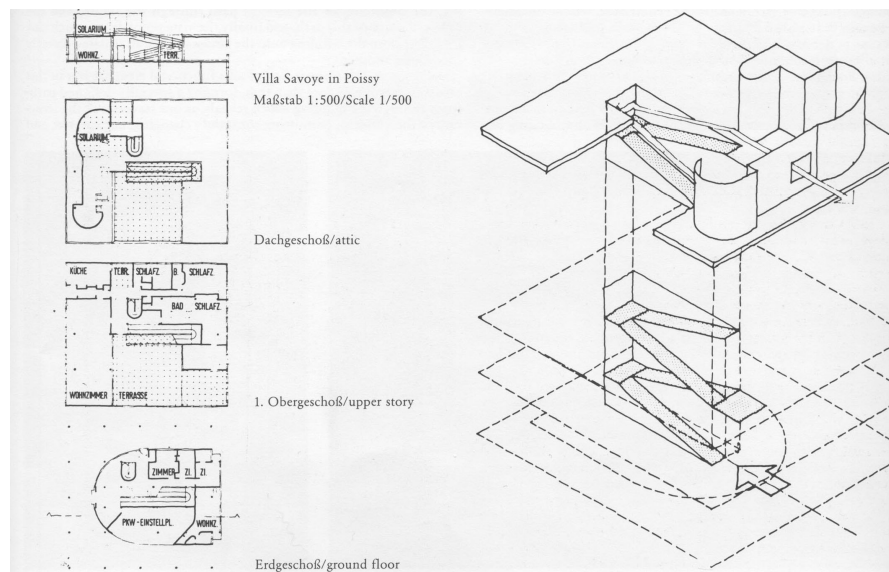
3.17 Villa Savoye in Poisy: section, floor plans and isometric drawings of the

ramp.

(Source: Jürgen Joedicke. "The Ramp as Architectonic Promenade in Le Corbusier's

Work," Daidalos, N. 12, 1984: 105)

Drawings display the layout and the direction of the movement. As seen from the drawings,

movement is the most important generator of the form. The formation of the idea is the

structuring of the path that is intended to be followed by the architect.

Le Corbusier also uses the idea of framing while designing the promenade. Very similar to

the framing in cinema, the succession of the framing is designed. In his drawings, it is seen

that there is the superiority of horizontal windows rather than the vertical ones.[52] As the

windows are horizontal, which is one of the principles of 'Five Points' – (1) pilotis, (2) roof

garden, (3) free plan, (4) continuous horizontal window and (5) free façade – it provides

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[52] For the dialogue between Auguste Perret and Le Corbusier about *porte fenêtre* and fenêtre *en longueur*, see Beatriz Colomina. "Le Corbusier and Photography," Assemblage, No. 4, 1987: 6-23

Also See Bruno Reichlin. "The Pros and Cons of the Horizontal Window," Daidalos, no.13, 1984: 64-78

scenes from nature like paintings. Diversity of the scene while moving in Villa Savoye is achieved from the ground floor to roof garden by the diversity of the framing of landscape. The movement is triggered by the 'frames' that produces a continuous image of changing perspectives.

3.18 Villa Savoye, Le Corbusier

(Source: Jürgen Joedicke. "The Ramp as Architectonic Promenade in Le Corbusier's
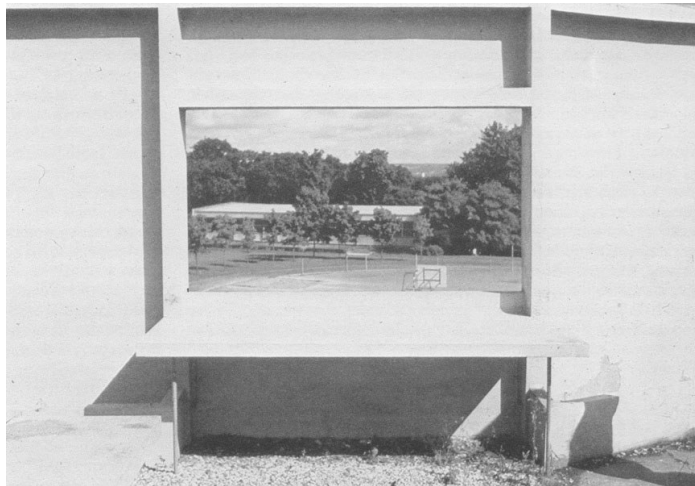
Work," Daidalos, N. 12, 1984: 107)
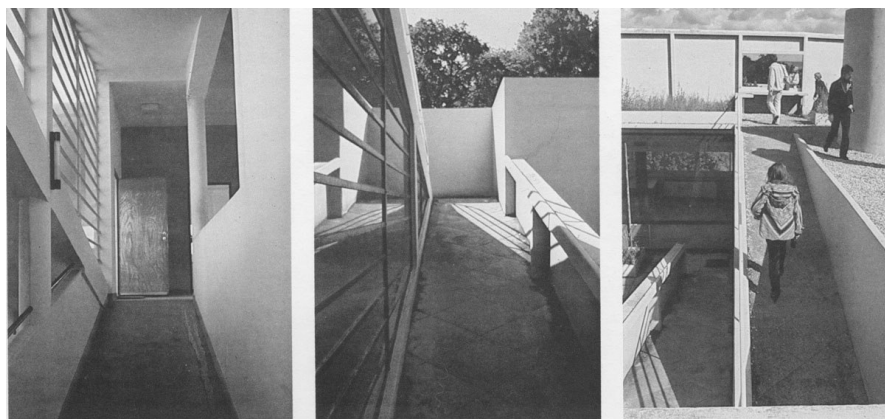
3. 19. Scenes from the ramp, Villa Savoye, Le Corbusier

(Source: Ibid. Joedicke. 1984: 107)

Every frame comes together and produces a series of consecutive frozen scenes for the architect's route that is intended to be followed. *Architectural promenade* is not only a tool to incorporate the spatial experience that is conceived, in the design process, but also it is a conception for generating form. While designing, Le Corbusier makes different layers of meaning. Firstly, he designs by using abstraction and pure geometry. Voids and solids are transformed in to slabs and ramps by *promenade*. Soriano claims that OMA's model and section for the Jussieu Library and Enric Miralles' Valencia University Lecture Hall are the examples of continuous plan shapes in this respect.

> The approach as one leaves the drive is a carefully orchestrated "*promenade*" of a kind familiar from the villas of the twenties. One is guided gradually past the glazing to one end of the lounge and towards views of the landscape cut out between the pilotis. One ascends shallow steps to a slightly raised podium on which the main box sits. … To enter the building one has to circle back through the structure and thread beneath the superstructure on a diagonal path. One than penetrates the hall and glimpses a series of transparent planes which allow a clear inspection of the options for movement. … Throughout this sequence one recalls Le Corbusier's dictum that "… architecture can be judged as dead or living by the degree to which the rule of *movement* has been disregarded or brilliantly exploited". The dynamic play of the main volumes seems to illustrate the difference between functions, but also the path that it is intended one should follow. [53]

Le Corbusier's invention of *architectural promenade*, an architect's itinerary that is designed to be followed, is an endeavor to construct one's experimentation. It also helps connecting spaces. The route from the entrance to the roof garden in addition to organization of spaces, offers a variety of vistas. In this example in which moving is considered as architect's own

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[53] William Curtis, "Ideas of structure and structure of ideas: Le Corbusier's Pavilion Suisse, 1930-31," <u>JSAH</u>, vol.40, no:4, 1981: 296

design modus-operandi, the plan may be understood as a form of abstraction of experiences of which architects have already -memorized- the knowledge. Architects imply the bodily experience that is already defined.

In the project for Mme. Meyer, 1925, Le Corbusier drew a sequence of vignettes to accompany the written description of the project sent to the owner. The sketches are like a guided tour through the house. (Figure 2.3)

L'architecture d'aujourd'hui [54] is a film by Pierre Chenal with Le Corbusier (1930-31). This film can be thought as a product of architectural representation. Film can be considered as a different mode of reproduction of architectural space. This kind of reproduction is a way to illustrate the architectural space by emphasizing the architect's route. One of the advantages with comparison to other modes of representations is that it is more close to reality, but it is still reproduction. It functions to emphasize the architect's ideation of one's experience of the space. The mode of expression is more illustrative.
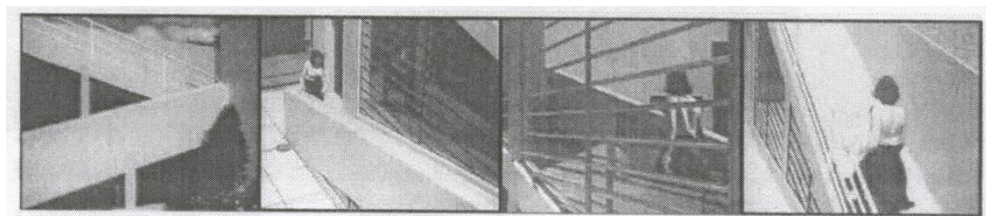
3.20 The Ramp Scene of the Villa Savoye (Chenal, 1930)

(Source: Penz, François. "The Architectural Promenade as Narrative Device: Practiced Based Research in Architecture and Moving Image" Digital Creativity, Vol. 15 Issue 1, March 2004: 43)

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[54] http://www2.uni-jena.de/philosophie/medien/Vortraege/Amsterdam/architecture_and_film.htm [last accessed 25 May 2005] Go for seeing the abbreviated version of the film.

In this regard, architectural scenario can be explained by describing the route designed by the architect. It might be both generative as a design input and illustrative in connecting the spaces in narrative manner.

3.2.3   Concept of 'Event' *

Structuring the experience might also be interpreted as forming the instant events while defining the architectural space. The concept of 'event' can be referred as a moment of the architectural program. Conceptualization of the space considering time that accommodates different events or actions can be represented by the ways of overlapped perspectives, superimposition of the plan, section or even perspective.

-   Overlapped Perspectives, Superimposition, Multiple Viewpoints

Tschumi states that architecture can be identified with relationships between physical space, movement and event. Event differs from the program that is pre-defined or pre-known, it is not possible to be known before and it is unpredictable. For him, event is an instant moment of forming the different conditions with physical space. Event architecture or space is the collisions of events that it contains.[55]

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* Some would use the term event instead of function or program. Here it is referred the definition by Tschumi.

"Event: an incident, an occurrence; a particular item in a program. Events can encompass particular uses, singular functions or isolated activities. They include moments of passion, acts of love and the instant of death.
Events have an independent existence of their own. Rarely are they purely the consequence of their surroundings. Events have their own logic, their own momentum. In literature, they belong to the category of the narrative (as opposed to the descriptive)."

Originally quoted from a lecture given at the Architectural Association on 8 June 1982, Bernard Tschumi, Manhattan Transcripts, Academy Editions, 1994: XXI

[55] … Çağdaş Dünya Mimarları: Bernard Tschumi, Boyut Yayın Grubu, 2000.
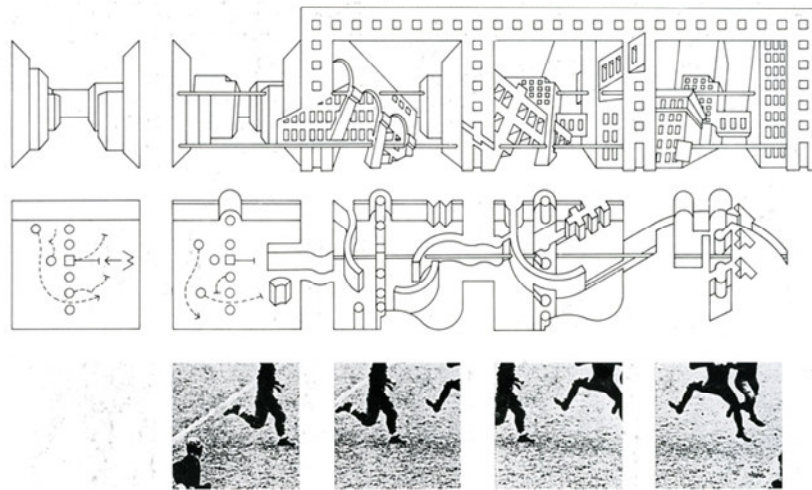
3.21 Manhattan Transcripts by Tschumi

(Source: Tschumi, Bernard. <u>Manhattan Transcripts</u>, Academy Editions, 1994)

Tschumi uses different codification or architectural notations, he defines *The Manhattan Transcripts*:

> The Manhattan Transcripts differ from most architectural drawings insofar as they are neither real projects nor mere fantasies. They propose to transcribe an architectural interpretation of reality. To this aim, they use a particular structure indicated by photographs that either direct or 'witness' events. At the same time, plans, section, and diagrams outline spaces and indicate the movements of the different protagonist – those people intruding into the architectural 'stage set'.[56]

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[56] Bernard Tschumi. <u>Manhattan Transcripts</u>, Academy Editions, 1994:7

3.3. 'Architectural Scenario' as a Tool to Determine an Abstract Theme and Process of Design

Although we referred to AS as an abstract theme and/or a tool to determine the process of design in Chapter Two, once more we would like to underline that AS might be the meta-structuring of an idea for producing architectural form or might be the outline of any design process. For the configuration of architectural elements, architect may use the abstract themes such as contrast, balance, hierarchy, rhythm, harmony and benefit from the conditions based on gestalt principles, such as proximity, similarity, closure, good continuation, to achieve unity.
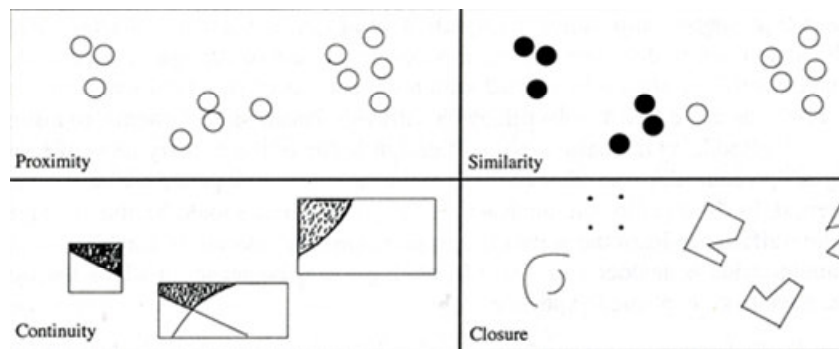
3.22 Conditions that Facilitate the Organization

(Source: Aytaç-Dural, Tuğyan. Theatre-Architecture-Education: Theatre as a Paradigm for Introductory Architectural Design Education, Ankara: METU Faculty of Arch. Press, 1999)

Scenario of form making process is different than the scenario of architectural space. Basic principles of design constitute the general framework throughout the process of architectural design and despite the misconceptions about their limitation they can provide the architect to create new formal compositions. For example, these visual themes and the conditions illustrated above serve generating architectural space in abstract level. Basic principles of design are used for making formal compositions that generate architectural space.

3.4. 'Architectural Scenario' as Utopia: Projection of Architectural Fantasy

Architectural fantasies[57] provide the new formal repertories. They provide the ground for the architect to design with utmost freedom and pure imagination. They are not alike other conventional architectonics of their periods. It is difficult to classify architectural fantasies but we can say some will have potential to be realized in terms of developments of technology some don't. They can make the architectural conceptions to change. They are accepted as visual manifestation of new ideas and new forms.
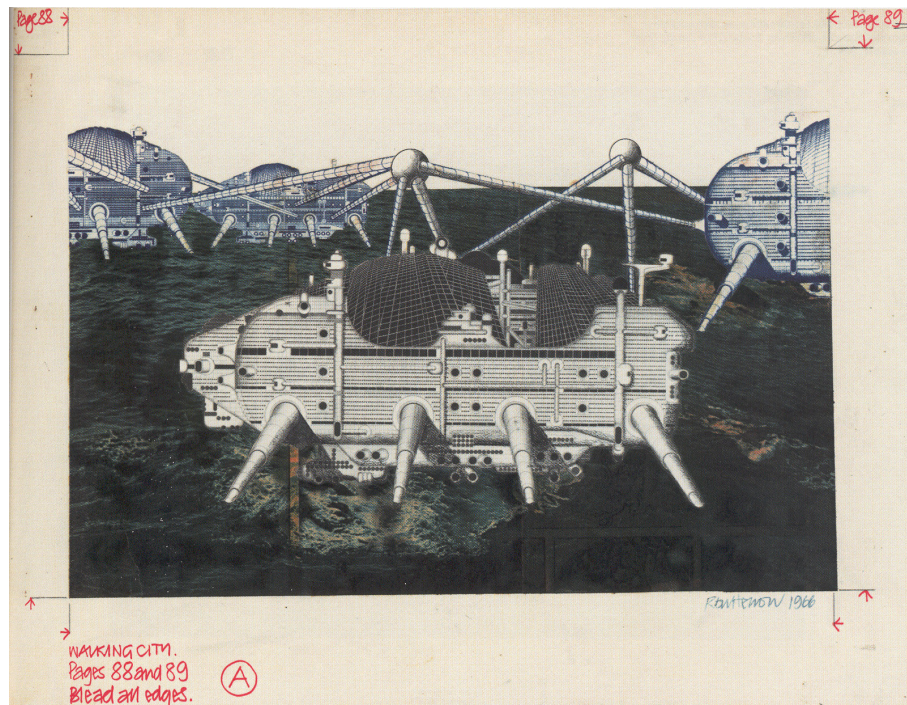
3.23 Walking City on the Ocean Project, Ron Herron (Archigram) 1964-1966

(Source: ..., Envisioning Architecture: Drawings from the Museum of Modern Art, ed. by

David Frankel, Department of Publications, The Museum of Modern Art, New York. 2003:

86)

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[57] Ulrich Conrads and Hans G. Sperlich, The Architecture of Fantasy: Utopian Building and Planning in Modern Times, trans., ed. and exp. by Christiane Crasemann Collins and George R. Collins, Frederick A. Praeger, Publishers, New York, Washington, 1966.

Architectural fantasies are also used by other disciplines to create environment, especially in cinema. It is possible to create environment (context) that can never be realized to complement the fiction of the cinema. In architecture, architect can be totally free to produce conditions and circumstances of the environment in the representation. It can be said that architectural fantasies may be both generative and illustrative.

3.5. Epilogue

So far architectural scenario was examined in architectural representations of which consequences and effects can be seen. Carlo mentions the developments in information technologies, which created the shift from script to print. At the beginning of the modern age, architectural practice had such a direction to that architectural images are mechanically reproduced for the transmission of the architectural knowledge. Revelation of architect's design ideas should first appear in a different medium; architect should have the ability to draw. It is well known that in Renaissance, architects were also very talented painters. Architects had to be well informed about the knowledge of construction, for their projects to be erected (realized), and had to be well equipped with the knowledge of representation for better expressing their ideas. Recent architectural practice is not so much different than the one that was set in Renaissance; and now there will be the next shift from printed to virtual/digital representations.[58]

Digital representations of architectural space are drawn upon cinematic tools. Simulations, and other types of modeling techniques, of which the products are moving images, are similar to cinematic way of experiencing space. One of the advantages of this form of representations is that it is easy to express the architectural space because of their similarity

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[58] Mario Carpo. <u>Architecture in the Age of Printing</u>, 2001

to the real case. It allows the viewer to understand and visualize the building (end product) through movement of the body in the space. But architectural space is still fragmented and framed likewise in the film and in architectural projections as mentioned before. It is more useful to illustrate the end product, rather than speculate and generate.

There is an in-between phase in regard to the ways of producing architectural space. The phase between the one only generated and illustrated by hand and the other only generated by computer is the way that "computer is not a generative device, but a tool to create a simulacrum of the real and extend an idea that has been 'thought through' by hand." [59] Though the idea may also be generated and evolved with the way of manual production (handmade drawings), using computer illustration and taking feedback from it will provide the changes of thinking way of the architect. In addition to drawing in architecture is an area of diffusion of the idea, is also of creating and evolving of the idea.

> The most innovative architects, those who do work through digital processes, still rely on hand-drawn representation. Because the computer does not discriminate information it receives, there is an even greater need for hand drawings and diagrams to sort out ideas.[60]

It may be a good question to further investigate the validity of architectural scenario in the new forms of architectural production especially when computer based form-making process is concerned. It can be said that the depiction of architectural scenario is manifested differently in respect to new design processes. The forms of the architectural representations that produced in the digital medium will alter – also is altering – the course of architecture

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[59] Sophia A. Gruzdys. "Drawing: The Creative Link". Architectural Record, Vol. 190, Issue 1, Jan. 2002: 67. Gruzdys states the way of architectural production and its representation of the firm Diller+Scofidio.

[60] Ibid. Gruzdys. 2002:65

and the role of architect. From now on the architect who inputs his/her concerns i.e. specific dimensions or problems in numerically in the computer, will be – or may be – the one who picks and ultimately makes a decision for the end form from out of the countless options produced by the computer.[61] A further point of investigation may productively be pursued in the significance of the architectural scenario as it affects new methods of producing architectural space.

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[61] This subject matter was discussed in the course of "ARCH 717: Advance Topics in Digital Constructivism", moderator is Zeynep Mennan, 2003-2004 spring semester.

CHAPTER 4

CONCLUSION

In this thesis we have tested the significance of 'architectural scenario' for the production of architectural space from different viewpoints. Questions that are mentioned in the 'Introduction' part constituted the whole thesis. We believe that AS is valid inherently in the process of design, unless it is hidden or cleared out obviously in the architectural representations.

In Chapter Two it was argued that 'Architectural Scenario' is a process of image construction. Architectural drawing as 'product of imaginative universals'[1] is the object of engendering and giving meaning to architectural thought. It is hard to imagine a building and draw an idea without conceptualizing on paper. With the invention of printing, reproduction of architectural images in treatises affected the transmitting of architectural knowledge. And this latter development resulted in changing the role of the architectural drawings and ultimately, led to transformation on architectural conceptualization.[2] Increasing importance

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[1] Marco Frascari. "A New Angel/Angle in Architectural Research: The Ideas of Demonstration." <u>JAE,</u> Vol. 44, Issue: 1, 1990

[2] Mario Carpo. <u>Architecture in the Age of Printing : Orality, Writing, Typography, and Printed Images in the History of Architectural Theory</u>, Cambridge, Mass. : MIT Press, 2001

of visuality during the process of design has suggested new implications for architectural expression.

To clarify the meaning of AS, we referred to the art of cinema and dealt with the relationship between initial film scenario, the screenplay and film. The connection between architecture and film is important for the following reason: Projected images employed in both architecture and cinema, the former of which apparently on the flat surface which may be precursor of an edifice likewise scenario of a film might be considered as mental image of designer despite of their different modes of representation. Cinematic paradigms are used to elucidate the phenomenon of architectural scenario. Both architectural projections and film scenario represent the end products in fragmentary manner. Because of their inherent limitations and properties, they do not suffice in providing all aspects of end products: an edifice or a film. As they both are considered as artifacts as well, their modes of representation affect the conceptualization. *Architectural Scenario* as artifact is a mode of representation that presents the architectural space in a fragmentary manner.

In exploring the relationships between process and the representative product in both realms, two different reproductions of the architectural space with specific concept were examined. We looked into the drawings by Le Corbusier and the film *L'architecture d'aujourd'hui* namely 'Architecture Today' by Pierre Chenal with respect to same concept named 'architectural promenade.' *Architectural promenade* was examined in different modes of representation. The drawings by Le Corbusier allow us to experience architectural space in sequential manner as in a film. However, in film, the manifestation of the notion of architectural promenade inspired more narrative expression of space. Depiction of the notion of architectural promenade in the drawings was used not only for integrating the spaces in narrative manner, also used for producing the abstract form composed of the solids and the

voids. *Architectural Scenario* is an artifact that changes in relation to changing architectural conception.

In the third part of this thesis, one of the questions was related to the illustrative and generative character of the AS. Inquiry focused on the argument that innovations in projection techniques and image construction and developments in other disciplines correlated to optic and visual arts as these art forms affected architectural thinking and conceptions of architectural space. Because of the attributes of the subject-matter of the thesis, it was difficult to identify the subject-matter as a single occasion. It should be noted that the notion of architectural scenario must be considered as a whole.

Architectural scenario is considered to be *generative* when it is utilized as a means for structuring all the decisions or/and all intentions about the architectural space. The architect as s/he takes start begins working on an AS; this is a process of image construction and terminates with the projection of the edifice. On the other hand it becomes *illustrative* both at the end of the design process and during the course of projection; it acts as a tool to visualize the end product. However, it is not easy to talk about a sharp distinction between the two since they both serve to represent something be it generative or narrative.

It was quite difficult to specify a definite case when we scanned the examples in their historical succession. We cannot say solely illustrative or generative for any one of these examples; it is even impossible to say which quality is dominant in most of cases because of the narrative/generative oscillation. Still we can speculate on the difference in between to elucidate or basic question for understanding the concept of AS. When architectural scenario illustrates the architectural space, it is narrative and supplementary to the visual material as an additional medium for representation. It narrates the "story' of the building, which may not be expressed in visual terms. The visual material based on conventions thus may become

comprehensible by other agents. Sometimes we encounter architects using narration to enhance the visual material for legitimizing their ideas. When *Architectural Scenario* is thought as illustrative, it can be said that architectural space is defined in terms of 'AS'

When the architectural scenario generates the architectural space, it is considered as a design strategy. It is the 'meta-structuring' of architectural knowledge. It is specific to architect's own invention and/or method to create the space. It is also seen in the way of representing. AS sometimes structures, sometimes expresses the mental activity, hence we argue that illustration and generation of ideas during the process of design comes out to complement each other. *Architectural Scenario* is a tool for representation either illustrates or generates architectural space.

Thus, we conclude that *Architectural Scenario* should be understood as whole temporal projections of the architect about the end product that may or not turn out to be the edifice and should be conceived as a different mode of architectural representation. The architectural drawing, in its trajectory from the emergence, continues to act as a visual mediator of the architect's material construction and accommodates the architect's mental conception.

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