BAROQUE TENDENCIES
IN CONTEMPORARY ARCHITECTURE

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ABSTRACT

BAROQUE TENDENCIES
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Recently, there has been a significant interest in the term "baroque". The term has been explored by scholars as a concept that provokes new ways of historical conceptualization in contemporary culture and artistic productions. As it is observable that in the late twentieth and early twenty-first centuries, many phenomena that are commonly associated with the seventeenth century Baroque, such as theatrical effects, excess, complex forms, curved and bulging surfaces, illusionistic, even decorative devices, though in a different guise, has been re-emerging in contemporary design culture, this study claims that contemporary approaches to spatial design use a baroque discourse that distinguishes them from the others of the recent past. The study uses the Baroque as a tool to analyze contemporary architecture, constructing a relationship between the art and architecture of the Baroque and the last two decades through an analogical reasoning over a set of works. The aim is to understand the relation between the Baroque and the contemporary design tendencies and to see whether these tendencies can be understood with the term "baroque," regarded as a paradigmatic entity rather than a style. Throughout the study, the term is considered as a transhistorical concept rather than just a phenomenon particular to a period confines of which are roughly defined as the seventeenth century.

Keywords: Neo-Baroque, Fold, Style, Discourse, Paradigm

ÖZ

GÜNCEL MİMARLIKTA
BAROK EĞİLİMLER

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Yakın dönemde "barok" terimine karşı artan bir ilgi olduğu gözlemlenmektedir. Barok, birçok kuramcı ve düşünür tarafından yeni tarihsel kavramsallaştırma yolları üretmeye elverişli bir olgu olarak yeniden ele alınmış, Barok dönemi çağrıştıran özellikler barındırdığı gözlemlenen çağdaş kültür ve sanatsal üretimleri yorumlamak için bir araç olarak kullanılmıştır. On yedinci yüzyıl Baroğunu tanımlarken kullanılan, tiyatrallik, aşırılık, optik yanılsamalar, karmaşık formlar, eğrisel yüzeyler, dekoratif öğeler gibi birçok özelliğin yirminci yüzyıl sonlarından itibaren mimari tasarım yaklaşımlarında, farklı şekillerde de olsa, yeniden ortaya çıktığını gözlemek mümkündür. Buna bağlı olarak bu tez, güncel mekânsal tasarım yaklaşımlarının onları yakın geçmişteki diğerlerinden ayıran barok bir söylem kullandığını öne sürmektedir. Çalışma, Barok dönem ile son yirmi yılın mimari ve sanatsal üretimleri arasında analojik bir ilişki kurarak baroğu güncel mimarlığı analiz etmek için bir araç olarak kullanmaktadır. Amaç, barok ile güncel tasarım eğilimleri arasındaki ilişkiyi anlamak ve bu eğilimlerin bir stil olmanın ötesinde paradigmatik bir olgu olarak ele alınan "barok" terimi ile tanımlanıp tanımlanamayacağını görmektir. Çalışmada barok, sınırları kabaca on yedinci yüzyıl olarak tanımlanan belirli bir döneme özgü bir olgu olarak değil, tarih boyunca herhangi bir zamanda ortaya çıkabilecek bir kavram olarak ele alınmaktadır.

Anahtar kelimeler: Neo-Baroque, Kıvrım, Stil, Söylem, Paradigma

To my family

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INTRODUCTION

Recently, there has been a revival of interest in the term "baroque." Baroque has been explored as a term that provokes new ways of historical conceptualization in contemporary artistic production. Influenced and informed by the writings of several theorists and philosophers, such as Walter Benjamin,[1] Christine Buci-Glucksmann,[2] Jose Antonio Maravall,[3] Omar Calabrese,[4] and most influentially Gilles Deleuze,[5] scholars have adopted the concept of baroque as a tool to rethink contemporary culture and artistic productions leading to labels such as "contemporary baroque," "neo-baroque" and "digital baroque" being applied to the contemporary productions of not only architecture but also art, literature, cinema and entertainment media.[6]

It is clearly observable that in the late twentieth and early twenty-first centuries, many phenomena that are commonly associated with the seventeenth century

[1] Walter Benjamin, *The Origin of German Tragic Drama*, trans. John Osborne (London; New York : Verso, 1985)

[2] Christine Buci-Glucksmann, *Baroque Reason: The Aesthetics of Modernity*, trans. Patrick Camiller (London: Sage, 1994)

[3] Jose Antonio Maravall, *Culture of the Baroque: Analysis of a Historical Structure*, trans. Terry Cochran (Minneapolis: University of Minnesota Press, 1986)

[4] Omar Calabrese, *Neo-Baroque: A Sign of the Times*, trans. Charles Lambert (Princeton, NJ: Princeton University Press, 1992)

[5] Gilles Deleuze, *The Fold: Leibniz and the Baroque*, trans. Tom Conley (London; New York: Continuum, 2006)

[6] See: Mieke Bal, *Quoting Caravaggio: Contemporary Art, Preposterious History* (Chicago: University of Chicago Press, 2001); Angela Ndalianis, *Neo-Baroque Aesthetics and Contemporary Entertainment* (Cambridge, MA; London: MIT Press, 2004); and Timothy Murray, *Digital Baroque: New Media Art and Cinematic Folds* (Minnesota: University of Minnesota Press, 2008)

Baroque, such as theatrical effects, excess, complex forms, curved and bulging surfaces, illusionistic, even decorative devices, though in a different guise, has been re-emerging in contemporary design culture. This study claims that contemporary approaches to spatial design use a baroque rhetoric that distinguishes them from the others of the recent past. Here, it should be noted that in using the term baroque the intention is not to make a "value judgment", and the study, in suggesting analogies between the two periods, proposes neither that there is a return to the baroque nor that the term stands as a stylistic term for contemporary architecture. The aim is to understand the relation between the baroque and the contemporary design tendencies and to see whether these tendencies can be understood with the term "baroque." Throughout the study, baroque is considered as a transhistorical design strategy rather than just a phenomenon particular to a period confines of which are roughly defined as the seventeenth century.

To be able to discuss that the baroque exists in contemporary architecture, the term "baroque" is examined with its different definitions and conceptions to discover its validity for the current state of architectural production. As the term had no usage in the period with which it was subsequently identified, the conception of baroque preoccupied the agenda of both the historians and the theoreticians of art and architecture throughout the following centuries. The study, providing a brief outline of the approaches towards the baroque, tests the possibility to detach the term from its historical confines, as it adopts an understanding which considers the baroque not as the style of a specific period but as a specific concept that may emerge at any time throughout the art history. That is why, throughout the study, the term has been specifically spelled with lowercase "b" unless it indicates the style of the seventeenth century whenever it is spelled with a capital "B".

What made "baroque" such a transmutable, provocative and influential term is its constructed nature. It is notable that whereas artists and architects of the Renaissance even coined a term to identify their style's absolute rapture from the Gothic, claiming that their work symbolizes a *rebirth*, none of the seventeenth century artists and architects discussed their own work either as "baroque" or as a style that broke away

from that of the Renaissance.[7] What is also important together with its instability with regard to its period is the term's bold connection to the problem of style. Style is foundational in the formation of the discipline of art history itself and particularly the Baroque style within it. From Jacob Burckhardt and Heinrich Wölfflin on, the Baroque has been remarkably associated with the conceptualization, justification and classification of styles. Therefore, while the intention is not to offer a theory of style, a brief inquiry on the conception of style is also made in order to understand the current state of architectural design.

The move from the clear geometries and projective space of Modernist architecture to the complex forms and dazzling, disorientating, space of present architecture noticeably conforms to the principles of stylistic change defined by Heinrich Wölfflin, one of the founders of the modern discipline of art history. Wölfflin would have explained this shift "as a manifestation of a tendency inherent in the human psyche to alternate between two polar opposite modes of seeing" which he calls *classic* and *baroque*.[8]

Wölfflin, in his book *Renaissance and Baroque*, seeks to understand the phenomenon of transition in art and change in style by making "a formal analysis of the complex of symptoms that constitutes the baroque."[9] Rather than taking baroque as a decline as his predecessors did, he presents Renaissance and Baroque as two different styles that can be recognized by certain specific oppositional characteristics. He puts the most prominent characteristic of Baroque as "painterliness" as opposed to the "linearity" of the Renaissance. Throughout the book Wölfflin analyzes the

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[7] Leland M. Roth, *Understanding Architecture: Its Elements, History and Meaning* (Buoulder, CO: Westview Press, 2007), 397; Gevork Hartoonian, "Tectonic Modalities in Baroque Architecture: An Alternative Historiography" Athens: ATINER'S Conference Paper Series, 2013, No: ARC2013-0456, 7, accessed September 02, 2013, http://www.atiner.gr/papers/ARC2013-0456.pdf.

[8] Irving Lavin, "Going for Baroque: Observations on the Post-modern Fold," in *Estetica Barocca. Atti del Convegno Internazionale Tenutosi a Roma dal 6 al 9 Marzo 2002*, ed. Sebastian Schütze (Rome, 2004), 423-452, accessed August 09, 2013, http://publications.ias.edu/sites/default/files/Lavin_GoingforBaroque_2004.pdf.

[9] Heinrich Wölfflin, *Renaissance and Baroque*, trans. Kathrin Simon (Ithaca, NY: Cornell University Press, 1967), 17.

Baroque through notions such as "massiveness," "indefiniteness," "limitlessness," "infinity," "*chiaroscuro*," "illusion of movement," and "tension." He defines the change in style seen in the seventeenth century as "an interesting progression from a strict to a 'free and painterly' style, from the formed to the formless."[10]

Later in his most influential book *Principles of Art History*, Wölfflin develops his argument offering a new method for the analysis of art and architecture which he considers to have general, indeed universal validity.[11] According to Wölfflin, there are two basic modes of perception and representation – two conceptions of the world. The characteristics of the two styles outlined in *Renaissance and Baroque* were especially developed in this book as five pairs of oppositional concepts that distinguish *classic* from *baroque*. Wölfflin puts these concepts as "linear" versus "painterly", "plane" versus "recession", "closed form" versus "open form", "multiplicity" versus "unity" and "absolute clarity" versus "relative clarity." Throughout the book, by the word "classic" Wölfflin refers to the art of High Renaissance. He uses the word, however, not only to imply a specific historical phase, but a special mode of creation in art. As the subject matter is architecture, this study, while considering the baroque as a paradigmatic entity rather than a style, largely draws on the terminology and the definitions of Wölfflin to be able to demonstrate the corporeal manifestation of the baroque mode of thinking.

Wölfflin's definition of the baroque as "formless" is important for this study, as formlessness serves a common ground for the contemporary examples that are to be put in a dialogue with the baroque. Whereas Modernism is known as favoring primary geometric forms and platonic solids as they are finite and tangible, contemporary architecture tends to distort the structures of the classic thinking and creates formless, indefinite compositions.

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[10] Ibid., 15.

[11] Heinrich Wölfflin, *Principles of Art History: The Problem of the Development of Style in Later Art* trans. M. D. Hottinger (Mineola, NY: Dover Publications, 1950)

As curves and folds hold a unique position in the creation of the formless, infinite sense of space, it is inevitable to refer to Deleuze's concept of the "fold" with which he identifies the baroque. In his influential book *The Fold*, Deleuze, referring to Leibniz's philosophy and mathematics, his monadology and differential calculus in particular, interprets the baroque in the figure of the fold, as a specific way of thinking. [12] Deleuze's idea of the fold has a two-fold nature. As Vidler notes, the fold is "immaterial, and elusive in its capacities to join and divide at the same time, and physical and formal in its ability to produce … curved and involuted shapes."[13] As the latter characteristic can be seen in many recent buildings in terms of physically folded forms, the former definition as an immaterial concept holds an important position as well, by omitting the normative distinctions between entities, exceeding the frame, establishing complex spatial and sensorial relations. Therefore, this study, understanding Deleuze's concept of the fold, not only in terms of a material phenomenon like in Baroque sculptures, but also as a structure of relations, tries to conceive recent architectural productions, including the ones that do not consist of physically folded forms, but make new articulations that are different than those of the Modernist thinking.

Seventeenth century is commonly associated with transition. Jose Antonio Maravall in his analysis of *Culture of the Baroque*, reminding that the seventeenth century marks the beginning of "consciousness," considers the Baroque as a period of major changes in the sciences, economics, religion, and the social system. He argues that these changes "created a climate from which the baroque emerged and nourished itself inspiring its development into the most varied areas of culture."[14] The study, keeping the discussions made on the quasi-autonomy of architecture and the

[12] Deleuze, *The Fold*.

[13] Ibid.

[14] As also it is seen in this quotation the baroque loses its uppercase format as Maravall considers the term not as a style but as the historical, cultural structure of the seventeenth century. Maravall, *Culture of the Baroque*, 53.

association of architectural form with social and cultural realities in mind,[15] also touches on other phenomena such as the developing technologies and accordingly the intensification of worldwide social relations and globalization, the expansion of the capitalist universe creating a manipulative power of images and the unification of the real and the virtual space.

It is not unusual to refer to the changes in the sciences and developing technologies when it comes to the formal transformations in art and architecture. The argument seems to be a *cliché,* since the same has been made for Modernist architecture. However there is a fact that radical shifts underlie the last two decades. Therefore it is true to say that the proliferating traits in contemporary architecture that seem to be a move away from preceding norms and conventions cannot be understood without considering the major changes brought about by the Information Age that affected the daily life as well as the environment with which the projects are designed and manufactured. Most of the contemporary designs are produced by means of computer software that allows the design and production of certain forms which were difficult to manufacture and thus were not common until recently.

The radical changes marking the last few decades call for Foucault's concept of "episteme." According to Foucault, as Calabrese writes of it, "there are epochs in which change in mentality is so radical (such as the seventeenth century) that one can justifiably speak of a rupture with the past. This is a strikingly important idea that undermines one of the principles of traditional historiography, that of causality understood as a necessary relationship between a "before" and an "after."[16] In relation to Foucault's conception comes Kuhn's evaluation of "paradigm shift." Steven Best and Douglas Kellner, in their work on the "postmodern turn," drawing on Kuhn's work, reconsider the concept of paradigm shifts:

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[15] K. Michael Hays, "Critical Architecture: Between Culture and Form," in *Perspecta* 21 (1984): 14-29; Stanford Anderson, "Quasi-Autonomy in Architecture: The Search for an In-Between," in *Perspecta* 33 (2002): 30-37. and Diana Agrest, "Design versus Non-Design," in *Oppositions Reader: Selected Readings from a Journal of Ideas and Criticism in Architecture 1973-1984*, ed. K. Michael Hays (New York: Princeton Architectural Press, 1998), 331-354.

[16] Calabrese, *Neo-Baroque,* 7.

> A "paradigm" is a "constellation" of values, beliefs, and methodological assumptions whether tacit or explicit, inscribed in a larger worldview. Kuhn observed that throughout the history of science there have been *paradigm shifts*, conceptual revolutions that threw the dominant approach into crisis and eventual dissolution, a discontinuous change provoked by altogether new assumptions, theories and research programs. In science, Kuhn argued a given paradigm survives until another one, seemingly having greater explanatory power, supersedes it.[17]

Best and Kellner, extending their observation on Kuhn's argument, assert that at any time, the dominant modes of thought of any discipline are challenged and overthrown by "a new approach that emerges through posing decisive challenge to status quo; if successful, this new approach becomes *dominant*, the next paradigm, itself ready to be deposed by another powerful challenger as the constellation of ideas continues to change and mutate."[18] One of the issues that underlie the discussions in this study is the assumption that the manifestation of the baroque in contemporary design culture has been caused by an emerging paradigm that has been formed in the last few decades while recent developments in technology has been changing the mentality of the contemporary society. However, it is necessary to keep in mind that it is not easy to analyze the present, and to establish the consistency of phenomena because of a "lack of good distance."[19]

Unquestionably, the seventeenth century and the last few decades are characterized by different historical conditions and their objects are thus incomparable. However certain aspects are obvious, stimulating a discussion on the commonalities of the two. This study seeks to make an analysis of contemporary architectural design tendencies trying to construct a relationship between the art and architecture of the Baroque and the last two decades through an analogical reasoning over a set of works. Analogical reasoning is a method of mapping knowledge between two

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[17] Steven Best and Thomas Kellner, *The Postmodern Turn* (New York: The Guilford Press, 1997), xi.

[18] Ibid.

[19] "Bonne Distance" is a concept invented by Lévi-Strauss. It means that an analyzed object needs to be at a certain distance from the observer. Claude Lévi-Strauss, *Anthropologie Structurale* (Paris: Plon, 1958), quoted in Omar Calabrese, *Neo-Baroque*, 5. (see n. 5).

domains by identifying a common relational system between the two in order to generate further inferences driven by these commonalities. The "base" is the domain which serves as the source of knowledge; the "target" is the domain that is attempted to be understood. Here, the target is contemporary design culture and the base is the seventeenth century Baroque. Analogy is a form of inductive reasoning as it seeks to provide an understanding of what is likely to be true, rather than deductively proving something as fact.[20] The study, pointing out the common aspects of the two, seeks to infer the conclusion that if the artistic and architectural productions of the seventeenth and early eighteenth centuries are defined by the term baroque, then the term can be used to interpret the contemporary architectural design tendencies, as expanded.

In this study, Dedre Gentner's "structure mapping theory" of analogy provides the methodological framework, which distinguishes analogies from literal similarity statements, applications of abstractions, and other kinds of comparisons, for the analysis of the architectural production of the last two decades in relation to the Baroque.[21] Analogy, as Gentner interprets, is the mapping of knowledge by matching the relational structures that are common within the base domain and within the target domain. Object correspondences are determined by similar roles in the common relational structure, rather than by direct object-level similarities.[22] As an example, Gentner gives a simple arithmetic analogy that is between "3:6" and "2:4" to explain how a structural mapping process works. It is not important how many features "3" has in common with "2", nor "6" with "4". What counts is the relationship "twice as great as" that holds in the two pairs. As Gentner states, "analogies must involve common relations but need not involve common object

[20] Dedre Gentner and Linsey Smith "Analogical Reasoning," in *Encyclopedia of Human Behavior (Second Edition)*, ed. Vilayanur S. Ramachandran (Oxford, UK: Elsevier, 2012), 130-136.

[21] Dedre Gentner, "Structure Mapping: A Theoretical Framework for Analogy," in *Cognitive Science* 7, no.2 (April 1983): 155-170; Dedre Gentner, "Structure Mapping in Analogy and Similarity," *American Psychologist* 52, no.1 (January 1997): 45-56.

[22] Gentner, "Structure Mapping in Analogy and Similarity," 45-56.

descriptions." [23] Therefore, it does not detract the reasoning that any contemporary object does not "look like" any Baroque one or that the Renaissance and the Modern are in the same historical conditions. What are considered are: first, the internal relations between the parts of a Baroque object and the internal relations between the parts of a contemporary object; second, the relational structure between the Baroque and the Renaissance on one hand, and Modernism and the last few decades on the other. The method is not a direct application of art historical discussions into architecture, but to benefit from the definitions and the criteria developed to differentiate the Baroque from the Renaissance.

[23] Ibid. 47.

CHAPTER 2

THINKING BAROQUE

2.1 Baroque: A Pliant Term

As mentioned above, the term baroque has been occupying the agenda of contemporary design discourse in the last two decades. Many theorists have associated the term with contemporary art and culture. As this study does a similar discussion through architecture, here, a brief outline of different definitions of baroque is necessary, to understand why this term is so thought-provoking. Although this study does not suggest a new historical construction or periodization the inquiry on the definition of the term develops chronologically to see how this once historically bounded term unfolds itself as a more complicated concept as the discussions zoom out from within the Baroque. The term develops from a derogatory term to a neutral designation that define a certain style, and to a transhistorical concept that radiates through diverse historical points and cultures. While the last definition, developed especially in the 80's, provides the theoretical basis for the discussion of this study, the definition of the formal characteristics of the Baroque style helps to draw the analogies between the Baroque and the contemporary architectural design tendencies.

2.1.1 Degeneration of the Classic

In the seventeenth century, as historians point out, the term "baroque" was not in use. Unlike Renaissance art, there was not a theory of Baroque art and the term had no

usage in the period with which it was subsequently identified. [24] The etymology of the term is uncertain. One claim is that it comes from the logical term *baroco* used by logicians for abstruse reasoning. [25] Another claim is that it comes from the Portuguese word *barocco* used for irregularly shaped pearls. In French, the word *baroque* appeared in the eighteenth century from where it migrated to other languages. In French and German, it meant strange, unusual, bizarre, ridiculous, and irregular and in Italian the term was not used to refer to irregular things until the end of the eighteenth century.[26]

As noted by Helen Hills, baroque was introduced to art in 1757 when it was defined by Antoine-Joseph Pernety as "that which is not in accord with the rules of proportions, but follows caprice. It is said of taste and design that the figures of this picture are baroque; the composition is in a baroque taste, to mean that is not good in taste."[27] Johann Joachim Winckelmann, in his influential book *History of the Art of Antiquity* referred to the works of the seventeenth century artists, such as Bernini and Borromini, as vulgar. He defined the period as the decadence of art when the norms and conceptions of beauty of ancient art were abandoned.[28] Subsequently, the Baroque came to be associated with corruption rather than bizarreness and to be seen as the decline of the Renaissance.

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[24] Helen Hills, "The Baroque: The Grit in the Oyster of Art History," in *Rethinking the Baroque*, ed. Helen Hills (Burlington: Ashgate, 2011), 12.

[25] It derives from Mnemonics devised by the late Scholastic logicians where 'a' denotes a general and positive statement and 'o' partial and negative one (barbara, baroco) for example, "All cats have whiskers, some animals have no whiskers, consequently some animals are not cats" See: Erwin Panofsky, "What Is Baroque?" in *Three Essays on Style*, ed. Irving Lavin (Cambridge, MA: MIT Press, 1995), 19.

[26] Otto Kurz, "Barocco: Storia di un Concetto," in *Barocco Europeo e Barocco Veneziano*, ed. Vittore Branca (Florence: Sansoni, 1962), 16-19, quoted in Hills, "The Baroque," 12.

[27] Antoine-Joseph Pernety, *Dictionnaire Portatif de Peinture, Sculpture et Gravure, avec un Traité Pratique des Differentes Manieres de Peindre* (Paris: Bauche, 1757), 24, quoted in Hills, "The Baroque," 12.

[28] Johann Joachim Winckelmann, *History of the Art of Antiquity*, trans. Harry Francis Mallgrave (Los Angeles, CA: Getty Publications, 2006)

In the nineteenth century, the term became cleared of its pejorative connotations and was converted into a neutral appellation designating the style that followed the Renaissance. Jacob Burckhardt's *Der Cicerone* is crucial for its usage of "baroque" as a stylistic term for the first time.[29] For Burckhardt, Baroque was a style with its own principles different from those of the Renaissance.[30] However for him too, it still meant a degeneration of the perfect. It was not until the turn of the twentieth century that the term was used neutrally to refer to a style that has its own qualities and is as noteworthy as the Renaissance.

2.1.2 The New Style

The term style, though sometimes approached critically, has been a construct which art historical discussions are based on. James Ackerman observes that style "provides a structure for the history of art."[31] Ernst Gombrich, discussing style, believes it to be a "necessary evil," adding that humans by nature classify things.[32] One of the reasons that make the concept of style so difficult to escape is its strong cognitive grip. In the history of architecture, style has functioned not just as an intellectual construct, but also as what cognitive linguist George Lakoff and philosopher Mark Johnson call a "basic-level category." Examples of basic-level categories are "house" or "chair." These words elicit mental pictures in mind. In contrast to basic-level category, "superordinate categories" such as the notions of architecture or furniture, being more abstract concepts, do not elicit such concrete mental images.[33]

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[29] Jacob Burckhardt, *Der Cicerone* (Basel: Schweighauser'sche Verlagsbuchhanglung, 1855), quoted in Hills, "The Baroque," 20.

[30] Ibid.

[31] James Ackerman, "Style," in *Distance Points: Essays in Theory and Renaissance Art and Architecture*, ed. James Ackerman (Cambridge, MA: MIT Press, 1991), 4.

[32] Ernst H. Gombrich, *Norm and Form: Studies in the Art of the Renaissance* (London: Phaidon, 1966), 82.

[33] George Lakoff and Mark Johnson, *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (New York: Basic Books, 1999), 27-28

The word "style" derived from Latin *stilus*, the Romans' writing instrument, was used to designate literary style, characterizing an author's manner of writing. As Ernst Gombrich notes, the term, though it slowly came to be applied to the visual arts in the late sixteenth and the seventeenth centuries, was first established as a term of art history in the eighteenth century most influentially through Winckelmann's *History of the Art of Antiquity*.[34] Since the Renaissance, art historians have been especially preoccupied with the explanation of the behavior of change in style. As Gombrich asserts, the whole terminology of styles or periods is based on a normative criticism that rests on the categories classical and non-classical. Names for styles used in art history denote either a dependence on the classical norms or deviations from it.[35] Hence, the sequence of classical, Romanesque, Gothic, Renaissance, mannerism, baroque, rococo, and neoclassical is actually a record of the victories and the downfalls of the classical ideal of perfection.[36] From the normative point of view, all artistic styles are bound to an intrinsic destiny which has been largely described in biological metaphors. The Renaissance historian Vasari believed that style, "like human bodies, are born, grow up, become old, and die."[37]

It has been argued that when any artistic style reaches maturity and perfection it faces exhaustion as all variations of the group of elements are tried, and this exhaustion leads to an increasing search for fresh complexities, and such phenomena as the baroque occur in the development of any artistic style in this *late* phase. However, since the terms such as "complexity" and "elements" are not measurable entities, as Gombrich points out, this schema is open to contrasting interpretations: "What may appear to one critic as the classic moment of an art may carry, for another, the seeds of corruption, and what looks like the final stage of exhaustion of a

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[34] Ernst H. Gombrich, "Style," in *The Art of Art History: A Critical Anthology*, ed. Donald Preziosi, (Oxford; New York: Oxford University Press, 1998)

[35] The spelling of the terms with either uppercase or lowercase letters is based on Gombrich's writings. Gombrich, *Norm and Form*, 82.

[36] Gombrich, "Style," 153.

[37] Giorgio Vasari, *The Lives of the Artists*, trans. Julia Conaway Bondanella and Peter Bondanella (Oxford; New York: Oxford University Press, 1998), 6.

style to one interpreter may be seen from another point of view as the groping beginnings of a new style."[38]

The biological model survived into the nineteenth century until a more specific and less normative scheme of evolution was offered by historians: from an archaic to a classic to a baroque phase. Nevertheless there remained a bias in favor of the classic as expressed in the term *High Renaissance* where Raphael was considered to be the peak of the cycle. Alois Riegl, who supported his theory of style with studies of nonclassical phases, such as baroque, was influential by granting equality to all phases. Riegl put cycles of evolution from an early "haptic" to a later "optic" phase.[39]

Yet the most influential theory around the turn of the twentieth century was offered by Heinrich Wölfflin. Besides approving the assumption of the preceding theory that "too-often-seen" is no longer effective, he finds it unconvincing. As he states, it is correct that "the organs of perception are numbed by an effect which is too often repeated" and this "jaded response should necessitate more powerful effects."[40] However he finds this theory, in which "man is regarded purely as a form-experiencing creature, enjoying, tiring, demanding fresh stimuli," instead of a real and vital being, inadequate in terms of explaining the baroque.

According to Wölfflin, "[t]he occidental development of modern times cannot simply be reduced to a curve with rise, height, and decline: it has two culminating points."[41] Unlike his predecessors, he considers baroque not as the degeneration of the Renaissance but as an individual style. To his *Renaissance and Baroque*, he starts by reminding that in his time it had become customary to use the term *baroque* to define "the style into which the Renaissance resolved itself or, as it is more commonly

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[38] Gombrich, "Style," 157.

[39] Ackerman, "Style," 7-8.

[40] Wölfflin, *Renaissance and Baroque*, 74.

[41] Wölfflin, *Principles of Art History*, 14.

expressed, into which the Renaissance degenerated."[42] But he avoids this argument stating that this is not valid in everywhere, since in Northern Europe "the architecture of the Renaissance was never subjected to the pure and ordered articulating process that it underwent in the South, but it was always open to the capricious influence of the painterly or even the decorative."[43] Considering the baroque as neither a rise nor a decline from the classic, he asserts that the Renaissance and the Baroque are equal in regard to "value." They are "two conceptions of the world differently oriented in taste and in their interest in the world, and yet each capable of giving perfect picture of visible things."[44] As mentioned above, Wölfflin defines these two styles by certain specific oppositional characteristics which he outlines as linear versus painterly, plane versus recession, closed form versus open form, multiplicity versus unity and absolute clarity versus relative clarity. The first term in each pair designates a formal characteristic of the classic, while the second term designates a formal characteristic of the baroque. For Wölfflin both the words "classic" and "baroque" imply special modes of creation in art rather than specific historical phases.

To introduce Wölfflin's scheme briefly, the "linear" mode emphasizes limits, solidity and stability while the "painterly" mode tends to look limitless, suggests movement and incompleteness. As the linear denotes clear, continuous outlines that define things in their tangible character, the "painterly" denotes unstressed, blurred contours and dissolving, merging surfaces. As Wölfflin defines it "[l]inear vision sharply distinguishes form from form, while the painterly eye on the other hand aims at that movement which passes over the sum of things. In the one case, uniformly clear lines which separate; in the other, unstressed boundaries which favor combination."[45] It is possible to see Wölfflin's pairs clearly if Sandro Botticelli's *The Birth of Venus* and Paul Peter Rubens's *Andromeda* are put side by side.[46]

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[42] Wölfflin, *Renaissance and Baroque*, 15.

[43] Ibid.

[44] Wölfflin, *Principles of Art History*, 18.

[45] Ibid., 19.

[46] The choice of the paintings as examples of the linear and the painterly is based on Arch 524 - Architecture and Different Modes of Representation course instructed by Prof. Dr. Ayşen Savaş.

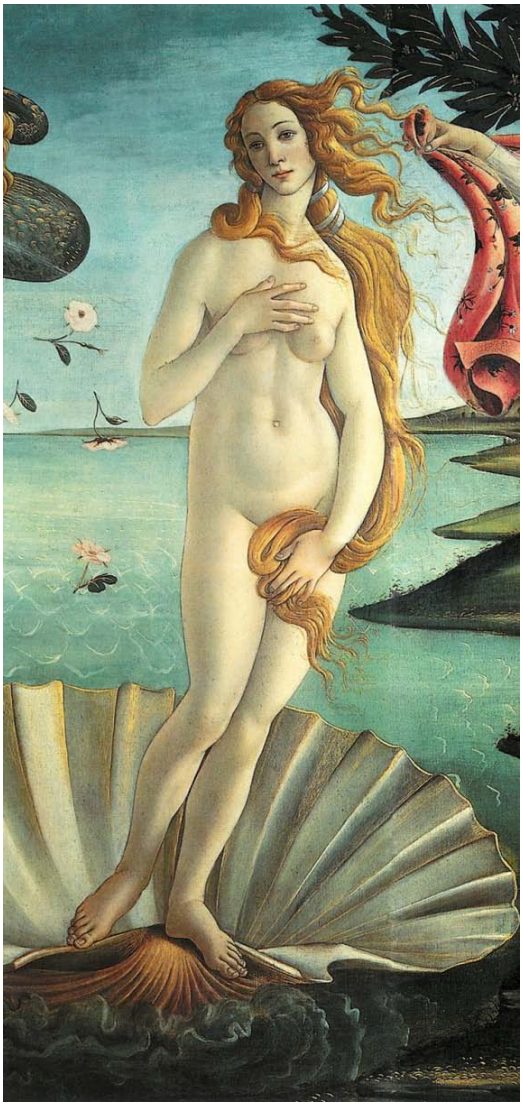

Figure 1 (left) Sandro Botticelli, *The Birth of Venus*, detail, 1486, tempera on canvas, 172.5 x 278.9 cm, Uffizi, Florence. From: http://en.wikipedia.org/wiki/The_Birth_of_Venus_(Botticelli), accessed September 07, 2013.

Figure 2 (right) Peter Paul Rubens, *Andromeda*, 1638, oil on canvas, 189 x 94 cm, Gemaldegalierie, Berlin. From: http://www.wikipaintings.org/en/peter-paul-rubens/andromeda, accessed September 07, 2013.

The elimination of line brings the elimination of plane. While in classic art the composition is formed by a sequence of planes, baroque emphasizes depth. The concept of "plane" denotes compositions in which objects are demarcated on separate layers parallel to the picture plane giving the sense that they can be detached from the relation to their surrounding settings. In the compositions referred to by the concept "recession," on the other hand, planes are withdrawn by means of blurred boundaries and play of light, suggesting a depth, a relief-like image.

The terms "closed form" and "open form" refer to tectonic and a-tectonic compositions. Closed form makes the art object a self-contained entity. The composition looks complete through an emphasis on the opposition of vertical and horizontal, symmetry, and centrality. In contrast, open form is seemingly unlimited and incomplete with a reliance on diagonals, asymmetry. The classic style tends to produce a perfect balance around a middle axis, while baroque avoids stabilization around the center. As Wölfflin defines, the closed form is "a style of composition which, with more or less tectonic means, makes the picture a self-contained entity, pointing everywhere back to itself, while, conversely, the style of open form everywhere points out beyond itself and purposely look limitless."[47] The treatment of the frame is also distinguishing for the two. The classic composition fits into the limits of the frame as if it is just made for that frame. Baroque, on the other hand does not seek to adjust the form to the frame. The composition is open, continuing beyond the frame, often emphasized by means of figures cropped by the frame.

In the classic system of composition, the total image is made up of multiple parts which have their certain independence. The term "multiplicity" describes this inclusion of multiple narrations, multiple points of interest within a single composition. The term "unity," in contrast, describes the baroque composition in which particular elements are merged to create a single visual impression. In both classic and baroque modes of vision unity is the main aim. However, in the former

[47] Wölfflin, *Principles of Art History*, 124.

unity is achieved by a harmony of free parts, in the latter by the unity of parts as an organized whole.

The concepts "absolute clarity" and "relative clarity" are in close relation with the contrast between linear and painterly. The linear, that Wölfflin defines also as "draughtsmanly," "represents things as they are" while the painterly "as they seem to be."[48] Absolute clarity indicates the classic ideal of perfect clarity, the explicit depiction of plastic qualities. In a baroque composition, explicitness of the object is no longer the sole purpose of representation. The concept "relative clarity" refers to the elusive and incomplete evocation of elements, created usually by means of light and shade.

Although his observations are basically derived from painting, Wölfflin's terminology and definitions of Baroque provide a useful model for an analysis of architectural works as well, in terms of a baroque mode of creation.

2.1.3 A Timeless Concept

While many art historians as exemplified above, interpreted baroque as a stylistic term mixed with opprobrium which marks a certain period, some scholars, in contrast, intended to break the model of periodization. As noted by Helen Hills, art historian Henri Focillon, in *Life of Forms in Art*, makes a new interpretation of baroque questioning the rationale of periodizaton.[49] He notes that different styles of art inflect each other. As Tom Conley summarizes, Focillon "writes of a history of art composed of differently paced but intermingling phases. An 'experimental' beginning seeks solutions to problems that a 'classical' moment discovers and exploits. A 'radiating' *(rayonnant)* period refines the solutions of the former to a degree of preciosity, while a 'Baroque' phase at once sums up, turns upon, contorts,

[48] Ibid., 20.

[49] Hills, "The Baroque," 22.

and narrates the formulas of all the other."[50] Therefore baroque is not only what is associated with seventeenth century art. "The baroque state reveals identical traits existing as constants within the most diverse environments and periods of time."[51]

For Focillon, formal patterns in art are in perpetual states of motion, being specific to time but also spanning across it: "Form may … become formula and canon; in other words, it may be abruptly frozen into a normative type. But form is primarily a mobile life in a changing world. Its metamorphoses endlessly begin anew, and it is by the principle of style that they are above all coordinated and stabilized."[52] Angela Ndalianis, paraphrasing Focillon suggests that "baroque form still continued to have a life, one that recurred throughout history but existed beyond the limits of a canon. Therefore, whereas the seventeenth century was a period during which baroque form became a "formula and canon," it does not necessarily follow that the baroque was frozen within the temporal parameters of the seventeenth century."[53]

In his historical and cultural study of the seventeenth century Spanish Baroque, Jose Antonio Maravall similarly observes that "it is possible to establish certain relations between external, purely formal elements of the Baroque in seventeenth century Europe, and elements present in very different historical epochs in unrelated cultural areas. A culture always has borrowings and legacies from previous and distant cultures."[54] He asserts that "one can speak of a baroque at any given time, in any given field of human endeavor."[55]

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[50] Tom Conley, foreword to *The Fold: Leibniz and the Baroque*, by Gilles Deleuze (London; New York: Continuum, 2006), ix.

[51] Henri Focillon, *The Life of Forms in Art*, Trans. Charles Beecher Hogan and George Kubler (New York: Zone Books, 1989), 58.

[52] Ibid., 44.

[53] Ndalianis, *Neo-Baroque Aesthetics*, 8.

[54] Maravall, *Culture of the Baroque*, 4.

[55] Ibid., 5.

On the other hand, some theorists found Modernist characteristics present in the Baroque period. In *The Origin of German Tragic Drama*, the baroque figure is central to Walter Benjamin's conception of time and history.[56] As Helen Hills observes, for Benjamin the baroque represents a way of thinking, which is part of his critique of a linear historical analysis. He uses baroque as a retrospective model to understand the present, modernity, and capitalism.[57] In Benjamin "a study of the baroque is no mere antiquarian, archival hobby: it mirrors, it anticipates and helps grasp the dark present."[58] Christine Buci-Glucksmann who also sees the baroque related to modernism suggests that the baroque might provide an archeology of the modern, which she seeks to do in her work *Baroque Reason*. Commenting on Benjamin's work, she states that "[o]ne might define it as an *archeology of the imaginary of and in history*, which is at work in the decisive junctures of modernity."[59]

Another theorist, Omar Calabrese, in his 1987 book *Neo-Baroque*, asserts that many important cultural phenomena of his time are "distinguished by a specific internal 'form' that recalls the baroque."[60] Searching for the signs of the existence of a "contemporary 'taste,' that links the most disparate objects, from science to mass communications, from art to everyday habits" he proposes a name for this prevailing taste: "neo-baroque."[61] For Calabrese the neo-baroque, which he defines as "a search for, and valorization of, forms that display a loss of entirety, totality, and system in favor of instability, polydimensionality, and change," is simply a spirit of the age "that pervades many of today's cultural phenomena in all fields of knowledge, making them familiar to each other and, simultaneously, distinguishing them from

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[56] Benjamin, *German Tragic Drama*.

[57] Hills, "The Baroque," 23.

[58] George Steiner, introduction to *The Origin of German Tragic Drama*, by Walter Benjamin (London; New York: Verso, 1985), 24.

[59] Buci-Glucksmann, *Baroque Reason*, 48.

[60] Calabrese, *Neo-Baroque*, 15.

[61] Ibid., xi-xii.

other cultural phenomena in a more or less recent past."[62] Although his concepts are in tune with "postmodernism," he avoids the term "postmodern" stating that it has "lost its original meaning and has become a slogan or label for a wide variety of different creative operations."[63] Thus, he intends to propose a different label, neo-baroque, "for some of the cultural objects … (not necessarily those that have been described as 'postmodern')"[64]

Among these theorists comes Gilles Deleuze, as the most influential, with his book *The Fold*. Deleuze adopts a definition of baroque that "radiates through different histories, cultures and worlds of knowledge."[65] He states that "the Baroque can be stretched beyond its precise historical limits."[66] For Deleuze "[t]he Baroque refers not to an essence but rather to an operative function, to a trait. It endlessly produces folds."[67] Deleuze interprets the baroque, in the figure of the "fold," through art, mathematics, science, costume, lyric and philosophy. He sees Gottfried Leibniz, the first mathematician of differential and integral calculus of curves and twisting surfaces, as the philosopher of the Baroque. Referring to Leibniz he argues that the fold cannot be reduced to an element of decoration, rather it refers to a specific way of thinking. In his exploration of the spatial characteristics of Leibniz's philosophy and mathematics, his monadology and differential calculus in particular, considered as "baroque," Deleuze introduces what has been a provocative formal theme for contemporary architects: the "fold" registered both as a material phenomenon, as in the folds of Bernini's sculptures, and as a metaphysical idea that joins the soul to the mind without division.[68] As Anthony Vidler writes, Deleuze's fold is "at once abstract, disseminated as a trait of all matter, and specific, embodied in objects and

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[62] Ibid., xii.

[63] Ibid., 12.

[64] Ibid., 14.

[65] Conley, foreword, xi.

[66] Deleuze, *The Fold*, 38.

[67] Ibid., 3.

[68] Anthony Vidler, *Warped Space: Art, Architecture and Anxiety in Modern Culture* (Cambridge, MA; London: MIT Press, 2000), 219.

spaces; immaterial, and elusive in its capacities to join and divide at the same time, and physical and formal in its ability to produce shapes, and especially curved and involuted shapes."[69] This last characteristic has been of especial interest to architects as the tangible attribute of this abstract thought.

2.2 Modern: A Discourse

The main problem of the term 'baroque' is whether it represents a definable style or a specific period in time. As the latter has its problem with the implication of a periodization, the problem with the former is that there are vast differences between the works of seventeenth century artists even though they share a common perspective. John Rupert Martin, drawing on Frank Warnke who uses the word 'Baroque' "to denote not a precisely definable style but a period complex made up of a whole cluster of more or less related styles,"[70] notes that there was not a stylistic unity in the Baroque period:

> Let us admit at the outset that this is an impossible task. Not only is there no homogeneity of style in the Baroque period, but one is tempted to speak of the very diversity of styles as one of its distinguishing features. The sober realism of the Dutch school bears no resemblance to the high-flown imagery of the Roman baroque, and neither shows any affinity to the noble classicism of the age of Louis XIV.[71]

Wölfflin was the one to attempt to define a coherent stylistic vocabulary for the Baroque style. His observations are certainly illuminating but his categorization has certain limitations. Wölfflin treated the sixteenth century as an artistic whole making no distinction between its latter phase which is now generally called Mannerism. Yet, as Martin asserts, the contrast between Baroque and Mannerism is more revealing and more significant than the one between Baroque and High Renaissance.

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[69] Ibid.

[70] Frank J. Warnke, *Versions of Baroque: European Literature of the seventeenth Century* (New Heaven and London: Yale University Press, 1972), 1.

[71] John Rupert Martin, *Baroque* (New York: Harper & Row, 1977), 26.

The early Baroque movement, he states, "took shape in opposition to the methods of Mannerism not those of the High Renaissance"[72] Moreover Wölfflin's conception of a unified baroque style is arrived at by neglecting some artists, such as Poussin, who do not truly fit in his classifications.[73]

The discussions on the problem of baroque as a uniform style, conjures up Sarah Williams Goldhagen's discussion on Modernism as a "style-based paradigm."[74] Goldhagen observes that the paradigm of style in many ways has served historians and theorists of modern architecture as well. Through a discussion on modernism, she criticizes the ongoing disciplinary reliance on the "style-based paradigm" pointing out its shortcomings. She argues that this long-standing paradigm is in need of critical examination, reformulation, and perhaps replacement. She starts her article with a quotation from Sigfried Giedion:

> There is a word we should refrain from using to describe contemporary architecture. This is the word "style." The moment we fence architecture within a notion of "style," we open the door to a formalistic approach. The contemporary movement is not a "style" ... it is an approach to life that slumbers unconsciously within all of us.[75]

Goldhagen points out that the image of modernism in architecture was derived not from the plenitude of the revolutionary and extensive architectural movement then in progress, but mainly from one subset, the so-called International Style, many principles of which were codified by the Congrès Internationaux d'Architecture Moderne (CIAM). She notes a cluster of these "formal tropes" that has been associated with modernism in architecture:

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[72] Ibid.

[73] Ibid.

[74] Sarah Williams Goldhagen, "Something to Talk About: Modernism, Discourse, Style," *Journal of the Society of Architectural Historians* 64, no. 2 (June 2005): 144-167. The discussion on "style" with reference to this article is based on the discussions generated in Arch 513 - Architectural Research Methods course instructed by Prof. Dr. Ayşen Savaş.

[75] Sigfried Giedion, *Space, Time and Architecture: The Growth of a New Tradition* (Cambridge: Harvard University Press, 1967), xxxiii.

> What was, or is, modernism in architecture? In contemplating this question many readers – even some who try not to – will likely conjure up a sturdy parade of familiar formal tropes. Flatroofs. "Transparency" and lots of glass: glass window-walls, glass doors, glass partitions. Reinforced-concrete or metal buildings, tough edged and stark. Compositions controlled with geometric rigor. Structural armatures split off from building skins, opening up free-flowing spaces articulated lightly with space dividers that barely touch the horizontal planes. A dynamically asymmetrical distribution of spaces. An absence of ornament or historical reference Calvinist in its rigor, an "abstraction," and a resulting emphasis on the compositional play between elements or volumes.[76]

As Goldhagen argues, these "rhetorical synecdoches" were extracted from a series of buildings, exhibitions and texts in the late 1920's by the most prominent historians and critics of the time, most of whom ignored certain practices and ideas that did not suit their "polemical intentions."[77] The above mentioned constellation of formal tropes reifies modernism in architecture into a style. This reification gives this constellation the status of a paradigm in the Kuhnian sense of the term: "an accepted model or pattern."[78] A paradigm working as a framing device provides coherence to a discipline by restricting its field of vision to problems of elaboration, expansion, and critique. However, a paradigm, as Kuhn states, "need not, and in fact never does, explain all the facts with which it can be confronted."[79] Kuhn identifies these facts that seem not to fit in the paradigm as *anomalies*.[80] Goldhagen states that to see modernism in architecture as a style means neglecting its intricate nature and richness.[81] The consideration of Modernism in architecture within the framework of the style-based paradigm introduces analytical problems. The paradigm of style leads to the writing of an architectural history that disregards a large range of projects that does not fit in this framework, including the ones of renowned modernists such as Le Corbusier, Mies van der Rohe, Frank Lloyd Wright, and Adolf Loos. At the first

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[76] Goldhagen, "Something to Talk About," 144.

[77] Ibid.

[78] Thomas S. Kuhn, *The Structure of Scientific Revolutions* (Chicago, IL: University of Chicago Press, 1996), 23.

[79] Ibid., 18.

[80] Ibid., 52-65.

[81] Goldhagen, "Something to Talk About," 144.

glance, the works of these architects may be included in the mainstream High Modernism, yet they have specific works representing of style tendencies, some of which may be regarded even as baroque in the scope of this study. Goldhagen seeks to revise the stylistic paradigm, which draws a rather a misrepresented image of a major aspect of twentieth-century culture, through conceiving design as *discourse*:

> The concept of discourse, derived from methodological models in cultural studies, philosophy, and the social sciences, and the conceptualization of modernism in architecture as a discourse, resolves many analytical problems and handles the conventional cases as well as the range of anomalous cases that have emerged in the scholarship that has been conducted within the framework of the style-based paradigm. Modernist architecture, conceived not as a style but as a discourse, becomes a heterologous array of individual positions and formal practices within a loosely structured field, of which a fundamental premise has been that architecture must instantiate an ethically grounded material practice that grapples with (rather than categorically rejects or ignores) the phenomenon of modernity itself.[82]

2.3 Modern Nested in Baroque

Erwin Panofsky, in his well-known essay "What is Baroque?" which he first presented as a lecture in 1934, conceives the Baroque not as a break from but as a continuation of the Renaissance. Panofsky, akin to Rupert Martin, asserts that the Baroque was a reaction not against Renaissance but against Mannerism and presents the Baroque as the synthesis between the two. Panofsky notes that the "Baroque phenomenon, amounted, at its inception, to a reaction against exaggeration and overcomplication, and that is due to a new tendency towards clarity, natural simplicity and even equilibrium."[83] Panofsky conceives the baroque in terms of dichotomies as Wölfflin did, however starts from the underlying discrepancy that he finds embedded in the Renaissance itself: a classical revival and a quite nonclassical

[82] Ibid., 145.

[83] Panofsky, "What Is Baroque?," 23.

naturalism.[84] Panofsky describes the Baroque as "the paradise of the High Renaissance regained" but "haunted and enlivened by the intense consciousness of an underlying dualism."[85] Thus, the Baroque was again a reconciliation of this dualism. As Lavin puts it:

> The conflicts and contrasts between plastic and spatial tendencies, ideal beauty and reality, neopagan humanism and Christian spiritualism, while still subsisting, began to merge. The merger was now in a new sphere, however, not in the harmonious balance and classical unity of the High Renaissance, but in highly subjective feelings, picturesque play of light and shadow, deep, irrational space, and melting expressions.[86]

For Panofsky, the Baroque is neither the decline, nor the end of what is called the Renaissance era. According to him, the Renaissance, conceived as one of the three main epochs of human history – the others being antiquity and the Middle Ages – lasted until "the time when Goethe died and the first railroads and industrial plants were built."[87] For him, Baroque is "the only phase of Renaissance civilization in which this civilization overcame its inherent conflicts not by just smoothing them away (as did the classic Cinquecento), but by realizing them consciously and transforming them into subjective emotional energy with all the consequences of this subjectivization," and at the same time, "the beginning of a fourth era, which may be called 'Modern' with a capital M."[88]

Interestingly, Panofsky's discussion, raising the question of whether Baroque is the end of the Renaissance or a part of it, recalls the long-standing discussion on postmodernism: is postmodernism the end of or the continuation of modernism? The stylistic diversity that is inherent in the baroque is indeed a general characteristic of today's pluralistic environment. This has led scholars that are cited throughout the

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[84] Ibid., 25.

[85] Ibid., 45.

[86] Irving Lavin, introduction to *Three Essays on Style*, ed. Irving Lavin (Cambridge, MA: MIT Press, 1995), 7.

[87] Panofsky, "What Is Baroque?," 88.

[88] Ibid.

study to draw affinities between the Baroque and the Postmodern, conceiving both as entities coming out from periods of crisis.

As discussed above, the dichotomization of modern and postmodern architecture is often arrived at only by the equation of modern architecture with the so-called International Style, which is just one version of architectural modernism. As the style dominated from the 1920s throughout the 1950s, it is generally ignored that there is a multiplicity of modernist styles and that there were considerable differences among them. Accordingly, Best and Kellner note that "[o]ften what is described as 'postmodern' is an intensification of the modern, a development of modern phenomena such as commodification and massification to such a degree that they appear to generate a postmodern break."[89]

Many architects of the Modern Movement themselves developed different styles, some similar to the postmodern or even baroque forms that are commonly opposed to it and criticized by the architects of the time. Le Corbusier, for example, has works that do not follow the rules of his own "five points."[90] For Modernist architects, use of curve, understood as a baroque tendency, was the basic aspect to be criticized. As Sandra Vivanco states:

> Oscar Niemeyer's fascination with the curve was formally established at Pampulha as a reference to tropical landscape and sensuality, and as an affront to the formal rigidity demanded by the prescriptive International Style. Niemeyer has spoken about Le Corbusier's enthusiasm for Pampulha and how he once chose to compliment Niemeyer by telling him 'you do the Baroque very well.' What an irony that years later Le Corbusier would be utterly offended by critics' assertions that Ronchamp had Baroque inspiration![91]

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[89] Best and Kellner, *Postmodern Turn*, 30.

[90] Le Corbusier's five points are: pilotis, free plan, free façade, horizontal windows, and roof gardens. See Le Corbusier, *Toward an Architecture*, trans. John Goodman (Los Angeles: Getty Publications, 2007)

[91] Sandra Vivanco, "Trope of the Tropics: The Baroque in Modern Brazilian Architecture," in *Transculturation: Cities, Spaces and Architecture in Latin America*, ed. Felipe Hernández, Mark Millington and Iain Borden (Amsterdam; New York: Rodopi, 2005), 197.

Figure 3 Le Corbusier, Chapel of Notre Dame Du Haut, 1955, Ronchamp. From: http://www.1stdibs.com/art/photography/black-white-photography/ezra-stoller-notre-dame-du-haut-ronchamp-chapel-le-corbusier-ronchamp-france/id-a_43664/, accessed October 06, 2013.

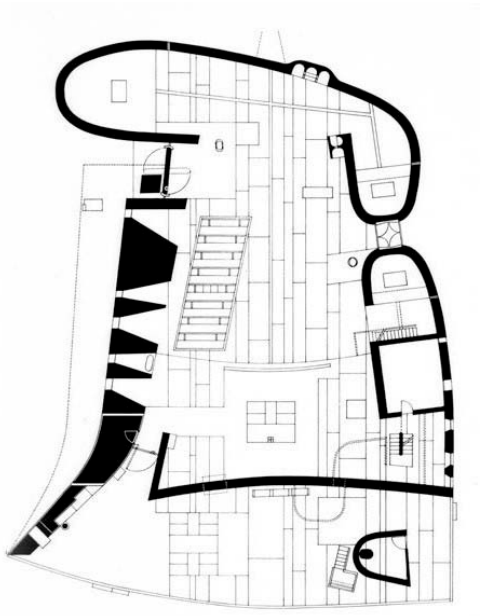

Figure 4 Le Corbusier, Chapel of Notre Dame Du Haut, 1955, Ronchamp, plan. From: http://architecturalmoleskine.blogspot.com/2012/06/le-corbusier-chapel-of-notre-dame-du_30.html, accessed October 06, 2013.

As Nikolaus Pevsler puts it, "Le Corbusier has … changed the style of his own buildings completely, and the pilgrimage chapel of Ronchamp … is the most discussed monument of a new irrationalism."[92] For James Stirling, too, Stanislaus von Moos notes, "Ronchamp was the measure of a current 'crisis of Rationalism.'"[93] And for Guilio Carlo Argan, "the project's 'baroque' rhetoric, combined with the lure of its 'Primitivism', places itself outside the laicist tradition of post-Enlightenment ethics and aesthetics altogether."[94]

This case, on one hand, proves that the baroque is an everlasting phenomenon, on the other hand shows that there are no clear-cut distinctions between the Renaissance and the Baroque, the Modern and the Postmodern or even the Baroque and the Modern. These pairs have more organic relationships. It is possible to say that the baroque tendency that manifests itself more clearly in the works of the last two decades has begun to emerge in the 1950s. When a new discourse is put forward, it needs to be somehow rationalized and systematized. Yet the system established in this early stage is, in fact, artificial. Once this system is internalized, it prepares the ground for the emergence of a more liberated attitude because it comes to be too restrictive. Nevertheless this does not mean the newer understanding is a total stranger to the initial discourse; the same system continues to exist at its very core. This can explain why an individual artist's or architect's style moves from an elementary crudeness to a baroque sophistication. Irving Lavin, for example, seeks to understand this change, through the painter Frank Stella's earlier and later works, stating that "baroque offered escape routes from the impasse of what might be called the absolute, ahistorical, indeed anti-historical visual style that modernism reached in abstract expressionism."[95] Thus in the following chapter, the contemporary examples

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[92] Nikolaus Pevsner, *An Outline of European Architecture* (Harmandsworth, Middlesex: Penguin Books, 1963), 429.

[93] James Stirling, "Ronchamp: Le Corbusier's Chapel and the Crisis of Rationalism," *The Architectural Review* 119 (March 1956): 155-161, quoted in Stanislaus von Moos, *Le Corbusier: Elements of a Synthesis* (Rotterdam: 010 Puplishers, 2009), 249.

[94] Guilio C. Argan, *Progetto e Destino* (Milan: Alberto Mondadori, 1965), 237-243, quoted in Moos, *Le Corbusier*, 249.

[95] Lavin, "Going for Baroque," 423.

put in a dialogue with Modern architecture are considered not as clear cut opposites, but as another conception of world, as Wölfflin calls it, that are becoming dominant as new circumstances have been destabilizing the mainstream pattern.

CHAPTER 3

CONTEMPORARY BAROQUE

It is possible to say that the baroque has been manifesting itself in a new guise in the architectural productions of the last few decades. What is noticeable in the first place is a formal tendency that differs from that of Modernism. Whereas Modernism is known as favoring primary geometric forms and platonic solids as they are finite and tangible, contemporary architecture tends to distort the structures of the classic thinking and creates formless, infinite compositions.

As curves and folds hold a unique position in the creation of the formless, infinite sense of space, it is inevitable to refer to Deleuze's concept of the "fold."[96] As mentioned above, Deleuze's idea of the fold has a two-fold nature. As its material characteristic can be seen in many recent buildings in terms of physically folded forms, it holds an important position as an immaterial concept as well, by omitting the normative distinctions between entities, exceeding the frame, establishing complex spatial and sensorial relations.

Here, an inquiry on two issues is necessary: First, the developments in technology which paved the way for the representation and the production of "formless" compositions; second, the architectural interpretations of the abstract idea of the folding in terms of "folded space" that moves away from the projective space and the self-standing body of the classic vision. The definitions and the terminology put

[96] The inquiry on the Deleuzian conception of baroque in this study originates from the criticism of Assoc. Prof. Dr. Namık Erkal throughout the research.

forward in the following two topics provide a common ground for the analysis of contemporary works that are going to be put in a dialogue with the baroque.

3.1 Formed and Formless

As Mario Carpo observes, "the nineties started angular and ended curvilinear."[97] By the end of the twentieth century, with few exceptions, curves were everywhere. It dominated industrial design including cars and furniture, fashion design, and also architectural design. Contemporary architecture going beyond the established norms of beauty and proportion in architecture draws parallels with the Baroque with an increasing interest in complex, curved, bulging forms and a tendency to create a sense of movement. Curved surfaces are of course present not only in the last decades but also in the mid-twentieth century with a range of examples such as Eero Saarinen's *TWA Terminal* in New York and Le Corbusier's *Chapel at Ronchamp*. Biomorphic forms, Branko Kolarevic observes, are not new:

> The forms of Gehry's recent projects could be traced to expressionism of the 1920's; one could argue that there are ample precedents for Greg Lynn's "blobs" in surrealism. Earlier precedents could be found in the organic biomorphic forms of Art Nouvaeu or, more specifically, in the sinuous curvilinear lines of Hector Guimard's metro stations in Paris. And then there is Gaudi's oeuvre of highly sculptural buildings with complex, organic geometric forms rigorously engineered through his own invented method of modeling catenary curves by suspending linked chains.[98]

However, until recently, there was a notable resistance towards the formless. Kolarevic, referring to Saarinen's statement that the "plastic form for its own sake, even when very virile, does not seem to come off," states that Saarinen is quite cautious about the usage of plastic forms and this attitude is exemplary of the

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[97] Mario Carpo, "Ten Years of Folding," in *Folding in Architecture*, ed. Greg Lynn (Chichester, West Sussex; Hoboken, NJ: Wiley-Academy, 2004), 14-19.

[98] Branko Kolarevic, *Architecture in the Digital Age* (New York: Taylor & Francis, 2005), 4-5.

modernists' noticeable hesitation towards the curvilinear and the indefinite.[99] As the curvilinear made it possible to break the monotony of the linear and the orthogonal, it was a new geometry about which they were still not sure. As noted by Bernard Cache; the modernists "knew that they had, above all, to avoid two opposite pitfalls: a dissolution into the indefinite and a return to the representation of natural form," the former manifested in "the loss of form," and the latter in "the organicist maze into which art nouveau had fallen."[100]

Modern architecture appreciated the primary forms of geometry adopting the idea that they are universally valid, being definite and tangible. Le Corbusier, in his *Toward an Architecture*, states that "[p]rimary forms are beautiful forms because they are clearly legible."[101] Colin Rowe, in his article "The Mathematics of the Ideal Villa," draws attention to the appreciation of the primary geometric forms as the way to achieve the "ideal".[102] Rowe makes a comparison of Palladio's Villa Rotonda with Le Corbusier's villas and theorizes the similarity of the compositional rules of these distinct examples belonging to different historical instances focusing on the aesthetic taste where the primary geometries are embraced as the most beautiful. Rowe refers to Christopher Wren who claims that "natural beauty" emerges from "geometry consisting in uniformity that is equality and proportion." As Wren asserts:

> Geometrical figures are naturally more beautiful than irregular ones: the square, the circle are the most beautiful, next the parallelogram and the oval. There are only two beautiful positions of straight lines, perpendicular and horizontal; this is from Nature and consequently necessity, no other than upright being firm.[103]

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[99] Eero Saarinen, *Eero Saarinen on his Work*, ed. Aline Saarinen (New Heaven: Yale University Press, 1968), 120-123, quoted in Kolarevic, *Architecture in the Digital Age*, 5.

[100] Bernard Cache, *Earth Moves: the Furnishing of Territories*, trans. Anne Boyman (Cambridge, MA: MIT Press, 1995), 48.

[101] Le Corbusier, *Toward an Architecture*, 85-86.

[102] Colin Rowe, "The Mathematics of The Ideal Villa," *The Mathematics of the Ideal Villa and Other Essays* (Cambridge, MA: MIT Press, 1976), 1-27.

[103] Christopher Wren, *Parentalia* (Farnborough, Hants, Eng.: Gregg Press, 1965), 351.

Egyptian, Greek and Roman architecture, as also observed by Le Corbusier, were based on Platonic solids: cylinder, pyramid, cones, cube, prism and sphere. One can see the influence of these forms in his monastery of La Tourette. Platonic solids are also intrinsic to the digital modeling software of the last decades as universal geometric *primitives*. These forms, however, are no longer seen "as some kind of unique isolated archetype, but as special cases of quadratic parametric surfaces."[104]

Recently complex and curved forms have been pervading contemporary architecture. The proliferation of curvilinearity in architecture in the last two decades cannot be examined independent of the developments in geometry and the changes brought about by new technologies. Severo Sarduy linking the aspects of science and art observes that "the form of Kepler's discovery of the elliptical orbit of planets is similar to that underlying the poetry of Gongora, Caravaggio's paintings and the architecture of Borromini."[105] Analogous phenomena can be found in every epoch.

Throughout history, architects, in search for an ideal architectural aesthetics, made use of geometry leading to the discovery of golden section and studies on it, such as the Fibonacci series. The relationship between mathematics and architecture was strengthened by the invention of perspective that was solidified by Leon Battista Alberti and his contemporaries who, by means of geometry and studies of optics, were able to "rationalize vision through mathematics and thereby to produce the illusion of the complex three-dimensional world on a two-dimensional surface."[106] The invention of perspective led to developments in architectural representation. It is obvious that geometry, besides the developments in optics, is intrinsic to baroque architecture as well with ovals, ellipses, parabolas and hyperbolas – stretched circles and squeezed spheres – that George Hersey defines as "beauties of distortion."[107] He

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[104] Kolarevic, *Architecture in the Digital Age*, 14.

[105] Severo Sarduy, *Barrocco* (Paris: Seuil, 1975), quoted in Calabrese, *Neo-Baroque*, 11.

[106] James Ackerman, *Distance Points: Essays in Theory and Renaissance Art and Architecture* (Cambridge, MA: MIT Press, 1991), 60.

[107] George L. Hersey, *Architecture and Geometry in the Age of the Baroque* (Chicago: University of Chicago Press, 2001), 132-155.

states that "[t]hough few modern scholars make use of the fact, or even seem to realize it, Baroque architecture was above all mathematical."[108]

Architectural thinking throughout centuries was based firmly on Euclidean formation. In the early nineteenth century, as architectural design and representation techniques were continuing their development based on Euclidean principles, Euclid's fifth postulate opened the realm of non-Euclidean geometries. Euclid, in *Elements*, proposed five basic postulates of geometry all of which are self-evident except the fifth one, the "parallel" postulate, which briefly is as follows: "given a line and a point not on the line, it is possible to draw exactly one line through the given point parallel to the line."[109] Many mathematicians studied and questioned this postulate and the studies resulted with the discovery that consistent non-Euclidean geometries exist. The view of a geometry independent of the fifth postulate that initiated with Carl Friedrich Gauss culminated with Nikolay Lobachevsky and Janos Bolyai who were able to successfully demonstrate the geometry called 'hyperbolic geometry.'[110]

The developments in non-Euclidean geometry continued throughout the nineteenth century with hyperbolic and spherical geometries leading to the research in the youngest and the most sophisticated branch of geometry, 'topology,' which holds a unique position in contemporary digital design techniques. Topology is, mathematically, a study of qualitative properties of geometric forms that does not change under continuous deformations such as shrinking, stretching, folding and twisting, without tearing apart or gluing together parts.[111]

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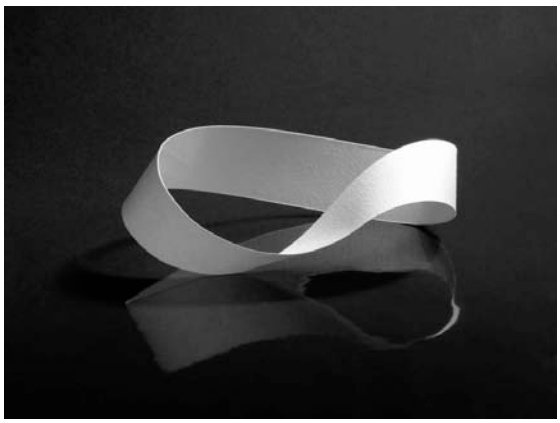
[108] Ibid., 4.

[109] William L. Hosch, *Britannica Guide to Geometry* (New York: Britannica Educational Publishing, 2011), 92.

[110] Roberto Bonola, *Non-Euclidean Geometry: a Critical and Historical Study of its Development*, trans. H. S. Carslaw (New York: Dover Puplications, 1955) 64-65.

[111] Hosch, *Britannica Guide*, 97.



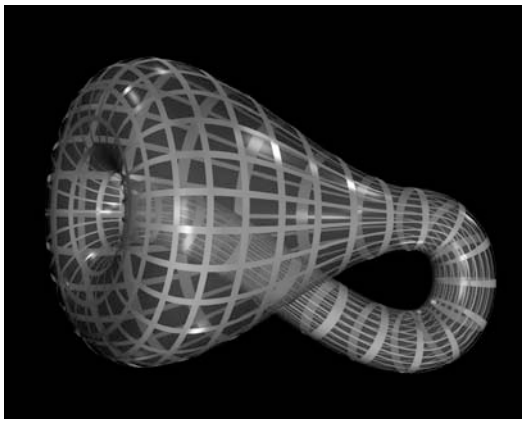


Figure 5 (left) Mobius Strip. From: http://psnt.net/blog/2010/11/mbius-turns-220/, accessed September 01, 2013.

Figure 6 (right) Klein Bottle. From: http://mediawingnuts.blogspot.com/2010/05/klein-bottle-or-klein-jar-either-way.html, accessed September 01, 2013.

The notion of topology has particular potentiality in architecture in terms of creation of a continuous yet heterogeneous system. The well-known examples of topological structures such as the Mobius strip and the Klein bottle are convenient to point out the significance of topology's relation to architectural design. The distinctive feature of these structures is the possibility of a ceaseless loop starting from any point on the surface along all sides which means that the forms do not have a consistently definable *interior* and *exterior*. Because of this intrinsic property, the structures have a potential for an architecture in which the boundaries between interior and exterior are blurred, and the normative separation of "inside" and "outside" is eliminated. [112]

The logic of digital design strategies has the potential to shift the spatial perception by replacing the conventional configuration of floor and wall, with continuous surfaces where floors become walls, walls become floors. The formal quality of this contemporary attitude is analogous to the above mentioned formal characteristics that were used by Wölfflin to define the Baroque architecture such as the omission of the framing members, elusiveness, continuity and, accordingly, the sense of movement and infinity.

[112] Kolarevic, *Architecture in the Digital Age*, 13.

3.1.1 Form and Technology

Developing computer technologies play an important role in the emergence of architectural forms that differ from the ones of the recent past. The discovery of the new geometries highly affected the disciplines of physics and engineering leading the development of new technologies. However, in architecture the concept of curvilinearity was largely neglected until recent years. The transmission and proliferation of curved surfaces in building industry that was among the last to adopt the digital technologies, became possible only in the last two decades by means of computer software.[113] Frank O. Gehry was the architect who introduced one of these software to the discipline. He used CATIA (Computer Aided Three-dimensional Interactive Application), which was initially developed to be used in aerospace industry, for the design of the sculpture *Fish* for the 1992 Olympics for the first time and continued with several notable works.

Figure 7 Frank Gehry, The Guggenheim Museum, 1997, Bilbao. From: http://en.wikipedia.org/wiki/Guggen heim_Museum_Bilbao, accessed September 09, 2013

[113] Ibid., 6.

Until the appearance of CAD (Computer Aided Design) and CAM (Computer Aided Manufacturing) technologies, complex forms were very difficult to conceive, develop, represent and manufacture. These forms were mentioned by Rafael Moneo as "forgotten geometries lost to us because of the difficulties of their representation."[114] Three-dimensional digital modeling software based on NURBS (Non-Uniform Rational B-Splines) has opened a universe of complex forms, Kolarevic states, and this new formal universe in turn "prompted a search for new tectonics that would make the new undulating, sinuous skins buildable."[115] Before the technologies that made the manufacturing of forms possible, conceptual possibilities were intriguing but are difficult to truly manifest tectonically, as seen in the conceptual model of Mobius House designed by UN Studio.

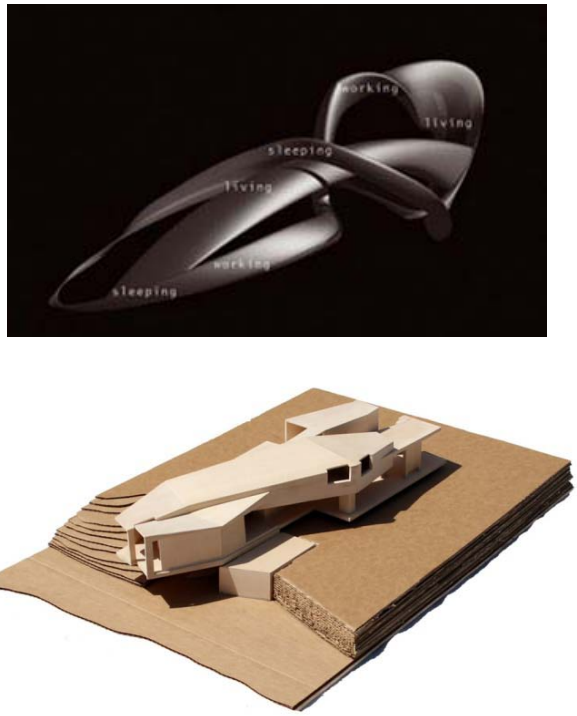


Figure 8 UN Studio, Mobius House, 1993-1998, Het Gooi, Netherlands, conceptual diagram and model. From: http://www.unstudio.com/projects/mobius-house, accessed September 09, 2013

[114] Rafael Moneo, "The Thing Called Architecture," in *Anything*, ed. Cynthia Davidson (New York: Anyone Corporation, 2001), 122.

[115] Kolarevic, *Architecture in the Digital Age*, 13.

3.2 Folded Space

A comparison of Michelangelo's sculpture of *David* with Bernini's highlights the distinction between classical and baroque attitudes to formal composition and perception. [116] The difference starts with the moment chosen to be depicted. Michelangelo's *David*, though in many ways differs from its predecessors, is represented shortly before the battle concentrated on the arrival of his enemy Goliath. He has a frown on his face but stands balanced and relaxed in a *contrapposto* stance, dependent on a frontal viewpoint. Bernini's David, on the other hand, is depicted in motion, in the act of throwing a stone to his enemy. His body is twisted back, his head is sharply turned with a furrowed face with intense concentration as he is about to release the stone. The formal quality of the statue, through its sense of movement and its capacity for evoking curiosity in the viewer, invites the spectator to move around rather than standing in front of it. As Hibbard states, "the single twisting figure necessarily introduces a number of subordinate views."[117] Baroque sculpture is not reliant on a single viewpoint. More than one supplementary perspective is possible depending on the position of the viewer. For example, the right arm is not visible unless the spectator moves around the sculpture. Similarly, from the right side of the statue, the focal point is David's body and from this perspective neither the slingshot nor the facial expression can be seen, therefore it is not possible to perceive the narrative unless the viewer changes his or her position. By the avoidance of a statically ordered perspectival arrangement, the center continually shifts, the result being the articulation of complex spatial relationships. Bernini's David, as Andrew Benjamin states, is "[a] sculptured body, and yet as sculpture it can be interpreted as the move from the body understood as proportion towards a body understood as a dynamic process of internal relationships."[118]

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[116] Comparison is based on the discussions generated in Arch 2523- Art History course instructed by Assist. Prof. Özlem Arıtan at DEU.

[117] Howard Hibbard, *Bernini* (Baltimore, MD: Penguin Books, 1965), 55.

[118] Andrew Benjamin, "Surface Effects: Borromini, Semper, Loos," in *Journal of Architecture* 11, no.1 (London: Routledge, 2006): 7.

Figure 9 (left) Michelangelo Buonarotti, David, 1501-1504, marble, 517 cm, Galleria dell'Academia, Florence. From: http://en.wikipedia.org/wiki/David_(Michelangelo), accessed September 12, 2013.

Figure 10 (right) Gian Lorenzo Bernini, David, 1623-1624, marble, 170 cm, Galleria Borghese, Rome. From: http://www.proprofs.com/flashcards/cardshowall.php?title=italian-baroque-art-160017 50, accessed September 12, 2013.

Analogous understanding has been developing in contemporary architectural design approaches which regard architectural form as a dynamic process of relationships rather than a perfectly proportioned, selfstanding body. While it is possible to see the tendency to create sense of movement in contemporary architecture in numerous buildings such as Calatrava's Turning Torso, recent computational design strategies are more in tune with the polycentric characteristic of baroque, with their intention to create a moving, changing and transforming body. These approaches are not only digitally enabled and digitally controlled but also influenced and informed by the

works of theorists, especially those of French philosopher Gilles Deleuze, one of the most influential thinkers of the twentieth century. It was Deleuze who introduced the *fold* as the definition of Baroque and who showed that there are *mille plateaux*,[119] "a multiplicity of positions from which different provisional constructions can be created, in essentially a non-linear manner, meaning that the reality and events are not organized along continuous threads, in orderly succession,"[120] The fold, as "a unifying figure whereby different segments and planes are joined and merged in continuous lines and volumes," is both the emblem and the object of Deleuze's discourse. For Deleuze, as put by Ignasi de Solà-Morales, the notion of the fold, supposes that space, in the poststructural situation demonstrated with *mille plateaux*, "is made up of platforms, fissures, folds, infills, surfaces, and depths that completely dislocate our spatial experience."[121]

Figure 11 Santiago Calatrava, HSB Turning Torso, 2001-2005, Malmö, sketch and exterior view. From: http://www.calatrava.com, accessed September 12, 2013.

[119] Gilles Deleuze, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987)

[120] Kolarevic, *Architecture in the Digital Age*, 4.

[121] Ignasi de Solà-Morales, *Differences: Topographies of Contemporary Architecture*, trans. Graham Thompson (Cambridge, MA: MIT Press, 1997), 86.

Even though Deleuze rarely deals directly with architecture as a subject matter, his philosophical concepts that evoke a spatial language, have inspired architects to explore what his philosophy might offer to the discipline. In the beginning of the nineties, as architectural theory was busy discussing deconstructivism and its angularity, Deleuzean folds that "avoid fractures, overlay gaps, interpolate," started to diffuse into architectural discourse when Peter Eisenman began to elaborate an architectural version of it.[122] Eisenman's writings of the time argue that a major paradigm shift has taken place in the second half of the twentieth century: a shift from the mechanical the electronic.[123] Eisenman, with no reference, however, to computer-aided design, frequently cite fax technology as the omen of this new paradigm of electronic reproducibility, "alternative and opposed to all paradigms of the mechanical age and destined to obliterate the Benjaminian distinction between original and reproduction."[124] The electronic paradigm, as Eisenman states, "directs a powerful challenge to architecture because it defines reality in terms of media and simulation, it values appearance over existence, what can be seen over what it is."[125]

Eisenman's reading of Deleuze's fold emphasizes "a new category of objects defined not by what they are, but by the way they change and by the laws that describe their continuous variations." [126] For Deleuze the fold opens up a new conception of space and time. He argues that Leibniz's mathematics abandons Cartesian rationalism and "[t]he smallest element of the labyrinth, is the fold, not the point which is never a

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[122] Carpo, "Ten Years of Folding," 14.

[123] See: Peter Eisenman, "Unfolding Events: Frankfurt Rebstock and the Possibility of a New Urbanism" in Eisenman Architects, Albert Speer and Partners and Hanna/Olin, *Unfolding Frankfurt*, (Berlin: Ernst and Sohn, 1991), 8-18; Peter Eisenman, "Oltre lo sguardo. L'architettura nell'epoca dei media elettronici," in *Domus*, no. 734, (January 1992): 17-24, reprinted as "Visions' Unfolding: Architecture in the Age of Electronic Media," in *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965-1995*, ed. Kate Nesbitt (New York: Princeton Architectural Press,1996), 556-562) and "Folding in Time: The Singularity of Rebstock", in *Architectural Design (Folding in Architecture)* 63, no. 3/4 (March / April 1993): 22-6.

[124] Carpo, "Ten Years of Folding," 15.

[125] Eisenman, "Visions' Unfolding," 557.

[126] Carpo, "Ten Years of Folding," 14-15.

part, but a simple extremity of the line."[127] In Leibniz's mathematics object is "no longer defined by an essential form" rather a continual variation characterized by the agency of fold.[128] For Deleuze, Eisenman states, "folded space articulates a new relationship between vertical and horizontal, figure and ground, inside and out – all structures articulated by traditional vision. Unlike the space of classical vision, the idea of folded space denies framing in favour of a temporal modulation. The fold no longer privileges planimetric projection; instead there is a variable curvature."[129] Eisenman takes Deleuze's idea into architecture as "folded space", as an alternative to normative, perspectival, gridded Cartesian space of the classical tradition:

> The fold presents the possibility of an alternative to the gridded space of the Cartesian order. The fold produces a dislocation of the dialectical distinction between figure and ground; in the process it animates what Gilles Deleuze calls 'a smooth space'. Smooth space presents the possibility of overcoming or exceeding the grid. The grid remains in place and the four walls will always exist but they are in fact overtaken by the folding of space. Here there is no longer one planimetric view which is then extruded to provide a sectional space. Instead it is no longer possible to relate vision of space in a two dimensional drawing to the three-dimensional reality of a folded space.[130]

Carpo, commenting on Eisenman's works, which are regarded as "primitive beginnings," also by Eisenman himself, states that the folding process remains purely generative and it does not relate to the actual form of the end product. Forms do not fold, rather they fracture and break.[131] For Greg Lynn, as a younger architect working with software based on differential calculus, Deleuze's reading of Leibniz gave birth to a new logic. Folding is one of the concepts used by Lynn, such as pliancy, smoothness, flexibility, multiplicity, appropriated from Deleuze's conception. In his essay on "architectural curvilinearity," Lynn proposes "topological architecture" as an alternative "smooth transformation" to the "deconstructivist logic

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[127] Deleuze, *The Fold*, 6-7.

[128] Ibid., 20.

[129] Eisenman, "Visions' Unfolding," 559.

[130] Ibid., 560.

[131] Carpo, "Ten Years of Folding," 15.

of contradiction and conflict."[132] He suggests a new approach to architectural design which he considers "a more fluid logic of connectivity" manifested by continuous curvilinear surfaces, as a response to "architecture's discovery of complex, disparate, differentiated and heterogeneous cultural and formal contexts."[133] Contemporary digital design approaches, as stated by Kolarevic:

> [A]ppear to reject any notion of urban and structural typology, continuity and morphology, and historic style and perspectival framework … They seem to prefigure an entirely new way of architectural thinking, one that ignores conventions of style or aesthetics altogether in favor of continuous experimentation based on digital generation and transformation of forms that respond to complex contextual or functional influences, both static and dynamic.[134]

One of the approaches that Lynn offers, "animate design," uses animation software not for the common usage for representation, but for form generation. Animation technique used for architectural representation is itself alone remarkable for its multiplication of the representational framework. While the complex forms are not easy to totally grasp the standard orthographic set, animation technique allows architects to represent the architectural work easily from multiple viewpoints. The increase in the usage of the animation technique among architects may be considered also as indicative of a contemporary architectural thinking concerned with motion and dynamism, rather than stability. However, Lynn asserts that discussing motion in architecture through the cinematic model, in which the movement is simulated by multiplication and sequencing of static snap-shots, removes force and motion from form and reintroduces them after the design process through a series of optical techniques. He asserts that animate design, in contrast, "is defined by the co-presence of motion and force at the moment of formal conception."[135] Lynn, introducing

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[132] Greg Lynn, "Architectural Curvilinearity: the Folded, the Pliant and the Supple," in *Folding in Architecture*, ed. Greg Lynn (Chichester, West Sussex; Hoboken, NJ: Wiley-Academy, 2004), 22-29.

[133] Ibid., 24.

[134] Kolarevic, *Architecture in the Digital Age*, 4.

[135] Ibid.

contemporary animation and special-effects software not as tools for design rather than as devices for rendering, asserts that:

> There is one aspect of virtuality that architects have neglected, however, and that is the principle of virtual force and the differential variation it implies. Architectural form is conventionally conceived in a dimensional space of idealized stasis, defined by Cartesian fixed-point coordinates. An object defined as a vector whose trajectory is relative to other objects, forces, fields and flows, defines form within an active space of force and motion. This shift from a passive space of static coordinates to an active space of interactions implies a move from autonomous purity to contextual specificity.[136]

In this context, recent architectural design approaches through the "multiplicities" in their logic, focusing on being interactive both with contextual conditions and users, rather than being self-standing, are analogous to the Baroque's attitude toward design. When the "fold" is understood in terms of a structure of relations, in addition to its formal capacities, it is possible to conceive many recent architectural or artistic productions by means of this concept.

3.3 Architecture of Folds

Benefiting the above mentioned discussions, it is possible to draw analogies between many contemporary works and the Baroque ones through Wölfflin's definitions of the baroque and the characteristics of the "folded space." The following set of contemporary works includes diverse examples that would not fall into the same group in terms of their stylistic properties, but share a common baroque attitude, which favors formless, obscure, dynamic compositions, creates continuous spaces, omits normative distinctions, overflows the grid and the frame, and dislocates subject's spatial experience. The examples, which the baroque manifests itself in different manners in each, are intended to indicate how the baroque, as a paradigmatic entity, diffuses through many contemporary works, even though they have vast differences between, like the works of the seventeenth century Baroque.

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[136] Greg Lynn, *Animate Form* (New York: Princeton Architectural Press, 1999), 11.

3.3.1 Curves and Movement

A fundamental issue for a study of the baroque is the distinction between the static and the dynamic. The most profound innovations of baroque architecture were complex geometric organizations and undulating surfaces that suggest movement. When the issue is curves and movement, the most prominent architect is Borromini with his San Carlo alle Quatro Fontane. As Blunt states, Borromini "breaks with every Renaissance convention and introduces the maximum effect of movement and variety" even in the smallest details, for example the balusters of the balustrade on the upper floor of San Carlo.[137]

> Architects of the sixteenth century always made their balusters circular in plan. Bramante made them symmetrical about their middle point, but Michelangelo made the bulge come below the middle, so that the balusters appeared more stable. Borromini has accepted Michelangelo's break with complete symmetry, but he has added two innovations: first, the balusters are not circular in plan but are based on triangles formed of three slightly concave arcs of circles; secondly, he places the balusters alternately so that in one bulge comes at the top and on the next at the bottom, thus producing an effect of movement rather than stability.[138]

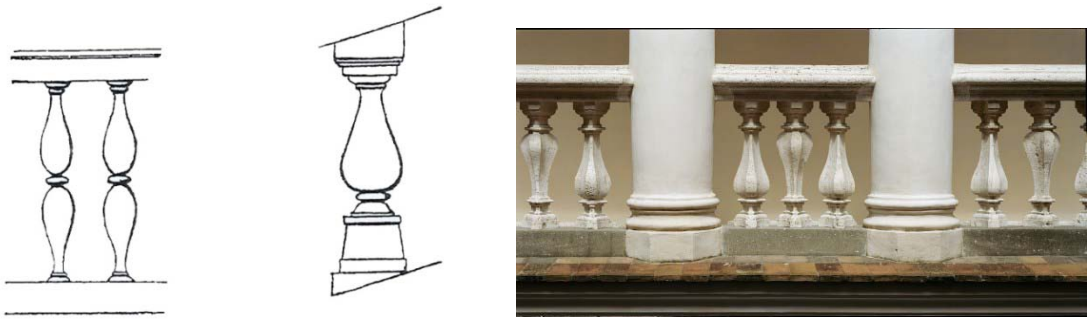

Figure 12 (left) Baluster after Raphael and Baluster after Michelangelo. From: Heinrich Wölfflin, *Renaissance and Baroque* (Ithaca, NY: Cornell University Press, 1967), 40.

Figure 13 (right) Francesco Borromini, San Carlo alle Quatro Fontane, 1638-1641, Rome, balusters. From: http://act.art.queensu.ca/details.php?i=3232, accessed December 27, 2013.

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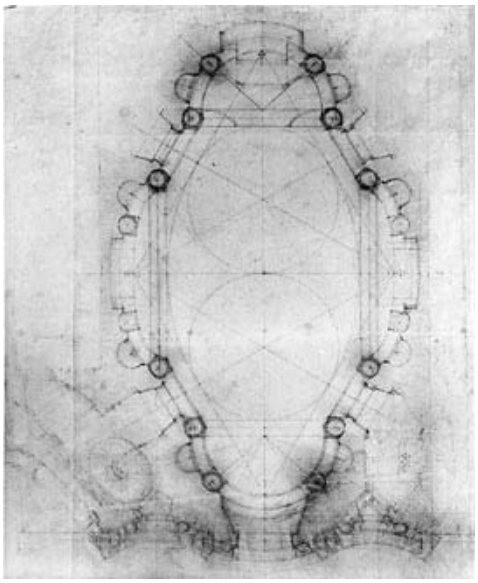
[137] Anthony Blunt, *Borromini* (Cambridge, MA: Harvard University Press, 1979), 57.

[138] Ibid.

Borromini, even in his simple rectangular chapels, "replaces the sharp corners by curves, so that the walls seem to form a continuous surface which, as it were, envelopes the worshippers in the church"[139] Yet the most famous is the undulating façade of the San Carlo. The interior also is a flow of curves which gives the space a sense of fluidity. The geometrical composition of the plan is informed by a superposition of multiple triangles and circles that establish an oval. His use of oval is important as Vitruvius and his Renaissance disciples would have despised it for absence of clarity and a fixed proportion.

Figure 14 Francesco Borromini, San Carlo alle Quatro Fontane, front façade. From: http://www.pinterest.com/pin/504332858241157565/, accessed December 18, 2013.

[139] Ibid., 67.



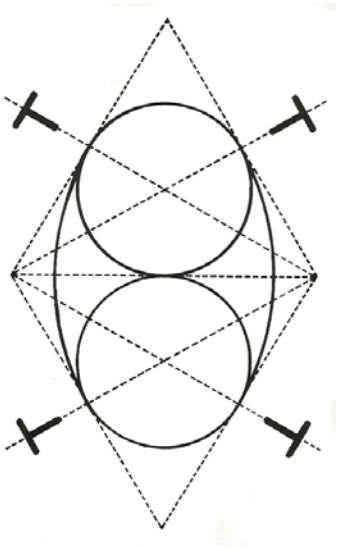


Figure 15 (left) Francesco Borromini, San Carlo alle Quatro Fontane, plan. From: http://www.etsavega.net/dibex/Carlino-e.htm, accessed December 19, 2013.

Figure 16 (right) Francesco Borromini, San Carlo alle Quatro Fontane, diagram of plan. From: Anthony Blunt, *Borromini* (Cambridge, MA: Harvard University Press, 1979), 57.

Another masterpiece, Sant'Ivo alla Sapienza, is also remarkable for Borromini's use of diverse geometries. The plan is based on two equilateral triangles which interpenetrate to form a six-pointed star on the outer periphery and a regular hexagon as the central space. The church itself is composed of this hexagon, surrounded by three pillars of alternating bays. One type of bay is formed by drawing a semi-circle with one of the sides of the hexagon as diameter. The other bays are more complicated in form. Their sides are straight and lie along the outlines of the star, but they end in a curved section which is curved inwards as an arc of a circle drawn with its center at the point of the star and with the same radius as the semicircular bays.[140] The effect of movement established by this plan is most easily appreciated in a view looking up into the dome, in which "the eye is carried round the line of the entablature in a ceaseless swing, moving from the simple concavity of one bay to the broken and more angular form of the next."[141]

[140] Ibid., 114.

[141] Ibid.

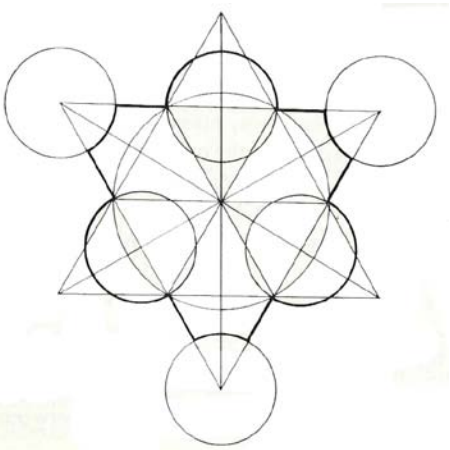


Figure 17 (left) Francesco Borromini, Sant'Ivo Alla Sapienza, 1642-1660, Rome, interior view of dome. From: http://www.quia.com/jg/2404490list.html, accessed December 10, 2013.

Figure 18 (right) Francesco Borromini, Sant'Ivo Alla Sapienza, 1642-1660, Rome, diagram of plan. From: Blunt, *Borromini*, 115.

Use of curves, juxtaposing forms and suggestion of movement, can be observed in many buildings of the last two decades. One of the most recent examples is Heydar Aliyev Cultural Center by Zaha Hadid Architects with its curved and folded envelope. One of the main design concepts of the center, opened in 2012, is a public plaza that folds and creates the building.[142] The continuous surface contains 3 major programs: a convention center, a museum and a library. The building's continuous architectural landscape merges various architectural components such as stairs, slab, wall, roof and bridge. The building contains heterogeneous properties which respond to various functional necessities, yet in the homogenous appearance of the single continuous surface.

[142] Saffet Kaya Bekiroğlu, "Saffet Bekiroğlu ile Haydar Aliyev Merkezi Üzerine bir Söyleşi," interview by Ceyhun Baskın, video, posted November 2013, http://kolokyum.com/yazi/5407/saffet_bekiroglu_ile_haydar_aliyev_merkezi_uzerine_bir_soylesi.

Figure 19 Zaha Hadid, Heydar Aliyev Cultural Center, 2007-2012, Baku. From: http://www.zaha-hadid.com/architecture/heydar-aliyev-centre/, accessed September 09, 2013.

Figure 20 Zaha Hadid, Heydar Aliyev Cultural Center, folds of the envelope. From: http://www.zaha-hadid.com/architecture/heydar-aliyev-centre/, accessed September 09, 2013.

As its architects state, Heydar Aliyev Center establishes a continuous fluid relationship between the external plaza and the center's interior, where the public are drawn into the building in a single, seamless gesture. The concept is to blur the differentiation between architecture and urban landscape, figure and ground, interior and exterior, private and public. Although the question whether the building really manages to achieve this quality is open to discussion, the design idea moves away from the Modernist thinking that seeks the separated rather than intertwined, as it can be seen in the figure-ground relationship of Modern architecture or in the zoning of modern urbanism.

As the abolishment of the contour is one of the basic characteristic of baroque painting, in architecture it becomes the abolishment of the frame. In the Baroque, as Wölfflin observes, "[t]he sense of massiveness was largely effected by omitting the framing members which enclose and subordinate the material … the baroque puts the emphasis on the material, and either omits the frame altogether or makes it seem inadequate to contain the bulging mass it encloses."[143] Similar phenomenon is one of the most profound characteristics of digitally designed and manufactured contemporary buildings. Like many other buildings by Zaha Hadid Architects, Heydar Aliyev Center is significant with its massiveness and its deviation from the conventional relationship between columns, walls and floors. As mentioned earlier in this chapter a surface of this kind has the ability to form the elements of the structure without creating any edges. The exterior plaza folds up creating the envelope for the center and the envelope folds inwards, creating floors and stairs.

Whereas in the Baroque, the continuity and infinity of space was usually created by blurring the boundaries between architectural members by means of illusionistic paintings or a dense use of ornament, in Hadid's building the fluidity is arrived at basically by the nature of the space frame structural system of the envelope. As Saffet Kaya Bekiroğlu, associate at Zaha Hadid Architects and one of the architects of the building, states:

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[143] Wölfflin, *Renaissance and Baroque*, 54-55.

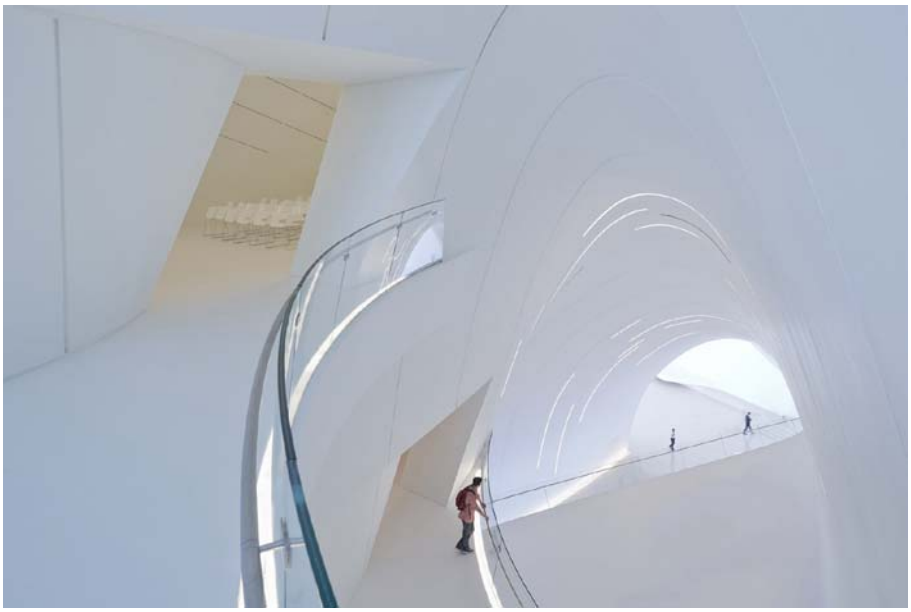

Figure 21 Zaha Hadid, Heydar Aliyev Cultural Center, interior. From: http://www.zaha-hadid.com/architecture/heydar-aliyev-centre/, accessed September 09, 2013.

Figure 22 Zaha Hadid, Heydar Aliyev Cultural Center, auditorium. From: http://www.zaha-hadid.com/archi tecture/heydar-aliyev-centre/, accessed September 09, 2013.

> The surface geometry driven by the architecture, dictates the need to pursue unconventional structural solutions; the introduction of curved 'boot columns' to achieve the inverse peel of the surface from the ground at the west, and the cantilever beams 'dovetails' tapering towards the free end, supporting the building envelope at the east. The substructure enables the incorporation of a flexible relationship between the rigid structural grid of the space frame and the free-formed exterior cladding seams which derive from complex geometry rationalization, architectural aesthetics and usage.[144]

This structural system, unlike the modernistic skeleton system – "skin and bones affair" as Vidler calls it – [145] which emphasizes the distinction between the structure and other architectural members, smoothes the relationship between these elements. As Kolarevic observes:

> The explorations in constructability of geometrically complex envelopes in the projects of the digital avant-garde have led to a rethinking of surface tectonics. The building envelope is increasingly being explored for its potential to reunify the skin and structure in opposition to the binary logics of the Modernistic thinking. The structure becomes embedded or subsumed into the skin, as in semimonocoque and monocoque structures... The principal idea is to conflate the structure and the skin into one element.[146]

Both for contemporary architecture and the Baroque, building material is also important to be able to establish the desired effect of fluidity. Wölfflin observes that in the Baroque period marble was almost entirely replaced by the travertine for its spongy character suitable for a "baroque type of treatment."[147] The realization of this unification prompted a search for new materials such as rubber, plastics and composites which were rarely used in the building industry before. In Heydar Aliyev Center this unifying material is glass fiber reinforced concrete (GFRC). As Bekiroğlu states, the material used for both the plaza flooring and also the envelope cladding in

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[144] Saffet Kaya Bekiroğlu, "Assembling Freeform Buildings in Precast Concrete: Heydar Aliyev Cultural Center by Zaha Hadid Architects," in *Precast 2010*, symposium reader, ed. Jan Vamberský and Roel Schipper (Delft: Delft University of Technology, 2010), 4.

[145] Vidler, *Warped Space*, 253.

[146] Kolarevic, *Architecture in the Digital Age*, 39.

[147] Wölfflin, *Renaissance and Baroque*, 47.

order to establish the continuity needed to adapt to the plasticity of the geometry, while offering the required color, texture and technical specifications of UV protection, graffiti-proofing and slip resistance. GFRC is the ideal material, Bekiroğlu states, which allows the creation of this building.[148] Each panel has a unique shape and size produced to fit exactly in its designed location. The tiling of these individual elements into one stable lattice, results in a sense of instability.

The sense of instability, besides the geometric form of the envelope, arises from the behavior of light on this form. Bekiroğlu, commenting on the geometry of the center, draws attention to the significance of light for their design concerns:

> A primary element that differentiates a rectilinear-surfaced volume from a volume with a fluid geometry is the way it reflects light. Each side of a cube or a box will reflect only one tone of light; however volumes with fluid geometries will reflect varying shades that continually transform and flow into each other, creating much richer surface composition.[149]

It is possible to interpret this aspect of the building in terms of Wölfflinian painterliness. As Wölfflin puts it "[l]ight and shade contain by nature a very strong element of movement. Unlike the contour, which gives the eye a definite and easily comprehensible direction to follow, a mass of light tends to a movement of dispersal, leading the eye to and fro; it has no bounds, no definite break in continuity, and on all sides it increases and decreases."[150] As the undulating façade of Borromini's San Carlo, the folded envelope of the cultural center seems to be moving and morphing ceaselessly by means of its form and the behavior of light on it.

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[148] Bekiroğlu, "Assembling Freeform Buildings," 5.

[149] Ibid., 4.

[150] Wölfflin, *Renaissance and Baroque*, 31.

3.3.2 Staircase

It can be said that, one of the most important parts of a baroque building was the staircase. In Renaissance buildings staircases were elements that merely serve to move from one level to another. This Renaissance attitude can be seen in Palladio's Villa Rotonda with its staircases squeezed between walls, nearly invisible to any visitor. Unlike the Renaissance, early eighteenth century architects investigated the spatial potential of staircases making them the most sophisticated part of the building.

One of the best-known examples is that of Würzburg Residence designed by Johann Balthasar Neumann. This spacious staircase, having an imperial plan, occupies a large room unlike its Renaissance counterparts.[151] On the lower floor, the staircase walls are dissolved so that the stair floats between the arcades. The long, impressive flight at the bottom appears to rise from within the arcade adjoining the portico. The whole stair hall is roofed with a vault painted by Tiepolo.[152]

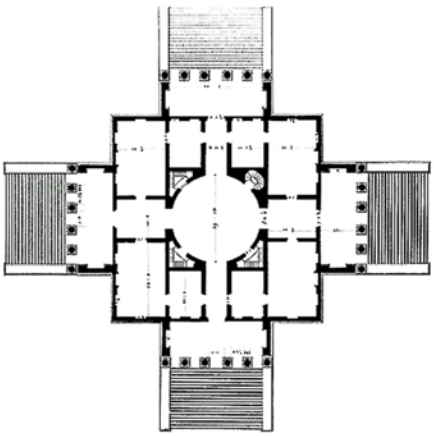

Figure 23 Andrea Palladio, Villa Rotonda, 1566-1571, Vicenza, plan. From: http://en.wikipedia.org/wiki/File:Palladio_Rotonda_planta_Scamozzi_1778.jpg, accessed December 09, 2013.

[151] A Baroque staircase with imperial plan has a central flight that ends in a landing at the rear wall and then it divides into two flights that ascend the remaining distance running parallel to the lower flight. See: Roth, *Understanding Architecture,* 429.

[152] John Templer, *The Staircase: History and Theories* (Cambridge, MA; London: MIT Press, 1995), 136.

Figure 24 Johann Balthasar Neumann, Würzburg Residence, 1735, Würzburg, staircase. From: http://artmagnifique.tumblr.com/post/8415354419/balthasar-neumann-staircase-at-the-wurzburg, accessed December 09, 2013.

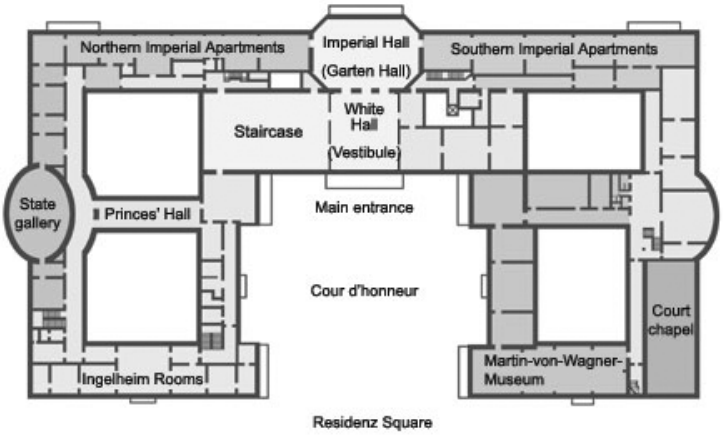

Figure 25 Johann Balthasar Neumann, Würzburg Residence, plan. From: http://www.residenz-wuerzburg.de/englisch/residenz/tour.htm, accessed December 09, 2013.

Baroque palace staircases carried messages of power and conquest. With their impressive architectural design and powerful symbolic decoration, they made an initial impact on any visitor entering the state apartment. The most famous example was the Ambassadors Staircase at Versailles. The staircase was intended for the use of ambassadors ascending to the Hall of Mirrors for an audience with Louis XIV. The bottom flight flowed out from the landing in all directions. False windows and niches, *trompe l'oeil* effects were used to expand the space, which was lit from above by a skylight. This staircase, demolished by Louis XV in 1752, was the beginning of the theatrical explorations typical of Baroque stairs. [153]

Staircase design in contemporary architecture invites an inevitable analogy to Baroque's attitude. In contemporary architecture the segregation of circulatory spaces and main spaces has been largely dismissed. Heydar Aliyev Cultural Center is a good example of this case. Upon arrival, the Museum greets visitors with a double-height lobby that houses a grand staircase which seamlessly peels off from the interior skin of the building. This staircase, which leads to the higher museum levels where the exhibitions are showcased, is intended also to be used to display sculptures. Here, the stairway which is not only an element of circulation is an extension of both the ground floor lobby and the upper exhibition space. Modernist architects believed in the need for the elegant and impressive presence of these architectonic elements, but they did not attribute them such spatial characteristics.

Zaha Hadid uses stairs and ramps for the effects of architectural promenade. Beyond their spatial quality, stairs as element of visual spectacle are also inherent in many contemporary buildings. Le Corbusier wanted the user/spectator to have the opportunity to explore the interior space from different heights and angles, but he rarely used ramps and stairs as elements of a performative action. [154] As Slavoj Žižek notes, Walter Benjamin, writing on Garnier Opera House the interior of which is significant of a Baroque staircase, states that the true focus of the opera is not the

[153] Ibid., 128.

[154] Gevork Hartoonian, *Architecture and Spectacle: A Critique* (Farnham, Surrey, UK, England; Burlington, VT: Ashgate, 2012), 162.

performance hall but the wide staircase on which ladies display their fashionable clothes and gentlemen meet for a casual smoke – this social life is what opera was really about.[155] Slavoj Žižek, following Lacan's theory, notes that "if enjoyment of the performance on stage was what drew the public in, the social game played out on the staircases before the performance and during the intermissions was the foreplay which provided the plue-de-jouir, the surplus-enjoyment that made it really worth coming."[156] Žižek, makes an interesting statement on the issue:

> Taking this logic to an absurd extreme, one could imagine a building which would consist *only* of a gigantic circular staircase, with elevators taking us to the top, so that what is usually just a means, a route to the true goal, would become the main purpose — one would go to such a building simply to take a slow walk down the stairs. Does the Guggenheim Museum in New York not come pretty close to this, with the art exhibits de facto reduced to decorations designed to make the long walk more pleasant?[157]

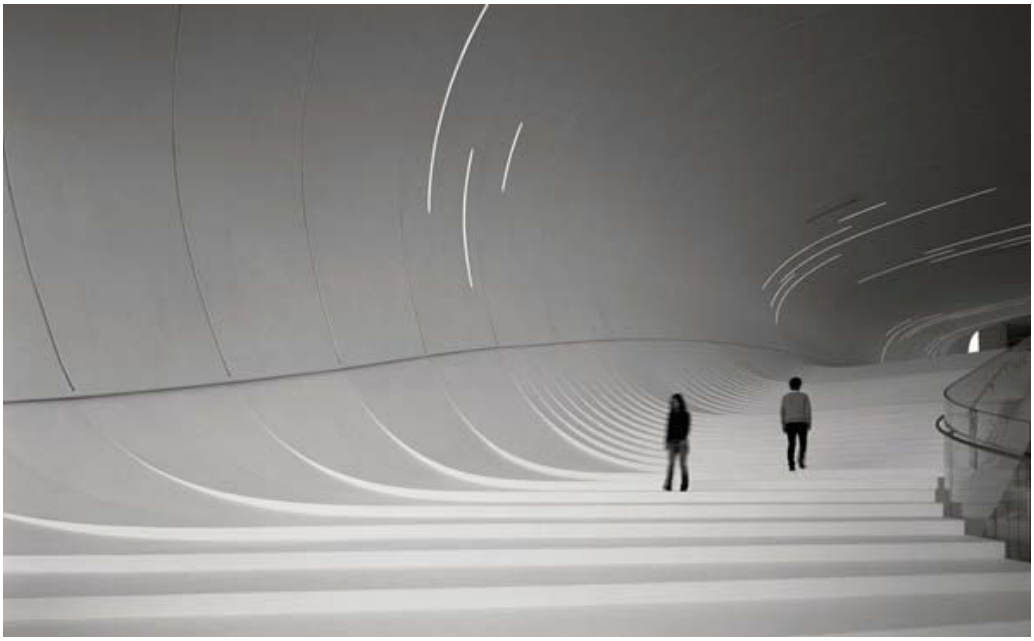

Figure 26 Zaha Hadid, Heydar Aliyev Cultural Center, stairs. From: http://www.zahahadid.com/architecture/heydar-aliyev-centre/, accessed December 09, 2013.

[155] Slavoj Žižek, *Living in the End Times*, (London: Verso, 2011), 272-273.

[156] Ibid., 273

[157] Ibid., (see n. 40)

Figure 27 Zaha Hadid, MAXXI National Museum of 21st Century Arts, 1999-2010, Rome, stairs. From: http://www.zaha-hadid.com/architecture/maxxi/, accessed December 10, 2013.

The baroque stair as a spectacle of movement emerges in Zaha Hadid's MAXXI national Museum of XXI Century Arts. The design of the stairs, which move up and down and crisscross occasionally occupying the whole interior space, is a choreography for the visitor's movement. Hartoonian, matching the image of the dramatized staircases to Gian Battista Piranesi's prison etchings, makes a notable observation:

> Here catwalks, gangways, and stairs are dramatized in the anticipation of ruination of *place*, hinted at in part by the absence of the roof and the daylight pouring from the sky. Piranesi's exaggeration and fragmentation of the materiality of stone is consequential for the loss of space, and was in reaction to the lavishness permeating Baroque Churches. Oddly enough, a stairway with a skylight at the top has become a generic element for contemporary commercial buildings.[158]

[158] Hartoonian, *Architecture and Spectacle*, 162.

3.3.3 Spatial Organization

Suggestion of movement is central to Zaha Hadid's design. Hadid's perception of space and movement in MAXXI, as Gevork Hartoonian discusses, departs from historical precedents such as Frank Lloyd Wright's Guggenheim Museum in New York or Hans Scharoun's Berlin State Library. "Much like the former," he argues, "the volume of MAXXI is infused with its internal spatial organization. And yet unlike both buildings, the final result in the MAXXI neither configures a coherent and unified geometry, nor is formless."[159] Each volume of the museum point to one aspect of the setting of the site: one looks towards the main street, the second towards the courtyard of the complex, and the third towards the rear side of the building. [160] As Hartoonian states:

> In the MAXXI, sectional investigation is edited to transgress both the classical and modern orthodoxies. Whereas in the architecture of early modern times, each floor replicates the geometry and structural organization of the ground, and where in Le Corbusier the tabula rasa of the open-plan is sustained in its vertical repetition, Hadid uses the sectional cuts to transfer and elevate the wide ground floor plan of the complex into a number of bar-shaped volumes.[161]

The L-shaped footprint of the site is taken full advantage of, as are the possibilities of exploring a "linear structure by bundling, twisting, and building mass in some areas and reducing it in others – creating an urban cultural center where a dense texture of interior and exterior spaces has been intertwined and superimposed over one another."[162]

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[159] Ibid., 163.

[160] Ibid.

[161] Ibid.

[162] Ibid.

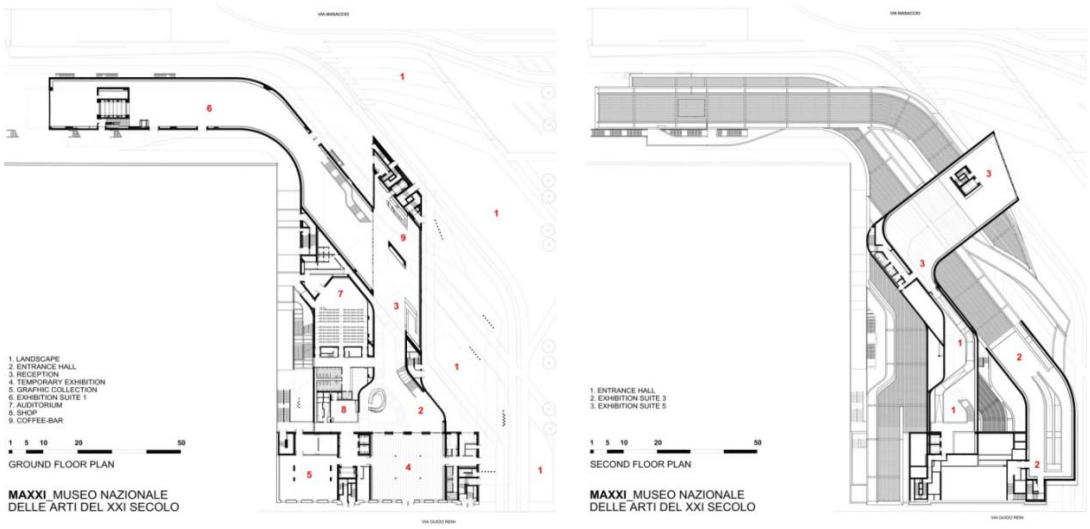

Figure 28 Zaha Hadid, MA XXI National Museum of 21st Century Arts, ground floor plan (left) and second floor plan (right). From: http://www.archdaily.com/43822/maxxi-museum-zaha-hadid-architects/, accessed December 09, 2013.

Superimposition of different layers in different forms in contemporary architecture may be seen as the analogue of the baroque planimetric organization. Under the light of the examples given above, where Borromini bases his design on the interpenetration of triangles, circles and ellipses, it is not unlikely to claim that what is unique to baroque architecture is a planimetric organization that deviates from the Renaissance orthogonal system.

3.3.4 Draping the Façade

Drapery, used as "a kind of proscenium intermediating between the fictive and real worlds" was one of the baroque devices.[163] The motif of drapery, in fact, has been apparent in figurative art since antiquity. However it was not until the seventeenth century that drapery became an excessive and dominant figure in arts as well as the "everyday recipes or modes of fashion that change a genre."[164] Deleuze states that

[163] Lavin, "Going for Baroque," 422.

[164] Deleuze, *The Fold*, 141.

the baroque, defined by the fold to infinity, can be recognized in its most simple form in the clothing of the seventeenth century:

> The fold can be recognized first of all in the textile model of the kind implied by garments: fabric or clothing has to free its own folds from its usual subordination to the finite body it covers. If there is an inherently Baroque costume, it is broad, in distending waves, billowing and flaring, surrounding the body with its independent folds, ever-multiplying, never betraying those of the body beneath: a system like rhingrave-canons — ample breeches bedecked with ribbons — but also vested doublets, flowing cloaks, enormous flaps, overflowing shirts, everything that forms the great Baroque contribution to clothing of the seventeenth century.[165]

In the Renaissance, drapery was dependent on what it covers. Leon Battista Alberti, in his *On Painting*, draws attention to this: "We first have to draw the naked body beneath and then cover it with clothes."[166] Leonardo da Vinci whose works include several drapery studies, writes an extensive commentary on draperies and folds in his *Treatise on Painting*. Having a consideration akin to Alberti's, he starts by asserting that "[t]he draperies with which you dress figures ought to have their folds so accommodated as to surround the parts they are intended to cover."[167] Da Vinci accuses many painters of forgetting the intended aim of clothes "which is to dress and surround parts carefully wherever they touch; and not to be fitted with wind, like bladders puffed up where the parts project" and asserts that drapery "must fit the body, and not appear like an empty bundle of cloth."[168]

From the mid sixteenth century on, drapery became detached from the body beneath. As Wölfflin puts it, "while the renaissance permeated the whole body with its feeling, and closely-enveloping draperies exposed its contours everywhere, the

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[165] Ibid., 139.

[166] Leon Battista Alberti, *On Painting*, trans. Cecil Grayson (London: Penguin Books, 1991), 72.

[167] Leonardo da Vinci, "Of Dresses, and of Draperies and Folds," *A Treatise on Painting*, trans. John Francis Rigaud (Mineola, NY: Dover Publications, 2005), 50.

[168] Ibid.

baroque luxuriated in unarticulated mass."[169] In Renaissance Art, drapes of a fabric are represented with clear and firm lines. Light and shade are applied just to emphasize the line of the fold. On the other hand, a painterly costume of the Baroque, not dominated by the linear, leads the eye on the movement of the surface. Free masses of light, patches of shadow emphasize the rise and fall of the surface.[170] Deleuze, exploring the baroque fold to infinity gives still life painting as an example, stating that it is so packed with folds that it results in what he calls a "schizophrenic 'stuffing.'"[171] For Deleuze, drapery that invades the entire surface is "a simple, but sure, sign of a rupture with Renaissance space."[172]

Figure 29 Gian Lorenzo Bernini, The Ecstasy of Santa Teresa, 1647-1652, marble, Santa Maria della Vittoria, Rome. From: http://nassifblog.blogspot.com/2012/08/gian-lorenzo-bernini-master-sculptor.html, accessed November 27, 2013.

[169] Wölfflin, *Renaissance and Baroque*, 80.

[170] Wölfflin, *Principles of Art History*, 37.

[171] Deleuze, *The Fold*, 141.

[172] Ibid., 139.

In the Baroque period, along with painters, sculptors treated drapery as an independent object. Bernini, whose manner of depicting drapery was criticized by his contemporaries and later writers such as Winckelmann, was one of the exponents of the era. His well-known sculpture *The Ecstasy of Santa Teresa* is one of the best examples to demonstrate his attitude. The tunic of St Teresa is so sharply folded, giving no response to gravity. The drapery of the clothing has almost no relation to her body; it has its own life.

The free and excessive quality of baroque drapery recalls that of the cladding in contemporary architecture. The façade in contemporary architecture does not necessarily depend on the space behind. Le Corbusier's notions of "open plan" and "free façade" played a significant role in the emergence of free-standing façades of this kind. However in Modern architecture, basically, the façade though being detached from the structural system still covered the space behind tightly, being dependent on the form of the structure. In many of the recent buildings, in contrast, the façade has its own life regardless of the rest of the building. There has been a move from "tailored architecture," as Açalya Allmer defines it, to "draped architecture."[173]

Deleuze suggests that baroque architecture can be defined by the "severing of the façade from the inside, of the interior from exterior, and the autonomy of the interior from the independence of the exterior, but in such conditions that each of the two terms thrusts the other forward."[174] He goes on stating that in baroque architecture:

> A new kind of link, of which pre-baroque architecture had no inkling, must be made between the inside and outside. "… Far from being adjusted to the structure, the Baroque façade only tends to thrust itself forward," while the inside falls back on itself, remains closed, and tends to be offered to the gaze that discovers it entirely from one point of view.[175]

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[173] Açalya Allmer, *Towards a Draped Architecture: Theatricality, Virtuosity and Ambiguity in Contemporary Architectrue*, (USA: VDM Publishing, 2009), 13.

[174] Deleuze, *The Fold*, 28.

[175] Ibid., 29.

Hans Sedlmayr observes that the key to Borromini's San Carlo's "artistic structure" is the undulating segment of wall replicated in the plan.[176] Here, "structure is found paradoxically in a surface element without structural function."[177] The correctness of Sedlymayr's observation, as Christopher Wood states, "is confirmed by the echoing of the tripartite motif not only in the façade, but also in the low balustrades in front of the altars. In other words, structure may reveal itself most clearly in apparently marginal or meaningless features."[178]

Figure 30 Frank Gehry, Fisher Center at Bard College, 2003, New York, model. From: http://www.azahner.com/portfolio/fisher-center, accessed November 13, 2013.

[176] Hans Sedlmayr, *Die Architektur Borrominis* (Berlin: Frankfurter Verlangsanstalt, 1930), 24-36, quoted in Christopher Wood, introduction to *The Vienna School Reader*, ed. Christopher Wood (New York: Zone Books, 2003), 32.

[177] Ibid.

[178] Ibid.

Figure 31 Frank Gehry, Fisher Center at Bard College, overview of front façade. From: http://architecture.about.com/od/greatbuildings/ig/Buildings-by-Frank-Gehry/Fisher-Center.htm, accessed December 25, 2013.

Figure 32 Anthony van Dyck, The Countess of Castlehaven, 1635-1638, Collection of the Earl of Pembroke, Wilton House, Salisbury. From: http://www.pubhist.com/w4416, accessed November 16, 2013.

As Wölfflin states, "[i]n the hands of the baroque architects the façade became a magnificent show-piece, placed in front of a building without any organic relationship whatever with the interior; side views were totally disregarded."[179] Analogous phenomenon can be found in numerous buildings by Frank Gehry as examples of the treatment of the façade as an autonomous part. The relationship between the front façade and the back side of the Fisher Center, for example, is significant in terms of revealing this baroque property. The metal drapery of the front façade of Fisher Center lacks any reasonable connection to other parts of the building, as it does also in baroque paintings, an example of which may be *The Countess of Castlehaven* by Anthony van Dyck,[180] or baroque buildings such as Borromini's San Carlo.

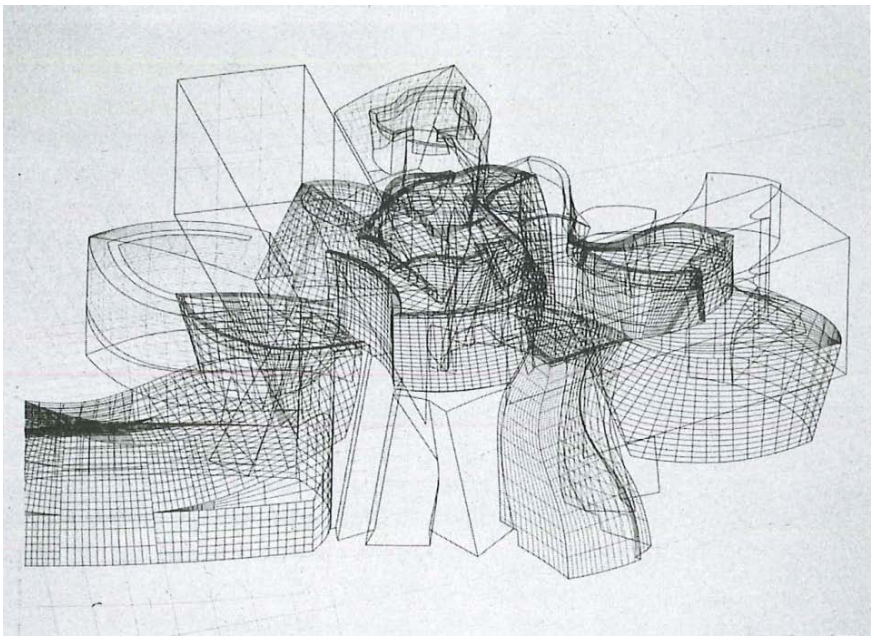

Figure 33 Frank Gehry, The Guggenheim Museum, three-dimensional rendering of steel structure frame. From: Gevork Hartoonian, *Architecture and Spectacle: A Critique* (Farnham, Surrey, UK, England; Burlington, VT: Ashgate, 2012), 195.

[179] Wölfflin, *Renaissance and Baroque*, 93.

[180] Allmer, *Draped Architecture*, 31.

Another best-known example is the Guggenheim Museum in Bilbao. As Hartoonian suggests, the "form-giving impulse" in the Guggenheim Bilbao building is "independent of structure, the element of wrapping."[181] What is gone in Gehry's vision is "the Miesian tectonic that is revealed in the dialogical relationship between column and wall, and the earth-work and the framework."[182] Gehry also forgoes the "attempt to reveal the way a space is conceived and constructed."[183]

Irving Lavin writes of a story of a visitor to Bernini's studio as he worked on the equestrian statue of Louis XIV.[184] The visitor criticized the manner in which Bernini portrayed the king's drapery and the horse's mane as "too wrinkled and perforated, beyond the rule passed on to us by the ancients."[185] Bernini's response was:

> What the critic considered a defect … was precisely the greatest achievement of his chisel [that is] to have overcome the difficulty of rendering stone malleable as wax, and to have in a certain sense fused painting and sculpture. This, even the ancients had not achieved, perhaps because they were not given the heart to render stones obedient to the hand as if they were pasta.[186]

This statement shows that, as Lavin states, "the material in which the artist worked was no longer a determinant in the result, but became a neutral medium wholly subject to his skill and will – which was to transform the traditionally earthbound equestrian figure into a heaven-bound vision bursting aloft in space."[187] In his marble sculptures Bernini achieves the effects usually found in sculptures only made of

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[181] Ibid., 194.

[182] Ibid.

[183] Ibid.

[184] Lavin, "Going for Baroque," 434.

[185] Filippo Baldinucci, *Vita del cavaliere Gío. Lorenzo Bernino*, ed. Sergio Samek Ludovici (Milan: Edizioni del Milione, 1948), 141, quoted in Lavin, "Going for Baroque," 434.

[186] Lavin, "Going for Baroque," 434.

[187] Ibid.

bronze which is cast from clay or wax models.[188] His technical mastery of using marble as if it is dough is why he is usually referred as a *virtuoso*. Virtuosity is explored in Ndalianis's work as a baroque feature through digitally produced cinematic images like in *The Jurassic Park*.[189] A certain principle of technological virtuosity is essential to draped surfaces as well. The realization of these surfaces displays the technological capabilities of contemporary architecture, "leaving the spectator in a state of wonder at the skill and technical mastery that lie behind its construction."[190]

Deleuze argues that the folds of clothing that acquire an autonomy with the Baroque do not simply arise from "decorative" concerns. "They convey the intensity of a spiritual force exerted on the body, either to turn it upside down or to stand or raise it up over and again, but in every event to turn it inside out and to mold its inner surfaces."[191] For Deleuze "the essence of the baroque entails neither falling into nor emerging from illusion, but rather realizing something in illusion itself, or of tying it to a spiritual presence that endows its spaces and fragments with a collective unity."[192]

Drapery in the baroque period was also a display of wealth and luxury. Powers such as the absolute monarchies of France and Spain prompted the creation of works that reflected their size and the majesty of their kings, Louis XIV and Philip IV. The Portrait of Louis XIV by Hyacinthe Rigaud is a typical example of the pompous style of the French court of that time. The extravagant cloak of Louis XIV and the otherwise redundant red drapery was depicted to evoke admiration. The representation of rich fabric serves to emphasize the splendor, the power of the king. Art and architecture in the Baroque era were intended to be in service of social and political agenda, also by the Catholic Church. As Lavin notes, the most outstanding

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[188] Hibbard, *Bernini,* 55.

[189] Ndalianis, *Neo-Baroque Aesthetics*, 151-207.

[190] Allmer, *Draped Architecture,* 76.

[191] Deleuze, *The Fold,* 140.

[192] Ibid., 124.

examples of Baroque architecture, with their visual power to impress the public, are deliberate manifestations of "the power and wealth of the papacy and the triumph of the Catholic Church and dogma over the temporal and spiritual challenge of the Protestant Reformation."[193]

The metal draperies of Gehry's buildings may be said to have socio-economic connotations. The use of expressive fabric in baroque art as a sign of wealth is reflected in Gehry's façades. As the construction of draped surfaces is very expensive, such buildings require clients who can afford it, such as Lilian Disney, Guggenheim family or Paul Allen, the co-founder of Microsoft. When the 50 million dollars of Lilian Disney were not enough to complete the construction, it was made possible by the contribution of donors whose names were etched onto the floors and the walls of the building, proportionate in size to the amount they gave. The most generous of them had their names given to the parts of the building such as Eli Broad Auditorium, Henri Mancini family stairway, Costanza restroom, and so forth.[194]

Gehry's architecture, beyond its architectural and spatial properties, is also important for being a politic statement. The Guggenheim Museum in Bilbao is the foremost example which created what is called the Bilbao Effect. The initial intention in building the museum was the dissemination and the glorification of the Guggenheim name and this intention was meshed with the Basque government's strategy of revitalization of their politics, bringing the once faint, economically distressed, post-industrial city of Bilbao into a remarkable place in the global arena. As William S. Saunders suggests, the building "cannot be thought of apart from its intended role in promoting the economic revitalization of Bilbao and its magnetic power for tourist money."[195]

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[193] Lavin, "Going for Baroque," 422.

[194] Aaron Betsky, "Frank Gehry's Walt Disney Concert Hall –His Masterpiece– Dances with Death," In *Architectural Record* 183, no. 10 (October 1995): 23.

[195] William S. Saunders, preface to *Commodification and Spectacle in Architecture: a Harvard Design Magazine Reader*, ed. William S. Saunders (Minneapolis, MN: University of Minnesota Press, 2005), viii.

Figure 34 Hyacinthe Rigaud, Portrait of Louis XIV, 1701, oil on canvas, 277 x 194 cm, Museé du Louvre, Paris. From: http://en.wikipedia.org/wiki/File:Louis_XIV_of_France.jpg, accessed September 03, 2013

Figure 35 Frank Gehry, The Guggenheim Museum, exterior view. From: http://freshome.com/2012/10/04/10-inspirational-lessons-from-the-most-important-architect-of-our-age-frank-gehry/, accessed December 01, 2013.

Hal Foster asserts that Gehry's cultural centers "appear as sites of spectacular spectatorship, of touristic awe … Such is the logic of many cultural centers today, designed, alongside theme parks and sports complexes, to assist in the corporate "revival" of the city—its being made safe for shopping, spectating and spacing out."[196] Spectacle, as Saunders states, is the primary manifestation of commodification or commercialization of design: "design that is intended to seduce consumers will likely be more or less spectacular, more or less matter of flashy, stimulating, quickly experienced gratification, more or less essentially like a television ad."[197] Žižek states that contemporary performance-art venues, like Gehry's Walt Disney Concert Hall, "are sacred and profane, like secular churches – and the way a visitor relates to them is with a mixture of sacred awe and profane consumption." He criticizes the architecture of draped and folded surfaces, for being also exclusive and elitist by "the cocooning protective wall of the "skin." It is this very additional protective "skin" which is responsible for the effect of the Sublime generated by these buildings."[198] As Hal Foster notes, Fredric Jameson, in his seminal analysis of postmodern space "Postmodernism or the Cultural Logic of Late Capitalism,"[199]

> used the vast atrium of the Bonaventure Hotel in Los Angeles designed by John Portman as a symptom of a new kind of architectural Sublime: a sort of hyper-space that deranges the human sensorium. Jameson took this spatial delirium as a particular instance of a general incapacity to comprehend the late capitalist universe, to map it cognitively. Strangely, what Jameson offered as a critique of postmodern culture many architects (Frank Gehry foremost among them) have taken as a paragon: the creation of extravagant spaces that work to overwhelm the subject, a neo-Baroque Sublime dedicated to the glory of the Corporation (which is the Church of our age). It is as if these architects designed not in contestation of the "cultural logic of late capitalism" but according to its specifications.[200]

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[196] Hal Foster, "Why All the Hoopla?," *London Review of Books* 23, no. 16 (23 August 2001): 26.

[197] Saunders, preface, viii.

[198] Žižek, *End Times*, 272-273.

[199] Fredric Jameson, *Postmodernism or the Cultural Logic of Late Capitalism* (London: Verso, 1991)

[200] Hal Foster, "The ABCs of Contemporary Design," in *October* 100 (Spring 2002), 191.

In The Society of the Spectacle, Guy Debord defines a spectacle as "capital accumulated to the point where it becomes an image."[201] Hal Foster states that now the reverse is true as well: spectacle is "an image accumulated to the point where it becomes capital."[202]

3.3.5 Vague Boundaries

Wölfflin, in *Principles of Art History*, notes that the main idea in the Italian Renaissance is that of perfect proportion. As Wölfflin observes, ideal proportion in the classical composition is achieved by self-standing elements, "the whole freely co-ordinated: nothing but independently living parts."[203] As he continues, the statement he makes about Renaissance architecture noticeably conforms to Modern Architecture:

> The column, the panel, the volume of a single element of a space as of a whole space – nothing here but forms in which the human being may find an existence satisfied in itself, extending beyond human measure, but always accessible to the imagination. With infinite content, the mind apprehends this art as the image of a higher, free existence in which it may participate.[204]

Baroque on the other hand focuses on the union of parts in a single mass, weaving each part into each other in order to produce a wholly perceptible image. As Wölfflin states, in the Baroque:

> The ideal of beautiful proportion vanishes, interest concentrates not on being, but on happening. The masses, heavy and thickset, come into movement. Architecture ceases to be what it was in the Renaissance, an art of articulation, and the composition of the building,

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[201] Guy Debord, *The Society of the Spectacle*, trans. Donald Nicholson-Smith (New York: Zone Books, 1995), 24.

[202] Hal Foster, *Design and Crime: And Other Diatribes* (London; New York: Verso, 2003), 41.

[203] Wölfflin, *Principles of Art History*, 9-10.

[204] Ibid., 10.

> which once raised the impression of freedom to its highest pitch, yields to a conglomeration of parts without true independence.[205]

The 2013 Serpentine Gallery Pavilion, designed by Japanese architect Sou Fujimoto, being a vague mass whose are not clearly definable, may be put in a dialogue with the baroque recalling Wölfflin's comment on Renaissance and Baroque: "[t]he earlier style is entirely linear: every object has a sharp unbroken outline and the main expressive element is the contour. The later style works with broad, vague masses, the contours barely indicated; the lines are tentative and repetitive strokes, or do not exist at all."

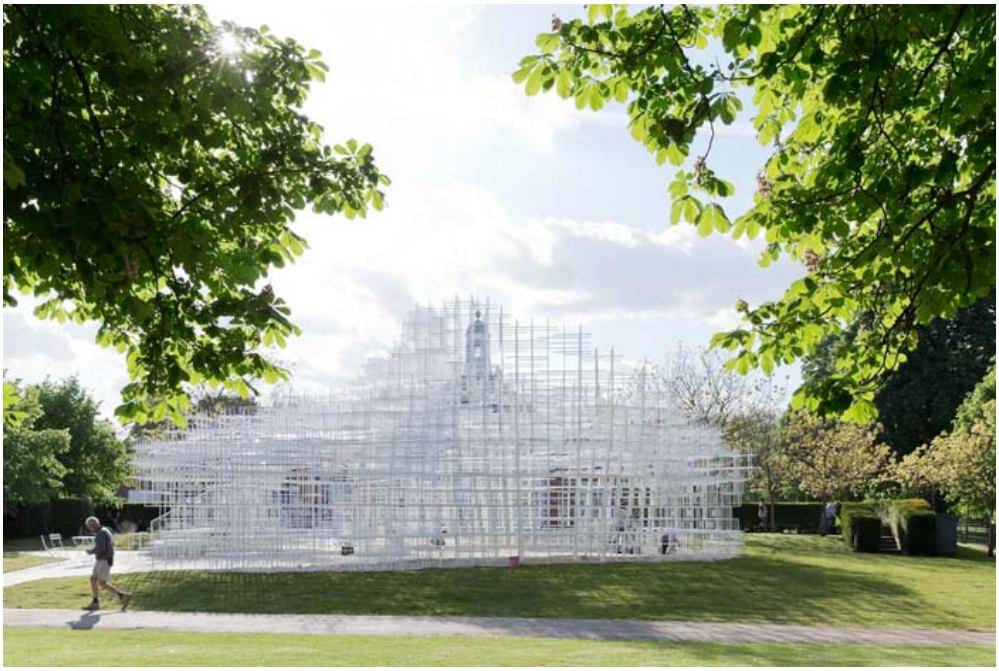

Figure 36 Sou Fujimoto, 2013 Serpentine Gallery Pavilion, 2013, London. From: http://www.serpentinegalleries.org/exhibitions-events/serpentine-gallery-pavilion-2013-sou-fujimoto, accessed October 07, 2013.

[205] Ibid.

Figure 37 Sou Fujimoto, 2013 Serpentine Gallery Pavilion, concept sketch. From: http://www.architectural-review.com/view/interviews/interview-sou-fujimoto/8646909.article,accessed September 12, 2013.

The pavilion, with an overall footprint of 350 square-meters, is a three-dimensional structure with each unit composed of fine steel bars, creating a cloud-like form. A series of stepped terraces provide seating areas that allow the pavilion to be used as a flexible, multi-purpose social space. As the architect states, with this pavilion, "the definition of architecture is renewed." Reminding that architecture usually "is made by solid walls and the roofs and floors," Fujimoto defines his project as a trial "to create something really transparent as much as possible to push the history of the pavilion forward."[206]

Fujimoto used a rigid geometric grid which is not a new design tool, however, to create a blurry mass. "The grid itself is quite straight, rigid and quite artificial," Fujimoto says, "but if you have such a huge amount of grids, then, it becomes more

[206] Sou Fujimoto, "The Making of Sou Fujimoto's 2013 Serpentine Gallery Pavilion," interview by Naomi Pollock, video, posted June 2013, http://www.wallpaper.com/ architecture/video-the-making-of-sou-fujimotos-2013-serpen tine- gallery-pavilion/6543.

like an organic cloud-like or forest-like [structure]."[207] This is a deliberate manipulation of the familiar to create the unfamiliar which is the underlying feature of the baroque. Baroque, as Wölfflin states, "uses the same system of forms," with the Renaissance "but in place of the perfect, the completed, gives the restless, the becoming, in place of the limited, the conceivable, gives the limitless, the colossal."[208]

Fujimoto states that "the inspiration started from the beautiful surroundings," and he tried to create in this green environment "something between nature and architecture." He explains his intention as "to create a transparent structure which melts into the background." The pavilion created from a white lattice of steel poles, with variations in density, forms "a semi-transparent, irregular ring," Fujimoto says, "simultaneously protecting visitors from the elements while allowing them to remain part of the landscape" and he finds the contrast between "the really sharp, artificial white grids and the organic, formless experience" fascinating.[209]

Fujimoto's explanation of his design strategy again brings Wölfflin's interpretation to mind. Wölfflin on the opposition between the classic and the baroque formation asserts that:

> Classic taste works throughout with clear-cut, tangible boundaries; every surface has a definite edge, every solid speaks as a perfectly tangible form; there is nothing there that could not be perfectly apprehended as a body. The baroque neutralizes line as boundary, it multiplies edges, and while the form in itself grows intricate and the order more involved, it becomes increasingly difficult for the individual parts to assert their validity as plastic values; a (purely visual) movement is set going over the sum of the forms, independently of the particular viewpoint. The wall vibrates, the space quivers in every corner.[210]

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[207] Sou Fujimoto, "Movie Interview with Sou Fujimoto at Serpentine Gallery Pavilion 2013," interview by Dezeen, video, posted June 2013, http://www.dezeen.com/ 2013/06/04/sou-fujimoto-design-of-his-serpentine-gallery-pavilion-2013/.

[208] Wölfflin, *Principles of Art History*, 10.

[209] Ibid.

[210] Ibid., 65.

Figure 38 Sou Fujimoto, 2013 Serpentine Gallery Pavilion, a render of the pavilion demonstrating the structure's intangibility. From: http://www.archdaily.com/tag/sou-fujimoto/, accessed September 20, 2013.

Figure 39 Sou Fujimoto, 2013 Serpentine Gallery Pavilion, render from the interior. From: http://www.archdaily.com/tag/sou-fujimoto/, accessed September 20, 2013.

The independence of a particular viewpoint and the non-existence of any distinctions between inside-outside or solid-void – even though the architect does not give any reference to it – has a Deleuzian conception in terms of "multiplicities," as with Bernini's *David*, as well as in terms of a folded space. As Anthony Vidler notes, Deleuze's concept of fold does not only imply a literal folding of the envelope and a complex curving of the skin. Vidler suggest that a fold is not simply the curved surface of a tentlike or bloblike structure:

> In Deleuze's terms, as derived from an exceedingly original reading of Leibniz, the fold is at once abstract, disseminated as a trait of all matter, and specific, embodied in objects and spaces; immaterial, and elusive in its capacities to join and divide at the same time, and physical and formal in its ability to produce shapes, and especially curved and involuted shapes. This last characteristic has been of especial interest to architects, always searching for the tangible attribute of an abstract thought; but it is not at all clear that folds, in the sense of folded forms, correspond in any way to Deleuze's concept, or even less to Leibniz's model. For Leibniz, and also for Deleuze, to say that folds are manifested in "pleats of matter" is not simply to refer to a crease in a piece of cloth; matter is, in these terms, everywhere, in the void as well as in the solid and subject to the same forces. Folds then exist in space and in time, in things and in ideas, and among their unique properties is the ability to join all these levels and categories at the same moment.[211]

The nature of Leibnizian space, Vidler notes, is "thick and full, container and contained, it recognizes no distinctions between the solid and the void, and thence no real division between the inside of a fold and its outside; the matter out of which a fold is constituted is after all the same matter as forms the space in the pleat, under the pleat, and between pleats."[212] Then qualities other than curvilinearity, like in Fujimoto's pavilion, can be interpreted as baroque not only in the Wölfflinian, but also in the Deleuzian sense.

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[211] Vidler, *Warped Space,* 219.

[212] Ibid., 225.

3.3.6 Dislocating Vision

One of the most profound innovations of the baroque, as Irving Lavin states, "is the interactions between medium and space, notably painting and sculpture (and architecture as the situation required), the fusion of which gave the work a kind of existence in the real world it had never had before." [213] The key factor, he states, is that the "'depicted' space does not recede into an imaginary distance, but proceeds into a real presence."[214] The seventeenth century was an age of great scientific developments. With the discoveries concerning the nature of the universe, "the ancient distinction between the celestial and terrestrial" was abandoned, and "[t]he cosmos was henceforth to be thought as a vast, uniform system of interconnected parts."[215] As Martin states:

> The awareness of the physical unity of the universe is reflected in the new attitude adopted by many baroque artists towards the problem of space. Their *aim*, as one might put it, is to break down the barrier between the work of art and the real world; their *method* is to conceive of the subject represented as existing in a space coextensive with that of the observer. Implicit in this unification of space, in which everything forms part of a continuous and unbroken totality, is a concept of infinity analogous to that framed by some of the greatest thinkers of the period.[216]

Andrea Pozzo's *quadratura* on the nave vault of Saint Ignatius in Rome, *The Glory of Sant'Ignasio*, stands as one of the most significant examples of the baroque concerns of the seventeenth century, collapsing the boundary between illusion and reality, representational space and real space, architecture and art object, spectator and spectacle. By means of one-point perspective the architectural framework of the church vault extends towards the heavens. The painting dissolves the solidity of the vault and the actual architectural space of the nave ruptures, extending into the skies and dragging the spectator into this fictive space. Rudolf Wittkower argues that

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[213] Lavin, "Going for Baroque," 426.

[214] Ibid.

[215] Martin, *Baroque*, 155.

[216] Ibid.

"[w]hat distinguishes the Baroque from earlier periods … is that the beholder is stimulated to participate actively in the supra-natural manifestations of the mystical art rather than to look at it 'from outside.'"[217] What is established through *trompe l'oeil* effects is the experience of an infinite, fictive space.

Figure 40 Andrea Pozzo, The Glory of Sant'Ignasio, 1691-1694, fresco, Church of St. Ignazio, Rome. From: http://en.wikipedia.org/wiki/Andrea_Pozzo, accessed September 03, 2013.

[217] Rudolf Wittkower, *Art and Architecture in Italy, 1600-1750* (Baltimore: Penguin Books, 1965), 139.

Foucault's reading of Velázquez's *Las Meninas*, clarifies the baroque order of art object with its space. Velázquez, in this baroque masterpiece, portrays himself working behind a large canvas the back of which is turned to the spectator. The painter looks out at a point outside the picture that the spectator can easily assign himself. The painter's gaze, according to Michel Foucault, constructs a triangular relationship between the painter, the spectator in the position of his model who is occupying the volume outside the depicted space and the painting on the canvas which is invisible to the spectator.[218]

> As soon as they place the spectator in the field of their gaze, the painter's eyes seize hold of him, force him to enter the picture, assign him a place at once privileged and inescapable, levy their luminous and visible tribute from him, and project it upon the inaccessible surface of the canvas within the picture.[219]

According to Foucault, there are two major elements which serve as a "common locus of the representation"[220] removing the border between the "two neighboring spaces, overlapping but irreducible: the surface of the painting, together with the volume it represents (which is to say, the painter's studio, or the salon in which his easel is now set up), and, in front of that surface, the real volume occupied by the spectator (or again, the unreal site of the model)"[221] and make the spectator exist and be visible with the other figures in the representation at the same time. One is the canvas on the extreme left which has the representation of the latter on its invisible side; the other is the window which is barely illustrated on the extreme right. Foucault states that:

> This extreme, partial, scarcely indicated window frees a whole flow of daylight which serves as the common locus of the representation. It balances the invisible canvas on the other side of the picture: just as that canvas, by turning its back to the spectators, folds itself

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[218] Michel Foucault, *The Order of Things: An Archeology of the Human Sciences* (New York: Vintage Books, 1994), 5.

[219] Ibid.

[220] Ibid., 6.

[221] Ibid., 5.

in against the picture representing it, and forms, by the superimposition of its reverse and visible side upon the surface of the picture depicting it, the ground, inaccessible to us, on which there shimmers the Image par excellence, so does the window, a pure aperture, establish a space as manifest as the other is hidden; as much the common ground of painter, figures, models, and spectators, as the other is solitary (for no one is looking at it, not even the painter) … The light, by flooding the scene (I mean the room as well as the canvas, the room represented on the canvas, and the room in which the canvas stands), envelops the figures and the spectators and carries them with it, under the painter's gaze, towards the place where his brush will represent them. But that place is concealed from us. We are observing ourselves being observed by the painter, and made visible to his eyes by the same light that enables us to see him. [222]

Figure 41 Diego Velázquez, Las Meninas, 1656, oil on canvas, 318 x 276 cm, Museo del Prado, Madrid. From: http://en.wikipedia.org/wiki/Las_Meninas, accessed September 03, 2013.

[222] Ibid., 6.

The painting, unifying these two adjacent spaces, is in fact the representation of the whole scene which is completed by the volume in front of its surface and the spectator.

The above mentioned baroque manner of polycentric relationships that has been replacing the self-contained nature of the classic order can be observed in contemporary art and the contemporary attitude towards the design of art galleries and museums. Especially in the last few decades, there has been a shift in the types of spaces used for contemporary art exhibitions. This shift, which has a bold connection to the manifestation of baroque form in contemporary art that needed a different kind of space, can be identified as a move away from the conventional gallery space structured on a passive visitor who stares at the art object from a distant point, to a more informal, flexible one which makes an ambiguous relationship between the art work, its space and the spectator possible.

Since the 1920's, exhibition spaces, with the influence of the Modern Movement, were designed as enclosed, isolated, artificially illuminated spaces. Brian O'Doherty identifies this as the "white cube" phenomenon, stating that:

> The ideal gallery subtracts from the artwork all clues that interfere with the fact that it is art. The outside world must not come in, so windows are usually sealed off. Walls are painted white. The ceiling becomes the source of light. The wooden floor polished so that you click along clinically, or carpeted so that you pad soundlessly, resting the feet while the eyes have [sic] at the wall. The art is free, as the saying used to go, "to take on its own life". In this context, the standing ashtray becomes almost a sacred object.[223]

This white cube tries to make the work as autonomous as possible so that nothing, which was not the work, manages to distract the eye.[224]

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[223] Brian O'Doherty, "Notes on the Gallery Space," *Inside the White Cube*, (San Francisco: The Lapis Press, 1986), 15.

[224] Daniel Buren, "Function of Architecture," in *Thinking About Exhibitions*, ed. Reesa Greenberg, Bruce W. Ferguson and Sandy Nairne (London; New York: Routledge, 1996), 317.

In the last few decades, alternatively, the attitude toward gallery space design has been changing, linked to contemporary art that has been becoming spacious, performative and interactive. Space, as El Lissitzky states, "is not looked at through a key hole, not through an open door. Space does not exist for the eye only: it is not a picture; one wants to live in it."[225] This situation indicates the baroque manner in both art and architecture. While the art work engages with its space, the spectator engages with the art work and becomes a part of it instead of just gazing. The art work, and accordingly its space, is not based on frontality any more. Instead, as Germano Celant claims, there is a "spherical perception"[226], as artworks can be experienced on all sides, analogous to baroque sculptures examined above.

In order to illustrate the contemporary baroque ways of interaction with the space and the spectator, Olafur Eliasson's "Weather Project" realized in Tate Modern's Turbine Hall would be a good example. The exhibition, that was realized during 16 October 2003 - 21 March 2004, features a giant semicircular form made up of hundreds of mono-frequency lamps placed at the far end of the Turbine Hall. The huge ceiling covered with mirror panels completes the semicircular form into a bright disc as a representation of the sun. Generally used in street lighting, mono-frequency lamps emit light at such a narrow frequency that colors other than yellow and black are invisible, thus transforms the visual field around the sun into a vast duotone landscape.[227] As Susan May writes:

> While the iconography of the sun continues to draw the viewer forward, linking the real space with the reflection, the intensity of the rays makes the approach increasingly discomforting. As the eyes pulsate, adjusting to the blinding light, the register of color on the visual cortex is reduced to a duotone range. The wavelength generated by the yellow

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[225] El Lissitzky, *Proun Space*, 1923, quoted in Judith Barry, "Dissenting Spaces," in *Thinking About Exhibitions*, ed. Reesa Greenberg, Bruce W. Ferguson and Sandy Nairne (London; New York: Routledge, 1996), 307.

[226] Germano Celant, "A Visual Machine: Art as Installation and Its Modern Archetypes," in *Thinking About Exhibitions*, ed. Reesa Greenberg, Bruce W. Ferguson and Sandy Nairne (London; New York: Routledge, 1996), 348-350.

[227] http://www.tate.org.uk/whats-on/exhibition/unilever-series-olafur-eliasson-weather-project/olafur-eliasson-weather-project (accessed 21.10.2013)

neon leads the eye to record only colors ranging from yellow to black, transforming the visual field into an extraordinary monochrome landscape.[228]

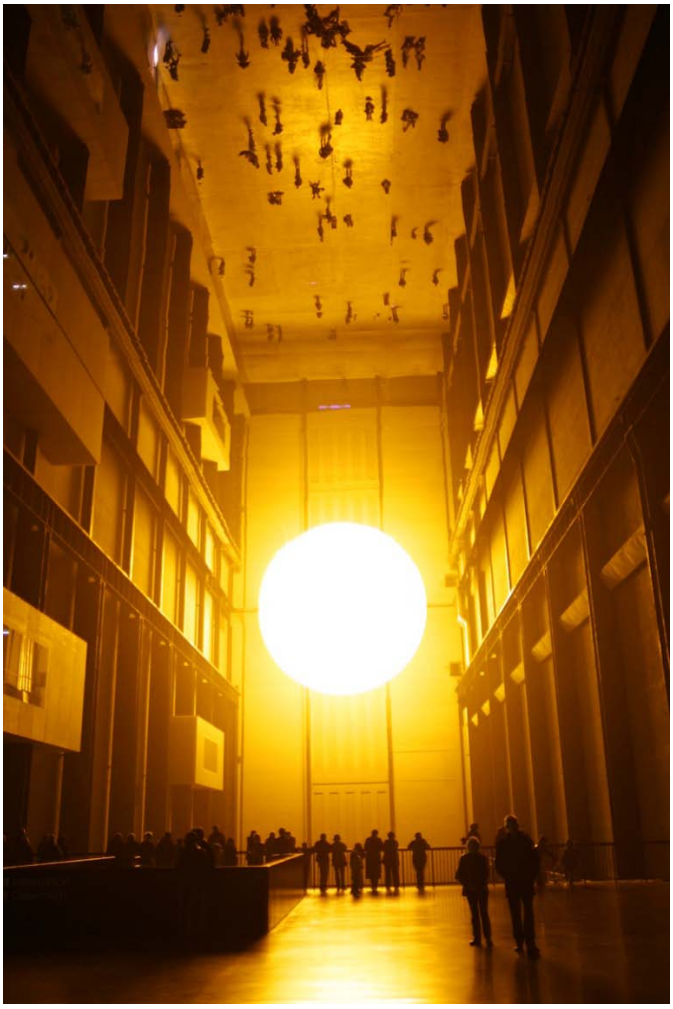

Figure 42 Olafur Elliason, *The Weather Project*, 2005, Tate Modern, London. From: http://en.wikipedia.org/wiki/File:OlafurEliasson_TheWeatherProject.jpg, accessed August 02, 2013.

[228] Susan May, "Meteorologica," in *Olafur Eliasson: The Weather Project*, exhibition catalogue, ed. Susan May (London: Tate Publishing, 2003), 15-28, accessed August 02, 2013, http://www.olafureliasson.net/publications/ download_ texts/Meterologica.pdf.

A mist was also created in the air to blur the boundaries of the hall. This exhibition, by creating an illusion, exploded the boundaries of the real space of the Turbine Hall like a seventeenth century *trompe l'oeil*, challenging the audiences' perception. The illusion of sunset is so overwhelming that audiences' behavioral responses to the artwork and the gallery space were dramatically shifted from conventional to an informal one. Some sat on the ground to relax, some lay on their backs and some played as if they are outdoors during the sunset. This work of art makes the space of typical industrial building turn into something else in a way that of a Pozzo fresco.

Similar effects intended by architects may also be observed in the usage of reflecting materials, or LED displays to blur the boundary between the real and fictive space or to abolish the corporeal presence of architecture. Along with many others, the Digital Gallery of the EXPO 2012 or the Mirror House designed by MLRP can be examples of this strategy that is "folding" which Eisenman defines as a "strategy for dislocating vision."[229]

As the examples intended to discuss, it is possible to map knowledge between many contemporary works and Baroque ones, although they do not have direct object-level similarities. They have common relational structures that are within themselves as well as with their preceding counterparts, the Renaissance and the Modern. The baroque articulates new relationships that are different than those of the classic thinking. Baroque blurs the boundaries, eliminates the normative distinctions between figure and ground, vertical and horizontal, inside and outside, object and user/spectator. A baroque object is interactive rather than self-standing, dynamic rather than static, open rather than closed; it favors depth rather than surface, obscurity rather than clarity.

[229] "Folding is one of perhaps many strategies for dislocating vision." Eisenman, "Visions' Unfolding," 560.

Figure 43 MLRP Architects, Mirror House, 2011, Copenhagen, Denmark. From: http://www.mlrp.dk/work/interaktiv-legeplads/, accessed September 18, 2013.

CHAPTER 4

CONCLUSION

As discussed above, the neutralization of the once opprobrious term baroque led to several extensions of its use – just like "Gothic". First of all, as Panofsky notes, the term which had been limited to architecture and ornament was applied other media in the visual arts, to sculpture and painting. Second, it was applied to other media outside the visual arts, so that one may speak of Baroque poetry, Baroque music, and even Baroque mathematics. As the first two extensions were within the period, the third went beyond the period. Every style supposedly related to a preceding one that is supposed to be related to the Renaissance, have been denoted by such composite appellations as "Hellenistic Baroque," "Romanesque Baroque," "Late Gothic Baroque," etc.[230]

As this last extension of the term shows, it is possible to see the baroque as a permanent entity throughout the history. Baroque, has been a key for the interpretation of artistic and architectural design tendencies of different times and cultures. This study similarly tried to interpret the current tendencies in architectural design through a hypothetical "contemporary baroque' system in terms of its opposite pole, an equally hypothetical 'classical' system that is of Modernism. Classical does not simply mean a return to past or the repetition of figures from the ancient Greek and Roman world, or the Renaissance. Calabrese notes that "talking about 'classicism' is not a question of discovering iconographical reappearances of objects from an ideal past. It consists in the appearance of certain underlying

[230] Panofsky, "What Is Baroque?," 20.

morphologies in phenomena endowed with order, stability and symmetry … in a coherence of value judgments."[231] The same works for baroque as well. It is not a certain style or reappearance of certain objects that belong to the historical Baroque. Baroque is another conception of the world, endowed with an unstable, asymmetric, and obscure structure.

It cannot be said that baroque is the only characteristic of contemporary architecture. Although there is a move from certainty and regularity, most of the contemporary architectural productions are still composed of highly traditional, stable, and ordered subsystems. This shows that classic and baroque do not succeed each other as the evolutionary model suggests. Classic and baroque coexist, as one often dominates the other. Baroque, as mentioned above, existed in the Modern. However it was often repressed. Today, the static, closed, self-standing, finite form is being replaced by the dynamic, interactive, obscure form that has been appreciated rather than offended as it used to be. This is happening because the dominant system of values is being influenced by phenomena which destabilize it.

Even when accepting the so called "postmodern" as a part of the modern paradigm seems adequate in many senses, the possibility that the baroque is a new paradigm is open to discussion. The consequences of the shift from mechanization to digitalization can be said to be radically different from that of the Industrial Revolution to which the birth of modernism can be traced back. As Michael Hays states:

> While the train, automobile, and airplane interrupted and distorted the rationalized space of the nineteenth-century of industrialism, these technologies did not fundamentally challenge the representational paradigm that understands forces of communication and speed to produce visible effects. Architectural surfaces still formed boundaries, cities still comprised clusters of locales, and space was still managed perspectivally.[232]

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[231] Calabrese, *Neo-Baroque*, 184.

[232] K. Michael Hays, *Architecture Theory Since 1968*, ed. K. Michael Hays (Cambridge, MA: The MIT Press, 1998), 540.

However, in the twenty-first century, space is no longer defined by any perspectival or architectural boundaries. As the *flâneur* of the nineteenth century has become the internet surfer and the public spaces have become the online social networks, the distinction between the actual and the virtual realms has been abolished causing a shift in the perception of space. And this shift, far from being a continuity of the modern understanding of space and architecture, may mark the very beginning of a new paradigm which is not yet possible to fully conceptualize.

The traces of this shift may also be seen in architectural representation through the meaning of the orthographic set which is an important aspect of Modern architecture. As Robin Evans states, while orthographic projections are more commonly encountered "*on the way* to buildings," perspectives are more commonly encountered "*coming from* buildings."[233] The reverse is true now. Unbuilt projects are represented by computer models and perspectives, and the orthographic set is no more the way to represent a building to be constructed. Elevations or sections have been transforming into post-produced images. Today many buildings, especially those which have complex geometries are being constructed by means of digital data. It would be impossible to construct these buildings, such as the Guggenheim Museum in Bilbao, through the orthographic set as hundreds of sections would be needed.

As it is stressed at the very beginning of the study, it is difficult to make art historical discussions and to adequately analyze the "how"s and "why"s of the current state of architecture, because from the standpoint of this study, the framework of the "contemporary" is not so clear. Any conclusions, thus, would be oversimplifications. Yet something is certain: The baroque, once seen beyond being an obsolete style or a singular instance in art history, proves to be a productive and useful concept to fold, unfold, and refold alternative architectural spaces and alternative historiographies. A

[233] Robin Evans, "Architectural Projection," in *Architecture and Its Image: Four Centuries of Architectural Representation*, ed. Eve Blau and Edward Kaufman (Montreal: Canadian Centre for Architecture; Cambridge, MA: MIT Press, 1989), 21.

study of the baroque "is no mere antiquarian, archival hobby: it mirrors, it anticipates and helps grasp the dark present."[234]

[234] Steiner, introduction, 24.

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