

TRACING REPETITION IN THE ARCHITECTURAL PLANS
OF
ENRIC MIRALLES

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OF
ENRIC MIRALLES**

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ABSTRACT

TRACING REPETITION IN THE ARCHITECTURAL PLANS OF ENRIC MIRALLES

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The concept of repetition is mainly developed by the theoretical realms of philosophy, literature and psychoanalysis. This thesis aims to reclaim repetition from theoretical realms of these mediums and to originate a link between repetition and architectural praxis as a drive of cognitive process and methodological execution. In this point, Enric Miralles' architecture provides a substantial ground to seek repetitional operations. The concept of repetition enters Miralles' architectural operations as a method, or as a tool, necessary to perform his architecture. It is an indispensable part of his *modus operandi*. The "systematic repetition" that he adopts within his practice is a composition of two main components, namely "procedural" and "act of repetition;" the former refers to repetition of the same form through different projects, while the latter refers to the repetition of the same sketch over and over again. Miralles' performance of repetitional procedures and acts is operational within architectural praxis and it holds the power to transform its process, and in turn, its object.

Within this context, repetition concept, having a major role in Miralles' working method, is investigated in relation to its status under Michael Hays' discussion of architectural late avant-garde. Since repetition concept of Miralles is directly related with Deleuze's theoretical disclosures on the subject, an additional framework is drawn under Deleuzean perspective. In this light, in the scope of this study, architectural drawings and sketches of Enric Miralles are subjected to analysis to demonstrate the potentiality of repetition in practical execution.

Keywords: Repetition, Procedural Repetition, Act of Repetition, Enric Miralles, Architectural Drawing, Architectural Sketch, Architectural Late Avant-Garde, Deleuze.

ÖZ

ENRIC MIRALLES'İN MİMARİ PLANLARINDA TEKRARIN İZİNİ SÜRMEK

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Tekrar kavramı, temel olarak, felsefe, edebiyat ve psikanaliz teorileri tarafından incelenmiş ve geliştirilmiştir. Bu tez, “tekrar” ı bu ortamların teorik alanlarından geri kazanıp, bilişsel sürecin ve metodolojik icranın bir yolu olarak, “tekrar” ve mimarlık praksi arasında bir bağ oluşturmayı amaçlar. Bu noktada, Enric Miralles’in mimarlığı “tekrar” ile ilgili süreçleri araştırmada önemli bir zemin sağlar. “Tekrar” kavramı Miralles’in mimari uygulamalarına, mimarlığını sürdürmesinde gerekli bir metot ya da bir araç olarak girer. Onun “çalışma metodu” nun ayrılmaz bir parçasıdır. Miralles’in pratiğinde benimsediği “sistemik tekrar,” “prosedürel tekrar” ve “eylem olarak tekrar” olmak üzere iki ana bileşenden oluşur. “Prosedürel tekrar” aynı formun farklı projelerde tekrarını işaretlerken, “eylem olarak tekrar” aynı eskizin defalarca tekrarını ifade eder. Miralles’in “tekrarsal” süreç ve eylemleri, mimarlık pratiğinde uygulanabilir olmasıyla, kendi sürecinin yanında, nesnesini de dönüştürecek gücü elinde tutar.

Bu bağlamda, bu çalışma Miralles’in çalışma metodunda önemli bir yer tutan “tekrar” kavramını, Michael Hays’in Mimari Geç Avangard tartışmasındaki yeri üzerinden inceler. Miralles’in “tekrar” kavramı direkt olarak Deleuze’un bu kavram üzerine geliştirdiği teorisi ile ilişkili olduğundan; Deleuzeyen bir

perspektiften, ek bir çerçeve oluşturur. Bu bilgiler ışığında, Enric Miralles'in mimari çizimleri ve eskizleri üzerinden, pratiğe dair uygulamalardaki potansiyelini deneylemek amacıyla analiz yapar.

Anahtar kelimeler: Tekrar, Prosedürel Tekrar, Eylem olarak Tekrar, Enric Miralles, Mimari Çizim, Mimari Eskiz, Mimari Geç Avangard, Deleuze.

To My Parents Besim and Nermin

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PREFACE

My personal journey on Enric Miralles began in Spain in 2009 during my studentship in Universitat Politècnica de València under the Erasmus Exchange Program. The first architectural trip that I attended was a tour to his buildings in Barcelona, which continued as educational briefs, exhibitions and seminars on his architectural practice during the academic year. During my graduate years I decided to further my research on his drawings. In December 2014, in the pursuit of extending my knowledge on Miralles, I moved to Barcelona for a short period of time to do research in the archive of Fundació Enric Miralles and visit his projects. I visited the archive and his office EMBT, where I had the chance to examine his sketches for the projects; and in the meantime, to visit the realized projects of the drawings I studied. I could observe the working method of the office, which still follows the path Miralles founded. I was able to use the sources of the Library of ETSAB where I had the chance to reach Miralles' PhD thesis, which was crucial to survey his theoretical background and understanding of architecture. It was fortunate to find the rare copy of his thesis and to use it as guidance for my study. In accordance with my interests in representation and exhibition curatorial studies during my graduate years, I attempted to bring one of the exhibitions on Miralles' architectural approach which was held in Fundació Enric Miralles to Ankara and İstanbul. After all the arrangements between Spain and Turkey, locations and dates for the exhibition are set; however, due to economic difficulties, it has been delayed to future date. This study could not be accomplished and shaped in its current form without the period spent in Spain and without the help of the aforementioned institutions; the encouragement my supervisor Prof. Dr. Ayşen Savaş provided along the way and the help of my friend Dicle Taşkın in Barcelona.

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CHAPTER 1

INTRODUCTION

1.1.Enric Miralles and his *Modus Operandi**

Personally, I find much more interesting an architect like Enric Miralles, who has, you could say, conservative theoretical ambitions but a radical practice. Think of the way in which Enric Miralles relates his work to a sense of place, to tectonics and construction, his affinity for the work of Alison and Peter Smithson – all of these apparently “conservative” themes in today’s discourse. Yet for all that (or perhaps because of that), his architecture is highly experimental, radical, and original.

Stan Allen—Relations , 1999

Enric Miralles, an architect who had practiced during the second half of the 20th century, along with his buildings is known for his drawings—“from his initial sketches to the drafted plans.”¹ (Figure 1.1) In order to comprehend

* This is the Latin phrase that indicates the “method of operation” of (in this text) an architect.

¹ Juan Antonio Cortés, “The Complexity of Real” in El Croquis: EMBT Enric Miralles / Benedetta Tagliabue 2000-2009: After Life in Progress, No.144. El Croquis: 2009, p.19

Miralles' work and in turn to perform analysis upon it, it is necessary first to focus on his methodology—*modus operandi*—where main emphasis would inevitably be on his drawings, and equally on the theoretical and intellectual disclosure he continually provided along with his practice.² The term *modus operandi* includes the methodology of the architect used throughout his practice, his stylistic approach, his understanding of architecture and theoretical background traced in the drawings and the built work as a total. Relatedly, the concept of repetition, the main theme of this thesis, enters Miralles' architectural operations as a method, or as a tool, necessary to perform his architecture. As a concept mainly developed beyond the theory of architecture, repetition has the virtue to be reflected to architectural operations. This study aims to question the practicability of repetition within architectural praxis with regard to Miralles' architectural operations.

Enric Miralles was born in Barcelona, Spain in 1955. He studied architecture at ETSAB, Barcelona Technical School of Architecture, and graduated in 1974.³ Between the years 1973 and 1983 he collaborated with Albert Viaplana and Helio Piñón. For the academic year 1980-81, he went to Columbia University as a Fullbright guest lecturer. In 1985, he furthered his career with Carme Pinós. In 1993, Miralles founded his office, EMBT, with Benedetta Tagliabue. (Figure 1.2) Since 1985, he had been an active professor in different universities.⁴ Miralles died in 2000 at the age of 45 from a brain tumor.

² Juan Antonio Cortés, *ibid.*

³ Escuela Técnica Superior de Arquitectura de Barcelona

⁴ Since 1985, he was a professor at ETSAB. In 1990, he continued his academic career as Director and Professor of the Master Class at Städelschule of Frankfurt. Beginning from 1992, he served as the "Kenzo Tange Chair" professor at Harvard University.



Figure 1.1 Enric Miralles Drawing in his Office

Source: <https://homenajeaenricmiralles.wordpress.com/2013/04/24/definir-agrupar-y-clasificar/> Reached at 10.Apr.2017



Figure 1.2 EMBT Studio

Source: “Miralles Tagliabue Studio” <http://www.mirallestagliabue.com/studio/> Reached at June 2017

As he conceived drawing and the intermediate stages of the design process as the primary goal and object of his architectural practice, ironically enough he himself did not had the chance to realize most of them.⁵ Apart from his famous project Igualada Cemetery; when he died, several projects conducted in the office, such as, Santa Caterina Market, Scottish Parliament Building and Gran Via Project, remained unfinished; yet, the office continued practice. (Figure 1.3 and 1.4) He had produced drawings and sketches of the projects that would later be realized by Benedetta Tagliabue and her associates.

To understand Miralles' architecture, it is necessary to focus more on his practical operations—to his *modus operandi*. As developing his projects, in the creative process, Miralles rejects to adhere to a “prior idea.” Instead, he draws without having a definite concept, to see where the project is leading.⁶ He prefers to replace the attitude of “having an imposed idea to the whole” with “being in an ‘open dialog’ with the project.”⁷ Thus, in every project, by avoiding the imposition of an idea *a priori*, there occurs a “conversational process.”⁸ Being in a perpetual conversation with the project, Miralles enters to an empirical path within architectural practice, that is, a mode of empiricism is furthered at each step of a design process. Miralles states that, for him, the most interesting part of a design process is the intermediate stage where a

⁵ Benedetta Tagliabue, “Don Quixote’s Itineraries: or Material on the Clouds” Enric Miralles: Mixed Talks. Academy Editions: 1995, p.118 Also see, Beatriz Colomina and Mark Wigley, (interview with Benedetta Tagliabue) “A conversation with Benedetta Tagliabue” in El Croquis: EMBT Enric Miralles / Benedetta Tagliabue 2000-2009: After Life in Progress, No.144. El Croquis: 2009, p.244

⁶ Benedetta Tagliabue, “Families: Notes on work by EMBT Studio form 1995”, in El Croquis: EMBT Enric Miralles / Benedetta Tagliabue 1996-2000: Maps for a Cartography, No.100/101. El Croquis: 2000, p.23

⁷ Yoshio Futagawa, “Enric Miralles 1955-2000” in Studio Talk: Interview with 15 Architects. A.D.A Edita: 2002, pp.638-667

⁸ Juan Antonio Cortés, *op.cit.* p.21

possible idea for the next step appears.⁹ Therefore, rather than primarily considering the formal outcome of a project, the end product is valued by its derivation from a progressive mechanism invented by the architect every time due to the circumstantial conditions of the project ongoing. Today's problematic of architectural production equally requires such an attitude towards design methods, which Alberto Perez-Gomez puts as "it is imperative" that an architect should not "take for granted certain assumptions about architectural ideation" and "redefine [his] tools in order to generate meaningful form."¹⁰ For Miralles, if the final form does not reflect the process, it is regarded as ineffectual.¹¹ Such an assertion about the process being evidential on the end product is approached by Michael Hays including "defamiliarization" and "estrangement" concepts into the argument. Since with these concepts the object's production process and its representations are acknowledged "as part of its content" as:

Any traditional or conventional form is likely to have more authority, to engage our assent more readily, than a form that tries to expose the complex matrix of disciplinary procedures and institutional apparatuses through which the object is actually constructed. Part of the power of such a representational architecture lies in its suppression of its procedures of production, of how it got to be what it is. Strategies of defamiliarization and estrangement, by contrast, attempt to make the processes of the object's production and the mechanisms of its representation part of its content. The object does not attempt to pass itself off as unquestionable, but rather to lay bare the devices of its own formation so that the viewer will be encouraged to reflect critically on the particular, partial ways in which it is constituted, the particular ways it takes its place.¹²

⁹ Beatriz Colomina and Mark Wigley, (interview with Benedetta Tagliabue), *op.cit.*

¹⁰ Alberto Pérez-Gómez and Louise Pelletier, "Architectural Representation Beyond Perspectivism in Perspecta Vol.27. The MIT Press:1992, p.22

¹¹ Josep M. Rovira, "Acercarse a Enric Miralles" in Enric Miralles:1972-2000. Fundacion Caja de Arquitectos: 2011, p.16

¹² K. Michael Hays, "Repetition" in Architecture's Desire: Reading the Late Avant-Garde. The MIT Press:2010, p.55



Figure 1.3 Igualada Cemetery (1994)

Source: Photographs by the author (December 2014)

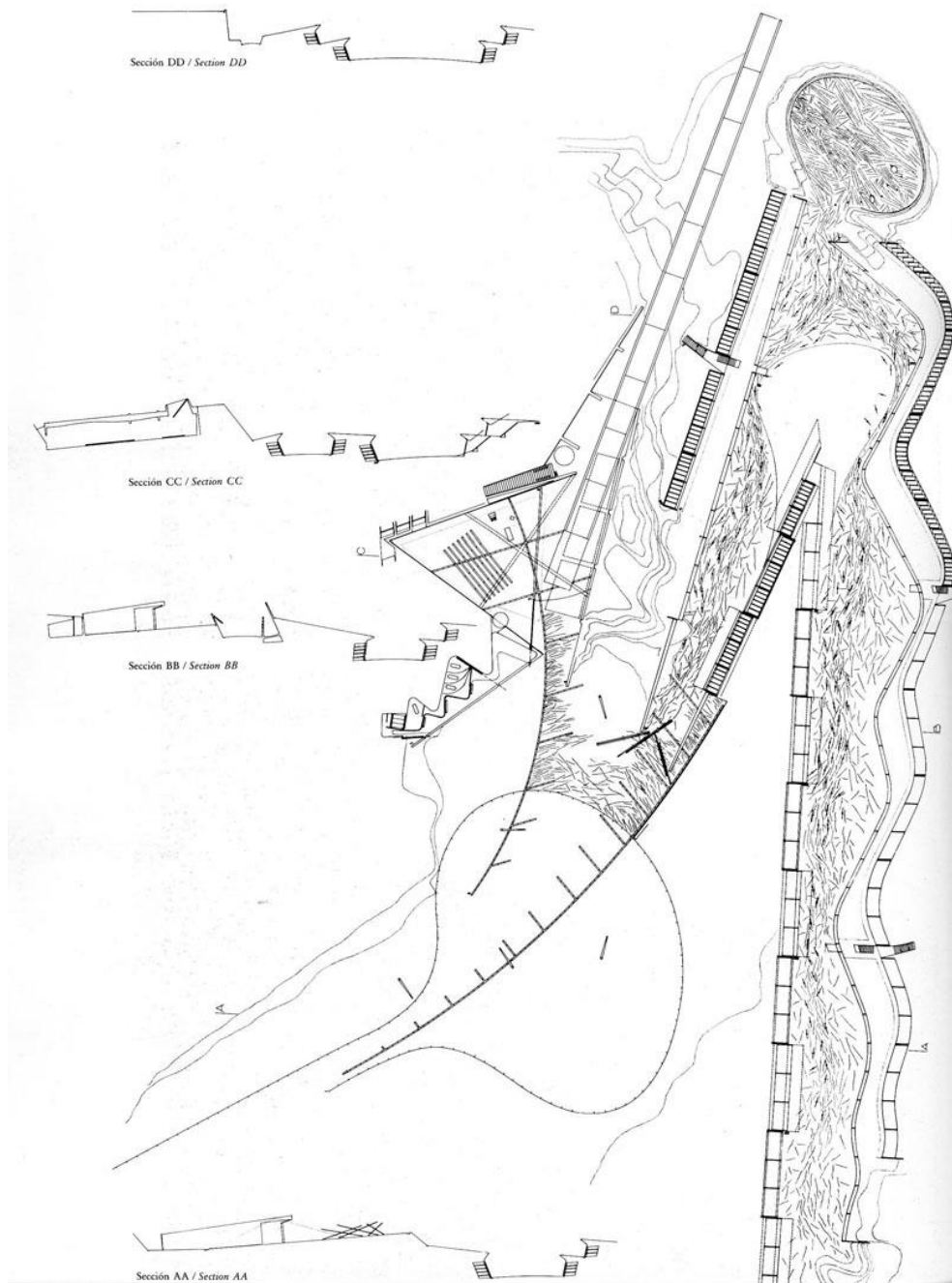


Figure 1.4 Igualada Cemetery Project Plan and Sections (1994)

Source: "Igualada Cemetery / Enric Miralles + Estudio Carme Pinos"
<http://www.archdaily.com/375034/ad-classics-igualada-cemetery-enric-miralles-carme-pinos> Reached at June 2017

These arguments on prioritization of process over the final product, or the theoretical and practical acknowledgment that Miralles also agreed on through his praxis: “drawing is architecture,” “drawing as architecture,” or “drawing for drawing.” In the scope of this study, the history of architectural drawing will not be examined; however, effects of the transformations and changes will be discussed when they remain necessary in order to form a basis for further analysis on Enric Miralles’ working method within the field of architectural production.

Architectural drawing, that is, architectural production before the execution of a building or simply “architecture” as, if not already *passé*, in recent studies on architectural production has transformed its representational means throughout centuries. At first, architectural drawing was evolving with the discovery and introduction of new methods into the field, forming the norms of classicism towards contemporary production.¹³ Later, after the “conventions” of drawing practice within architecture were mapped out, it became open to interpretation and led to introduction of respective methods into the field just as forming a signature or manifesting an independent style, by the architects hitherto. “Perspectival Drawing” and “Orthographic Projection” of “classicism”, “Axonometric Drawing” and “Sketch” of the 20th century constitute a basis for drawing methods within architectural practice.¹⁴ For centuries, parallel projections, including orthographic, remained as “a practice without a

¹³ The term “classicism” here refers to what James Ackerman points out. Ackerman describes the term “classical” as “it is an invention of post-Renaissance times that was cast back onto ancient and Renaissance art by critics who had their own sensibilities and agendas” rather than “the art and culture of the Greeks and Romans”. James S. Ackerman, “Palladio: Classical in What Sense?” in Origins, Imitation, Conventions. The MIT Press: 2001, p.236

¹⁴ Robin Evans, “Architectural Projection” in Architecture and Its Image: Four Centuries of Architectural Representation. Ed. Eve Blau and Edward Kaufman. Canadian Centre for Architecture Press: 1989, pp.19-35

theory.”¹⁵ The introduction of different representational techniques cleared the ground for empirical practices having theory as an integral of architectural production.

The separation of architectural drawing from the built object after the acknowledgement of orthographic projections can be conceived as a milestone in architectural production changing the conception of it. The orthographic drawings did not represent a real world as we see it, different than the perspectives did; they were more “abstract” and more “axiomatic systems.”¹⁶ Synchronic to the convergence of abstract means into the practice, empiricism entered into the field of representation, and the “mental schemata” of the artist and the architect changed.¹⁷ The “separation” of architectural drawing from building led the integration of “abstract thought” into the design process. Diana Agrest interprets this shift in the discourse of representation as:

The moment of separation between the field of construction and that of drawing (as a tool) that occurs during the Renaissance is crucial. This separation allows abstract thought to guide the process of design as separate from the process of construction. It is at this juncture that the mode of representation, while developing its own discourse, becomes a part of the process of the production of architecture and that the development of the techniques of drawing and design have an impact as important, if not more, as building techniques themselves.¹⁸

The shift in the role of architectural drawing—into a more heuristic and empirical means of the practice—changed the prevalent conception of architectural production as well. To mention architecture, the built object

¹⁵ Mario Carpo, “Variable, Identical, Differential: Allography and Notations” in The Alphabet and the Algorithm. The MIT Press: 2011, p.19

¹⁶ *ibid.* p.21

¹⁷ Mark Hewitt, “Representational Forms and Modes of Conception: An Approach to History of Architectural Drawing” in Journal of Architectural Education, Vol.39, No.2, Association of Collegiate Schools of Architecture: 1985, p.7

¹⁸ Diana Agrest, “Representation as Articulation Between Theory and Practice” in Practice: Architecture, Technique and Representation. Routledge: 2000, p.168

remains no longer necessary. As Alberto Pérez-Gómez states, architectural ideas are embodied in the drawings.¹⁹ In this respect, Steven Holl, architect, professor, and the contemporary of Enric Miralles, suggests in the conference “Drawing as Thought” that “An architecture doesn’t necessarily mean it is the final form of a built building. A drawing is a complete piece of architecture.”²⁰

Alberti’s theory from 15th century that “the design of a building is the original, and the building is its copy” pierces his time and is recognized even within contemporary discussions.²¹ As his disclosure is still prevalent in today’s discussions on architectural theory and its practice, it provides a basis for many arguments hitherto. Robin Evans, as one of the figures advancing the discussions of architectural production by means of drawings, claims that architectural drawings should be regarded for their own right rather than in relation to the built object.²² He believes that they are “the real repository of architectural art.”²³ Therefore, one drawing could carry “the full intentionality” of the architect.²⁴ Evans formulates his argument as: “Architects do not make buildings; they make drawings of buildings.”²⁵

Departed from this point, if architect’s job is to create drawings of subsequent buildings; (or even drawings of not-to-be-realized theoretical architecture), and

¹⁹ Alberto Pérez-Gómez, “Architecture as Drawing”, in Journal of Architectural Education, Vol.36 No:2, Blackwell:1982, p.6

²⁰ Steven Holl, “Drawing as Thought,” GSAAP - Campbell School Center, California: 17 April 2013, Retrieved from <https://www.youtube.com/watch?v=qnp3g-6VoaU>, Reached at 04 Feb. 2017

²¹ Mario Carpo, *op.cit.* p.26

²² Robin Evans, “In front of Lines That Leave Nothing Behind” in Architecture Theory Since 1968, ed. K. Michael Hays, The MIT Press: 1998, pp.482-489

²³ Robin Evans, “Translations from Drawing to Building” in Translations from Drawing to Building and Other Essays. Architectural Association Publications: 1997, p.157

²⁴ Alberto Pérez-Gómez and Louise Pelletier, *op.cit.* p.34; see footnote 40

²⁵ Robin Evans, “Architectural Projection” *op.cit.* p.21

if drawing is the primary agent of architectural ideas and thought, it is to be privileged over building so that the idea behind its creation stays “vital.” As Evans quotes, that Derrida and Tschumi whom overturn Platonism and integrate it into architecture with respect to drawing, suggesting a reversal in the implementation of architectural production requires attention:

[I]f speech is now judged to be neither prior to nor more authentic than writing (as previously supposed), then privilege writing instead; and if buildings are now held to be more real and authentic than representations of buildings (as previously supposed), then privilege drawing instead. Such reversals of fortune have practical consequences. In the case of architecture it fortifies an already ensconced Platonism, whereby ideas lose vitality as they put on weight.²⁶

Enric Miralles situates himself between these arguments recognizing architectural drawing as architecture. His understanding of architecture and its practice embraces this acknowledgement and it is embedded within his operational methods. The unfinished projects stayed on paper with the death of Miralles should not be confused with methodological preferences. However, the fact that architectural drawing is what is necessary to mention architecture legitimizes the analyses to be conducted on the architectural drawings of Miralles rather than his built works.

Miralles’ position towards architectural practice—the prioritization of the process over the end product and acknowledgement of drawing as architecture rather than a built work—is related with the stylistic approach of the architect; in other words, with his *modus operandi*. Since, for Miralles, “style” should not be related with formal and visual considerations of a work; yet, with operational methods of the architect. The ways an architect produces architecture constitutes his style, rather than the appearances of his built works.

²⁶ Robin Evans, “Persistent Breakage” in The Projective Cast: Architecture and Its Three Geometries. The MIT Press: 1995, p.86

The concept of repetition, as a method Miralles adopted through his architectural practice, is embedded within his ideation of style, which emerges in his conversation on architecture with Alejandro Zaera as:

From the outset, I would like to insist that I do not take style to be the systematic repetition of formal gestures. It is something that comes from a way of operating. The gestures that determine my work are born from a series of specific interests, irrespective of the spatial result they acquire. It is a sort of systematic repetition of certain acts that provide things with coherence. A great deal of my work is produced almost through accumulation, by repetition. I repeat every sketch I do thirty times, and my colleagues repeat it likewise. I believe that repetition is aimed at finding the precise structure of the physical conditions of the place, the scale, the dimensions...²⁷

The “systematic repetition” that Miralles mentions briefly constitutes the main theme of this study. It is a composition of two main components, namely “procedural repetition” and “act of repetition;” the former of which refers to repetition of the same form through different projects, while the latter refers to the repetition of the same sketch over and over again during intermediate stages of designing. Repetition as part of his stylistic approach, therefore of his *modus operandi*, that he repeatedly implemented during his career has a major role in Miralles’ architecture. Being a concept that hasn’t been a comprehensively delineated subject for architectural medium posits “repetition” in a substantial status to further research on. In the scope of this study the concept of repetition, will be replaced from its established positions within the areas of philosophy, literature and psychoanalysis into architecture with the aim to seek its methodological practicability within the praxis.

²⁷ Alejandro Zaera, “A Conversation with Enric Miralles” in El Croquis: EMBT Enric Miralles, No.72. El Croquis: 1995, p.13

1.2. “Things Seen From Right and Left (Without Glasses)”—Doctoral Thesis of Enric Miralles as Guidance to His Work

The transference of line to a free environment produces a number of extremely important results. Its outer expediency turns into an inner one. Its practical meaning becomes abstract. As a result, the line discloses an inner sound of artistic significance.

Vasily Kandinsky-On Line-1919

The contribution of Miralles architectural field both in practical and intellectual terms is worthwhile to make analysis on. Throughout his practice, he craved to read and investigate in various realms, and was enthusiastic to embed this multiform information within his architecture along with his ideal—empiricism. This sort of practice, incorporating miscellaneous manifestations within architectural production, sets a precedent for the discussion upon its bilateral relationship with theory. Stan Allen elaborates the discussion by emphasizing the embodiment of theory, or writing, within the practice of architecture saying that it is “something that happens alongside drawing, building, or teaching.”²⁸ He stresses on the fictitiousness of “the abstraction of theory from practice” and recognizes theory “as” practice itself rather than accepting practice as the “object of theory.”²⁹ Allen repeats the motto “there is no theory, there is no practice,” and claims in order to perform improvisational practice, theory is equally needed.³⁰

[I]t is of little use to see theory and practice as competing abstractions, and to argue for one over the other. Intelligent, creative practices—the writing of theory included—are always more than the habitual exercise of

²⁸ Stan Allen, “Introduction: Practice vs. Project” in Practice: Architecture, Technique and Representation, Routledge: 2000, p.XXIV

²⁹ *ibid.* p.XXIV, XV

³⁰ *ibid.* p.XVI

rules defined elsewhere. More significantly, practice is not a static construct, but is defined precisely by its movements and trajectories. *There is no theory, there is no practice.* There are only *practices*, which consist in action and agency. They unfold in time, and their repetitions are never identical. It is for this reason that the “know-how” of practice (whether of writing or design) is a continual source of innovation and change. Tactical improvisations accumulate over time to produce new models for operations.³¹

Accordingly, Cortés states on Miralles’ oral and textual interpolations into his practice as:

“[A]lthough it is true that the various levels of [Miralles’] project can be ‘read’ from the drawings, this reading is clarified and enriched when supplemented with words, both written and spoken, of the architect himself. Moreover, these words explain something else, the lines of thought and the operations that underlie these project-drawings.”³²

In this respect, it is fundamental to elicit the research Miralles presented as his PhD thesis in 1987. Because, as it can be observed throughout his oeuvre, Miralles resumed to embody the materials from his thesis as references—practical or conceptual—to, if not all, most of his projects. Also, most of the verbal and theoretical disclosures that accompany his projects and those included in the scope of this thesis on Miralles reach back to his PhD research in general. In this context, Rafael Moneo claims that his thesis is an “indispensible source” to understand Miralles’ works:

I now see the work of Enric with the help of the thesis. [...] I am eager to collect the clues, which allowed him to build an argument, within the text. Seen in this way, the thesis takes on enormous interest and becomes an indispensable source to further a study on Enric’s work.³³

³¹ *ibid.*

³² Juan Antonio Cortés, *op.cit.*

³³ Rafael Moneo, “Cosas Vistas a Izquierda y a Derecha (Sin Gafas): Tesis Doctoral de Enric Miralles Moya, Enric Miralles: 1972-2000, ed. Josep M. Rovira. Fundación Caja de Arquitectos: 2011, p.71

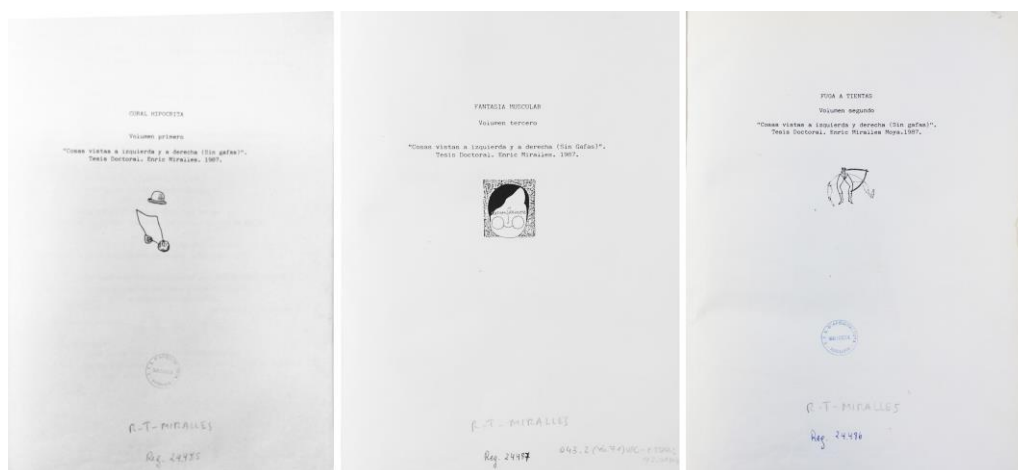


Figure 1.5 Three Volumes of Enric Miralles' PhD Thesis—"Things Seen from Right and Left (Without Glasses)"

Source: Enric Miralles, "Cosas Vistas a Izquierda y a Derecha (Sin Gafas)," Phd Thesis, ETSAB, 1987. Reached at Library of ETSAB, December 2014. (See Appendix A)

Miralles completed his PhD at ETSAB with his thesis titled "Things Seen to the Right and Left (Without Glasses)" which is comprised of three volumes titled: "Hypocritical Chorus," "Groping Flight," and "Muscular Fantasy." (Figure 1.5) The thesis is accessible only as hard copy at the library of ETSAB in Barcelona, and unfortunately, it hasn't yet been translated to English from its original Spanish version.

The title of the thesis and the titles of the volumes are an exchange from Erik Satie's—composer and pianist—suite composed in 1914. Satie was the inventor of the term "furniture music" —*musique d'ameublement*—the music to

occupy space as furniture does as an “atmospheric background” rather than as the convention suggests: “music is to be listened to.”³⁴ This conception of music as “furniture” directly refers to Dadaism’s “ontological issue that it is music that questions its identity as music.”³⁵ It is not a coincidence Miralles referred to Satie for the title of his study. To contextualize, Moneo claims, Miralles anticipates his constructions occupy any type of space and in the end they deserve to be recognized as architecture.³⁶ Besides, the expressive method Miralles used while writing his thesis suggests a manifest of Dadaism in its totality. The thesis, in particular, can be accounted as similar to Dadaism’s—subsequent to Surrealism—“automatic writing” as simply alleged in the third volume by Miralles: “there are not any significant points that the attention is in any part.”³⁷ “Drawing”—the main theme of the thesis—is conceived as a map that “as the reader observes each time reading the text he provided, it perpetually sends the author back by the movements of the former’s thoughts.”³⁸ A sort of vertiginous movement, through drawings, is proclaimed.

Throughout three volumes, the main theme of the thesis is “drawing” without losing any focus from the subject. While Rafael Moneo, one of the evaluating committee members for the thesis, describes the text Miralles presented simply as “intimate and personal,” which also is the justification of the jury after rejecting his first dissertation for being incompatible to academic writing; Miralles, himself, later comments on it briefly as it is “a reflection on the use of

³⁴ Simon Shaw-Miller, “Furniture Music”, Erik Satie: Music, Art and Literature. ed. Caroline Potter. Routledge: 2013, p.112

³⁵ *ibid.*

³⁶ Rafael Moneo, *op.cit.* p.64

³⁷ Enric Miralles, Cosas Vistas a Izquierda y a Derecha (Sin Gafas): Fantasía Muscular. Vol.3, Phd Thesis, ETSAB, 1987, p.1

³⁸ *ibid.*

drawing as an annotation of thought and as an indication for construction.”³⁹ Although the thesis could be delineated with the help of its author’s few uncompounded words and similarly with its seemingly modest aim, far-reaching information and divergent examples on drawing provided throughout the pages demonstrate a determined mind behind it.

The first volume “Hypocritical Chorus”—*Coral Hipócritica*—is comprised of 94 pages with intertwined texts and images. It includes drawings of English and German travellers of the 18th and 19th centuries with supportive ideas of writers and philosophers such as Sterne, Shaftesbury, Benjamin, Adorno, Octavio Paz, Blake, Kierkegaard, Deleuze, Kafka, Calvino, Susan Sontag, Gerard de Nerval, etc.

The second volume “Groping Flight”—*Fuga a Tientas*—is the longest with 262 pages which continues the first volume offering drawings of travellers with a rather expanded scope of English, central Europeans and Italians supported with ideologies of the philosophers, writers and artists such as Juvarra, Robert Adam, Piranesi, Tafuri, Blake, Boticelli, André Chastel, Leonardo, Flaxman, Matisse, Schinkel, John Soane, etc.

The third volume “Muscular Fantasy”—*Fantasia Muscular*—is comprised of 52 pages. After an overview and a presentation of 5-page-writing, it continues with drawings of Enric Miralles that he produced mostly while working with Viaplana and Piñón.

³⁹ Rafael Moneo, *op.cit.* p.61. Using the term “construction” as in “drawing [...] as an indication for construction” Miralles again points to “construction of a drawing,” it should not to be misinterpreted as architectural construction. Enric Miralles, “Foreword”, *Enric Miralles: Works and Projects 1975-1995*, ed. Benedetta Tagliabue. The Monacelli Press: 1996, p.7

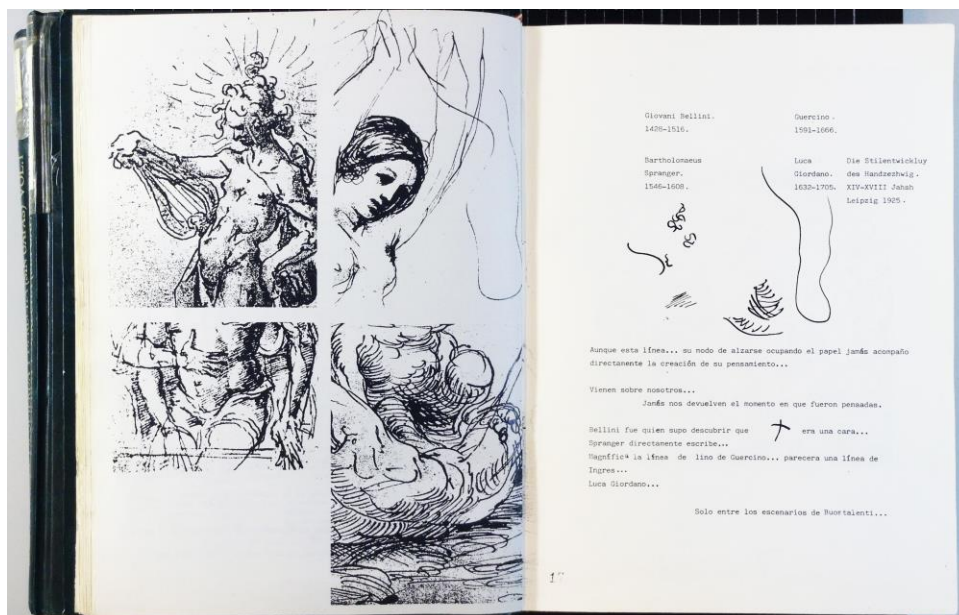
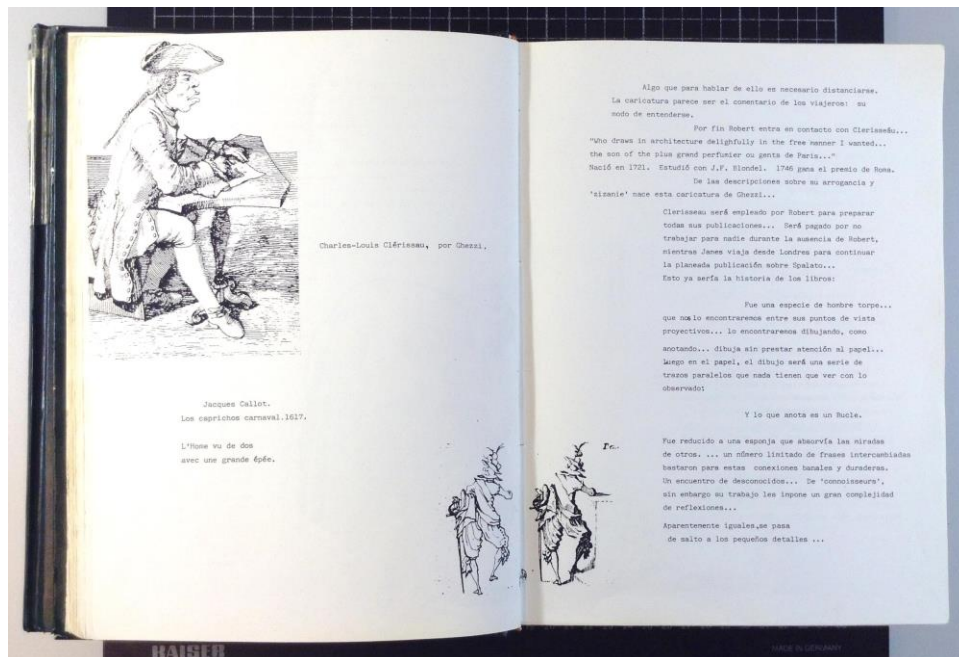


Figure 1.6 Drawings integrated with Text: Pages from Miralles' Phd Thesis (1987)

Source: Enric Miralles, "Cosas Vistas a Izquierda y a Derecha (Sin Gafas)" Phd Thesis, ETSAB, 1987. Reached at Library of ETSAB, December 2014

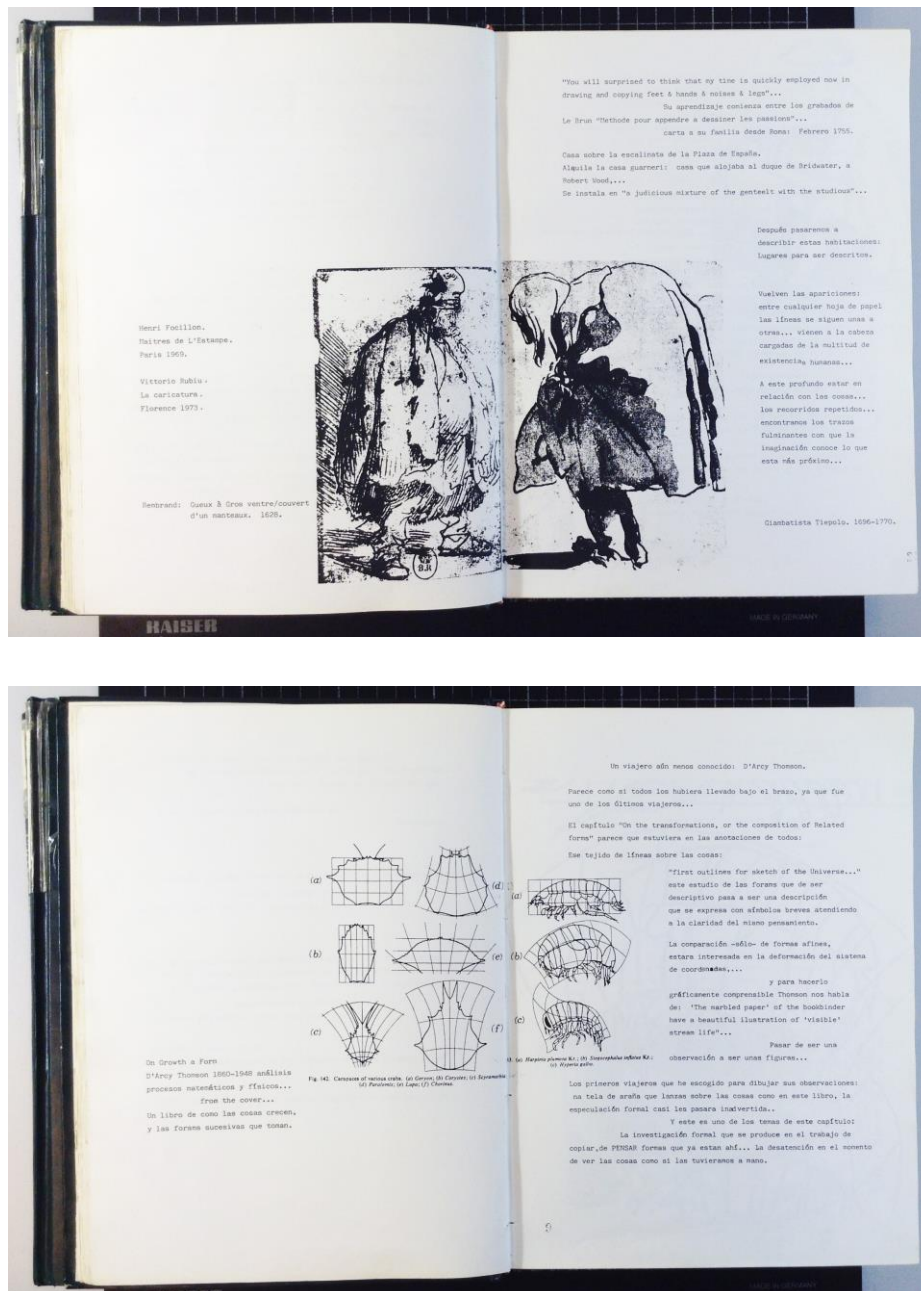


Figure 1.7 Drawings integrated with text: Pages from Miralles' PhD Thesis (1987)

Source: Enric Miralles, "Cosas Vistas a Izquierda y a Derecha (Sin Gafas)" Phd Thesis, ETSAB, 1987. Reached at Library of ETSAB, December 2014

Miralles writes that “drawings” which “are architecture” are not included in the thesis.⁴⁰ Rather, the objective is to investigate drawing’s character as “annotation” and thoughts—*pensamiento*—behind its creation. (Figure 1.6 and 1.7) Forming the basis of his research and explaining why he chose travellers to investigate, Miralles states “the process of a text or discourse is parallel to that of visual, which is one of the new modes of expression that appears in the origin of the notes of [them].”⁴¹ In other words, the origin of a drawing—that is, annotation for Miralles—is analogous to that of writing. The flux of ideas whether in the form of writing or drawing is investigated throughout his study. The types of methods to transfer ideas onto paper and their methodological or formal characters are stressed. Parallel to Miralles’ perspective on drawing, Catherine de Zegher, the curator of the exhibition “On Line: Drawing Through the Twentieth Century” held in MOMA in 2010, writes about drawing that “[D]rawing is born from an outward gesture linking inner impulses and thoughts to the other through the touching of a surface with repeated graphic marks and lines.”⁴²

The concept of repetition in Miralles’ thesis, and apparently within his practice, is founded with guidance of Deleuze’s ideation of the concept. Miralles traces “imperfect repetitions,” and states that “repetition is a mode of conduct which brings us close to the singularity of our action” as in Deleuze’s argument on the “singularity of repetition,” which later be examined thoroughly in the scope of this research. The “imperfect repetitions” claim to break the illusion of the possibility of direct representation of thought; however, as Miralles

⁴⁰ Enric Miralles, Cosas Vistas a Izquierda y a Derecha (Sin Gafas): Coral Hipócritica Vol.1, Phd Thesis, ETSAB, 1987, p.59

⁴¹ Enric Miralles, *ibid.* p.5

⁴² Catherine de Zegher, “A Century Under the Sign of Line: Drawing and Its Extension (1910-2010)” in On Line: Drawing Through the Twentieth Century. MOMA: 2010, p.23

states, they stand in between the instruments: the eye and the idea.⁴³ This statement, when projected to drawing, legitimizes the repetition of an idea is contingent to the repetition of drawing—since drawing is the annotation of thought—not to perfect it but emphasizing its instantaneous character to transfer ideas.

The concept of repetition, in this research, will not be discussed in relation to the concepts of originality or authenticity or reproduction of a work.⁴⁴ The original is not valued over the repeated object,⁴⁵ and instead, it is repeated within its originality at the very same place of its origin. As Deleuze argues, the original, or the “first,” as in Monet’s water lily example, repeats all of its repetitions.⁴⁶ It becomes the repetition and the origin *quasi* disappears. Or, it only exists in the form of repetition. However, rather than dealing with the originality and reproduction of an object, repetition will be analyzed by its transferring character of ideas with respect to the conception of “singularity.” Basically, it will be discussed either as a tool or as a medium of conduct for cognitive processes within architectural practice.

In the scope of this thesis, the chapters are organized accordingly to provide a legitimate ground in the end to perform analysis on Miralles’ drawings with respect to the concept of repetition. To begin with, the architectural plan will be placed within the “poetic origin” of architecture. Since Miralles’

⁴³ Enric Miralles, *op.cit.* p.40

⁴⁴ The concept of originality is discussed by Rosalind Krauss. For further information see, Rosalind Krauss, “The Originality of the Avant-Garde” in The Originality of the Avant-Garde and Other Modernist Myths. The MIT Press:1985,pp.151-171 For more information on reproduction of a work see Walter Benjamin, “The Work of Art in the Age of Mechanical Reproduction” in Illuminations. ed.Hannah Arendt. Schocken Books: 1968, pp.217-253

⁴⁵ Walter Benjamin, *ibid.* p.221

⁴⁶ Gilles Deleuze, “Introduction: Repetition and Difference” in Difference and Repetition. trans. Paul Patton. Columbia University Press: 1995, pp.1-27

architecture suggests that a drawing is not only a tool of representation; it is not conceived only as a technical drawing or footprint of a building, rather it includes all the procedural operations of the architect on itself. In this light, the concepts of “trace” and “index,” integrated to architectural plan, will be put forward as part of Miralles’ *modus operandi* to create a framework of his understanding and practice of drawing, supporting the plan’s “poetic” character.

Repetition concept, having a major role in Miralles’ working method, will be investigated in relation to its status under the discussions of architectural Late Avant-Garde. Since repetition concept of the architect is directly related with Deleuze’s theoretical disclosures on the subject, an additional framework will be drawn with regard to Deleuzean perspective. The two different modes of repetition, as conducted in Miralles’ practice, namely “procedural repetition” and “act of repetition” will be examined to posit the concept within his procedural operations.

After the theoretical background is set, analysis will be performed through selected projects of Miralles. The repetitional acts and repetition itself as a method performed by Miralles will be traced throughout his architectural drawings and sketches for different projects. As a method, Deleuze’s formulation of repetition which designates “one” as identity, “two” as difference, and “three” as the beginning of future repetitions will be used. To apply analysis in accordance with this formulation Paul Klee’s definitions of lines from his “Pedagogical Sketchbook” will be used as guidance on depicting “lines” from the plans of Miralles. This analysis is based on the ideation of “procedural repetition.”

To further, the repeated sketches will be superimposed on a single plate in order to represent the “act of repetition” and its agents in an instant. The interaction of the observer with the repetitional act when distorted and superposed on one image and the cognitive process of the architect will be discussed. The practicability of theory of repetition will be questioned and experimented on four project-plans and repeated sketches of the architect.

CHAPTER 2

THE ACT OF ARCHITECTURAL PLAN

2.1 Architectural Plan as Poetic Act

Go further, start everything again, sculptures, drawings,
writing.
Absolutely independent activity: Poetry.
Poetry
Heraclitus
Hegel
You get into and don't get into the *same river twice*.

Alberto Giacometti—Ecrits

When projections function as surrogates of buildings, when sets of drawings attempt to provide us with a “picture” of an architectural place or object, the buildings produced by such techniques must necessarily reflect the predictive quality of their conception: the possibility of a revelatory dimension is abandoned and the actualization of the architect's imagination will inevitably be lost in the translation.⁴⁷

Although it seems reductive when put primarily into argument, this statement of Alberto Pérez-Gómez, originally expressed in the conclusion of his essay “Architectural Representation Beyond Perspectivism,” enables to set a discussion on the understanding and implementation of architectural drawing and its status as “poetic act” within the conception of its “poetic translation” into built object rather than “prosaic transcription.”

⁴⁷ Alberto Pérez-Gómez and Louise Pelletier, *op.cit.* p.39

Drawings are conceived as more than mere representations of to-be-built objects of architecture; instead, they refer to a rather complex operation within architectural practice. The phrases “poetic translation” and “prosaic transcription” are used in reference to Pérez-Gómez’s ideation of the concepts.⁴⁸ The “prosaic transcription” suggests a direct translation of drawings into buildings. In this case, architectural drawings are the technical drawings necessary to construct a building and the transfer of ideas of the architect into built object is not foreseen. However, the “poetic” character of architecture refers to architectural drawings that are not surrogates for anything else than themselves. They embody architectural ideas behind their creation and include the “human condition” of the architect within. They “are” the architecture and if they are translated into three-dimensional constructions, the ideas stay vital in the built works as well.

The tendency towards the approval of drawings as an end in themselves legitimizes the fact that conventional conception of architectural drawing as a medium towards built realization has been altered as mentioned earlier.⁴⁹ In other words, the production of architectural drawing has been conceived as architectural production, and thus, drawing means architecture in its self-existence. The transformation of drawing from being an apparatus of representation into a more complex ground for investigation require focus on the developments in architectural production methods and its mediums.

The orthogonal drawing gained prominence as the primary means for architectural representation during Renaissance. By this inauguration into the

⁴⁸ *ibid.* pp.20-29

⁴⁹ K. Michael Hays, Foreword of “In front of Lines That Leave Nothing Behind” in *Architecture Theory Since 1968*, ed. Michael Hays, The MIT Press: 1998, p.480 Also see, James S. Ackerman, “The Conventions and Rhetoric of Architectural Drawing”, in *Origins, Imitation, Conventions*. The MIT Press: 2001, p.316

field, architectural drawing transcended *de facto* practice of creating representations of already existing built objects as “records”; rather, it sought to provide information as “flat representations to create embodied objects.”⁵⁰ Therefore, orthogonal projections were the regarded instruments “on the way to buildings.”⁵¹

During the Renaissance, architecture came to be understood as a liberal art, and architectural ideas were thereby increasingly conceived as geometrical lineamenti, as bidimensional, orthogonal projections. A gradual and complex transition from the classical theory of vision to a new mathematical and geometrical rationalization of the image was taking place.⁵²

Orthogonal projections refer to three instruments: plan, section and elevation—that is, the orthographic set. That Albrecht Dürer provided the very first drawing for a fortification in 1527 including plan, section, and elevation shown together on a single plate is important; because this method in turn created the basis for architectural representation with regard to projections.⁵³ Robin Evans claims, established in Renaissance, “[s]ets of plans, sections, and elevations describe aspects of buildings, and in describing them, give them constitutional privileges.”⁵⁴ However, “describing” buildings by projections remains inadequate for the architects after Renaissance and hitherto. The fact that representational tools provide a valid ground to “underlie conceptual elaboration of a project and the whole process of generation of form” does not prevent them from simultaneously setting limitations through its agents;

⁵⁰ Alberto Pérez-Gómez; however, suggests that in the Renaissance the architectural drawings were not as “instrumental” as the contemporary practice, and remained much more “autonomous” from the building. Their relationship to the built place was different. See, Alberto Pérez-Gómez, *op.cit.* p.26 Also see, Robin Evans, “Architectural Projection” *op.cit.* p.19

⁵¹ Robin Evans, “Architectural Projection” *op.cit.* p.21

⁵² Alberto Pérez-Gómez and Louise Pelletier, *op.cit.* p.23

⁵³ Robin Evans, “Architectural Projection” *op.cit.*

⁵⁴ *ibid.* p.25

namely, in the case of architecture, plans, sections and elevations.⁵⁵ This limiting status resulted in “re-definition” and “re-formation” of these agents into more heuristic means. The repository of drawing is, if not perceptively, conceptually extended to include architectural intentions in a more comprehensive mode that, now, to draw means to transcend *de facto* rules of its tradition, which forms the basis to perform “poetic” act within the practice:

[I]t is crucial to recognize the role of drawing as the embodiment of architectural ideas. In a manner of speaking [...] the drawing is the architecture, a privileged vehicle for expressing architectural intentions that are poetic in a profound traditional sense, as *poesis*, as symbol making.⁵⁶

The “poetic translation” of a drawing into building requires the appreciation of “human condition” of the architect, which is embedded within drawings traced in the form of lines.⁵⁷ To defeat the “prosaic transcription” of one drawing, it is necessary to see it beyond the window of descriptive geometry and pure Platonism.⁵⁸ The factor of the architect is added within the meaning of his architecture *per se*.⁵⁹

Meaning, we must remember, is *given* perception; it is not a product of “association.” Phenomenological studies have shown that meaning is not primarily or solely an intellectual construct. Architecture is an order that addresses our ambiguous, finite, human reality, it is not merely a vehicle

⁵⁵ Alberto Pérez-Gómez and Louise Pelletier, *op.cit.* p.21

⁵⁶ Alberto Pérez-Gómez, “Architecture as Drawing”, *op.cit.* p.6

⁵⁷ Alberto Pérez-Gómez and Louise Pelletier, *op.cit.* p.22 Also see, Alberto Pérez-Gómez, “Architecture as Drawing”, *op.cit.* p.5

⁵⁸ The adherence of “descriptive geometry” in architectural design is seen only after Durand in the beginning 19th century. For further information on Durand’s ideation of “descriptive geometry” into architectural design and the following discussions see Alberto Pérez-Gómez, “Architecture as Drawing” *op.cit.* pp.2-7 and Alberto Pérez-Gómez and Louise Pelletier, *op.cit.* pp.20-39 Also see, Jacques-Nicholas-Louis Durand, *Précis de Leçons d’Architecture*. Vol.2. 1819.

⁵⁹ The word “meaning” is used in its simplest terms.

for scientific “truths.” The paradox here is that architecture, by definition, is both abstract, *and* a mimesis of a transcendental reality.⁶⁰

“There is an intimate relationship between architectural meaning and *modus operandi* of the architect,” Pérez-Gómez says. Although the meaning of an architecture is related with the conditions of the place and time of the built object, it would be mistaken to ignore the architect’s intentions, his respective reality, and his operational methods during design process. The intentionality of the architect, the methods, and foreseeing vision are all included within his works. Therefore, the recorded realities within plans, the methodological operations, provide a legitimate ground to survey theoretical analysis of the architect’s work through drawings; even it validates formal analysis as taking into consideration practice includes theory *vice versa* theory is practice.⁶¹ In this respect, noting “human function” is positioned within the operational methods; architectural plan emerges as “poetic” act, as in other artistic procedures before production of the built object:

The objectifying vision of technology denies the possibility of realizing in one drawing or artifact a symbolic intention that might eventually be present in the built work. The fact is that the process of making the building endows it with a dimension that cannot be reproduced through the picture or image of the built work. Reciprocally, architectural representations must be regarded as having the potential to embody fully an intended order, like any other work of art.⁶²

Mario Carpo states that “[t]he drawing of “orthogonal” ground plan of a building may simply be seen as its imprint or trace on a real site (if necessary,

⁶⁰ Alberto Pérez-Gómez, “Architecture as Drawing”, *op.cit.* p.6

⁶¹ Stan Allen, *op.cit.* p.XVI

⁶² Alberto Pérez-Gómez and Louise Pelletier, *op.cit.* p.22 Pérez-Gómez explains the “embodiment” conception in his statements as: “The terms *embodiment* and *embodied reality* are used in their phenomenological sense. Embodiment refers specifically to a nondualistic, post-Cartesian understanding of consciousness where mind and body are in a functional, mechanistic relation, and the boundaries between the external and internal worlds of experience vanish.” See side-note 4. *ibid.* p.22

redrawn to scale).”⁶³ Therefore, plan, i.e. different than front views, is more related with the complex reality of the designed object. It does not require any projections; however, it can operate and be comprehended in its own weight. The argument of Pérez-Gómez that “plan is the paradigmatic modern generator of architectural form” stays vital in the terms that plans carries manifold information and they are the mediators for its translation into three-dimensional architectural form.⁶⁴ In this respect, plan operates as an “active” record of architecture. It carries all the procedural traces of the architect, including sociological and traditional backgrounds, stylistic approaches, and cultural inputs synchronically on its body. Its character as “generator of form” begins from this point of departure. Michelangelo’s “non-perspectival approach” in architectural drawing, contra to his contemporaries in Renaissance, putting one simple sketch as “the symbol of a whole architectural intention, the seed of the whole work” favors the “poetic” origin of architecture and creates an inspirational influence transcending his retrospective being.⁶⁵ The “poetic” origin of architecture—with its human condition included—and plan as “poetic” act is neutral outcome of the discussions followed under the umbrella of the ideation: “drawing is architecture.”

In the Barcelona Symposium AA School of Architecture organized in 1992, Enric Miralles himself states that “our projects, without the plan, are difficult to understand.”⁶⁶ Throughout his practice, he remains preoccupied essentially with developing sketches of plans rather than sections, elevations or

⁶³ Mario Carpo, *op.cit.* p.18

⁶⁴ Alberto Pérez-Gómez, “The Image without an Observer: From Measurement to Abstraction: Isometry and Axonometry” in Architectural Representation and the Perspective Hinge. The MIT Press:1997, p.313

⁶⁵ Alberto Pérez-Gómez and Louise Pelletier, *op.cit.* p.27

⁶⁶ Enric Miralles, “4 Studios in Barcelona: Arribas/ Cortés/ Miralles/ Tusquet”, Gallery of Architectural Association, London: 28 Feb. 1992, Retrieved from <http://www.aaschool.ac.uk/VIDEO/lecture.php?ID=898>, 5 May 2016.

perspectives. With the superimposition of plans worked on different levels; sections, as canonical indicators of spatial characteristics of the place, as Miralles believes; are automatically constituted in the end phase of the design process.⁶⁷ Rejecting “prosaic transcription” of drawings, he states that this method is more abstract and conceptual than that of the “classical architecture”.⁶⁸ For Miralles, plans have the potential to embody “abstract materiality” together with capturing a reflection of reality within themselves. He rejects the prevalent argument on diagrams’ abstract quality⁶⁹ and pursues abstractness within the plans as:

The potential for an abstract materiality in the plans themselves distances them from their diagrammatic value. So it seems to me that diagrams have no abstract value. In order to have an abstract value, there must be a material quality. These plans [...] are constructions from the outset. In other words, the one that is a plan, that uses reality as its constructive and constrictive reference point, which includes the notion of measure, the sense of the specific, etc., is already architecture. It is one of the ways we work to construct a thought. Dimensions, the line, the specifics, all construct the basis for a work.⁷⁰

Thus, in Miralles’ architecture, plan arises as “the paradigmatic modern generator of architectural form” as in Pérez-Gomez’s suggestion.⁷¹ Without the plan there is no project. Besides being mediators for translation of lines into

⁶⁷ Juan Antonio Cortés, *op.cit.* p.23

⁶⁸ *ibid.*

⁶⁹ Stan Allen and Anthony Vidler emphasize the abstract character of diagrams. For more information on discussions on diagrams, see Stan Allen “Diagrams Matter” in ANY:Architecture New York, No.23. ANYone Corporation: 1988, pp.16-19 and Anthony Vidler, “Diagrams of Diagrams: Architectural Abstraction and Modern Representation” in Representations, No.72. University of California Press: 2000, pp.1-20

⁷⁰ Emilio Tuñón & Luis Moreno Mansilla, (interview with Enric Miralles and Benedetta Tagliabue), “Notes on an informal Conversation: with Enric Miralles”, in El Croquis: EMBT Enric Miralles / Benedetta Tagliabue 1996-2000: Maps for a Cartography, No.100/101. El Croquis: 2000, p.21

⁷¹ Alberto Pérez-Gómez, “The Image without an Observer: From Measurement to Abstraction: Isometry and Axonometry” *op.cit.* p.313

three-dimensional, Miralles' plans carry the information of the sections and elevations, including their projections, and all the projections, within the repository of them. Parallely, "abstract materiality" embodied in the plans and his attitude towards reality carry the potential for "poetic" act within the practice and for its "poetic translation" into the built object. Miralles' drawings do not act as surrogates for anything else, instead they are the architecture; they are similar to the theoretical projects—albeit in they are not solely theoretical—in the sense that they "question the possibility of truly poetic architecture in a prosaic world."⁷²

2.2. Enric Miralles and Tracing / Trace in the Plan

Miralles follows the lead that acknowledges the precedence of drawing and the design of it over construction along with the empirical procedure pursued before construction—*praxis*.⁷³ Thus, in order to conduct a research on Miralles' *praxis*, it is necessary to investigate his drawings; since, as Curtis states, his drawings are his "mental maps."⁷⁴

Miralles treats architectural drawings as "informative documents" rather than representational tools for communication or construction that all the production and thinking processes can be designated from the plans he produces. His works are generated by the juxtaposition of traces that he finds on the site, recorded as "indexical signs," becoming "regulating geometry" in particular cases, as in Stan Allen's categorization of "trace," extracted from the site and

⁷² Alberto Pérez-Gómez and Louise Pelletier, *op.cit.* p.39

⁷³ The term "praxis" refers to "the process of production" where "what is designed is not the final product; yet, the design process itself." See Ayşen Savaş, "Tarihin İzini Sürmek: Erimtan Arkeoloji ve Sanat Müzesi'nin Tasarım Süreci" in Arredamento Mimarlık. Vol.291 p.65

⁷⁴ William J.R. Curtis, "Mental Maps and Social Landscapes" in El Croquis: Miralles/Pinós, No.30+49/50. El Croquis: 1983-1990, p.17

transformed onto the paper.⁷⁵ Rosalind Krauss describes index as “indexes establish their meaning along the axis of a physical relationship to their referents. They are marks or traces of a particular cause, and that cause is the thing to which they refer, the object they signify. Into the category of the index, we would place physical traces (like footprints), medical symptoms, or the actual referents of the shifters.”⁷⁶

Similarly, Miralles’ drawings embody manifold information, i.e. the survey of the site, research, ideas about design, and all the transformations that the project has passed through. (Figure 2.1) Trace, as an irreducible integral of architecture, is like an “idealized scaffold” that maintains form thoroughly.⁷⁷ Likewise, regarding the notion of trace in architectural drawing, Allen claims that architecture has the capacity to “make invisible visible.”⁷⁸

⁷⁵ Stan Allen categorizes the “trace” as trace as indexical signs, the trace as absence and erasure, the trace as regulating geometry, and the trace as ephemeral marks that its abstract instruments of design and projection leave on the built work. In order for further information see Stan Allen, “Plotting Traces: On Process” in Practice: Architecture, Technique and Representation, Routledge: 2000, pp.47-69 Also, Erimtan Archeology and Arts Museum built in the historical castle zone of Ankara in 2015 provides a relevant example to the discussion of architectural design through “index” and “trace”—“ascertainable realities” as Ayşen Savaş states. It adopts the argument of extracting and recording both historical and physical traces from the site and integrates it into design, which in turn becomes the method for architectural production. Therefore, when the building is realized, it becomes the evident of its past and the present as well as the processes it has passed through while being designed by the architects. See, Ayşen Savaş, “Tarihin İzini Sürmek: Erimtan Arkeoloji ve Sanat Müzesi’nin Tasarım Süreci” in Arredamento Mimarlık. Vol.291 Boyut:2015, pp.66-67

⁷⁶ Rosalind Krauss, “Notes on the Index: Seventies Art in America, in October, Vol.3. The MIT Press:1972, p.70.

⁷⁷ Stan Allen, “Plotting Traces: On Process: Traces; Architecture and Deconstruction” *op.cit.* p.59

⁷⁸ *ibid.*

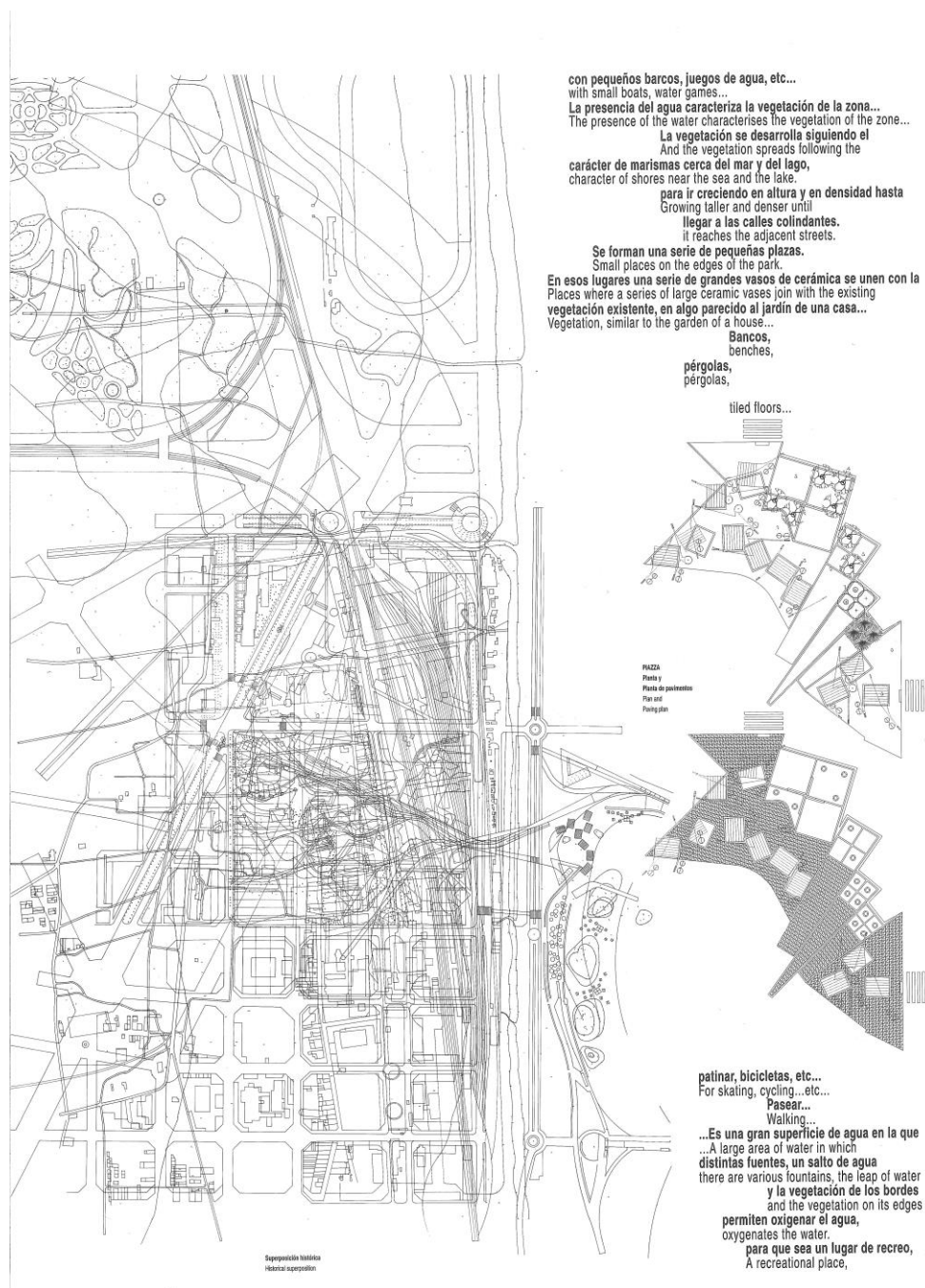


Figure 2.1 Historical Superposition Plan - Diagonal Mar Project (1997)

Source: El Croquis: EMBT Enric Miralles / Benedetta Tagliabue 1996-2000: Maps for a Cartography, No.100/101. El Croquis: 2000, p.186

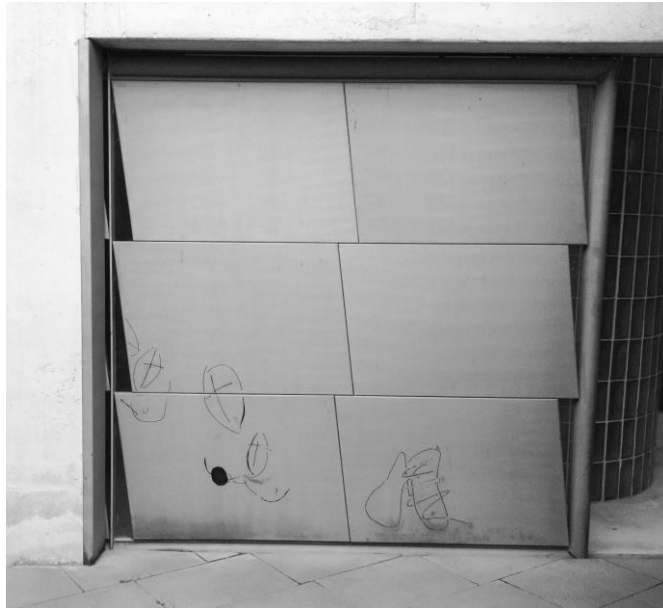


Figure 2.2 Sketch Cut Out from the Plates by Enric Miralles –The Door of the Chapel Building in Igualada Cemetery

Source: Photograph taken by the author (December 2014)



Figure 2.3 Sketch Cut Out from the Plates by Enric Miralles –The Door of the Chapel Building in Igualada Cemetery

Source: Photograph taken by the author (December 2014)

A quick sketch, sometimes drawn with eyes closed, is translated, as accurately as possible, into three-dimensional form of the building. The basis of such an operation is a faith that meaning—the energy and vitality of the initial concept—is somehow lodged in the tracery of the sketch, and the job of the designer is to tease that meaning out, to translate the intensity of that moment into an equally intense three-dimensional space. [...] The trace, in this case, is a vehicle for the preservation and transmission of meaning, like the pictographs of a primitive writing system.⁷⁹

Enric Miralles always carried his sketchbooks with him, and constantly recorded every piece of thought and data of a place in different media—mostly sketches—to translate them into tangible materials during architectural production. The urge Miralles has to sketch and record every thought is seen not only on paper, but in different mediums. During construction of Igualada Cemetery he even intervened in the production of the entrance door of the chapel building in the workshop and sketched on the surface of the metal plates by cutting them out. (Figure 2.2 and 2.3) These lines could be accounted as annotation of thoughts in the third-dimension: on the surface of the door. Also this example shows that, having drawing as the primary medium to define his architectural practice, he does not hesitate to leave permanent marks of his thoughts in any surface. Not only his projects mark the landscape with sophisticated lines, he also marks the surfaces of the façades.

Sketch has a peculiar place in Miralles' *modus operandi*. He works in sketches until the final phase of the design process where “definitive drawings,” in Michael Graves' terms, are drawn to hand in to the constructor.⁸⁰ Evans describes architectural “sketch” as:

⁷⁹ *ibid.* p.56-57

⁸⁰ Michael Graves, “The Necessity for Drawing: Tangible Speculation” in Architectural Design. Vol.47. 1977, pp.384-393, Robin Evans, “Architectural Projection” *op.cit.* pp.19-36

The sketch is a peculiar phenomenon. It is impossible to decide, except by dogmatic means, whether it is a projection or not. In so far as it is like a scale drawing, it is projective; but its capacity to absorb so many other interpretations, to be whatever one wants to see in it, and to multiply ambiguities and inconsistencies, make it work quite differently. So it would not be right to classify it as an imprecise approximation of a projection. Its relation to its object is far more uncertain than with the drawings discussed so far, being more a matter of suggestion than designation. And this is why its increased prominence is significant. The sketch has become a way of holding back, keeping everything in a state of suspension, of refusing to give in too quickly to the parti, a way of staving off the fixation of a particular figure or shape.⁸¹

While for Mark Hewitt sketch is a “symptom” of the inauguration of empiricism into the field of architecture in Renaissance; for Evans, it is a product of the 20th century architecture.⁸² Evans claims that sketch operates on the basis of “suspension” different than other “definitive” representational drawings. This “state of suspension,” as indicated by him, would in turn affect the cognitive procedures of the observer of the drawing and the architect synchronically; to further, it emphasizes drawing’s character as annotation of thought as in Miralles’ ideation of drawing. Based on the definitions of “cognitive” and “irrational” line by Catherine de Zegher, Miralles’ line gives more clues of “cognitive line” of Constructivists and Suprematists than the “irrational line” of Surrealists, albeit in he is interested in Surrealists’ operational processes in evidence.⁸³ Behind the imprecise appearances of Miralles’ sketches lie precise ideas to be translated into built object. For Evans, “each architect used sketch in different ways.”⁸⁴ In the categorization he provided, the sketch in Miralles’ working method stands closer to that of Louis Kahn’s:

⁸¹ Robin Evans, *ibid.* p.33

⁸² Mark Hewitt, *op.cit.* p.7

⁸³ Catherine de Zegher, *op.cit.* p.50

⁸⁴ Robin Evans, “Architectural Projection” *op.cit.* p.34

It is true that different architects use the sketch in different ways. The expressive sketch is familiar enough, where an essential feeling is recorded in a dynamic calligraphy; and the ensuing architecture tries to follow the original trace as closely as it might, suggesting that all inspiration had been released and captured in the first few seconds. Mendelsohn worked this way in his early career. The drawings by Poelzig for the Grosses Schauspielhaus, Berlin, are also of this sort. Kahn's are not. His sketches mutated quite suddenly into something else. Out of the blurred charcoal and the cryptic ciphers a complete configuration would crystalize.⁸⁵

Each mark scratched on the paper finds body, material or abstract, through the development of the project. "Lines" are fundamental for Miralles. They do not act as passive records of data of the place; instead, each recorded trace becomes active elements of his designs.⁸⁶ In other words, what Allen suggests on the capacity of architecture is pertinent for Miralles that no line, or trace, he draws remain "invisible" in the projects; they are reified plausibly in the final product. In this respect, "trace" embedded within the object of architectural operation becomes an evidence of architect's ingenuity to contact with the "complexity of the real":

[T]o locate the trace in architecture means not turning away from building's concreteness, but precisely getting closer to it. The presentness of the building in this sense would not be seen as an impediment to be dissolved into the flux of representation, but rather as the site of architecture's contact with the complexity of the real. This requires moving beyond design process and its abstract codes, and paying closer attention to the unpredictable transactions between the drawn and the built [...] The building is understood as a representation of the abstract

⁸⁵ *ibid.* To further investigate the similarity in Miralles and Louis Kahn's *modus operandi* see: Alberto Bravo and Laguna Socorro, "Sound Planimetry: From Kahn to Miralles" in Expresión Gráfica Arquitectónica, pp. 198-209 For Miralles' personal note on his admiration on Kahn's architecture see Enric Miralles, "Sobre Louis I. Kahn (1999)" in Conversaciones con Enric Miralles, ed. Carles Muro. Editorial Gustavo Gili: 2016, p.73

⁸⁶ Alejandro Zaera, *op.cit.* p.25

procedures of design. The conventions of representation, where one sign always designates another are projected onto the experience of the real.⁸⁷

Cortés reconciles the role of “line” in Miralles’ *modus operandi* with that in the late Avant-garde architecture, as the “active component” in generation of a project.⁸⁸ The notion of “active line” first appeared in Paul Klee’s writings in his book *Pedagogical Sketchbook*, which includes his notes on visual understanding for his students in Bauhaus.⁸⁹ Klee defines “active” and “passive” lines and their operational and transformative characters with simple diagrams. Alejandro Zaera designates Miralles’ association with lines, similar to Klee’s definition of “active line,” as “Enric Miralles is part of the tradition of masters of the dynamic line as generator of form, albeit with his own unique features” and continues his statement as “[w]ith respect to the place, one must first discover the lines it contains, and then make them visible.”⁹⁰

⁸⁷ Stan Allen, “Plotting Traces: On Process: Traces; Architecture and Deconstruction” *op.cit.* p.59-60

⁸⁸ Juan Antonio Cortés, *op.cit.* p.29

⁸⁹ The original handwritten notes of Klee dates back to 1921-1931. Paul Klee, *Pedagogical Sketchbook*. Trans. Sibyl Moholy-Nagy. Faber&Faber:1968

⁹⁰ Juan Antonio Cortés, *op.cit.*

CHAPTER 3

REPETITION IN THE DRAWINGS OF ENRIC MIRALLES AND THE LATE AVANT-GARDE

3.1. Repetition Theory

“Repetition is not generality,” Deleuze asserts as the first sentence of his book “Difference and Repetition.”⁹¹ The repeated object or act should not be mistaken within the ideation of generality, in the terms that generality embraces “resemblances” which stands different from repetition.⁹² Rather, for him, repetition emphasizes the “singularity” of action or object in a rather *naïve* way. The first, namely the original, is carried to the “nth power” by repetitional operations in its integral singularity; by this, seeking plurality stays impertinent. Briankle Chang, professor of philosophy of communication in UMass, cites Deleuze’s argument on repetition’s “singularity” as:

[R]epetition is a necessary and justified conduct only in relation to that which cannot be replaced. Repetition as a conduct and as a point of view concerns non-exchangeable and non-substitutable singularities. . . . [Repetitions] do not add a second time and a third time to the first, but carry the first time to the “nth” power . . . it is not the Federation Day

⁹¹ Gilles Deleuze, *op.cit.* p.1

⁹² *ibid.*

which commemorates or represent the fall of the Bastille, but the fall of the Bastille which celebrates and repeats in advance all the Federation Days, or Monet's first water lily which repeats all the others. Generality, as generality of the particular, thus stands opposed to repetition as universality of the singular.⁹³

Repetition does not stand for a "plurality" of multiple repeated objects; yet, it represents a singular act or a single object. Noting that Deleuze built his argument on repetition subsequent to Kierkegaard's theory of repetition; "repetition" in Kierkegaardian theory, albeit it was idealized on theater and literature, refers its character of uniting time as sequence (allegory) and time's instantaneity at the same time (irony).⁹⁴ Dirk Lauwaert, art critic and professor, asserts that "the time of the drawing fades away as line accrete and soon the resulting image erases sequence, whichever line came first disappearing into the rest,"⁹⁵ just as the repeated drawings where the first one remains unimportant. Their totality as "one," or to better "singularity" in Deleuze's terms, is what becomes important. Repetition erases time and sequence. In this respect, Deleuze's argument on singularity of repetition shares its foundations with Kierkegaard regarding the notion of "instantaneity." Either ideations of the concept suggest a "transgression," in opposing to "generality's" dependence on laws, as in Deleuze's words:

If repetition exists, it expresses at once a singularity opposed to the general, a universality opposed to the particular, a distinctive opposed to the ordinary, an instantaneity opposed to variation, and an eternity opposed to permanence. In every respect, repetition is a transgression. It

⁹³ Briankle G. Chang, "Deleuze, Monet and Being Repetitive" in Cultural Critique, No. 41. University of Minnesota Press: 1999, p.184. Also see Gilles Deleuze, *op.cit.* pp.1-27

⁹⁴ Arne Melberg, "Repetition (in the Kierkegaardian Sense of the Term)" in Diacritics, Vol.20, No.3. The Johns Hopkins University Press: 1990, p.83

⁹⁵ Catherine de Zegher, *op.cit.* p.23

puts law into question, it denounces its nominal or general character in favor of a more profound and more artistic reality.⁹⁶

Chang argues that “repetition necessarily becomes itself because it always returns to itself; and by returning to itself, it remains itself.”⁹⁷ His interpretation justifies the practicality of repetition within architectural practice. The repetition of one drawing, despite the number of its repetitions, can become the “drawing itself.” However, in this point, the acknowledgement of “difference” in every repetition is necessary to put forward.⁹⁸ Repetition includes “difference” within itself.⁹⁹ The idea of “the authentication the different [sic]” by repeating the “Same”, in Deleuze’s words, actually constitutes a singular output, which appears as “a” drawing in the architect’s status.¹⁰⁰

To further, to crystalize the practicability of theory, the legitimate questions appear in mind: When repetition begins? How many operations are necessary to mention repetition? Derrida responds to these questions as: “[t]hree is the first figure of repetition.”¹⁰¹ Thus, in Derridean point of view, repetition starts with the third. Chang states that Deleuze, as well, acknowledges Derrida’s assertion on the number “three,” and justifies it as: “‘one’ characterizes identity, and ‘two’ marks the emergence of difference, ‘three’ signifies the anamnestic beginning of becoming, of the possibility that we can say ‘one’ now and in the

⁹⁶ Gilles Deleuze, *op.cit.* pp.2-3

⁹⁷ Brian G. Chang, *op.cit.* p.211

⁹⁸ Deleuze’s concept of “difference” is developed mainly in reference and subsequent to Derrida’s term and concept “*différance*.” It is first used by Derrida in his essay “*Cogito et histoire de la folie*” published in 1963. Jacques Derrida, “*Cogito et histoire de la folie*,” in *Revue de Métaphysique et de Morale*. Presses Universitaires de France: 1963, pp.460-494. Also see, Jacques Derrida, *Writing and Difference, op.cit.*

⁹⁹ Gilles Deleuze, *op.cit.* p.22.

¹⁰⁰ For “authentication of the different” see *ibid.* The concept of difference will be investigated more thoroughly in the following chapter.

¹⁰¹ Jacques Derrida, “Ellipsis” in *Writing and Difference*. Routledge: 2001 (First published in 1967). p.378

future, again, again, and again.”¹⁰² Therefore to seek repetition minimum of three repeated acts or objects remains necessary. This does not refute the assertion on “singularity” of repetition; however, it is nestled within.

The concept of repetition is not separable from the operations conducted in the late avant-garde, as well. The term late avant-garde is adopted by Michael Hays with reference to Peter Bürger’s “neo-avant-garde” from his known book “Theory of the Avant-Garde.” Bürger explains his notion of “neo-avant-garde” as:

The neo-avant-garde institutionalizes the avant-garde as art and thus negates genuinely avant-gardiste intentions. This is true independently of the consciousness that may perfectly well be avant-gardist. . . . Neo-avant-gardiste art is autonomous art in the full sense of the term, which means that it negates the avant-gardiste intention of returning art to the praxis of life. ¹⁰³

The “lateness” or “secondness” of the late avant-garde lies in its dependency to a previous.¹⁰⁴ It repeats what historical avant-garde did, in its simplest terms.

¹⁰² Briankle G. Chang, *op.cit.* p.190

¹⁰³ Peter Bürger, Theory of the Avant-Garde, trans. Michael Shaw. Minnesota Press: 1984. Departed from Bürger’s *neo-avant-garde*, Hays explains his justification of the term “late avant-garde” as: “The term *late avant-garde* has the advantage of association with Frederic Jameson’s *late modern*, by which he intends an extreme reflexivity within the modern itself rather than a replay of modernism—that is, a condition in which the ideology (understood as a positive and necessary framework for practice) of modernism has been theorized and identified in terms of artistic autonomy, “a return to art about art, and art about the creation of art.” [T]he late architectural avant-garde keeps its namesake’s commitment to rigorous formal analysis, making the material of architecture stand against consumerism. [...] The term also recalls Theodor Adorno’s concept of “late style” and Edward Said’s elaboration of it. See K. Michael Hays, “Desire” in Architecture’s Desire: Reading the Late Avant-Garde. The MIT Press: 2010, p.11. For further reading in use of the concepts see Edward W. Said, On Late Style: Music and Literature against the Grain. Pantheon:2006, pp.7-8 and Theodor W. Adorno, “Late Style in Beethoven”, in Essay on Music, ed. Richard Leppert, trans. Susan H. Gillespie. University of California Press: 2002.

¹⁰⁴ K. Michael Hays, “Desire” *ibid.* p.12

The “original” is positioned in the avant-garde paradigms of art and architecture, whereas the late-avant-garde produced only “projections” of the ideas conducted in the avant-garde of the 1920s.¹⁰⁵ The concept of repetition of the late avant-garde mostly has a negative connotation, even defined as a “problem” by Hal Foster, trivializing the repeated ideas and productions, claiming that they “cancel the historical avant-garde.”¹⁰⁶ This sort of repetition is closely related with Walter Benjamin’s conception of “allegorical repetition” in which the idea of “repeating the previous” becomes affirmative. Hays investigates “allegory” through Eisenman’s Cannaregio project, where he designs a new project using Le Corbusier’s precedent never-realized project’s elements for Venice. “Allegorical repetition” as a suggested diachronic movement in architectural production does not under-values the first; however, it embraces it and enriches the meaning and operation of it. This allegory concept for Hays can concur by Freudian paradigm of *Weiderholungszwang*, or “repetition compulsion,” which refers to repeating a past trauma. It is primarily observed by Freud of his grand-child’s “tendency to repeat, as in the game of *Fort-Da*, anything found to be effective in diminishing his displeasure during the absence of his mother.”¹⁰⁷ At the same time, as Hays adds on, it refers to “certain neurotic fixations on traumatic events and the paradoxical regression to unpleasure through the repetition of those events.”¹⁰⁸

The argument on the above-stated “singularity” of repetition is compatible with what Freud alleges in his theory of “repetition compulsion.” The architectural late avant-garde’s repetitional operations are attentively correlated with

¹⁰⁵ Benjamin H. D. Buchloh, “The Primary Colors for the Second Time: A Paradigm of the Neo-Avant-Garde” in *October*, Vol.37. The MIT Press: 1986, p.48

¹⁰⁶ Hal Foster, “What is Neo about the Neo-Avant-Garde?” in *October*, Vol.70. The MIT Press: 1994, p.5, p.20

¹⁰⁷ K. Michael Hays, “Repetition” *op.cit.* p.82

¹⁰⁸ *ibid.*

Freudian analysis of the subject, as well. Michael Hays identifies Freud's "repetition compulsion" as "an instinctual impulse to achieve *stasis* in the psychic economy and reduce the quantity of stimulation and internal tension to the lowest possible level."¹⁰⁹ This idea of "reduction of quantity" constitutes a shared ground with Deleuze's assertion in terms of a generated "singularity." Albeit in Peter Bürger's rejection of the use of psychoanalytical explanation for the notion of repetition in architectural late avant-garde, as in Eisenman's repetition of the previous idea of Le Corbusier and the same architectural element in amount; and also as suggestively in Miralles' ideation of repetition as a method, Hays claims, "through repetition as discharge, the psyche seeks to eliminate all quantity."¹¹⁰ Bürger objects this argument as:

The use of deferred action as a general category of reflection, which I am glad to endorse, needs to be distinguished from an adoption of the Freudian model of trauma and repetition. I consider it objectionable to transfer concepts used by Freud to describe unconscious, psychic events onto historical processes undertaken by conscious, active individuals. In referring to repetition compulsion, Freud defines it as "an ungovernable process originating in the unconscious. As a result of its action, the subject deliberately places himself in distressing situations, thereby repeating an old experience, but he does not recall this prototype." It is perfectly clear that the repetition of avant-garde practices by the neo-avant-garde cannot be understood in this manner. It does not happen unconsciously nor does it contain elements of unconscious compulsion; we are dealing, rather, with a conscious resumption within a different context.¹¹¹

As another counter opinion to the investigation of an architectural object in its singularity, Alberto Pérez-Gómez states that an object of architecture cannot be

¹⁰⁹ *ibid.*

¹¹⁰ *ibid.* p.83

¹¹¹ Peter Bürger, Bettina Brandt and Daniel Purdy, "Avant-Garde and Neo-Avant-Garde: An Attempt to Answer Certain Critics of 'Theory of the Avant-Garde'" in New Literary History, Vol.41, No.4, The John Hopkins University Press: 2010, p.710 For Freud's definition of theory also see Laplanche and Pontalis, "Compulsion to Repeat" Language of Psychoanalysis, p.78

separated from its suggestive “meaning.” The “intimate” relationship of the architect with his *techne* cannot be comprehended by focusing solely on the architectural drawings, however, the procedural operations of the architect should be examined as an “inseparable” whole as Pérez-Gómez suggests.¹¹²

The products of architecture have been manifold. They range from the daidala of classical antiquity to the gnomons, machinae and buildings of Vitruvius, from the gardens and ephemeral architecture of the baroque period to the built and unbuilt "architecture of resistance" of modernity, such as Le Corbusier's La Tourette, Gaudi's Casa Batlle, and Hejduk's "masques." This "recognition" is not merely one of semantic equivalence; rather it occurs in experience and, like in a poem, its "meaning" is inseparable from the experience of the poem itself.¹¹³

However, in order to examine one singular architectural object or act and conduct architectural operations on it, it is apt to focus on the object itself—on the “internal coherence” as Miralles puts it—so that it could be separated from all attributed disciplinary “meanings.” When “meaning” is “neutralized,” as Derrida suggests, “the relief and design of structures appear more clearly,” and thus, any thorough analysis within the singularity of object, or drawing, could be viable. Derrida states that:

[T]he relief and design of structures appears more clearly when content, which is the living energy of meaning, is neutralized. Somewhat like the architecture of an uninhabited or deserted city, reduced to its skeleton by some catastrophe of nature or art. A city no longer inhabited, not simply left behind, but haunted by meaning and culture. This state of being haunted, which keeps the city from returning to nature, is perhaps the general mode of the presence or absence of the thing itself in pure language.¹¹⁴

¹¹² Alberto Pérez-Gómez, “Architectural Representation Beyond Perspectivism” *op.cit.* p.23

¹¹³ Alberto Pérez-Gómez, “Hermeneutics as Discourse in Design” in Design Issues, Vol.15, No. 2. The MIT Press:1999, p.71

¹¹⁴ Jacques Derrida, “Force and Signification” in Writing and Difference. Routledge: 1978, p.4

These arguments, either interrelated or contrary, provide an enriched repository to investigate an architectural operation. The theory of repetition, although it is in particular posited beyond the theory of architecture, carries the potential of interpretation regarding architectural operations. In this respect, Miralles' architecture is worthwhile in the terms that it forms a *niche* where repetition is settled in the center of architectural production.

3.2. Procedural Repetition vs. Act of Repetition: Enric Miralles and Repetition

Now I've got to undo everything. One should try to succeed in undoing everything and then doing it all over again very quickly, several times in the same sitting. I'd like to be able to paint like a machine.

Alberto Giacometti - A Giacometti Portrait, 1964

The contemporary ideal of "drawing for drawing," or "drawing as architecture," is acknowledged as prevalent conception of the architectural practice of the late avant-garde. The concept of "centrality of the drawing as drawing" of the late avant-garde is valued by Michael Hays since it is proclaimed as the "necessary vehicle" of architectural production as:

The centrality of drawing as drawing, [in the problematic of] the late avant-garde, is not merely the result of economic contingencies or an inability to get projects built. It is rather that drawing is the necessary vehicle of imagination, symbolization, and self-reflection in architecture, analogous to writing in language; drawing is perhaps the necessary medium of critical architecture. Drawing is a medium of marks that have passed from the architectural unconscious through the signifier, thus enabling and controlling signification. The drawing is indeed a privileged signifier because it alone inaugurates the process of architectural signification.¹¹⁵

¹¹⁵ K. Michael Hays, "Repetition" *op.cit.* p.63

The repetition concept, as well, is foregrounded in the architectural late avant-garde as the repetition of the same architectural element, the same object or the same act—both conscious and unconscious—is seen in the practices of the architects of the period. The concept of repetition finds its basis back in the avant-garde art as Krauss describes with relation to the concept of “originality” as:

Now, if the very notion of the avant-garde can be seen as a function of the discourse of originality, the actual practice of vanguard art tends to reveal that “originality” is a working assumption that itself emerges from a ground of repetition and recurrence.¹¹⁶

From the grounds of repetition, Deleuze argues, “true repetition” does not exist; however, it appears in two different ways: “sometimes the action remains the same in different contexts and with different intentions” and “sometimes the action changes and is perfected while the intention remains constant.”¹¹⁷ The former in Deleuze’s assertion refers to “procedural repetition” while the latter refers to “the act of repetition,” as they will be discussed in this research.

Being an architect registering the codes of architectural late avant-garde into his practice, “repetition” obtains prominence as one of the key-concepts for Miralles. He regards all of his projects as they are in a successive continuum. Certain procedural gestures are repeated through projects, and even, forms are transferred from one project to another.¹¹⁸ Hays defines this sort of transfer of formal gestures in an architect’s oeuvre as “procedural repetition” in his article “Architecture by Numbers” as:

[...] to architect is necessarily to repeat; the repetition of certain geometric procedures contains experience, and experience accumulates as architecture demonstrates its present capacity for transformation,

¹¹⁶ Rosalind Krauss, “The Originality of the Avant-Garde” *op.cit.* p.157

¹¹⁷ Gilles Deleuze, *op.cit.* p.5

¹¹⁸ Juan Antonio Cortés, *op.cit.* p.23

elaboration, and reconnection with other cultural materials. This procedural repetition is an appetite, the effort by which architecture strives to preserve itself. And the consciousness of that appetite is just what I mean by the desire to architect.¹¹⁹

Apart from the procedural repetition, in Miralles' office, EMBT, a particular drawing or sketch is repeated several times as *de facto* execution. He claims "every new sketch involves an operation of forgetting, and the rules that are generated have their internal coherence."¹²⁰ Juan Antonio Cortés continues Miralles' statement as

By repeating a sketch over and over again, it releases itself from its faithfulness to the place and the brief for which initially it is a record – its extrinsic conditions – and consequently, gradually sharpens its own internal coherence.¹²¹

The repetition of a certain sketch is essential for Miralles in order to emancipate a drawing from being the apparatus of representation. (Figure 3.1) The objective Miralles has, the intention to reach to the status where he could deal simply with the "internal coherence" of a drawing, brings about, and even requires, a preferable exemption within the prevalent architectural practice. The operational method he embraced to achieve this status—the constant repetition of the same drawing—is, if not all-inclusively, associated with the "defamiliarization" and "alienation" concepts in architectural production.¹²² Being estranged from the object's disciplinary "meanings" by repeating it several times enables one to interrogate it thoroughly as Hays claims:

¹¹⁹ K. Michael Hays, "Architecture by Numbers", in Constructing a New Agenda: Architectural Theory 1993-2009. Ed. A. Krista Sykes. Princeton Architectural Press: 2010, pp.332-345

¹²⁰ Alejandro Zaera, *op.cit.* p.14

¹²¹ Juan Antonio Cortés, *op.cit.*

¹²² K. Michael Hays, "Repetition" *op.cit.* p.76

[T]he repetition and depletion of signs is a successor to the production of defamiliarization and alienation effects [...], a procedure that repeats its object in order to interrogate it, to examine how it came into being, to foreground its arbitrariness, to show, that is, the object as constructed according to the conventional techniques and categories authorized by the discipline itself.¹²³

In many texts and interviews, commenting on his conception of repetition, Miralles gives the example of Giacometti's portrait of James Lord.¹²⁴ (Figure 3.2) While painting Lord's portrait, Giacometti makes eighteen different portraits which did not go beyond sketches. He repeats the same attempt each day, and therefore, the "act of repetition" supersedes the actual painting; in turn reaching the status of "singularity" as discussed by Deleuze. Departed from Giacometti's experience, by means of constant repetition of the object, which here is the drawing, Miralles claims, "the lines are blurred and *mimesis* dissolves."¹²⁵ The architect's correlation with the disciplinary presumptions is put aside in favor of focusing on the above-stated "internal coherence" of the drawing. Michael Hays, examining Eisenman's Cannaregio project as an ideation of "repetition of the previous" within architectural practice, suggests putting a "hiatus" between form and content provides the architect to elude himself from the presumptions of the discipline.¹²⁶

¹²³ *ibid.*

¹²⁴ James Lord, A Giacometti Portrait, MOMA: 1965

¹²⁵ Enric Miralles, "Foreword", *op.cit.* Also see, Juan Antonio Cortés, *op.cit.*

¹²⁶ K. Michael Hays, "Repetition" *op.cit.*



Figure 3.1 Enric Miralles Repeated Sketches for Igualada Cemetery Competition Entry

Source: Fundació Enric Miralles Archive, Barcelona. Reached at December 2014 (The sketches are photocopied to black and white)



de izquierda a derecha y de arriba abajo: las dieciocho etapas - left to right and top to bottom: the eighteen stages

129

UN PORTRAIT PAR GIACOMETTI
JAMES LORD, 1965.
Edizione Limitada: 1991

Figure 3.2 Alberto Giacometti- Portraits of James Lord (1965)

Source: Enric Miralles “A portrait by Giacometti: in the Mode of an Epilog” in El Croquis: EMBT Enric Miralles, No.72. El Croquis: 1995, p.129

The concept of difference, in accordance with the concept of repetition, as well, is not unallied to Miralles' practice. His use of the concept is seen not only as theoretical disclosure, also as an integral of his ideation of design. The sketch for the Ines-Table that he designed in 1993 initially for an exhibition in the Magasin - Centre National d'Art Contemporain de Grenoble shows his consciousness on the concept and his conversion of it into a prospective game. He proclaims in his annotation attached to the sketch: "find the differences."¹²⁷ The singular output containing all the changes in the positioning and form of the table will be itself as one single design object. However, as Miralles claims, each day it will open a discussion on difference by its self-existence. This sketch of Miralles, his writing included, provides a profound example to examine the concept of difference with regard to repetition; thus to a physical occurrence of the notion of "singularity."

The "act of repetition," repeating the same drawing over and over again helps Miralles to reach a profound form for the particular architectural problem that he is contemplating on. It helps to understand his thoughts, where he sees the lines as the annotations of them. Synchronically, "procedural repetition" suggests a similar operation. The repetition of similar forms throughout different projects traces a personal, at the same time successive, research within architectural production. It can be said that certain repetitional procedures are transferred *en bloc* throughout his works.

¹²⁷ Conversaciones con Enric Miralles, ed. Carles Muro. Editorial Gustavo Gili: 2016, p.66

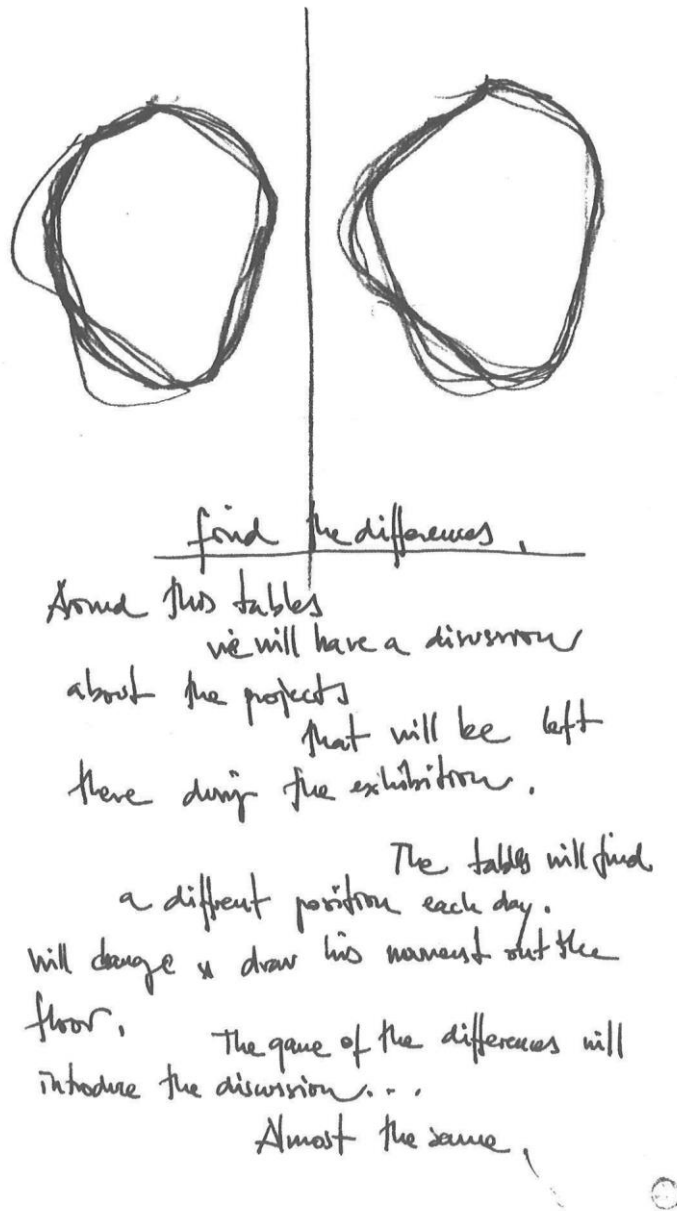


Figure 3.3 Sketch and Annotations (handwritten by Miralles) for Ines-Table Design of Miralles (1993)

Source: Conversaciones con Enric Miralles. ed. Carles Muro. Editorial Gustavo Gili: 2016, p.66

CHAPTER 4

TRACING REPETITION IN THE ARCHITECTURAL PLANS OF ENRIC MIRALLES

4.1. The Form of “Z” or “Zigzag” Repeated

Miralles repeats. He repeats either the same procedure, form or the same drawing over and over again. He argues that his projects do not end, rather, they should be considered as one major project evolving—“a single, ever-present project” as in Moneo’s words.¹²⁸ “The continuous shift of elements from one project to another” is described by Miralles as “movement of information” between projects “as if the search was going on simultaneously in different territories.”¹²⁹ Therefore, transfer of forms from one project to another, or as part of one continuous project,—“procedural repetition”—stays legitimate to further analysis on.

The formal outcomes of Miralles’ projects are complex in visual and structural terms; however, even among this complexity, certain forms can be followed

¹²⁸ Rafael Moneo, “Enric Miralles: An Intense Life, A Consumate Work”, in El Croquis: EMBT Enric Miralles / Benedetta Tagliabue 1996-2000: Maps for a Cartography, No.100/101. El Croquis: 2000, p.311

¹²⁹ *ibid.*

through his projects. One of these repeated forms is “Z-form” or “Zigzag.” The “Z-form” or “zigzag” appears in many projects as though it is part of a continuous research for formal ideas in Miralles’ oeuvre, transferred with slight variations in form and differences in scales throughout the plans. The ultimate letter of the alphabet—Z, as an architectural form, performs “like a connection that makes a possible future” as Josep Rovira, architectural historian, claims.¹³⁰ The concept of repetition, in general, is also related with future in Deleuze’s ideation of it as he claims “repetition is the thought of future: it is opposed to both the ancient category of reminiscence and the modern category of *habitus*.”¹³¹ It cannot be considered as close to a convention or a habit. Rather it suggests a movement through future. An architectural form’s relation with future points out to a progressive movement, if not a “vertiginous movement” as Deleuze later adds on in “Repetition and Difference.” However, either progressive or vertiginous, the suggested movement of a repeated form remains as an integral within personal research and the operations of the architect for formal achievements; in other words, as an integral of his *modus operandi*. The “procedural repetition” appears in Miralles’ architectural operations as if it were “a chain unstoppable within the trajectory” of the architect’s oeuvre.¹³²

¹³⁰ Josep M. Rovira, “Reconversión de la Fábrica la Llauna en un Instituto de Bup, Badalona (Barcelona) 1984-1986” in Enric Miralles: 1972-2000, ed. Josep M. Rovira. Fundación Caja de Arquitectos: 2011, p.91

¹³¹ Gilles Deleuze, *op.cit.* pp.7-8 For the concept of *habitus* related to repetition see: Gilles Deleuze, “Repetition for Itself” in Difference and Repetition, trans. Paul Patton. Columbia University Press: 1995, pp.79-84

¹³² Josep M. Rovira, *ibid.* For “vertiginous movement” see Gilles Deleuze, *op.cit.* p.11



Figure 4.1 Roofs of *Plaza Mayor* in Barcelona (1985)

Source: “Roofs for Town Square in Parets del Vallés” in El Croquis: Miralles/Pinós, No.30+49/50. El Croquis: 1983-1990, pp.47-48

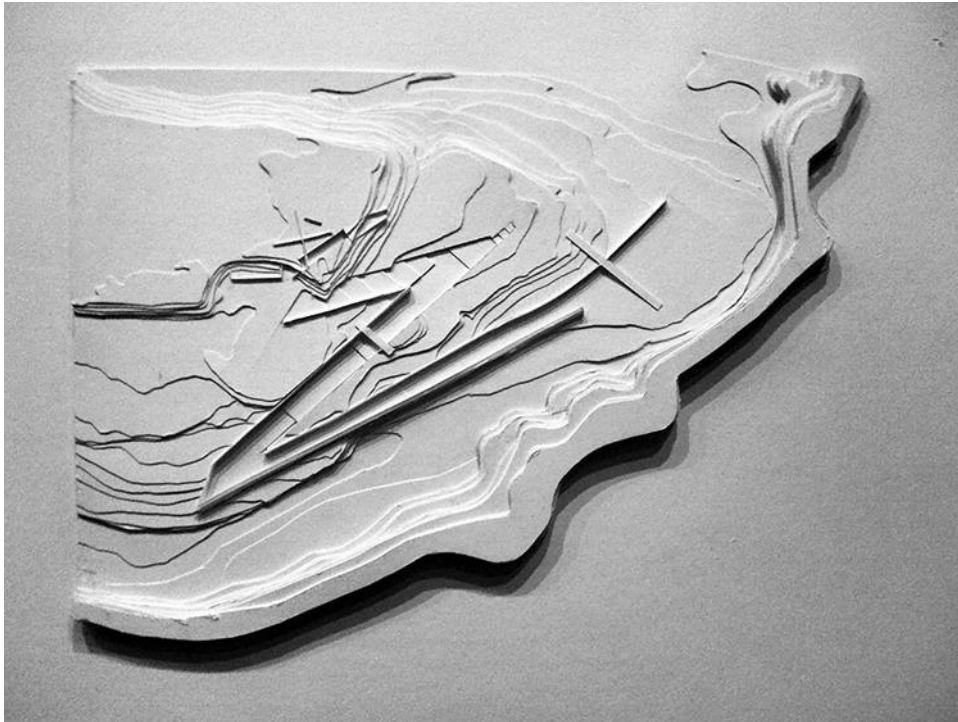


Figure 4.2 Model for Igualada Cemetery Competition Entry (1985)

Source: “Concurso de Anteproyectos de Construcción de un Nuevo Parque-Cementario Municipal Convocado Por el Ayuntamiento de Igualada, 1983-85”
 Retrieved from
<https://homenajeaenricmiralles.wordpress.com/2014/10/29/mp06-concurso-de-anteproyectos-de-construccion-de-un-nuevo-parque-cementerio-municipal-convocado-por-el-ayuntamiento-de-igualada-1983-85/> Reached at May 2017



Figure 4.3 Typography Detail for Igualada Cemetery Competition Entry - “Z” of Zemen+iri (1985)

Source: Foundation of Enric Miralles Archive, Reached at December 2014

The Z-form, in the case of Miralles, is proclaimed by Rovira as the “mark of the house” moving a step forward. It appears as he seeks the best benefit of one form throughout his works. The first project that this particular form is observed, if not the competition entry for Igualada Cemetery, is the “Roofs of *Plaza Mayor* in Barcelona” designed in 1985 (Figure 4.1) “The Z-form is used to create a visual distortion,” Rovira says, “which later converts itself into a manifesto as it repeats itself to keep the memory of the ones who want to forget in.”¹³³ He also suggests that these marks stay open to the Z-form’s return in other projects.

It is not clearly stated what Miralles aims by or whether he has a determinate aim in using the form of zigzag repeatedly throughout his projects. For example in the competition entry for Igualada Cemetery, Miralles and Pinós designed a cemetery paving the main path for visitors in the form of “Z” as in the initial of the word “*Zementiri*” in Catalan for “cemetery”, playing with calligraphy, where they also used the letter “T” in the form of a “cross” from the same word for shaping the project as in their formulation of the word like a “joke”: “Zemen+iri.” (Figure 4.2 and 4.3)

By proposing a path in the form of “zigzag,” like a “tectonic footprint,” Miralles, in turn, breaks the directionality of movement.¹³⁴ He enriches the experience and sensory perception of space as a mark of phenomenology faced within his architecture. Following the path in the form of zigzag, the direction of one’s gaze who experiences the space as he visits, also, is diverted accordingly. From this perspective, it can be said that the visual and physical

¹³³ For “tectonic footprint” see Josep M. Rovira, “Cubiertas en la Plaza Mayor, Pareds del Vallés (Barcelona 1985)” in Enric Miralles: 1972-2000. ed. Josep M. Rovira. Fundación Caja de Arquitectos: 2011, p.97

¹³⁴ Antonio Pízza, “Cementario Municipal, Igualada (Barcelona) 1985-1991” in Enric Miralles: 1972-2000. ed. Josep M. Rovira. Fundación Caja de Arquitectos: 2011, p.114

experience of a space is augmented by the deflected directionality of the eye of the observer. This refers to a demonstration of Miralles' attemptive play with the instrument: "distracted gaze." The "distracted gaze" as a constant in his architectural operations, Miralles claims, re-invents and repeats the project in every movement as he wrote on "simultaneous presence" of forms:

Montage and simultaneous presence. To redo the whole design every time. The instrument is the distracted gaze... The gaze which follows your head as it turns to talk to someone at your side, or the gaze searching for a place to rest. It resembles the zig-zag of a fly buzzing about the middle of the room. The distracted gaze fixes the points and reconstructs a common fabric. There are no transitions. It invents and repeats the design. It dissolves the false problem created by two extreme positions. The *contraposto* is not a reply. The distracted gaze, which is thinking of something else, responds to the desire of the one who is designing to possess all the forms drawn simultaneously from every angle.¹³⁵

The gaze, here, is conceived as an instrument as in the conception of the term in art discussions. Michael Foucault interprets the gaze in Velázquez's painting, "Las Meninas," and addresses it as an instrument equal to the palette and the brush, or the reflections, the light and the man standing at the back.¹³⁶ It is used as an instrument by the painter in the momentary of the imagination of the scene of the painting. It does not have a constant and fixed character that when the observer's position or the observer changes, it is variable accordingly. Miralles' gaze is similarly an instrument in the sense that he uses the "gaze" of the potential visitor of the project site and "distracts" it by the elements of its design to simultaneously deflect the directionality and spread it to various places and moments. By this, it constitutes the "simultaneous presence" he mentions, where the form of "zigzag" operates as the mediator of this idea.

¹³⁵ Enric Miralles, "The Inside of a Pocket" in El Croquis: Miralles/Pinós, No.30+49/50. El Croquis: 1983-1990, p.112

¹³⁶ Michael Foucault, "Las Meninas" in The Order of the Things. Routledge: 2002, pp.3-18

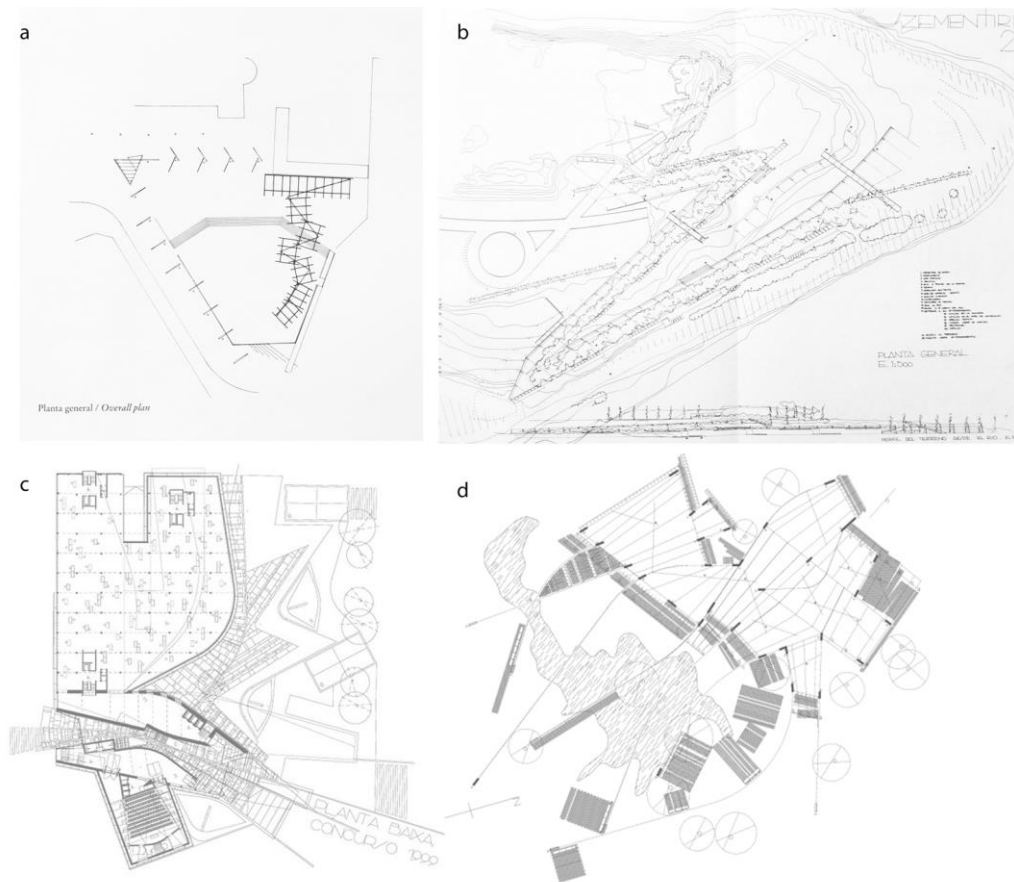


Figure 4.4 Four Projects (a) Roofs for the *Plaza Mayor* in Barcelona (1985), (b) Igualada Cemetery Competition Entry (1985), (c) Natural Gas Headquarters Building (1999), and (d) Public Library in Palafolls (1997)

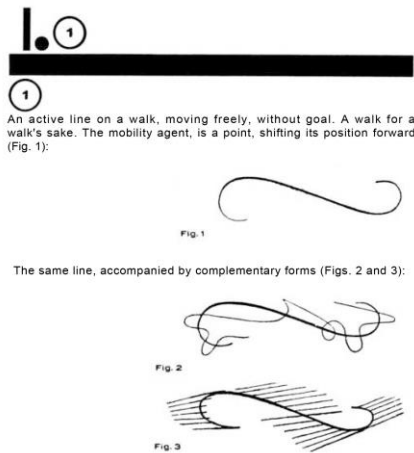
Source: (a) “Roofs for Town Square in Parets del Vallés” in El Croquis: Miralles/Pinós, No.30+49/50. El Croquis: 1983-1990, p.44, (b) Foundation of Enric Miralles Archive, Reached at December 2014, (c) “New Head Office for Gas Natural” in El Croquis: EMBT Enric Miralles / Benedetta Tagliabue 2000-2009: After Life in Progress, No.144. El Croquis: 2009, pp., and (d) “Palafolls Public Library” in El Croquis: EMBT Enric Miralles / Benedetta Tagliabue 1996-2000: Maps for a Cartography, No.100/101. El Croquis: 2000, p.171

The form “Z” or “zigzag” is also related with elongating the path, and therefore, expanding the experience of a space. Rovira quotes Georg Lichtenberg’s expression on “walking in zigzag” while mentioning Miralles’ formal disclosure, which remains appropriate in the terms that what Lichtenberg provided is a description of elongating the path of life that “God gave us,” staging the grounds for the analogy of prolonging the path either of life or of a pedestrian in an architecturally paved space. Lichtenberg claims:

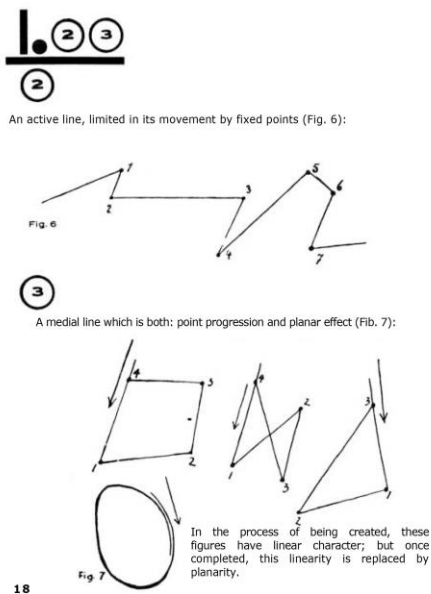
There are two ways to prolong the life. The first consists in distancing the two points, the one of the birth and the one of the death to the maximum from each other, thus paving the way. The other way, is to walk more slowly leaving the two end points where God wants them to be; is the life of the philosophers, who have discovered that it is best to walk in zigzag, like collecting plants and trying to jump a trench and, beyond, where the ground is clean and nobody sees it, giving a somersault.¹³⁷

To apply analysis with regard to “repetition,” four projects of Enric Miralles, which contain the form of “zigzag” in their plans, are selected. (Figure 4.1) The form “zigzag” is carried from the Roofs for the *Plaza Mayor* to Igualada Cemetery, to Public Library in Palafolls, and to Natural Gas Headquarters Projects. (Figure 4.4) Although there are differences in the formations of this particular obliging form; as in the Roofs it appears as covers, in Cemetery project it occupies the main axes and dominates the whole orientation, in the Natural Gas Building it is seen as part of the landscape accompanying elevation in the form of “Z” but curved slightly, in Palafolls it appears as part of the structural system, not affecting the whole design completely but in aid for the multi-angled façade orientation in plan; the repetition of “zigzag” is what is stationary and creates proper ground for further analysis.

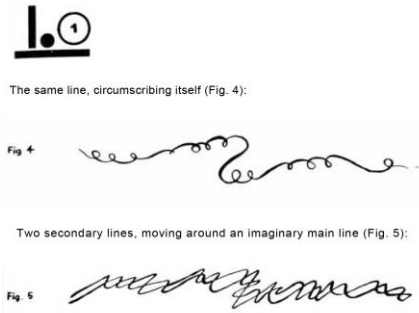
¹³⁷ Josep M. Rovira, “Cubiertas en la Plaza Mayor, Parets del Vallés (Barcelona 1985)” *op.cit.* p.102 Also see Georg Ch. Lichtenberg, *Aforismos*. Edhasa:1990.



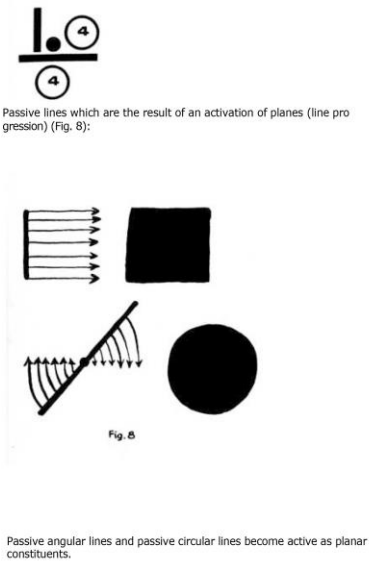
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18



17



19

Figure 4.5 “Active” and “Passive” Lines of Paul Klee

Source: Paul Klee, Pedagogical Sketchbook. Trans. Sibyl Moholy-Nagy. Faber&Faber:1968, pp.16-19

The ideation of repetition concept finds its foundations within the frame of philosophy and psychoanalysis as in the theoretical disclosure provided earlier. However, it still carries the possibility of its reflection to architectural theory, which Michael Hays attempted in his book *Architecture's Desire*, and, to further, the possibility of its operation within architectural praxis. From this point of departure, Deleuze's formulation of repetition will be applied as "one" refers to "identity", "two" refers to "difference", and "three" refers to "beginning of becoming for future repetitions", to the selected projects from Miralles' oeuvre in order to demonstrate the practicability of theory developed beyond architecture in reading an architectural operation.¹³⁸

To begin with, in selected projects the "Z" form or "zigzag" is delineated over with no interpretation with red dashed line in search for the "active line" of the project regarding Paul Klee's unequivocal definition of "active" and "passive" lines from his "Pedagogical Sketchbook." (Figure 4.5) Second, the "influence zone" of the zigzag is colored in grey shade extracted from the plans without any outer imposition; this grey shade demonstrates the space defined by the "zigzag" in the particularity of each project. Third, secondary black lines are applied perpendicular to the lines forming the zigzag to demonstrate the change in the directionality among the fixed angles of the "zigzag." The implied "passive" character of these additional lines would turn into "active" when they achieve planar character, as will be explained thoroughly.

¹³⁸ Briankle G. Chang, *op.cit.* p.190

4.1.1. “One” as Identity



Figure 4.6 Zigzag in the Plan of Roofs of *Plaza Mayor* in Barcelona

Source: Diagram drawn by the author.

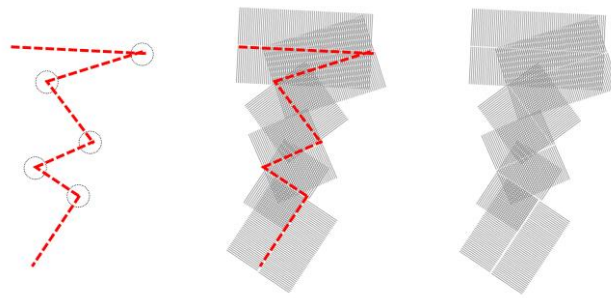


Figure 4.7 Active and Passive Lines in the Plan of Roofs of *Plaza Mayor* in Barcelona.

Source: Diagram drawn by the author.

In Deleuze's formulation, "one," simply, characterizes "identity." The Roofs of *Plaza Mayor* project is the first project that the form of "zigzag" is seen among Miralles' works. In this example, it emerges as the main structural system of the project. (Figure 4.6) To define and discuss the zigzag-form and investigate upon it, the "Roof-zigzag" suggests a point of origin. As in the Monet's water lily example of Deleuze, the first, which is the form of an identity, has the potentiality to repeat, and thus, carry all other zigzag forms appeared in Miralles projects.

The "zigzag", shown with red dashed-line, is the "active line" of the project. The active line is "limited in its movement by fixed points" which are determined by the architect upon the repetitional operation—continuous sketching and the cognitive process furthered along with it.¹³⁹ (Figure 4.7) When the "active line" is remarked, sequential "passive lines" which are perpendicular to the main lines of the zigzag are additionally drawn to demonstrate and emphasize the "influence zones" for the mentioned instrument of Miralles—the "distracted gaze." Although the applied perpendicular lines are initially passive in character, when they create a unity, or in other words, when their "linearity" is "replaced by planarity," their passive character also replaces itself with "being active as planar constituents."¹⁴⁰ In this light, they operate as active zones for the "distracted gaze." Even when these lines are isolated from the active line, namely, from the zigzag, they collide with each other providing new multiple versions of zigzag-form; this time, with a width. Now we can consider "planes"—the influence zones—for the movement of the visitor, for the shade and shadow areas, or for the seating areas in the particularity of this project; in short, for the "gaze."

¹³⁹ Paul Klee, *op.cit.* p.18

¹⁴⁰ *ibid.* pp.18-19

4.1.2. “Two” as Difference*

In Deleuze’s statement, “two” refers to “difference.” Deleuze does not give “difference” a certain definition in his book “Difference and Repetition;” however, he uses “difference” as an instrument or a method to mention the concept of “difference” itself. On seeking the “difference” of “two,” he claims that “[t]he difference ‘between’ two things is only empirical.”¹⁴¹ It is true that “to compare differences” or “to depict resemblances,” which refer to similar operation according to Deleuze’s ideation, can only be on the grounds of empiricism, wherein the set of rules are variable either due to the “Self” of the operations, here it is the architect, or circumstances of the two objects’ *statis*, which in this study is the two selected projects of Miralles. Deleuze uses “*genus*” and “*genera*” notions where he identifies classification of species and their cause of differentiations to achieve the understanding of the concept of “difference,” that is, to set a limitation where it can be mentioned. He, also, underlines the importance of the notion of “essence” specific to the “intrinsic” character of the “two” that is to be compared.¹⁴²

The “essence,” in the case of Miralles, shows itself in the form of “zigzag.” When “zigzag” is the “essence,” the analysis will be “intrinsic” regarding the repetitive implementation of this particular form within Miralles’ works. The two projects Roofs of *Plaza Mayor* in Barcelona and Natural Gas Headquarters Building both house the form of “zigzag,” that is, they have the same “essence.” (Figure 4.8) However, within their common ground, they differ from each other in certain ways. “Difference” here occurs “on the basis of repetition” of

¹⁴¹ Gilles Deleuze, “Difference in Itself” in Difference and Repetition, trans. Paul Patton. Columbia University Press: 1995, p.28

¹⁴² Deleuze divides “difference” into many sectors. Among those he explains “specific difference” extensively. The “specific difference” can be mentioned with regard to one specific “*genus*” and its “essence.” For Deleuze, “difference” is a “quality of the essence itself.” See, *ibid.*p.31

the same form in different works just as “repetition” within the generality of Miralles’ works has occurred “on the basis of difference.”¹⁴³ Since, as Deleuze claims, repetition is “the formless being of all differences.”¹⁴⁴

First, the objects of analysis, the two “zigzag” forms, are different with regard to directionality and movement. (Figure 4.9) While the Roof-zigzag suggests vertical movement in plan from top to bottom and *vice versa*; the zigzag of Natural Gas building is rather dispersed, which is evidential when looked at the orientation of the fixed points. As in the former the fixed points are in a succession from the points “1” to “5” in the same direction, while in the latter there is a shift in its movement, which is seen through the fixed points “1” and “2;” the point “2” suggests a return as going in the other direction. This shows the difference in their character; the former uses the form of zigzag as an idiosyncratic orientation only in relation with itself and its movement, whereas the latter holds an extroverted character resulted from the orientation of the fixed points. This can be observed as in the influence areas of the zigzag forms; the former is intertwined with the singular zigzag-line, as the latter only accompanies it. (Figure 4.10)

¹⁴³ *ibid.* p.42

¹⁴⁴ *ibid.* p.57



Figure 4.8 Zigzag and its Influence Zone in the Plans of Roofs of *Plaza Mayor* in Barcelona (a) and Natural Gas Headquarters Building (b)

Source: Diagram drawn by the author

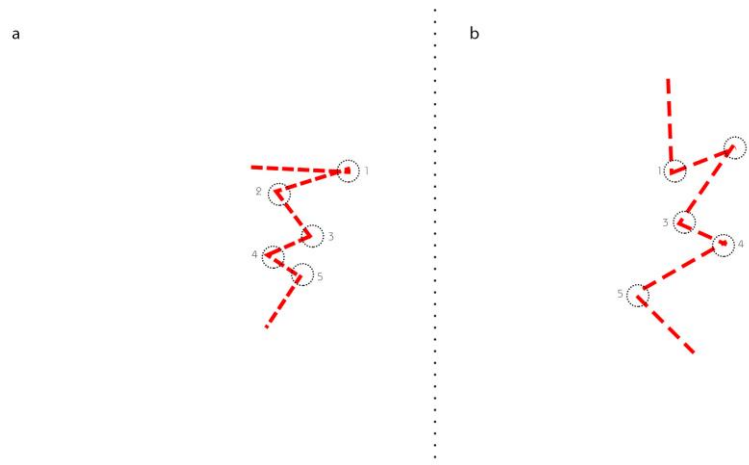


Figure 4.9 Fixed Points and Zigzag as the Active Line

Source: Diagram drawn by the author

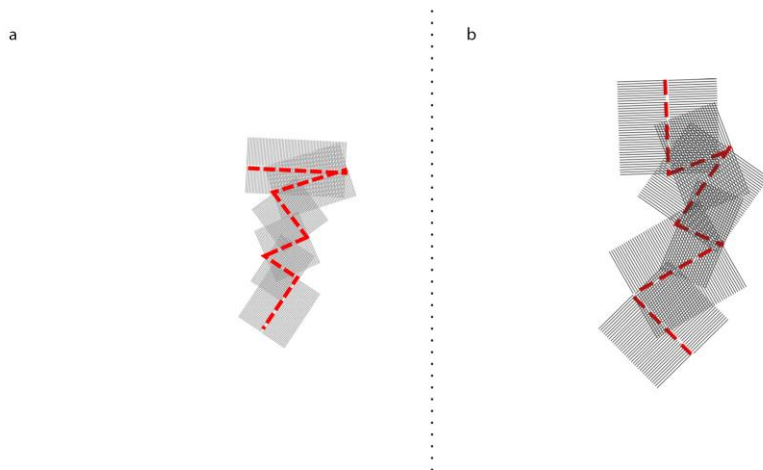


Figure 4.10 Passive Lines Applied to the Zigzag

Source: Diagram drawn by the author

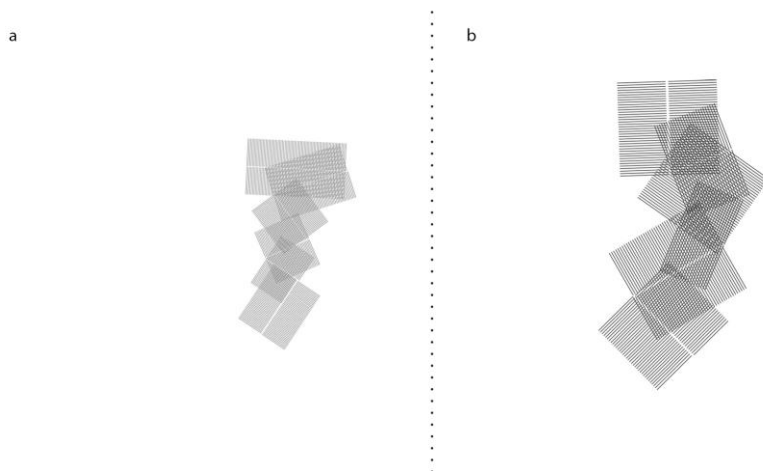


Figure 4.11 Passive Lines-Active Zones

Source: Diagram drawn by the author.

Second, when “passive” lines are applied to show the “active” influence zones, both projects suggest a distraction on the visitors’ gaze. However, since the former is for the roofs, the impact of the “distracted gaze” is augmented including the shadow effects, and the movement is paced down by the addition of seating accordingly to the zigzag form, which refers back to the zigzag’s influence area intertwined with it. While, in the latter, the instrument “distracted gaze” is less effectual in terms of the experience of zigzag-orientation. The “distracted gaze” here does not suggest a maximum of “simultaneous presence” of forms, as in Miralles’ statement, due to its extroverted character and does lessen the effect of it. (Figure 4.11)

Although they resemble each other, they are different in form, in character, and in their impact. Deleuze argues, “differences” always “resemble one another.” He also adds that “difference is behind everything, but behind difference there is nothing.”¹⁴⁵ Therefore, this repeated form in different territories, times, and scales only suggests differences as in the fact of a “repetitive operation.” Their differences are evidential as a possibility in the first sketch. Two repeated forms only characterize “difference.”

¹⁴⁵ *ibid.* p.57

4.1.3. “Three” as the First Number of Repetition

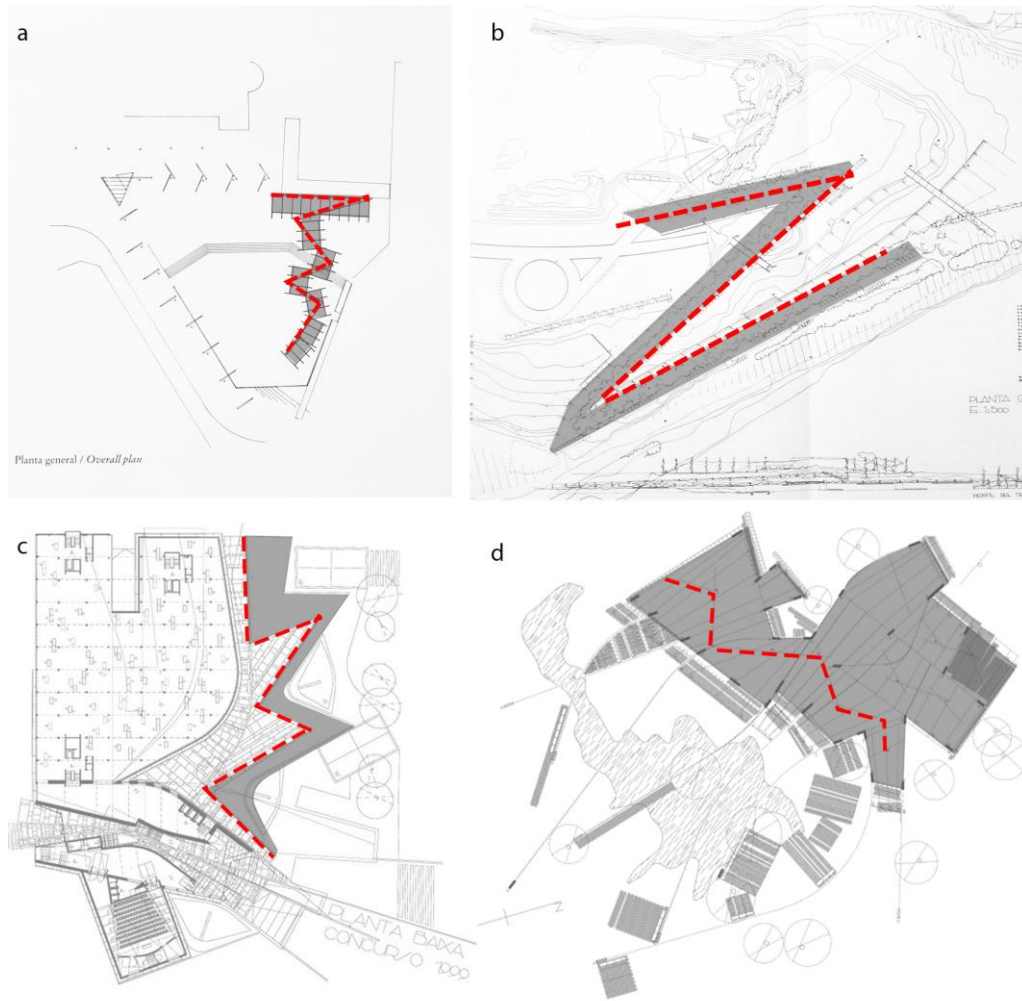


Figure 4.12 Zigzag in the Four Project Plans: (a) Roofs of *Plaza Mayor* in Barcelona, (b) Igualada Cemetery Competition Entry Plan, (c) Natural Gas Headquarters Building, and (d) Library of Pallafols.

Source: Diagram drawn by the author.

For Deleuze's disclosure on repetition, "three" refers to "anamnestic beginning of becoming, of the possibility that we can say 'one' now and in the future, again, again, and again."¹⁴⁶ The repetition of the same form is "anamnestic" because it is an expression of a "mnemonic" operation. Repetition is both related with past, as in Freud's "repetition compulsion" theory which is the unconscious repetition of a past trauma, and with future as one operation carries a possibility of a return of the operation or object repeated.¹⁴⁷

An architectural drawing carries the full intentionality of the architect, just as the first drawing including the "zigzag" form carries all the future possibilities of its repetition. When four projects are put together they suggest a unity—a "singularity"—within the collection of the architect's works. These zigzag forms are derived from the same repetitive operation. (Figure 4.12) They are part of a continuous research from Miralles' *modus operandi*. They differ in their orientation of fixed points, in scale, in their positioning within the projects and in their times. (Figure 4.13) However, they resemble each other as the outcome of similar progressive and cognitive activity that dominates the hand of the architect. The aforementioned "psychic economy" is visualized when they are seen together. They are both productions of the instrument "distracted gaze," suggesting shifts in directionality of movement, if not they suggest a sort of movement solely by their beings. (Figure 4.14 and 4.15)

¹⁴⁶ Briankle G. Chang, *op.cit.*

¹⁴⁷ Gilles Deleuze, "Repetition for Itself" *op.cit.* p.90

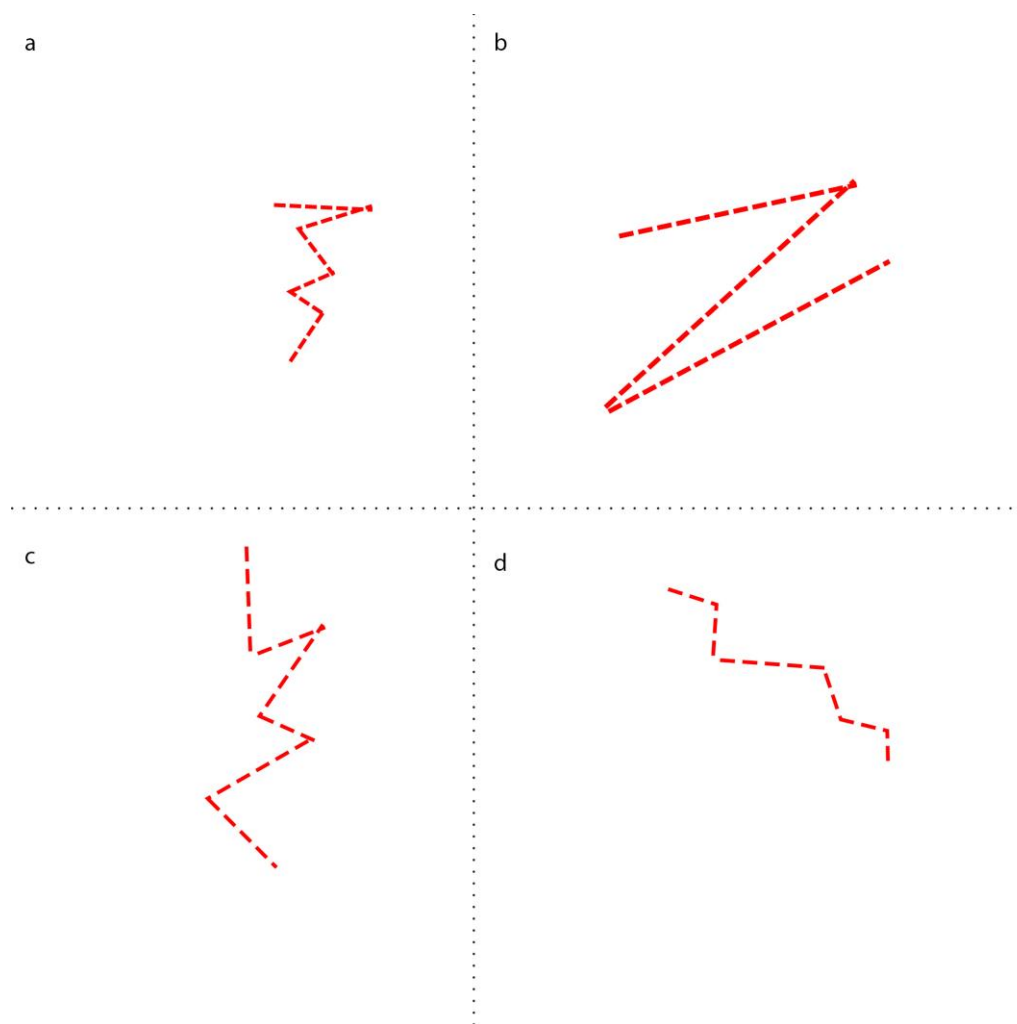


Figure 4.13 Active Lines of Four Plans

Source: Diagram drawn by the author

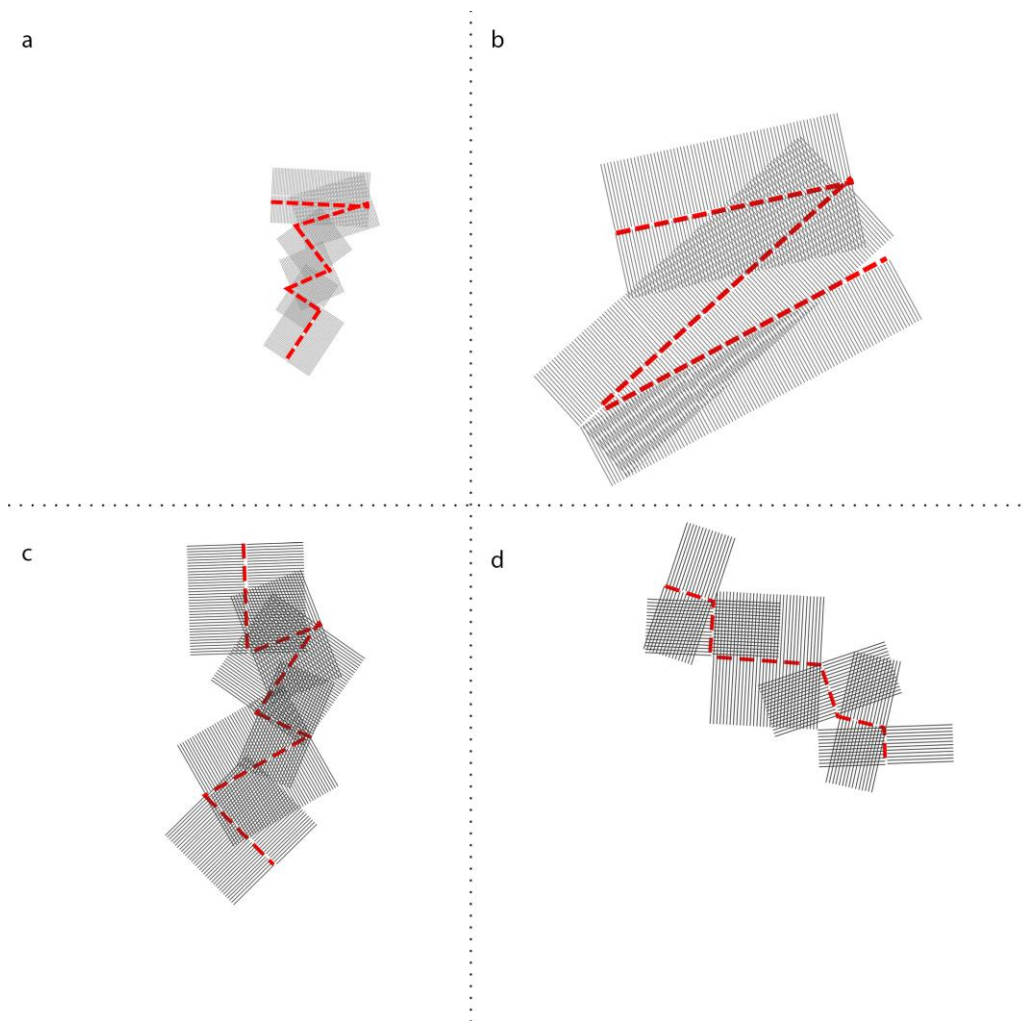


Figure 4.14 Active and Passive Lines Applied to Four Plans

Source: Diagram drawn by the author.

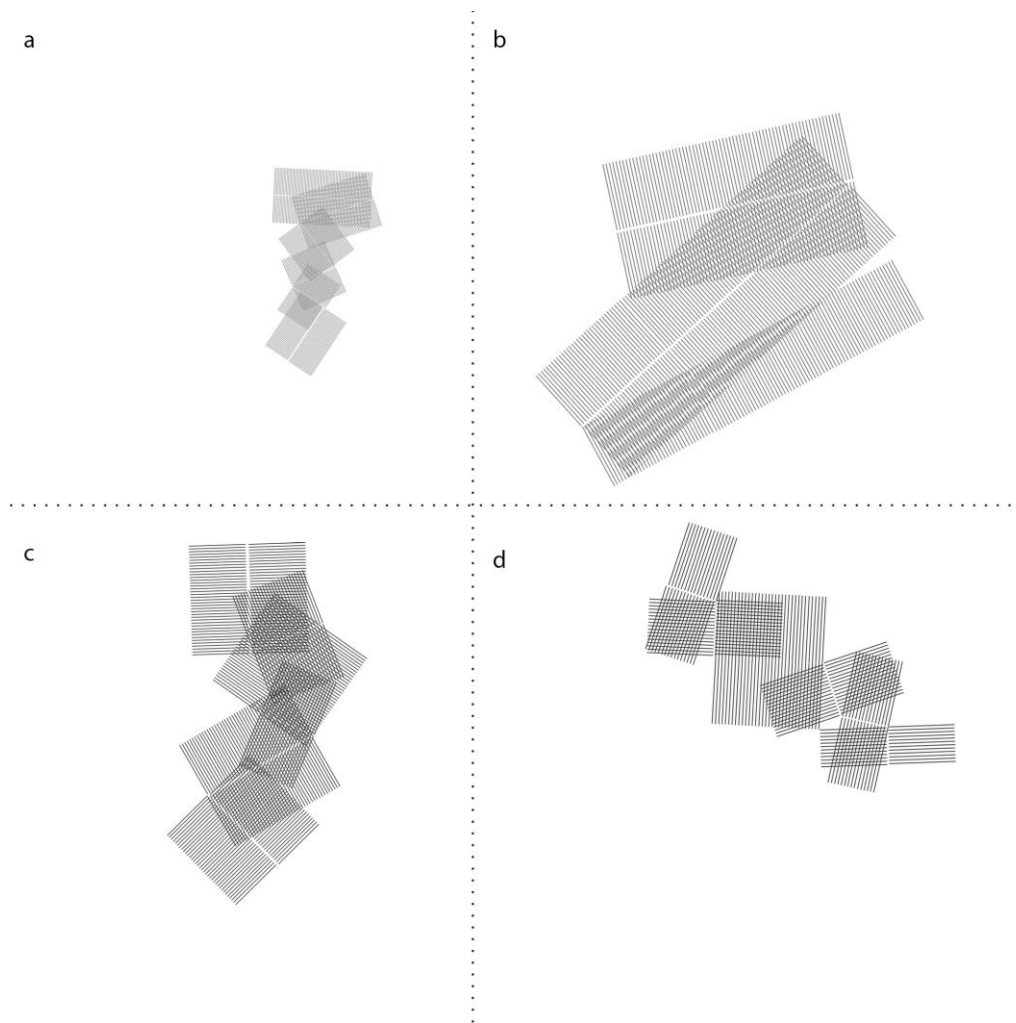


Figure 4.15 Passive Lines-Active Zones of Four Plans

Source: Diagram drawn by the author.

4.2. Repetition of the Same: The “Act of Repetition” Superposed

Miralles argues that repetition of the same sketch, which herein is referred as the “act of repetition,” is a method for the expression of an idea, not to perfect it but to express it in its most profound form. This repetitional operation Miralles adopts and implements within his *modus operandi* is prevalent through his practical disclosures.

Miralles rejects erasing. For him, one should proceed to draw without using an eraser.¹⁴⁸ Theory reflected into his practice; he searches his answers as if they are in between the differences occurred by means of repetitions of the drawings and forms. Erasing lines causes a drawback, in its literal terms. Through erasing lines from the paper, the “Self” of the repetition, which here is the architect who draws, is erased with the same pace. In Deleuze’ ideation of the subject, the “Self” of the repetition can be traced through the repeated drawings as:

We are right to speak of repetition when we find ourselves confronted by identical elements with exactly the same concept. However, we must distinguish between these discrete elements, these repeated objects, and a secret subject, the real subject of repetition, which repeats itself through them. Repetition must be understood in the pronominal; we must find the Self of repetition, the singularity within that which repeats.¹⁴⁹

Drawings of Miralles as a whole, now classified and filed in the Foundation of Enric Miralles, generously provide the observer myriad repeated drawings and lines. Inbetween these repeated lines and the constant performance of drawing, which can even be observed at a glance, Miralles seeks to encounter his inner

¹⁴⁸ Eva Prats and Ricardo Flores, “Eva Prats y Ricardo Flores Rememoran a Enric Miralles” in Homenaje a Enric Miralles. 09.Sept.2015. __Retrieved from <https://homenajeaenricmiralles.wordpress.com/2015/09/09/eva-prats-y-ricardo-flores-rememoran-a-enric-miralles/> Reached at 11.Sept.2015.

¹⁴⁹ Gilles Deleuze, “Introduction: Repetition and Difference” *op.cit.* p.23

intentions, and to put the argument forward, it can be claimed that he pursues, and in turn exhibits, a condition of intimacy through them.

The collective drawing, that is, the repeated sketches in the office, points out that one single drawing is “insignificant” within the “singularity” of repetition. (Figure 4.16) Instead, it is the repetition itself what matters above all. The repeated sketches as part of a cognitive process do not exhibit a series of drawings in sequence; however, they are replaced with the instantaneity of a singular drawing that has the intentions of seeking a profound form or answer to an architectural problem—a conscious trial for the unconscious to reveal—in the same context of theirs just as Giacometti’s not-ceasing portrait repetitions. To depict the influence of repetitional operations both on the object and in the mind and to clear the ground for understanding of the “act of repetition,” Deleuze’s citation of Hume can provide a return. Hume suggests that “repetition changes nothing in the object repeated, but does change something in the mind which contemplates it.”¹⁵⁰ Therefore, the object is not changed by repetitional operations, but the understanding of it is what changes. The cognitive process of Miralles as the actor of the repetitional operations reappears in a succession, through which an encounter and an understanding of forms are sought.

¹⁵⁰ Gilles Deleuze, “Repetition for Itself” *op.cit.* p.70

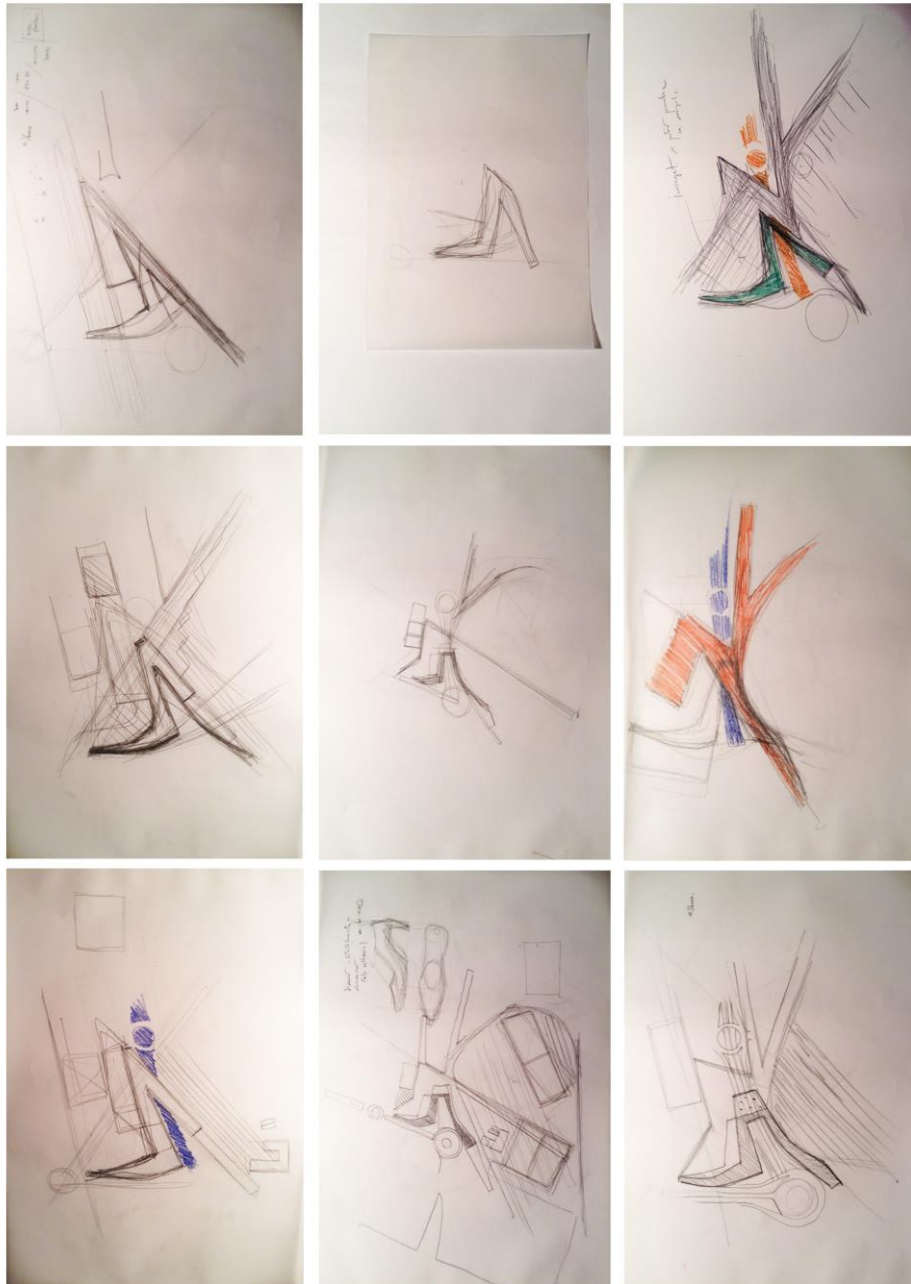


Figure 4.16 Repeated Sketches of Enric Miralles for Diagonal Mar Park Project in Barcelona

Source: Fundació Enric Miralles Archive, Barcelona. Reached at December 2014



Figure 4.17 Repeated Sketches of Miralles-Superposed

Source: Created by the author.

As Miralles' sketches are compiled on one plate, on a singular image, they become a single drawing; therefore, the "act of repetition" is visualized as *de facto*. (Figure 4.17) The repeated drawings of Miralles as superposed; also, changes the understanding of the operation by the third party—the observer. By the superposition of the drawings, the factors of time, space and movement of drawing action are deformed and compressed into one single plate. In other words, this single image is a simulation of time-space-movement agents interred within the act of repetition. It can also be said that the drawings when superposed has a new value in itself.

This frame of representation of repeated sketches, besides the "repeating self," has also influence in the "contemplating mind" of the observer. If "representation is a simulation of the meaning of the present"¹⁵¹ as Eisenman claims, it is not mistaken to say that, here, it simplifies to comprehend the carrying of the first drawing to the "nth" power and the essence of repetition. It also carries possible future meanings within itself. By this suggested representation of the repetitional operation, the interaction of the observer with the procedure of repetition and the cognitive process of the architect are differed with respect to the way that the information of its meaning, slightly augmented, is given.

The performance of sketching of Enric Miralles is lodged in one plate giving clues for his methodological preferences. (Figure 4.18) It is evidential that Miralles did not use transparent tracing paper to repeat the same sketch; instead, as he claims, he *re*-draws the same sketch from scratch without considering any scale, or its positioning on the surface of the paper. He used any piece of paper without regarding its quality, size or type to depict his thoughts *via* lines.

¹⁵¹ Peter Eisenman, "The End of the Classical: The End of the Beginning, the End of the End," in Perspecta, Vol.21. The MIT Press:1984, p.159



Figure 4.18 Sketches Scaled and Rotated Before Superposition

Source: Fundació Enric Miralles Archive, Barcelona. Reached at December 2014. Changes are made by the author.

Therefore, to superpose the drawings the re-scaling of them is required as it can be observed. He also used color only to emphasize the parts that he is contemplating on; to differentiate the materials or the parts from each other. The sketches are quickly delineated without any consideration on the quality of the lines so that the essence of his thoughts is annotated on the surface of the paper similar to an expression of “automatic writing.”

4.3. A Shoe on the Way

From the very beginning, from the first moment I drew or painted, I have certainly been painting and sculpting to get a grip on reality, to protect myself, to feed myself, to get bigger; to get bigger to protect myself better, to fight better, to keep going, to move forward as far as I can on every front, in every direction, to protect myself against hunger, against the cold, against death, to be as free as possible; as free as possible to try—with the means that are now most clearly mine—to see better, to understand things around me better, to understand better to be as free and as big as possible, to spend, to spend myself as much as possible in what I do, to discover new world, to wage my war, for pleasure? For joy? War for the pleasure of winning and losing.

Alberto Giacometti-My Reality

For Diagonal Mar Park Project in Barcelona, Miralles, primarily, recorded the traces from the site and its environment with no hierarchical correlations. After he adopts the lines he recorded and begins to sketch to encounter his thoughts on paper, Z-like form emerges in his sketches and is repeated to reveal its profound formal appearance once again, this time for a Public Park.

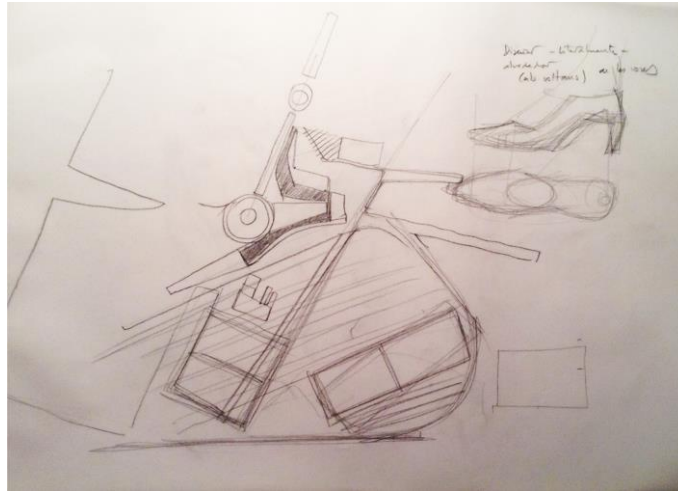


Figure 4.19 A Sketch of Enric Miralles for Diagonal Mar Park Project

Source: Fundació Enric Miralles Archive, Barcelona. Reached at December 2014

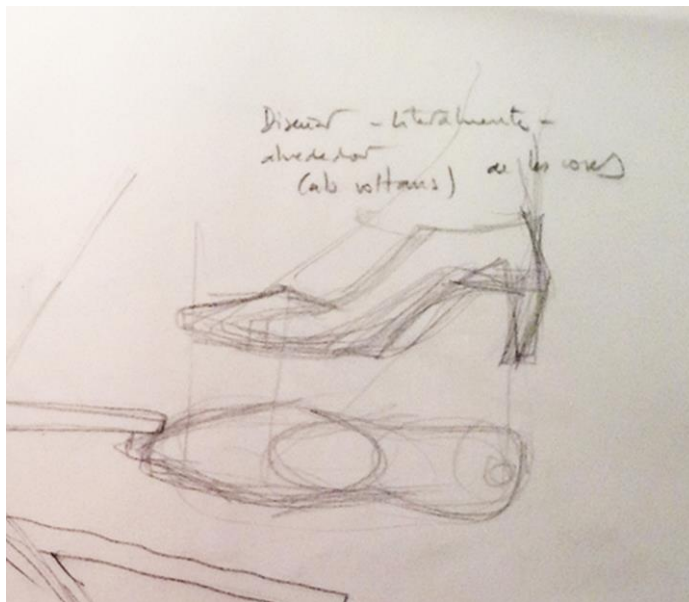


Figure 4.20 Shoe Sketch – Detail

Source: Fundació Enric Miralles Archive, Barcelona. Reached at December 2014

Drawing one of his sketches, while repeating the same lines, Miralles encounters with a familiar form—the form of a “shoe,” sketched on the right corner of the sketch-paper with a note attached as “*Diseñar—literalmente—alrededor de las cosas (ab voltans)*.”¹⁵² (Figure 4.19 and 4.20)

Albeit in, the appeared image of a “shoe” belongs to the “generality” from the imagery record-book of the mind, it is not valued within the “generality” of architectural forms. However, with regard to singularity of the project, it—the literal “shoe-form”—appears as if it had been dominating the movement of the hand. The simulacrum of a shoe emerges as a reduction of the thought, on the surface of paper—as an “annotation” which here is doubled in addition with his written note. It is a different mimetic pulse—a cognitive process to understand the drawn form and its structural and formal character. It is not an imposed form or a referenced *mimesis*, but rather a cognitive derivation.

The lack of avoidance of resembling lines to any regular form is not new for Miralles. Similarly, in his independent research with Eva Prats on measuring a “croissant” shows his interest in understanding regular forms and emphasizing the possibility of analysis of them in the search for the meaning of a form.¹⁵³ (Figure 4.21) However, in this partial sketch for Diagonal Mar Park Project, the appearance of a “shoe” stays closer to a coincidence or encounter on the way than an outcome or answer in this regard. It remains necessary for understanding of the thoughts expressed in the form of lines.

¹⁵² “Design literally around the things.” The note in the paranthesis is a personal note in Catalan language meaning: “around.”

¹⁵³ Enric Miralles and Eva Prats, “How to Lay Out a Croissant” in *El Croquis*: Miralles/Pinós, No.30+49/50. *El Croquis*: 1983-1990, pp.192-193

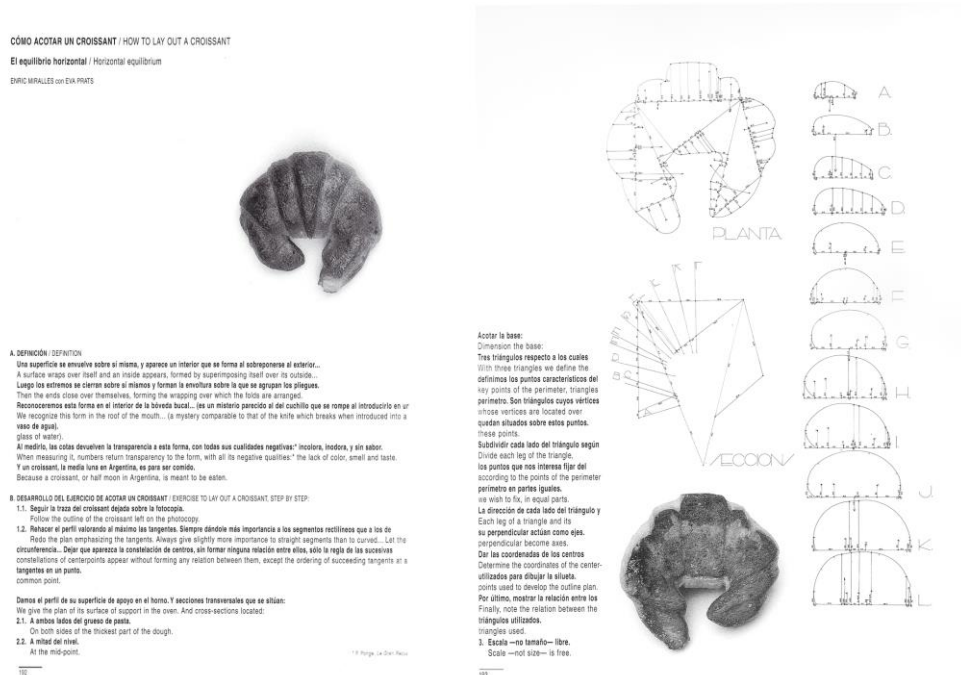


Figure 4.21 How to Lay Out a Croissant

Source: Enric Miralles and Eva Prats, “How to Lay Out a Croissant” in El Croquis: Miralles/Pinós, No.30+49/50. El Croquis: 1983-1990, pp.192-193

This sketching paper in its particularity and the “act of repetition” that encapsulates it mark a reference to the “psychic automatism” of Surrealist Manifesto. It can be evaluated as an instance of a tidal play with the unconscious, as well as with the reality of the project drawn. The eliminated quantity and “internal tension” appears in the form of a shoe in the

instantaneity of a sketch.¹⁵⁴ Catherine de Zegher, art historian and curator, quotes André Breton and adds on automatic and collective drawing as:

Soon the Surrealists would set out the terms for a line reflecting, in André Breton's words, "psychic automatism in its pure state...Directed by thought, in the absence of any control exercised by reason, exempt from any aesthetic or moral concern." Automatic and collective drawing had already emerged as ways of rendering what lies hidden behind reality[.]¹⁵⁵

Behind the reality of the sketch paper, a cognitive process is pursued by the repeating architect. The above-mentioned argument that repetition does not change anything in the object but changes something in the mind contemplating it,¹⁵⁶ again, stays legitimate in the resembling the drawn sketch literally to a "shoe." This expression through drawing, which can be agreed as "exempt from any aesthetic or moral concern" as in "psychic automatism"¹⁵⁷ is not important in the sense that the understanding of the lines drawn supersedes it. Does psyche eliminate all the quantity of lines and brings forward the form of a shoe? Or does the appearance of the shoe would change the direction of sketching process? Probably, the answer is no. However, the reality of a shoe lies behind the reality of the hand recording the thoughts of the architect in the form of annotation, or as a "trace." Stan Allen proclaimed that the "energy" and "vitality" of an idea is lingered within the "tracery of the sketch."¹⁵⁸ The recurrence of the form of a shoe drawn on paper emphasizes the character of the sketch as the "state of suspension" once again.¹⁵⁹ It is a "suspension" on the way to understand. It also stays close to being a "trace" in

¹⁵⁴ For "internal tension" see K. Michael Hays, "Repetition" *op.cit.* p.82

¹⁵⁵ Catherine de Zegher, *op.cit.* p.50

¹⁵⁶ Gilles Deleuze, "Repetition for Itself" *op.cit.*

¹⁵⁷ Catherine de Zegher, *op.cit.*

¹⁵⁸ Stan Allen, "Plotting Traces: On Process: Traces; Architecture and Deconstruction" *op.cit.* pp.56-57

¹⁵⁹ Robin Evans, "Architectural Projection" p.33

the search for a transcendental meaning from the “poetic” origin of architecture along with the reality of an architectural project.¹⁶⁰

¹⁶⁰ Alberto Perez-Gomez, “Architecture as Drawing”, *op.cit.* p.6

CHAPTER 5

CONCLUSION

Architecture is the medium where theory is embodied within its execution either in the form of drawing or built object. The relationship between practice and theory is “dynamic” in the terms that the mutual transition of information or tactics both practical and theoretical enriches the generation of future outputs in the architectural realm. Architecture, as a cognitive process, is a “research” in itself, as well as *for* itself. In this respect, the architecture of Enric Miralles lies on the grounds that it intertwines theory and practice bringing them into an inseparable status. This inherence is, also, reflected to the analyses applied as in turn making them to spontaneously be both theoretical and formal. This vague, and simultaneously assertive, status is what brings Miralles’ architecture worth to stress attention on.

Architectural drawing, i.e. the “cognitive object” of architecture, theory included in its execution, acts as an instrument to express any respective architectural operations itself. Since Renaissance, it remains open to provide grounds for manipulations and empirical procedures within the realm of architecture. The argument that architectural drawing is *per se* what is required to mention architecture reinforces its position within the practice. Architectural

drawing in the form of sketch, in particular, which is the most liberal means among architectural representations without any conventions or set of rules, provides an open surface to express ideas in numerous modes.

Sketch stands close to writing regarding their instantaneous character on the expression of thoughts just like “annotations” as Miralles argues. Therefore, it is not mistaken to say that it is a method which is, above all, personal and intimate. The mode an architect sketches gives clues for his *modus operandi*, his understanding of architecture, and even his theoretical perspective. Since it is a medium open to manipulation and allows imposition of personal gestures within, it stays open to further analysis on with no limitations.

Enric Miralles who performs and develops his architecture in the form of sketches, or to be more accurate sketches of plans, has an unequivocal manner in architecture. His *modus operandi* includes various layers when dealing with a single project; however, it is repeated and carried *en bloc* throughout projects. The tidal character of the operations Miralles conduct, which have been mentioned, initially embedding every former trace discovered on the site into his designs, and when reached to a respective context, later putting them aside by repetitional acts to focus on the mentioned “internal coherence” of the drawing; however, therewithal creating a phenomenological architecture in third-dimension far from rationality, should not result in a confusion; rather, it gives clues for a “kinesthesia” regarding the movements of his thoughts and his methodological operations. This kinesthetic character of Miralles’ *modus operandi* suggests a progressive practice encapsulating repetitional operations within itself.

The concept of “repetition,” though, is matured by philosophers of 20th century; it can be traced that it hasn’t built its foundations deliberately into the field of architectural theory yet. The attempts to include it into architectural

theory are not undervalued; however, it is still on the ground that it hasn't yet been reified in its full terms that, as mentioned earlier, the roots of the subject still reach back to Kierkegaard, Deleuze and Freud. However, the concept of repetition still carries the potentiality to be embodied by the theory of architecture, especially by its practice. This research aims to reclaim repetition from theoretical realm of philosophy and psychoanalysis and to originate a link between architectural praxes and repetition as a drive of cognitive process and methodological execution. This makes this research a step forward in the realm of architectural theory and its reflection, or, to take a step further, its operation within its praxis.

The concept of repetition, in the scope of this research, is attributed to Deleuze's ideation of it sharing authority with Kierkegaard and Freud. Following Deleuze, it alludes Michael Hays deviation of the concept. Hays' argument is mainly a theoretical manifestation taking Eisenmann's two projects as its subject. He underlines the concept of repetition with regard to the concept of "allegory," and positions it in architectural Late Avant-Garde. Rosalind Krauss states that Avant-Garde uses repetition as repeating the same figures recurred in many art projects giving the example of "the grid" repeating itself as an objective surface.¹⁶¹ Miralles' performance of repetitional procedures and acts is beyond being a banal repetition, but it is operational within the praxis and it holds the power to transform its process, and in turn, its object. Repetition concept constitutes a major role in his *modus operandi* that, it is evidential, with deduction of repetition, the architecture of Miralles would remain no longer the same.

Enric Miralles implements repetition throughout his practice in two ways. The repetitional operations he adopts are distinguished as "procedural repetition"

¹⁶¹ Rosalind Krauss, "The Originality of the Avant-Garde" *op.cit.* p.157

and “act of repetition.” The former is identified with respect to Michael Hays’ use of the term in his article “Architecture by Numbers,” while the latter uses the example of Giacometti as its basis. The “procedural repetition” suggests the carrying of forms from one project to another as it is fundamental “to architect.” The “act of repetition” suggests the constant repetition of the same object to achieve a profound architecture. Both operations are tenable only under the umbrella of empiricism, that is to carry an architecture to the intermediate stages and leave it there as Miralles desired.

The analyses applied to the works of Miralles aim to show the practicability of the concept of repetition within architecture that they reclaim theory as practice. The theoretical construction of repetition is sought within the architectural disclosures of Enric Miralles who achieved the turn of the abstract into practical. As Deleuze’s formulation is applied to Miralles’ projects, which are part of his research for “zigzag” or “Z” form, repetition’s instrumental character is represented by the depiction of “active” and “passive” lines from the plans. The “zigzag” is attributed as the “active line” as Klee provided the information of categorization. The “passive lines” are rather deceptive due to its transformative character into “active” when they become planar. As a result, every zigzag creates its respective “active” zones for the “gaze” of the visitor, which is “distracted” into a mode of enrichment of experience. The repetition of this form throughout projects, with the inferential augmentation of experience, when observed as a whole, can be positioned within the framework of “singularity” concept. The “procedural repetition” having the form of “zigzag” as its object carries in itself the possibility of all future projects constituted as reaching to the “nth” power of repetition, albeit with what it generates will in turn be “one” singular project just as Miralles claims that he has only a major project that does not end as long as he continues practicing.

Repetition itself underlies a cognitive process. The “act of repetition,” that is, the repetition of the same drawing for Miralles, achronically performed with “procedural repetition,” is an attachment of the thinking process of the architect. The relation between the architect and the repetition of drawings resides within the “contemplating mind” and annotations of thought in the form of lines as its evidence. The repetition concept encloses the agents, time, space and movement, in itself. When all of the repeated drawings are superposed, these agents are compressed into an instant. This way, a deviation in the understanding of the viewer occurs, which engenders a twofold cognition together with the “Self” of the repetition including time, space and movement factors of an architectural process. The instantaneity of the sketch does not lose vitality when it is repeated; rather, repetition itself with all the expressions it offers is instantaneous in character. The superposed drawings embrace the *modus operandi* of the architect with the attitude that a superposition of repetition is conveyed through the representation of a single image. It suggests both a reduction and a resurgence of meaning at the same time.

Repetition, as it was conceptualized, is applicable to architectural production within the practice by means of empiricism. Since it is a method open to any practical and respective interpolations while it is conducted. The modes that repetition is implemented in architectural practice can vary according to its self—the architect. It is intrinsic to architecture by its transferring character of ideas. The theory of repetition is not self-enclosed and archaic; instead it has the potential to be integrated within architectural theory and be conducted in its practice. Repetition can become a tool or a method in the praxis of architecture and simultaneously be an integral part of its theory.

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APPENDIX A

VOLUME COVERS OF ENRIC MIRALLES' PHD THESIS

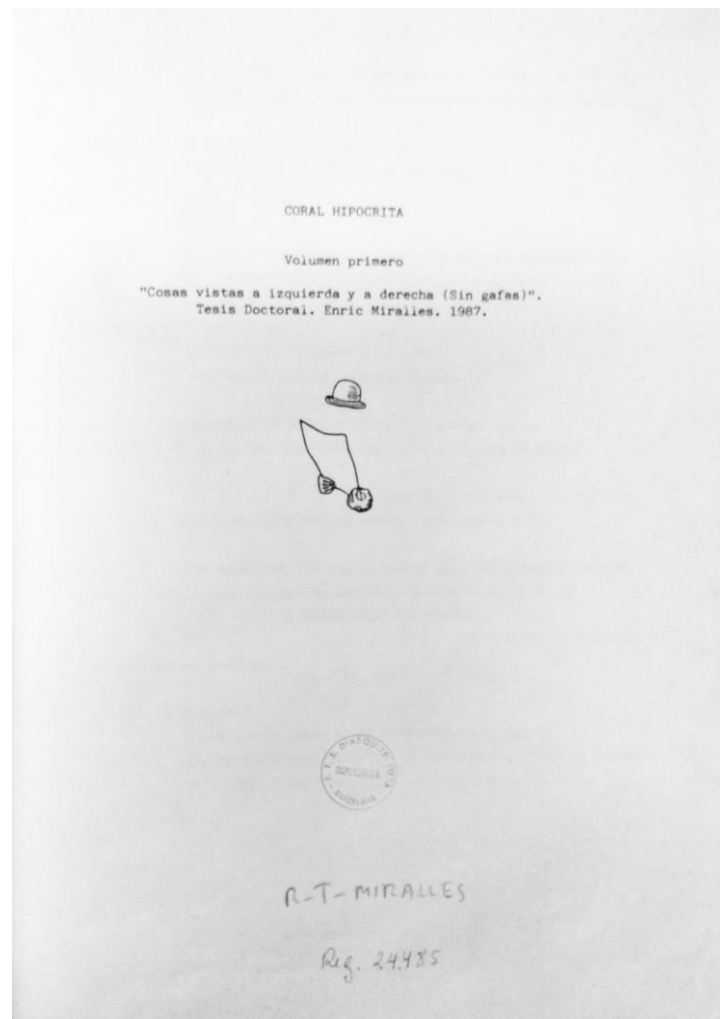


Figure A.1 First Volume of Enric Miralles' PhD Thesis-“Things Seen from Right and Left (Without Glasses)” (1987)

Source: Enric Miralles, “Cosas Vistas a Izquierda y a Derecha (Sin Gafas),” Phd Thesis, ETSAB, 1987. Reached at Library of ETSAB, December 2014.

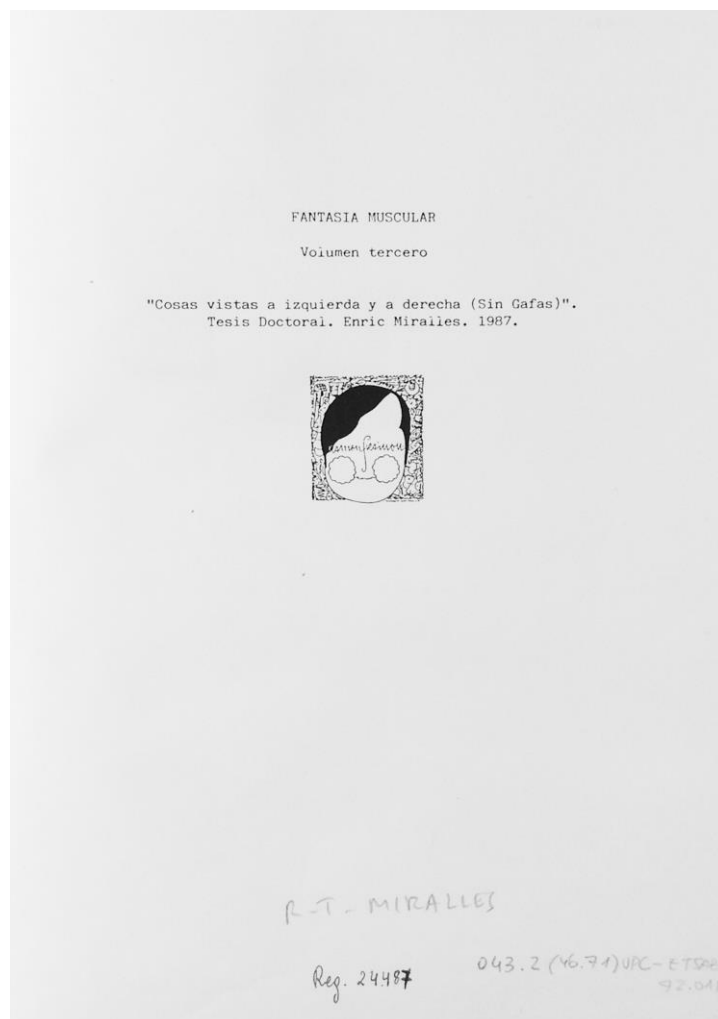


Figure A.2 Second Volume of Enric Miralles' PhD Thesis-“Things Seen from Right and Left (Without Glasses)” (1987)

Source: Enric Miralles, “Cosas Vistas a Izquierda y a Derecha (Sin Gafas),” Phd Thesis, ETSAB, 1987. Reached at Library of ETSAB, December 2014.

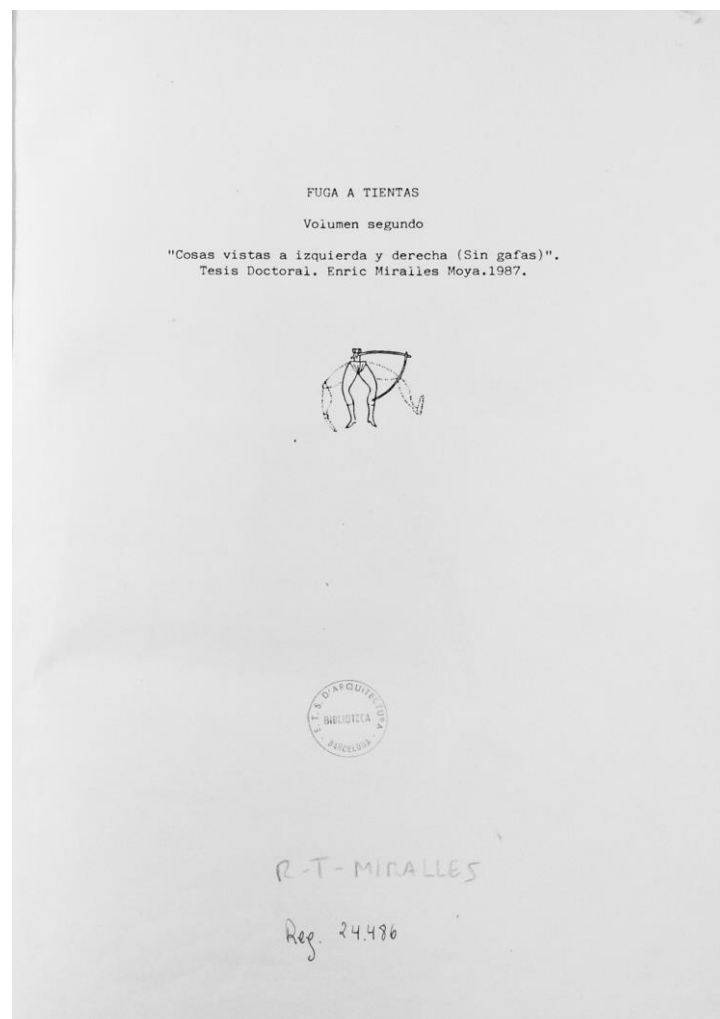


Figure A.3 Third Volume of Enric Miralles' PhD Thesis-"Things Seen from Right and Left (Without Glasses)" (1987)

Source: Enric Miralles, "Cosas Vistas a Izquierda y a Derecha (Sin Gafas)," Phd Thesis, ETSAB, 1987. Reached at Library of ETSAB, December 2014.

APPENDIX B

DRAWINGS AND SKETCHES OF ENRIC MIRALLES

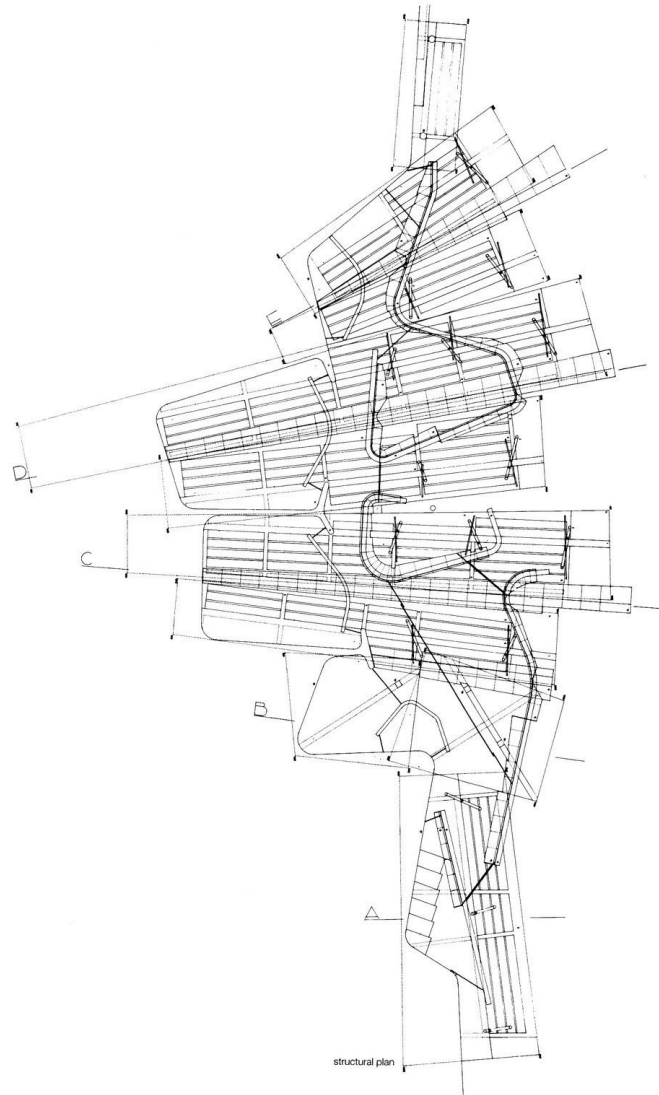


Figure B.1 Olympic Archery Range Project Structural Plan (1991)

Source: <http://www.archdaily.com/539870/ad-classics-olympic-archery-range-enric-miralles-and-carne-pinos> Reached at June 2017

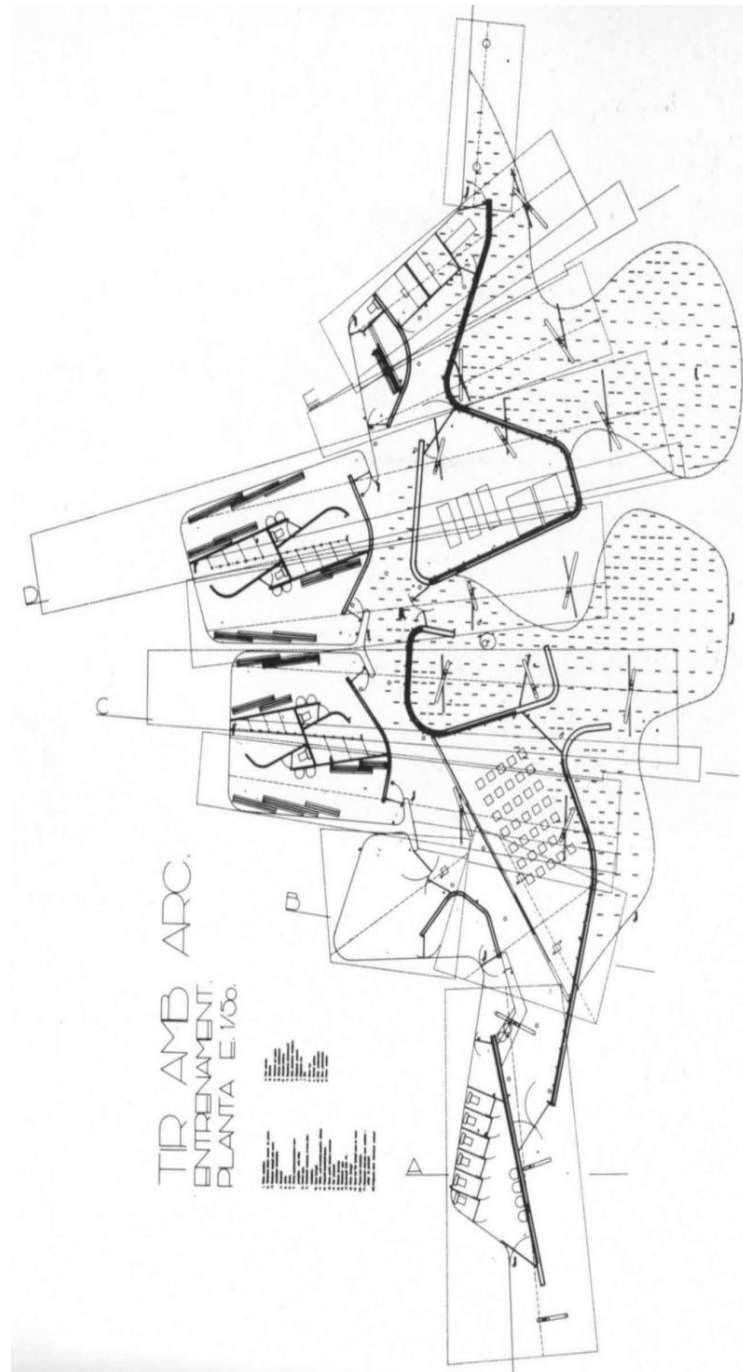


Figure B.2 Olympic Archery Range Project Plan (1991)

Source: <http://www.archdaily.com/539870/ad-classics-olympic-archery-range-enric-miralles-and-carne-pinos> Reached at June 2017

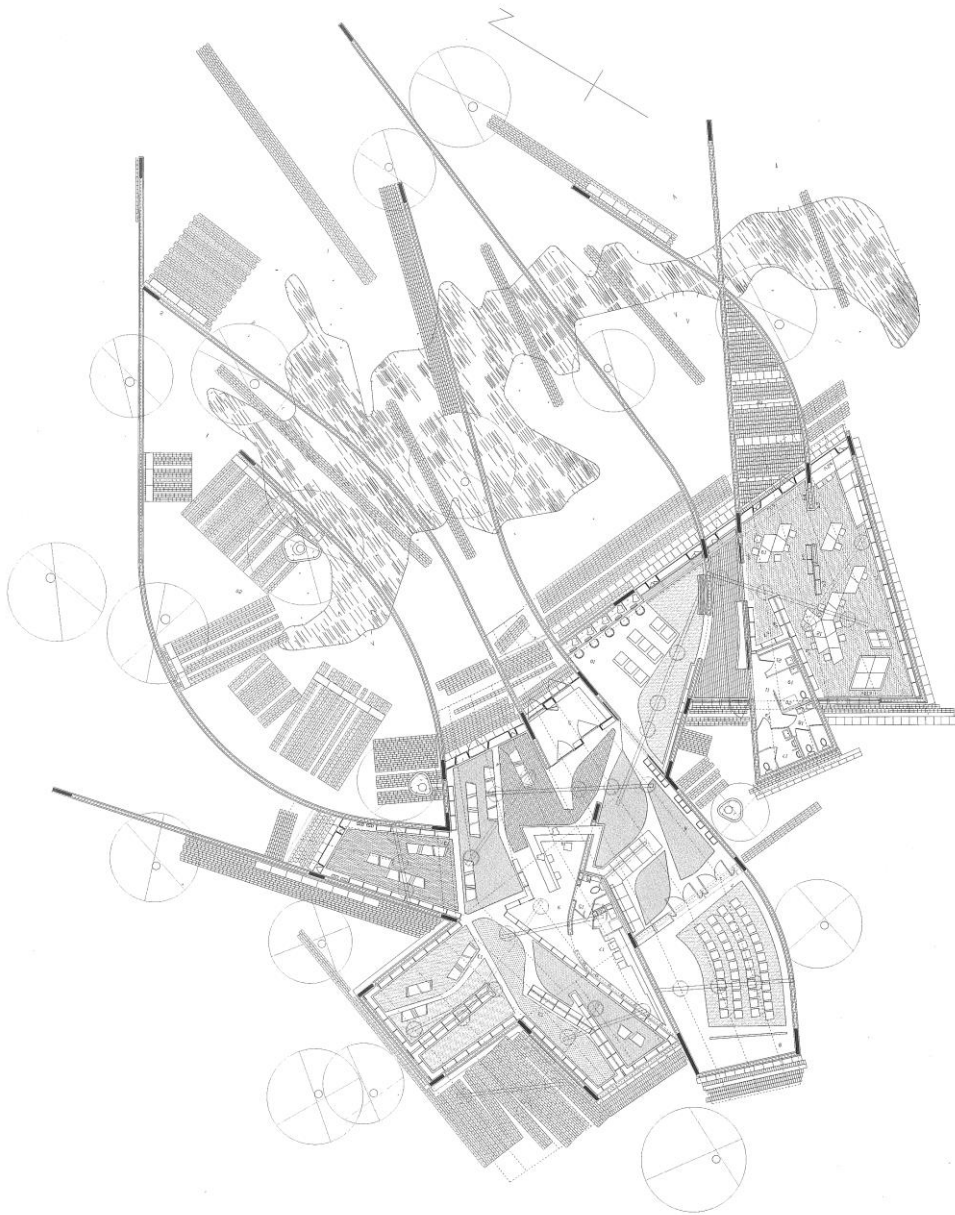


Figure B.3 Palafolls Public Library Plan (1997)

Source: “Palafolls Public Library”, in El Croquis: EMBT Enric Miralles / Benedetta Tagliabue 1996-2000: Maps for a Cartography, No.100/101. El Croquis: 2000, p.172



Figure B.4 Diagonal Mar Park Project – Collage/Sketch

Source: Fundació Enric Miralles Archive, Barcelona. Reached at December 2014



Figure B.5 Diagonal Mar Project – Sketch

Source: Fundació Enric Miralles Archive, Barcelona. Reached at December 2014



Figure B.6 “*Manchas*” (Blots) for Diagonal Mar Project

Source: Fundació Enric Miralles Archive, Barcelona. Reached at December 2014 (The images are combined by the author)

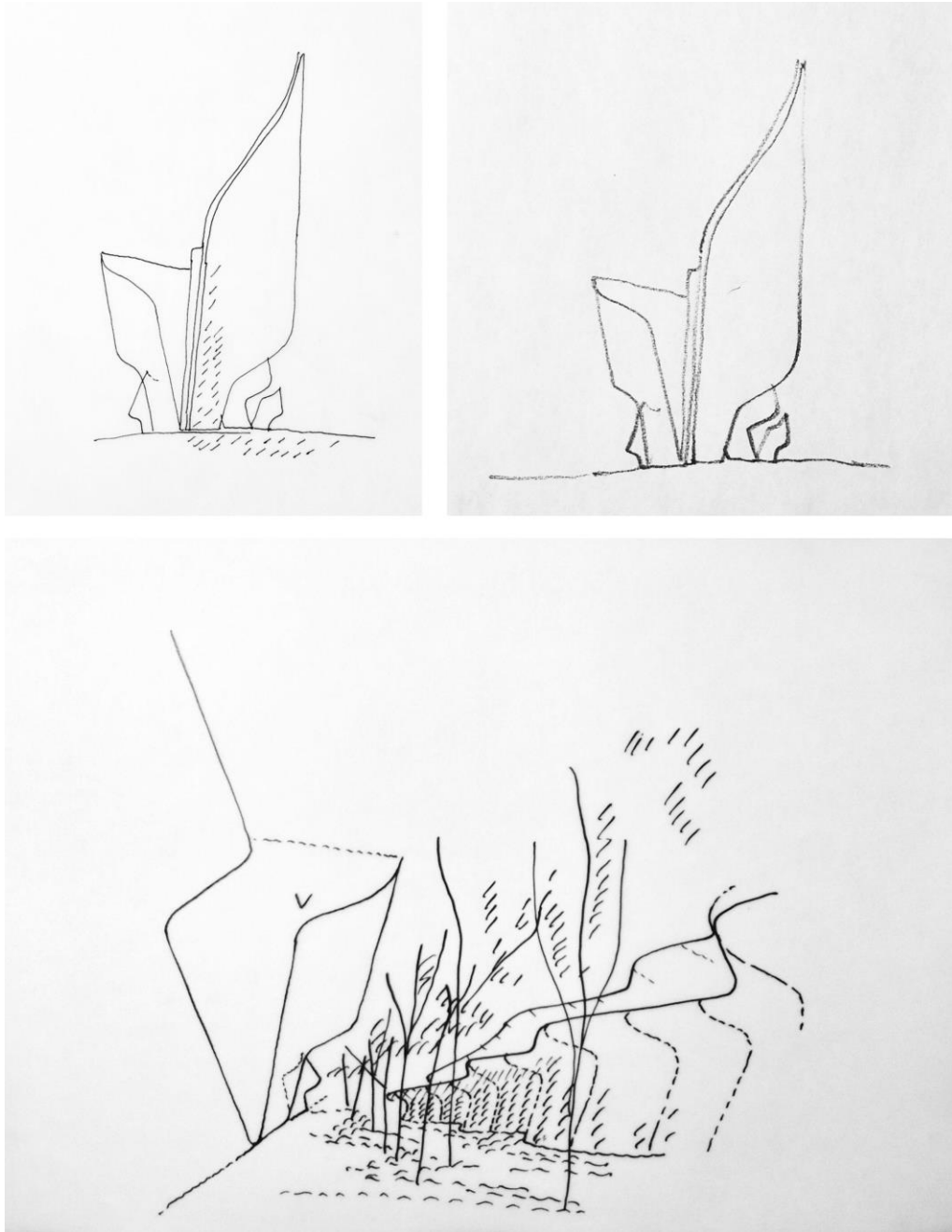


Figure B.7 Sketches for Igualada Cemetery Project Competition

Source: Fundació Enric Miralles Archive, Barcelona. Reached at December 2014

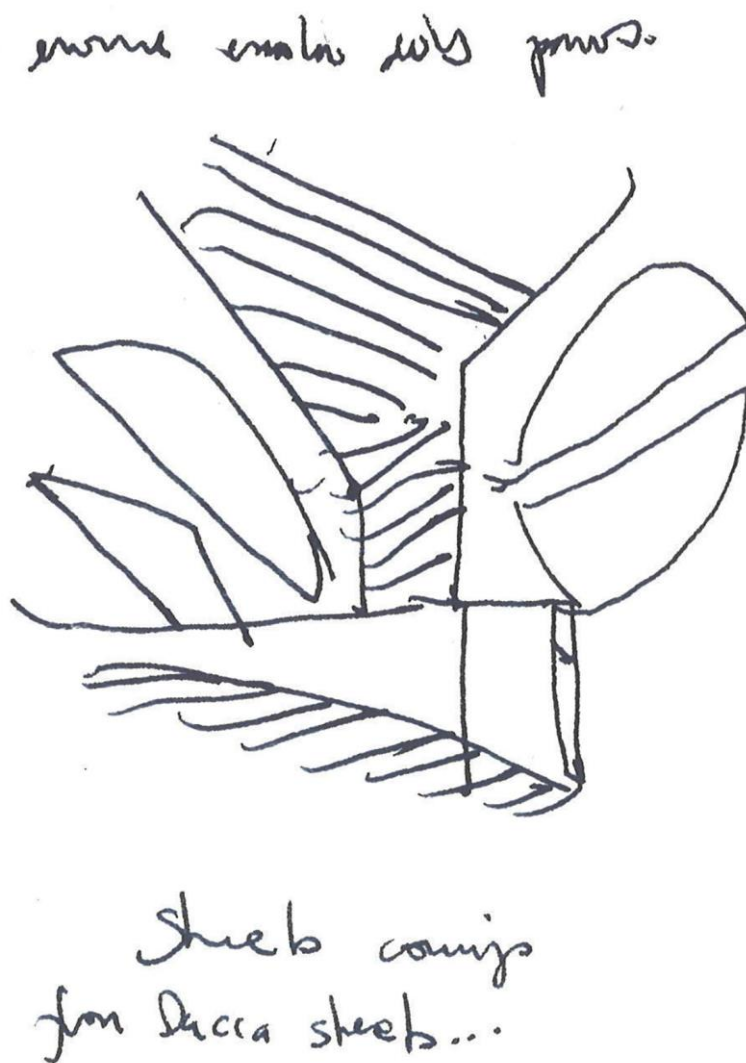


Figure B.8 Enric Miralles – Sketch of a Louis I. Kahn Work –National Assembly Building of Bangladesh – Dhaka Bangladesh (1992)

Source: Conversaciones con Enric Miralles, ed.Carles Muro. Editorial Gustavo Gili: 2016, p.75