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The Aesthetics of Frank Lloyd Wright's Organic Architecture: Hegel, Japanese Art, and Modernism

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THE AESTHETICS OF FRANK LLOYD WRIGHT'S ORGANIC ARCHITECTURE:
HEGEL, JAPANESE ART, AND MODERNISM

by

Kenneth C. Dahlin

A Dissertation Submitted in
Partial Fulfillment of the
Requirements for the Degree of

Doctor of Philosophy
in Architecture

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December 2018

ABSTRACT

THE AESTHETICS OF FRANK LLOYD WRIGHT'S ORGANIC ARCHITECTURE: HEGEL, JAPANESE ART, AND MODERNISM by

Kenneth C Dahlin

The University of Wisconsin-Milwaukee, 2018
Under the Supervision of Professor Robert Greenstreet, PhD

The goal of this dissertation is to write the theory of organic architecture which Wright himself did not write. This is done through a comparison with GWF Hegel's philosophy of art to help position Wright's theory of organic architecture and clarify his architectural aesthetic. Contemporary theories of organicism do not address the aesthetic basis of organic architecture as theorized and practiced by Wright, and the focus of this dissertation will be to fill part of this gap. Wright's organic theory was rooted in nineteenth-century Idealist philosophy where the aim of art is not the imitation of nature but the creation of beautiful objects which invite contemplation and express freedom. Wright perceived this quality in Japanese art and wove it into his organic theory.

This project is organized into three main categories from which Wright's own works and writings of organic architecture are framed, two of which are affinities of his views and one which, by its contrast, provides additional definition. The second chapter, Foundation, lays the philosophical or metaphysical foundation and is a comparison of Hegel's philosophy of art, including his Romantic stage of architecture, with Wright's own theory. The third chapter, Formalism, relates the affinity between Japanese art and Wright's own designs. Three case studies are here included, showing their

correlation. The fourth chapter, Filter, contrasts early twentieth-century Modernist architecture with Wright's own organicism. This provides a greater definition to Wright's organicism as it takes clues from Wright's own sense of discrimination between the contemporary modernism he saw and his own architecture. These three chapters lead to the proposal of a model theory of organic architecture in chapter five which is a structured theory of organic architecture with both historical and contemporary merit. This serves to provide a greater understanding of Wright's form of the organic as an aesthetically based system, both in historic context, and as relevant for contemporary discourse.

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CHAPTER I

INTRODUCTION

STATEMENT OF PROBLEM

The research problem being addressed in this dissertation is to determine how a comparison with a key historical source of aesthetics might help to position Wright's theory of organic architecture and to clarify his architectural aesthetic. Further, it addresses how this might help structure the theory of organic architecture which Wright himself did not write.

THESIS

Wright's own theory of organic architecture was not systematically structured nor defined, and even today the idea of "organic architecture" is conflicted and ambiguous. Wright's own manifestos of organic architecture, from his 1908 "In the Cause of Architecture" essay, to his 1957 outline of the organic from his book *A Testament*, reveal a lack of systematic structure. While Wright's body of work over his entire career has much continuity of principle, this is not properly reflected in his own writings on the subject. There are categorical errors, lack of parallelism, lack of hierarchical structuring of his terms, and seeming ad hoc groupings of ideas so that it is difficult to know when his language is merely rhetorical rather than theoretically significant. And yet he made it clear that he felt a proper theory of organic architecture needed to be grounded in philosophy.

Contemporary theories of organicism do not address the aesthetic concept of organic architecture as it exists in Wright's work and often try to interpret it through the lens of biological analogues and materialist theories. While many of today's biologically-based theories of organicism are not founded in aesthetics, Wright shows evidence of prioritizing the aesthetic and thus not being a true, biologically-based theory of organicism. More useful for this analysis is to ground Wright's theory into the key historical source of aesthetics which Wright interacted with, directly or indirectly, in providing a framework to understand his own applied aesthetics and define the primary mode of formal generation he practiced. Hegel's philosophy of art provides this historical source which provided the theoretical environment in the time, place, and circle of influential thinkers which Wright worked in.

This project, therefore, provides a structure to Wright's theory, by aligning his concepts within proper categories so that the structure holds together as a system – a system which in turn fits within the historical context of the theory of aesthetics to which it most closely aligns. In turn, this theory provides further insight into Wright's ideas and helps to expand on it as a working model aesthetic theory. While the term aesthetics implies a preoccupation with the "look" of something and its subjective perceptual effects, I am using the term here in the same sense that Hegel used it in his *Aesthetics*. While the word aesthetics will be used due to common use, the more accurate description here will be the more fuller sense conveyed by a philosophy of art. Not only will the perception of architecture be considered with its associated form, but also its content, and more importantly the relationship of form and content. While an interesting analysis could have been done using Kant's aesthetic judgments applied to Wright's architecture, it would not really be an analysis which gave explanatory power to Wright's particular system of organic architecture in the way that Hegel's philosophy of art does with its incorporation of content, history, and ontology. As will be shown in this dissertation, Hegel's philosophy of art provides parallels to Wright's theory of organic

architecture that are comprehensive and compelling. It is also appropriate that this is approached with Hegel's Philosophy of Art in mind, because Wright saw architecture as one of the fine arts (the Mother Art in fact), saw himself as an artist, and shows clear associations with other art forms from which he wrote and borrowed. That a goal of architecture was to be beautiful was essential to Wright, and this will address the relationship of beauty to architectural expression.

While much has been written about architecture, including Wright's architecture, from an art-historical or sociological standpoint, compared to the other arts, architecture has not received a great deal of treatment by philosophers, with Hegel and Heidegger being two exceptions. The purpose of the aesthetic approach to Wright's theory in this dissertation is to ground the theory within a relevant historic system. Perhaps ironically, this is not a stylistic treatment of Wright's work, but instead it considers how it fits within the discourse of aesthetic problems, such as the place of architecture as a functional art, understanding the relationship between form and content (function), meaning and symbolism, art and nature, and the place of beauty.

This project is organized into three main categories from which to frame Wright's own works and writings of organic architecture, two which are affinities of his views and one, which by its contrast, provides additional definition. These are "Foundation," "Formalism," and "Filter," which broadly refer to Hegel's system of aesthetics, Japanese aesthetics, and European modernism. To clarify, this is not the framework that Wright himself outlined, but one which is used here to help define and give explanatory power for his system. This dissertation brings together the German thinker Hegel and Japanese art. This connection seems appropriate for several reasons as will be described ahead, but also from Wright himself, who said upon receiving the Imperial Hotel commission and the chance to return to Japan, "I looked forward to Japan as refuge and rescue. The

lands of my dreams--old Japan and old Germany.”¹

The Foundation chapter builds a framework for Wright’s organic theory by placing it in relation to GWF Hegel’s aesthetics in general, and his Romantic stage of architecture in particular. Hegel’s two-volume *Aesthetics*, is the primary source material for this. Insights from Hegel provide a greater philosophical grounding to Wright’s concepts of space, unity, nature, form and content, among others. Hegel’s theory also reveals a tension or incompleteness in some of Wright’s theory which Hegel resolves. The choice of Hegel over other philosophers is made for two main reasons. The first is the genetic tracing of Hegel’s influence over those nineteenth-century idealists and romanticists by whom Wright was influenced. Secondly, Hegel was an art lover and the philosopher who wrote the most about aesthetics and the arts, producing an aesthetic foundation which was the most systematic of the post-Kantian Idealists.

For Hegel, art is the embodiment of spirit in sensuous form. As to the manner in which Idea is embodied in material form, Hegel defines three progressive stages in the relationship between Idea and form, the Symbolic, the Classical, and the Romantic stages of art. Particular focus is on Hegel’s third stage of art, the Romantic stage and its description of architecture as an art. The connection of Wright’s organic theory with Hegel’s Romantic stage of architecture has not been published to my knowledge.

The third chapter, Formalism, presents a formalist review of Wright’s organic theory by relating its affinity to Japanese art and architecture. While the first section emphasizes the theoretical foundations for Wright’s theory, this section views the formal expression of Wright’s work as an outgrowth of that foundation. Hence, in this section, both Wright’s physical works and Japanese art

¹ Frank Lloyd Wright, *An Autobiography*, (Petaluma: Pomegranate, 1943), 194.

are examined in a more object-oriented approach with case studies to reveal these connections. Japanese art is used because there are clear statements by Wright himself to this connection. Whether he is referring to the influence of the Japanese prints, the “elimination of the insignificant” he saw in its art and architecture, or his time and associations in Japan, there is a clear thread tying together the development of Wright’s architecture and theory to the art and culture of Japan. Beyond this, however, is the way it fits with Hegel’s thought. The terms Wright uses to describe Japanese art in his 1912 book, *The Japanese Print: An Interpretation*, can also be used to describe Hegel’s Idealist system. Ernest Fenollosa is a key bridge between these two sections. Fenollosa’s attempt to unite East and West was something Wright related to and believed in. In fact, Wright wrote in 1952:

To two great but various cultures I owe most in that strange occurrence we call our education: to Old Germany and Old Japan. Goethe, Beethoven and Nietzsche, their inspiration has lasted me lifelong. Rikyu, Sesshu and ‘Moderns’ like Korin, Sotatsu, Hiroshige and Hokusai².

This chapter explores Wright’s interaction with Japanese art and architecture in the areas of traditional Japanese aesthetics (*wabi sabi*, *miegekura*, *yugen*), art, and architecture. The work of scholars on Japanese art such as Julia Meech, Timon Screech, Andrew Watsky and Kevin Nute is included here. Additionally, primary material is referenced from many of the *ukiyo-e* era woodblock prints by Utagawa Hiroshige and Katsushika Hokusai in the spatial analysis of the print. These are analyzed with Wright’s own architectural projects, including Unity Temple, the Imperial Hotel, and the Bernard Schwartz residence. Unity Temple is significant for several reasons, but it is here where Wright says that his major breakthrough took place in his concept of organic space. The Imperial Hotel provides important clues to Wright’s use of ornament in space, but is also significant in its

² Frank Lloyd Wright and Bruce Brooks Pfeiffer, *Letters to Architects*, (Fresno, CA: Press at California State University, 1984), 193.

relationship to developments in contemporaneous architecture in Europe. The Schwartz house as a case study tests certain Gestalt perceptual ideas with parallel constructs in the Japanese print. Gestalt is the German word for form or shape, and is the theory of mind which maintains that the whole has a reality of its own, independent of the parts, and the idea that vision is not a mechanical recording of elements but rather the apprehension of significant structural patterns. The Gestalt theory of Rudolf Arnheim is used here, as he has written most extensively of it in its relation to architectural space. The correlation between the Gestalt emphasis on the whole, Wright's idea of the integrated whole, and Hegel's view of unity provides further evidence that Wright's organic theory has a strong relationship to visual perception, and more broadly, to aesthetics.

In this chapter, Wright's spaces are analyzed to foreground the correlations to the types of two-dimensional spatial constructions found in Japanese art. While much of gestalt analysis has dealt with a comparison of like sources, such as the comparison between two-dimensional images and the emergent patterns seen in them, here a comparison between Wright's three-dimensional space with the two-dimensional print image is provided. This is because Wright himself claimed that his spatial system didn't derive from Japanese architecture but from the Japanese print.

The fourth chapter, Filter, explores European Modernism as a vehicle to provide further definition to Wright's theory by its contrast with his own. Wright claimed, and with some credibility, that he was the architect who most influenced the beginnings of Modernist architecture in Europe. Walter Gropius, Le Corbusier, and Mies van der Rohe were young architects who all were influenced by his Wasmuth portfolio of 1911. So why was he so opposed to the International Style when it gained momentum? Through contrast, this becomes a significant source from which his organic architecture may be framed.

Seen from a distance, Wright might be placed in the same category as the other modernists of

his day, as Bruno Zevi has sought with his language of modernism. On the other hand, viewed more closely, the differences become significant both in understanding Wright's organic theory, as well as the modernist project's place as an avant-garde movement. My intent for this section is not to do an art-historical formal comparison between Wright's architecture and European modernism. This has already been done by Vincent Scully, Neil Levine and others. The purpose for including European Modernism in this project is to provide further evidence for the distinctions which help to place Wright's organicism in the philosophy of aesthetics. This then advances an understanding of Wright's theory of organic architecture in relation to Hegel's system of the Romantic stage of art, provides reasons for his later clash with the Modernist project, and the background for his Asian aesthetic and spatial conceptions. And, perhaps most ironically in our era of visual culture studies, this provides explanatory power why the "look" of Wright's works was not an afterthought or consequence of functionalist determinants but ontologically integral to the organic theory he espoused.

METHODOLOGY

My methodology involves a close reading of historical and theoretical texts, formal analysis of drawings, photographs and buildings, and case studies of Wright buildings. Primary sources for Wright's theory of organic architecture are drawn from Wright's own writings and essays. These include, but are not limited to, *The Japanese Print: An Interpretation*, *In the Cause of Architecture*, *The Art and Craft of the Machine*, *An Autobiography*, *The Future of Architecture*, *The Natural House*, and other sources, including unpublished talks and transcripts from the Taliesin Print parties. Secondary sources for Wright's theories include materials from Neil Levine, Jerome Klinkowitz, Norris Kelly Smith, Donald Hoffman, Kevin Nute and others. The case studies are based on published representations, and my own primary research of his buildings.

While Wright possibly never made reference to Hegel himself, Hegel's foundation for nineteenth-century Idealism, and the related group of mutual thinkers, gives one of the largest categories for comparison. Wright was a voracious reader, and his writings make reference to many thinkers, philosophers, poets, authors and architects which he considers significant to his own theory of organic architecture. In 1949, Wright himself listed "...Whitman, Emerson, Thoreau, Nietzsche, Goethe, Rousseau..." as chief among the modern exemplars of the tradition in which he knew himself to stand.³ Further, he did not hesitate to criticize those thinkers, artists, and architects that he was opposed to, and that he felt were contrary to these organic principles. Wright's texts provide documentation from which to make historical comparisons of theories. Beyond these texts are the architectural works themselves, which provide substantiation for his theory and a material culture from which to draw additional conclusions, such as the consistency of Wright's theory of materiality, both with his own works and also in relation to Hegel's view of materiality in the Romantic stage of art.

Methodologically, Wright's texts on organic theory are classified into categories which more closely follows Hegel's philosophy of art in his *Aesthetics*. These categories include concepts such as unity, part-to-whole relationships, form and content, and essential nature, among others. The model theory of organic architecture in chapter five is hierarchically arranged to Hegel's system, incorporating Wright's tenets of organic architecture as they more properly fit into this larger philosophical backdrop.

³ Norris Kelly Smith, *Frank Lloyd Wright: A Study in Architectural Content*, (Englewood Cliffs, NJ: Prentice-Hall, 1966), 45.

SIGNIFICANCE

This project brings several contributions to the current discourse on organic architecture and organicism in general. It provides greater clarity to Wright's theory of organic architecture by providing it with a more structured definition based on Hegel's philosophy of art, its true antecedent. It reinforces the central role of Japanese aesthetics in Wright's organic theory beyond a stylistic comparison between the two architectures. Instead, it accomplishes this through analyzing how two-dimensional Japanese spatial depiction influenced Wright's three-dimensional spatial construction. This project positions Wright's theory of organic architecture within an historic context, without which, Wright's thought cannot properly be understood. This project provides an aesthetic foundation for future expressions of the organic which may not have been explored by Wright himself. It raises the broader significance of this project by examining the place of "art" in architectural design, which is to foreground the aesthetic aspect of architecture. Wright's treatment of this subject raises questions which are common to the art of architecture. An aesthetic theory which is not arbitrary but is grounded intrinsically within the means of its being still has merit in restoring a balance to the design profession.

While many approaches can (and have) be taken towards Wright's idea of organic architecture, this study's focus on the roots and characteristics of the aesthetics which he practiced and wrote about reveal clues as to why his work bears the marks of the humane and beautiful, and thus brings forth insights into creating new works today which don't merely imitate his external forms but produce new forms based on associated principles — something he himself said was the proper goal of architecture, and why the foundations of Wright's concept of organic architecture is important to today's understanding and praxis of organic design. The conclusions produced here, in part fill the

lacunae of much of what has been lost to our current pedagogy and praxis of architecture. The historic and humanistic foundations Wright drew from do not need to be superficially imitated, but can enrich and harmonize the forms that arise intrinsically from today's technology and culture.

The novelty of this approach is that it approaches organicism from the direction of the aesthetic. This approach is the reverse direction from many current trends that view it reductionistically and build up to larger structures deterministically. This project places the wholes of human experience at the beginning and works backwards. Wright himself foregrounded the aesthetic approach, and specifically said so in his 1912 book, *The Japanese Print: An Interpretation*, where he chided Western architects for missing the aesthetic viewpoint he saw evidenced in Japanese art.

The focus is on these core areas of his theory of organic design, and the case is built that Wright's work takes into account the phenomenological and human response to architecture through the aesthetic realm, rooted in Hegel's idealism which had wide impact on the cultural milieu of Romanticist thought in the nineteenth century. The outcome of this research is the formulation of a new framework for organic architecture. This is an aid, both in the historical understanding of Wright's theory of organicism, as well as a useful framework for current and future practice of organic architecture which flows from this tree of design principles.

CHAPTER 2

FOUNDATION

THE AESTHETIC APPROACH

This chapter lays the aesthetic foundation for the understanding of Wright's concept and praxis of organic architecture. While Wright's connection to popular romanticists has been fairly well written about, the connection between Hegel's theory and Wright has been less so. Yet Hegel is foundational to the study of these romanticists and will so provide a more complete foundation for a theory of Wright's organic architecture to rest upon.

The central question of aesthetics in architectural practice and education is 'what is architecture?' The answer to this seemingly simple question very quickly becomes mired in a tangle of uncertainty. If one uses the simple definition of architecture as being the art-science of building, then not all buildings attain to art. A common view of what separates those buildings qualifying in the class of architecture and those merely in the general class of buildings is that architecture is the art of building. But this raises the problem of where the 'art' of building resides which some buildings have and others lack. Related is the question as to whether architecture is one of the fine arts. Hegel includes it as one of his five fine arts. But architecture, more so than any of the other fine arts, must serve a physically functional purpose. The ensuing relationship between form and function has thus been a continuing subject of debate among architects, theorists, and critics. For example, early Modernism may be seen as a product of social, economic and technological factors—as functionalist architecture which eschewed aesthetics and style. And yet that is not how Wright, Walter Gropius,

Mies van der Rohe, or Le Corbusier viewed it. They did reject previous styles but they did this “within a tradition that still demanded style. Gropius’ definition of beauty was less than precise, but he was still clear that architecture must be governed by aesthetic aims.”⁴ It is here that Hegel’s theory of aesthetics transcends that used by the Modernists who were following the “form follows function” dictum. While Hegel wrote prior to these modernists, his theory was more robust and sophisticated regarding the place of art and how a unity, through a dialectic process, provides a better approach; moreover, it parallels Wright’s own stance toward this subject.

The place and definition of art in architecture lies outside the practice of architecture itself and is found in philosophy, or more precisely in aesthetics (coined by A.G. Baumgarten), the branch of philosophy that explores the nature of art, beauty, and taste. This is parallel to the role that the philosophy of science brings to science itself, posing and answering questions lying beyond the scope of science and yet having consequences for its practice and discourse.

The distinction should also be made that architectural aesthetics is not the same thing as architectural theory. Architectural theory attempts to formulate what ought to be in architecture, a manifesto to design in a certain preferred manner; for example, as historically proposed through the years by Vitruvius, Alberti, Ruskin, Morris, etc. In the twentieth century, one only need to skim Ulrich Conrad’s *Programs and Manifestoes on 20th-Century Architecture* to see how multiplied architectural theories had become.⁵

It has been characteristic for architectural theorists to claim a universal validity for their theories. It is the place of architectural aesthetics to test such claims. As the British analytic philosopher

⁴ Michael McMordie, *Review of The Aesthetics of Architecture*, by Roger Scruton, *Journal of the Society of Architectural Historians*, 40, no. 1 (1981), 85-86.

⁵ Ulrich Conrads, Ed. *Programs and Manifestoes on 20th Century Architecture*, trans. Michael Bullock (Cambridge: MIT Press, 1971).

Roger Scruton has stated, "Vitruvius, Alberti, Ruskin, and Le Corbusier cannot all be right in believing that their favored form of architecture is uniquely authorized by the rational understanding. As we shall see, they are all wrong."⁶ Scruton is one of the few philosophers to give sustained philosophical treatment of architecture. Other arts have more commonly been the subject of philosophical treatment, while architecture as an art has received relatively little attention in philosophy. In addition to Scruton, notable philosophers such as GWF Hegel and Martin Heidegger have attended to architecture. Kant, while he gives less attention to architecture, still plays an important role in architectural aesthetics and serves as an influence on Hegel and later philosophers.

It was Kant who shifted the aesthetic theory of architecture from a Vitruvian conception of beauty and utility to a cognitivist or expressionist conception of architecture where architecture is seen as expressing or communicating abstract ideas that yield inexhaustible material for the free play of imagination.⁷ It is here where the subjective aspects of perception are as important as the object of contemplation itself. This dissertation will focus both on aspects involving perception as well as the theory of the work of art. Before discussing the primary theorist, Hegel in more detail, it is worth mentioning some of the more important concepts which Kant has brought to architectural aesthetics.

Eighteenth century aesthetics was caught between natural beauty and artificial beauty, between a theory of reception and a theory of the work of art.⁸ Kant's aesthetics is not a theory of art, as it will be for Hegel, but a study of aesthetic experience and of his transcendental analysis of judgment to bring this experience into thought and word. Key to Kantian aesthetics is the idea that our pleasure in a beautiful object (e.g. a building) is not dependent on any knowledge one has that it

⁶ Roger Scruton, *The Aesthetics of Architecture*, (Princeton: Princeton University Press, 1979), 4.

⁷ Paul Guyer, "Kant and the Philosophy of Architecture," in *The Aesthetics of Architecture: Philosophical Investigations into the Art of Building*, ed. David Goldblatt et al. (Malden: Wiley-Blackwell, 2011), 7.

⁸ Jean-Marie Schaeffer, "Kantian Prolegomena to an Analytic Aesthetics," in *Art of the Modern Age: Philosophy of Art from Kant To Heidegger*, (Princeton: Princeton University Press, 2000), 17.

serves any function in which the subject has an interest—it is based on a disinterested pleasure.

Therefore it cannot be said in advance which class a beautiful object belongs; beauty is an absolutely contingent condition, one which is not conceptually determined.⁹ Even so, judgments of beauty speak with a universal voice and claim validity for all who would respond to the same object.¹⁰ Kant states that one derives pleasure in the work from the ‘free play’ of imagination and understanding where the presentation of the experience satisfies the understanding’s general interest in cognition without any determinate concept which would constrict the imagination.¹¹ Wright himself appealed to the human imagination as a key factor in discriminating between organic architecture and modernist architecture. While imagination is central both to the creation and perception of architecture, Wright was speaking of the creative process in light of the Idealist view where mind is realized and concretized through material form. Yet the involvement of the imaginative faculties in perception is central to the spatial experience of Wright’s buildings seen in light of Gestalt theory which is discussed in chapter three.

Kant resolves the seeming paradox between determinate concept and the free play of imagination by stating that while the creation and experience of works of art are guided by concepts, they are never fully determined by those concepts. His discussion of genius also comes in to play here in that the artistic genius’s originality takes him beyond his own rules and allows him to pass on exemplars of originality but not determinate rules to successive artists.¹² Finally, a curious conclusion which actually seems to have some applicability to the process of avant-garde design—the work of art, although intentional, must not have the appearance of being intentional. Fine art must be clothed with the aspect of nature, even though it be recognized as art. So, the genius is one able to combine two

⁹ Ibid., 32.

¹⁰ Guyer, 13.

¹¹ Ibid., 14.

¹² Ibid., 15.

contradictory characteristics, that of being an object produced intentionally, but one in which the intentionality is effaced.¹³ An application of this in the present context can be seen as follows.

Whether it was Wright or his European contemporaries, there was the tension between the creativity of the individual artist and a design which arose determinately from the conditions of its being. Every architect guards against the impression of the arbitrary or gratuitous in their design, while pointing out the functional conditions which gives it form. While this may be less so for the artist, architecture must prove its functional merits, regardless of its aesthetic qualities. And still, the aesthetic qualities are one of the first, and enduring, characteristics from which we draw judgments of architecture.

There seems to be an unstated rule that architects lecturing and describing their work try to make it appear as if the design were a 'natural' outworking of the conditions of its being and not the forcing of the architect's will of any predetermined style or look upon the design. To do so would only reveal the end result as superficial, or worse, as kitsch. Joseph Esherick sums up this sentiment well when he states:

Beauty is a consequential thing, a product of solving problems correctly. It is unreal as a goal. Preoccupation with aesthetics leads to arbitrary design, to buildings which take a certain form because the designer 'likes the way it looks.' No successful architecture can be formulated on a generalized system of aesthetics.¹⁴

Yet, Esherick's conclusion here does not provide a real solution to the problem in the way that Hegel addresses it as a unity. The answer lies neither at the polarity of forcing upon the form a pre-determined aesthetic nor in the total abandonment of aesthetic consequences in "solving problems." The real issue at hand is the relationship between the two and how this dualism is resolved as a unified whole.

¹³ Schaeffer, 40.

¹⁴ Scruton, 25.

The persistence of appearance in architecture, whether one use Kant's theories or not, deserves greater place and discourse in our schools of architecture. While currently there seems to be a general denial of the same and con-committal focus on the 'functional,' aesthetics can provide a methodological approach to understanding the place and borders of art and the visual within our field. At minimum, it can help clear up the confusion regarding 'functionalism.' Esherick's statement that beauty would be "a product of solving problems correctly" naively makes the same functionalist mistake as the earlier modernists made. It is actually a misunderstanding of functionalism as much as of aesthetic value. It assumes a use of reason that is possible without recourse to aesthetic intention. Likewise, it assumes these two can be separated. It also assumes a deterministic approach to design is possible whereby by inputting the proper 'problem,' a solution can thence be produced.

The problem with such an approach is that the functional problem to be solved can never be adequately isolated and described in architecture. Furthermore, even with aesthetics aside, there are multiple approaches and solutions to architectural 'problems.' But the difficulty begins prior to this with the definition of terms. What is a function? Are functions limited to physical properties or can they also incorporate behavioral factors of the users of buildings? If so, are there instances where the appearances of the same are a factor in its function? Is it the function of the building or the function of its parts that is being referenced? And is it in the nature of architecture to express its functions or not? And is it clear how a particular function is to be translated into form? This would be so if the adage, 'form follows function' were actually true. In reality, there is no one to one correspondence to solving architectural 'problems.' Even stating design as solving 'problems' turns out to be problematic. To state an architectural dogma a priori that claims universal validity will ultimately be shown to be

arbitrary.¹⁵ It is possible, however, to judge completed designs whether on paper, model form, or buildings on their ability to meet certain functions and other relevant criteria. Going in the reverse direction from functional requirements to design, however, requires intuition, according to philosopher Roger Scruton, who states:

Therefore, the search for some ideal solution, which satisfies some given set of functions as well as circumstances permit, must take account of an intuitive understanding, not only of the 'problem' but of the 'solution' itself. Being constrained at both ends, as it were, by the limits of human intuition, it is hard to see that the process of design can hope to free itself from intuition, or that it ought seriously to try to do so.¹⁶

HEGEL'S PLACE IN NINETEENTH-CENTURY ROMANTICISM

The German philosopher Georg Wilhelm Friedrich Hegel lived from 1770 to 1831, after Kant (1724-1804), and approximately a hundred years before Wright's time (1867-1959). He was a major figure in German Idealism and influenced subsequent philosophy, politics, historicism, and the arts. The Romanticist movement can be traced from Jean-Jacques Rousseau to Immanuel Kant and then the German idealists Fichte, Schelling, Schopenhauer and Hegel, with Hegel arguably being the most influential of this group. Hegel in turn influenced those that Wright personally identified as important to his thinking, including Goethe, Emerson, Blake, and Wordsworth, among others. There is a very broad historical context of German Idealism in the 1800s that would influence nineteenth century European and American thinkers and architects and set the stage for Richardson, Sullivan, and Wright

¹⁵ Ibid., 42.

¹⁶ Ibid., 30.

just before the twentieth century. The idea of the zeitgeist and the feeling that each age should have its own architecture particular to the spirit of its own age and people was something Wright would espouse and make an American vision for a democratic culture. Viollet-le-Duc and Friedrich Schinkel had been declaring the need for a new architecture of the age rather than continuing down the path of Greek classicism before Wright.

Hegel's *Lectures on Aesthetics*, a compilation of lectures Hegel gave in Heidelberg and Berlin between 1818 and 1829 were assembled by one of Hegel's students, Heinrich Hotho and later published in English in 1975¹⁷. In Hegel's *Aesthetics*, he describes three phases of art, the Symbolic, the Classical, and the Romantic.

While Wright did not quote Hegel as he did other Romantics and thinkers, nevertheless Wright worked from a foundation of thought which was in many ways derivative of the German Idealism which influenced Romantic and Transcendental thinking in the United States in the nineteenth century. Whether Wright had read other thinkers who had in turn been influenced by Hegel's ideas, or if he had read Hegel but did not quote him, may never be known. What is significant is the parallel between Hegel's theory of art and Wright's theory and works of organic architecture. Wright's theory would not be possible without the foundation that Hegel and his followers had laid.

It is known that John Kedney's translation of Hegel's *Aesthetics* (1885) was available in the Midwest in Wright's time. It is also known that Hegel was more popular in the Midwest than on the East coast at the time. Walt Whitman, a favorite of Wright, was certainly familiar with Hegel, saying that, "Only Hegel is fit for America, is large enough and free enough."¹⁸ Fenollosa, trained in

¹⁷ Stephen Houlgate, "Hegel's Aesthetics," *The Stanford Encyclopedia of Philosophy* (Spring 2016 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/spr2016/entries/hegel-aesthetics/>>.

¹⁸ Kevin Nute, *Frank Lloyd Wright and Japan: The Role of Traditional Japanese Art and Architecture in the Work of Frank Lloyd Wright*, (New York: Van Nostrand Reinhold, 1993), 75.

philosophy at Harvard, was known to Wright and also an important connection to Japan for him. Fenollosa's attachments were to Emerson and Hegel and he taught Emerson and Hegel to his students at the Tokyo Higher Normal School.¹⁹ Fenollosa used Hegel's dialectic to weave together a new union between East and West which he was passionate about. Closer yet to Wright, his mentor and "Lieber Meister," Louis Sullivan, was versed in Spencer, Emerson, and Hegel.²⁰ Fenollosa is a very important bridge, not only between Hegel and Wright, but also with Japanese art. Because of his importance in this study, Fenollosa will be examined in more detail in the chapter, Formalism.

THE PLACE OF ART IN HEGEL'S AESTHETICS

HEGEL'S SYSTEM

Georg Wilhelm Friedrich Hegel's philosophy of art falls within a larger heritage of German aesthetics stretching from J.J. Winckelmann (1717-1768), G.E. Lessing (1729-1781), Immanuel Kant (1724-1804), Friedrich Schiller (1759-1805), Friedrich Nietzsche (1844-1900), Martin Heidegger (1889-1976), and Theodore Adorno (1903-1969). While Hegel accepted the term "aesthetics" for his work due to its common use, he felt that this word connoted a too superficial meaning, one which implied that the subject matter of aesthetics was the feeling of pleasure or other response elicited by a work of art. His preference was that his aesthetics be considered the philosophy of art, and better yet,

¹⁹ Ibid., 74.

²⁰ Ibid., 75.

a philosophy of fine art²¹. Hegel's philosophy of art went beyond sensory response— it was a system which included the place of art in human freedom, an account of beauty, the historical development of art, and an in-depth review of the five arts of architecture, sculpture, painting, music, and poetry. Unlike the neoclassical and enlightenment aesthetics which preceded him, Hegel's aesthetics was not a rationally-based imitation of nature but rather the expression of idea and content through the various media of art. Idea in Hegel's system represents a form of self-determining reason. Life becomes more rational and self-determining when it becomes self-conscious and can exercise freedom. Geist, or spirit, is that self-conscious life.

Art then, for Hegel, is one of three manifestations of absolute spirit (or ultimate reality), along with religion and philosophy. Of the three, it is the one closest to nature and the one in which the sensuous elements dominate the spiritual elements. It is one step above nature, and below religion and philosophy. In religion this manifestation is balanced, and in philosophy mind dominates the sensuous, while it also assumes the realities of art and religion. Art expresses spirit's self-understanding through material form, unlike philosophy or religion which express this through pure concepts and images of faith. Spirit (or Geist) in Hegel's system is the ultimate form of reality and what nature is made of. It is what humans experience. Absolute spirit is the highest form of reality, either expressed as God theologically, or the metaphysical equivalent of God otherwise. Idea to Hegel is the metaphysical structure of reality (being) which manifests itself in nature, in art, in religion, in civil society, and philosophy. The measure of reality is the relationship between spirit and materiality. The aim of art in this view is not the imitation of nature but the creation of beautiful objects which invite contemplation and express this character of freedom. Art is not for art's sake but for beauty's sake in a

²¹ Hegel, *Aesthetics Vol I*, Introduction I. Prefatory remarks. (Oxford: Clarendon Press. 1975)

sensuous form of human self-expression and self-understanding.

Hegel's system of art analyzes the five media of architecture, sculpture, painting, music, and poetry. Each of these are instantiations of Idea into a sensuous form particular to the medium in which it is expressed. Hegel provides a secondary axis of structure which he calls the Symbolic, Classical, and Romantic stages of art, all of which can be applied to each of the above five mediums of art (these stages will be explained in more detail below in "Hegel's Three Stages of Art"). Hegel introduces architecture as the "beginning of art." This is not primarily from a historical standpoint but from an ontological one. As such its first purpose is to give shape to the physical world of nature, to give it a meaning which is not immanent in the objective world itself. Yet, architecture is the beginning of art, not the fullest expression of it since it does not create a "free beauty" unencumbered with functional necessity as sculpture is able to do, for instance. This is because architecture must first serve its functional purpose to house man or god as shelter. Through its manifestation of the Idea architecture begins to be art, according to Hegel, and fulfill its potential through a dialectical unfolding through time.

Hegel continues the project of aesthetics where Kant left off, and while he does not reject Kant's dualism of freedom versus nature, he integrates it into a unity, in an intelligible way, rather than through Kant's unknowable, transcendent, 'given.' Like Hegel, Kant maintained that our experience of beauty is an experience of freedom, but Kant felt that a work of art was beautiful in relation to its effect on the perceiver rather than in any objective quality in the work of art itself. The free play of imagination and understanding leads one to judge the object as beautiful, and for him beautiful objects are those that elicit a positive judgment by all capable viewers. Hegel, however, along with Schiller, maintained that beauty was an objective quality in the object rather than merely the subjective judgment of the viewer. Schiller saw it as an appearance of being free possessed by the work of art when in fact it was not, while Hegel saw beauty as the direct sensuous manifestation of freedom, and

not a mere appearance of freedom. Beauty is the direct sensuous manifestation of the freedom of spirit and so must be produced by free spirit²².

Hegel scholar William Desmond argues that Hegel's treatment of beauty is particularly useful in countering the problems of metaphysical dualisms of the Western tradition. Here beauty and appearance is to be understood as a concrete embodiment of the essential rather than opposed to the sensuous nature. The art work, conceived through the Ideal of Beauty presents through the sensuous appearance an authentic appearance of Geist itself and brings about a dialectical reconciliation of subjectivity and objectivity.²³ Without this foundational understanding of Wright's aesthetic basis in nineteenth-century Idealism, much of his narrative during the twentieth-century, and in particular his reaction to the International Style modernists in Europe, cannot be properly understood.

Additionally, Hegel's conception of the organic will be central to Wright's own theory a hundred years later. Beauty here is a sensuous image of being whole. The beautiful must express a certain organic wholeness, rising immanently from within the object itself and not an aggregation of heterogeneous parts.²⁴ Appropriating Hegel's notion of the organic whole, Wright was in fact not stating something new when he proposed the organic whole and its concomitant emphasis on unity and the part-to-whole relationship. His contribution, however, was to bring this into architecture.

Hegel would do what Kant did not, which was to establish a theory of art that included a significant attention to architecture. Even so, beauty in architecture, remained stubbornly obscure. To Kant, architecture's beauty was not specifiable. Because of architecture's mixture of the conceptual with the

²² Houlgate, Stephen, "Hegel's Aesthetics", *The Stanford Encyclopedia of Philosophy* (Spring 2016 Edition), Edward N. Zalta (ed.), URL = <<https://plato.stanford.edu/archives/spr2016/entries/hegel-aesthetics/>>.

²³ Brian John Martine, review of *Art and the Absolute*, by William Desmond, *The Journal of Speculative Philosophy*, New Series, Vol. 2, No. 1 (1988), 57-62.

²⁴ William Desmond, *Art and the Absolute. A Study of Hegel's Aesthetics*. (Albany: SUNY Press, 1986), 137-138.

material and the utilitarian which limited its free artistic expression, most philosophers of the time did not place it highly as a medium for art. Such was Schopenhauer's view who felt that architecture already had reached its pinnacle and that it must "forever bear the weight of fundamental forces of nature and thus remain the faithful servant of necessity and utility."²⁵ Hegel is able to claim a greater degree of beauty for architecture as will be outlined in his three stages of art below.

Hegel's process of the dialectic has relevance to understanding Wright's organic design process as will be further described later. The dialectical process (sometimes referred to as thesis, antithesis, and synthesis, although Hegel himself didn't represent it this way) resolves apparent contradictions not by denying either polarity but rather subsuming both into a higher whole which resolves the contradiction. There is the aspect of the dialectic as a historical outworking of this principle through time, but my thesis will primarily focus on the dialectic applied to resolving design problems (teleological) and understanding Wright's idea of the integrated whole.

Hegel held that the full meaning of the work of architecture cannot be understood without the whole in mind, and that part of its meaning is in its wholeness. In architecture, for example, opposing tensions of artistic intention and various functional necessities almost always present themselves. The resolution of this to Hegel is a dynamic, dialectical wholeness. There are several ways in the work that this dialectical wholeness is realized:²⁶

- 1.) through its concrete uniting of spirit and sensuousness
- 2.) through its attempts to make present a unification of freedom and necessity and of individuality and universality
- 3.) through its being marked by an intrinsic end

²⁵ Travis Anderson, "Complicating Heidegger and the Truth of Architecture," in *The Aesthetics of Architecture: Philosophical Investigations into The Art of Building*, ed. David Goldblatt et al. (Malden: Wiley-Blackwell, 2011), 71.

²⁶ *Ibid.*, 61.

One of the criticisms of the aestheticist movement in the latter half of the nineteenth-century is that it diminished the importance of content in the work of art (art for art's sake). However, Hegel is aware of the inseparability of form and purpose in architecture and sees the transformation of purpose by art into an end for itself.²⁷ Architecture is not to be framed simply by the form and function dualism, but through a unity in which architecture can embody a culture's expression, its utility and purpose, and also enter the realm of art beyond determinate purpose. It is also here where Hegel is most like Kant when he suggests the notion of purposiveness without any definite purpose.²⁸ For Hegel the building is purposive, but also beyond every definite or finite purpose. It is important that the implications of this to architecture are not underestimated, for it addresses the heart of the Modernist functionalist polemics and Wright's own positioning in this narrative. Wright did not accept the dualist position separating form and function, but like Hegel, felt that form and function unite on a higher level. Even if Wright didn't reference Hegel in this, Wright's work shows evidence of the appropriation of this idea.

WRIGHT'S THEORY AS HEGELIAN

My premise is that Wright is better understood from the Hegelian and Idealist milieu he arose from. Wright said that his architecture would only be great insofar as his philosophy was sound, a philosophy he felt was deduced from nature. While the idea of personally generating a philosophy from nature may fulfill an Emersonian notion of the pure artist in tune with nature, in substance it is more problematic. Wright did not invent a philosophy of the organic but rather integrated his formal applications to a suitable philosophy at hand — the idealism of the eighteenth and nineteenth

²⁷ Ibid., 240.

²⁸ William Desmond, "Gothic Hegel," in *The Owl of Minerva* 30, 2 (Spring), 243.

centuries systemized by Hegel, kin to his heroes Goethe, Whitman, Emerson, Ruskin, and grown in the fertile soil of the American sense of optimism and expansion of the nineteenth-century.

His philosophy of organic architecture posits the integrated whole and that the part cannot be properly understood isolated from that whole. Like Hegel, Wright saw architecture as inseparable from its purpose when he stated that form and function are one, not that form follows function. Hegel saw form and function not as a duality but as a unity. Hegel went further in stating that architecture as art is an end in itself. When Wright spoke of the higher goal of architecture being the expression of beauty, he was also elevating architecture to this level beyond mere functional necessity, even if he did not frame it in formal philosophical language as Hegel had done. Both like Kant's idea of purposiveness without any definite purpose, or Hegel's idea that a building has purpose yet it is also above every definite or finite purpose, Wright sought to elevate the functional needs of building into an art which in turn lifts the human soul, and like for Hegel, architecture as art was an end in itself.

Hegel felt that true art did not lie in the imitation of nature but was that which went beyond the accidents of external appearance into the essence of its Idea behind reality. As will be further elaborated upon in the section on Wright's and Japanese Aesthetics, Wright also saw the architect's role in organic architecture to be one who "got inside of the thing" and was not caught up in the imitation even of nature but saw past the external forms of nature into their abstract essences which to Wright were geometrically based. This point is important to realize otherwise Wright's organicism could be conflated with the imitation of nature or as a form of biomimicry. To Wright the sensuous material presence was an external physicality which was infused with Spirit or mind, and thus was a "living" architecture. Wright, very much like Hegel, states that architecture needs to put into concrete

form a reflection of the Life in a person, which he says is spirit materialized²⁹. But where Hegel expresses spirit more metaphysically as the ultimate form of reality, Wright expresses this in more personal terms, as an expression of the life within the person, or architect, who creates physical works from this place of inspiration. Yet, Wright does seem to get the direction of Hegel's spiritual manifestation in the sensual correct (or at least at some point derived from it) when he writes that our earthly dwelling is a materialization of Spirit and not a spiritualization of matter.³⁰

This sense of an underlying essence to material form was the power behind his idea of the elimination of the insignificant and the reality behind the work of architecture. This explains why he considered his very complex architectural forms to cohere with this idea of simplicity. Simplicity for him was not minimalism but that which most efficiently expressed the underlying essence of the idea inherent in the work of architecture. Wright referred to his organic architecture as unfolding "an inner content" and expressing "life from the within."³¹ While to Hegel art manifested Idea in form, Wright held that the Idea was like a seed which organically unfolded and caused the growth of form according to the information contained within.

That the manifest image of an object has power to convey spirit is discussed by the art historian, WJT Mitchell. He describes the view of the Talmudic scholar Maimonides, who states that the term 'image' applied to natural form is that which constitutes it as a substance and causes it to become what it is. The image is literally the essential reality of a thing and this essence resides in the mental or spiritual realm rather than the external realm of the senses, including that of sight.³² The thought here

²⁹ Frank Lloyd Wright, Andrew Devane, and Frederick Gutheim, *In the Cause of Architecture, Frank Lloyd Wright: Essays*, (New York: Architectural Record, 1975), 145.

³⁰ *Ibid.*, 151.

³¹ Bruce Brooks Pfeiffer, *The Essential Frank Lloyd Wright: Critical Writings on Architecture*. (Princeton, Princeton University Press, 2008), 187-88.

³² WJT Mitchell, *Iconology: Image, Text, Ideology*, (Chicago: University of Chicago Press, 1987), 32.

is that the external appearances are derivative of this internal essence; image is a likeness, not to be confused with a picture, and there is a primacy given to the abstract, ideal version, which is reflective of both Jewish and Christian thinking³³:

Hegel described this idea of penetrating to the essence of external things when he suggested, "This natural gift...to seize the particular element of objects and their real forms...is the prime condition of artistic genius." The artist should concentrate on isolating its essential formal Idea, having declared, "Truth in Art does not consist in mere fidelity in the imitation of nature. The real has been soiled by its mixture with the accidental, and Art must eliminate this defilement, and restore the contemplated object to its harmony with its veritable Idea."³⁴

Hegel's expression of the inner essence above conveys the same thought as Wright's conventionalization process, conventionalization being the idea of an abstraction process whereby the inner geometric idea is expressed through a process of the elimination of the insignificant.

One of the things which would be a tension for Wright throughout his career is the subjectivity inherent in the Romantic stage of architecture proposed by Hegel, that is where the expression of spirit went beyond the physical form, pointing outside of itself rather than in a classical balance. While Wright would seek to justify his designs from a functional standpoint, there were times when his aesthetic intentions superseded the material. Wright would often seek to infuse poetic expression in his works such as he produced at the Barnsdall home in Los Angeles with its Hollyhock motif. But when confronted by his Dutch friend H.P. Berlage who felt that Wright's romanticist strain was betraying principle growing out of the rationalism of the art and craft of the machine, Wright actually agreed and vowed to resume on the former path after this architectural "holiday."³⁵ The Barnsdall house, while in appearance a massive, Mayan-looking structure, was actually constructed out of wood

³³ Ibid.

³⁴ Kevin Nute, *Frank Lloyd Wright and Japan*, (New York: Chapman & Hall, 1993), 105.

³⁵ Neil Levine, *The Architecture of Frank Lloyd Wright*. (Princeton: Princeton University Press, 1996), 151.

studs and plaster and could not be considered an “honest” expression of materials, at least not in the sense it was used in the 1920s by his European colleagues.

Given Wright’s listing of so many Idealists and Romantics of the nineteenth century from which he gleaned, it is interesting that he does not include Hegel in this group. This could be unintentional, but at least the borrowing of Hegel by Wright is second-hand, since he influenced so many of those that Wright did specifically name. John Kedney’s book, *Hegel’s Aesthetics: A Critical Exposition*, was published in 1885 and would have been available to Wright as an English language version of Hegel’s aesthetics. Kevin Nute makes the claim that Wright probably was familiar with Kedney’s book on Hegel because of how Wright referred to the “life-principle” throughout his commentary on the print.³⁶ This idea of the life-principle was similar to Hegel’s idea. Kedney directly equated these terms, the Idea and the life-principle. Additionally, Nute says that unlike Fenollosa, Wright seems to have conflated the print artist’s expression of this Hegelian spiritual “Idea” with a revelation of the Platonic geometric ideas underlying natural forms.

HEGEL’S THREE STAGES OF ART

Hegel describes three phases of art, the Symbolic, the Classical, and the Romantic. The third phase of art, the Romantic, has very close parallels to Wright’s own theory of organic architecture. For Hegel, art is the embodiment of spirit in sensuous form. Art is not the imitation of nature but rather the expression of the Idea or inner essence behind physical reality. The genius is one who can see

³⁶ Kevin Nute, *Frank Lloyd Wright and Japan: The Role of Traditional Japanese Art and Architecture in The Work of Frank Lloyd Wright*. 1st ed. (London; New York: Chapman & Hall, 1993), 106.

beyond the accidental and contingent in the world and bring forth creative expressions of the manifestations of the Idea which is beyond nature. As to the manner in which Idea is embodied, Hegel defines these three progressive ways in which this occurs. Each of these systematic stages of art have different relations between form and content which proceed from the Idea. According to Hegel, beauty decomposes into its particular determinations along these three stages.

The Symbolic phase of art is the first and least expressed manifestation of meaning within form. The Egyptian pyramids are Hegel's prime example of this phase. Here, art begins when the Idea is made the content of artistic shapes; however, while the object is thoroughly determinate in its shape, the Idea is still indeterminate and unshapable.³⁷ Hegel gives the example of a symbol, the circle, which is taken as a symbol of eternity.³⁸ Because a symbol stands in signification of some idea, it is not the full expression of the idea itself. The symbol also contains within its form yet other signifiers independent of the common quality being considered. And so, the circle may symbolize eternity, but it can also signify other meanings as well since a circular form is only a partial, or indeterminate conveyor of the Idea of eternity. Interestingly, Wright also discusses the symbol of the circle in his 1912 book, *The Japanese Print: An Interpretation*.³⁹ Here, Wright is trying to convey where the "spell-power" of the artistic print comes from, and he states that it is due to the fact that the underlying geometry conveys its own symbolic meaning based on the platonic forms used in its construction. It is not clear with Wright's thought here where this "spell power" arises since apparently, he does not feel that platonic forms themselves so expressed carry special power except when they are the hidden forms underlying physical reality, not the tangible forms themselves. Wright says that the circle

³⁷ G. W. F. Hegel, Translated by T.M. Knox. *Aesthetics: Lectures on Fine Art*. Vol I. (Oxford: Clarendon Press, 1975), 76.

³⁸ *Ibid.*, 304.

³⁹ Frank Lloyd Wright. *The Japanese Print: An Interpretation*. (New York: Horizon Press, 1967), 14.

symbolizes infinity, the triangle structural unity (Hegel related the triangle to the trinity of the Godhead), the square integrity, etc. Whereas Hegel points out the limitations of the symbolic stage of art, Wright seems to construe this symbolic nature as the primary means by which his “conventionalization” process abstracts nature, but by this process of abstraction, he feels that he is bringing out this inner essence or idea that Hegel speaks of. Hegel sees architecture as a form of art that necessarily partakes of the beginning, or the symbolic form of art.⁴⁰ Even when architecture is Classical or Romantic in form, it is always still Symbolic since it remains at the indeterminate beginning.

The Classical stage of art is where the unity of the sensuous with the spirit is complete and in balance. Greek sculpture is the prime example here. Here there remains a limitation on the expression of the spirit to the human spirit and figure. The idea of the infinite is completely proportioned to the human figure. This is where the purposive forms of purely practical building have become artistic by an inner transformation in the direction of the organic. “Where these two extremes of building—the purely independent (artistic) and the exclusively purposeful (functional)—meet and merge, we have the beginnings of genuinely beautiful classical architecture.”⁴¹ One could say this in more contemporary terms as being the place where form and function are in balance.

The Romantic phase of art is the closest to the modern sense of defining art as an aesthetic phenomenon.⁴² The balance and unity of the Classical stage is broken, but in the opposite direction of the Symbolic phase. Here the inner world constitutes the content of the romantic sphere and celebrates its triumph over the external.⁴³ Because of this, the external medium is accepted as

⁴⁰ William Desmond, 1999, “Gothic Hegel,” in *The Owl of Minerva* 30, 2 (Spring), 239.

⁴¹ Hegel, Georg Wilhelm Friedrich, and Henry Paolucci. *Hegel, on the Arts: Selections from G.W.F. Hegel's Aesthetics, or the Philosophy of Fine Art*. 2nd ed. (Smyrna, DE: Griffon House, 2001), 72.

⁴² William Desmond, *Art and the Absolute. A Study of Hegel's Aesthetics*. (Albany: SUNY Press, 1986), 43.

⁴³ G. W. F. Hegel, Translated by T.M. Knox. *Aesthetics: Lectures on Fine Art*. Vol I. (Oxford: Clarendon Press, 1975), 81.

something inessential and transient, and there is an inwardizing of the infinite in man himself. This “inwardized infinite” went hand in hand with creativity theories of art. The inadequacy of art to convey this inner infinite is why Romantic art points beyond itself. Hegel speaks of the “self-transcendence of art but within its own sphere and in the form of art itself.”⁴⁴ Here, Hegel reveals that art is its own sphere, but already within its sphere the transcendence of the merely aesthetic is already at work. But this transcending is not a simple negation or supersession of art but is rather tied up with its highest attainment and fulfillment. Art itself, as it were, sacrifices its own exclusively aesthetic form to open out upon a fuller religious configuration.⁴⁵ Hegel introduces the transition to the Romantic stage of art as produced by the principle of subjectivity that breaks into the subject-matter. This subjectivity he says is the essential nature of the spirit which withdraws out of the external world into an inner existence that no longer maintains a unity with its body.⁴⁶

Wright did not specifically refer to Hegel’s three stages of art, but his writings and works place him in the Romantic stage of art, which will be further detailed in the next section. However, it is worth noting here that he does give suggestions that would also show a connection to the first Symbolic stage of art, which is coincidentally, where Hegel places architecture in general, even though particular forms of architecture may also fall in the Classical and Romantic categories of art. Even so, Wright’s use of the symbolic in architecture was intended to be working within the Romantic mode of art rather than as a separate category. Again, on Hegel, architecture always maintains some degree of the symbolic, even if classified with the Romantic. Wright felt that the spiritual message transmitted through the great lineage of architecture from prehistory to Egypt, Greece, and Italy had come to an

⁴⁴ Hegel, *Aesthetics*, 521-22.

⁴⁵ Desmond, 44.

⁴⁶ G. W. F. Hegel, Translated by T.M. Knox. *Aesthetics: Lectures on Fine Art*. Vol 2. (Oxford: Clarendon Press, 1975), 792.

end and that a purified language of form was needed to convey it again.⁴⁷ This would be accomplished through abstraction and conventionalization as mentioned above in reference to the Japanese print, but also applied to his own architecture.

What Wright seemed particularly opposed to, however, was Classical architecture. His evident disdain for Classical architecture certainly had other reasons than what can be attributed to Hegel's philosophical characteristics of the Classical phase of art and architecture. Some of these other factors being stereotypical overuse of Greek revival architecture in America along with the Beaux Arts school of thought which he rejected early on in his career. This disdain also did not arise from Hegel, who was particularly appreciative of Greek art and architecture. Still, the following quote from Wright in regard to Greek Classicism provides some reasons for his rejecting the Classical that have correspondence with Hegel's descriptive characterization of this mode:

When this unfolding [organic] architecture as distinguished from enfolding [Classical] architecture comes to America there will be truth of feature, to truth of being: individuality realized as a noble attribute of being. That is the character the architecture of democracy will take.... Clearly this new conception will realize architecture as no longer the sculptured block of some building material or as any enfolding imitation. Architecture must now unfold an inner content—express "life" from the 'within'.... An architecture no longer composed or arranged or pieced together as symbolic, but living as upstanding expression of reality. This organic architecture, too, would be so intimately a growth, all the while, as to make barbarous the continual destruction of the old by the new. American architecture, though both little and young, therefore conceives something deeper and at the same time more vital than the great Parthenon or even the beautiful Greek vase: an architecture no longer symbolic sculpture but a true culture that will grow greater buildings and grow more beautiful belongings true to the nature of the thing and more at one with the nature of man.⁴⁸

Wright's distinction above between the "enfolding" and "unfolding" aspects of architecture

⁴⁷ Anthony Alofsin, *Frank Lloyd Wright: The Lost Years, 1910-1922: A Study of Influence*, New paperback ed. (Austin: InnerformsLtd.com, 2009), 153.

⁴⁸ Bruce Brooks Pfeiffer. *The Essential Frank Lloyd Wright: Critical Writings on Architecture*. (Princeton, Princeton University Press, 2008), 187-88.

reflect the difference he felt between the old Classical form and the new organic form of architecture. Enfolding implies an enclosure from without encasing the inner. It imposes form from the outside which confines the inner impulse of freedom from being expressed. However, the unfolding architecture is an architecture where the external expression of form is the result of inner forces expanding outward according to their free play and nature. It is similar to the growth pattern of the seed which grows out from a small kernel containing the information content of its expression. This is how he felt buildings should be designed. Never was the architect to start with the external form and then fit the plan elements into it. Rather, they should start with the working out of the floor plan and let the external form derive from that. One consequence of this would be that it would give rise to asymmetrical forms rather than static, symmetrical forms which generally typify Greek architecture. He saw Greek architecture as too static and archaic to be able to provide for the kind of freedom of expression our modern age required.

Not only did Wright feel it wrong to import an ancient architecture for America, but he was also moving further away from Classical rules of composition in his own work. While he began in his pre-1900's work often using symmetry and static compositions, he later almost exclusively designed very asymmetric forms with very dynamic balancing of composition, in much the same way that the Gothic was dynamic in form compared to the static, self-sufficient forms of Greek classicism. For example, this progression can be seen in his work by comparing two of his well-known works, the Winslow house of 1893 and Fallingwater from 1936 (figures 2.1 & 2.2).



Figure 2.1 Frank Lloyd Wright, Fallingwater. 1937.



Figure 2.2. Frank Lloyd Wright, Winslow house. 1893.

The Winslow house was his breakthrough house which began his Prairie Style of architecture.

But this composition is entirely symmetrical and very classically composed; overall, a very static, balanced composition.⁴⁹ Later, his mature period masterpiece, Fallingwater, dissolves symmetry in plan and elevation and yet in its asymmetry, there is a dynamic balance of forms, much as is the case in Gothic architecture. The Winslow house, to use Wright's words above, was more about an 'enfolded' architecture where the external form takes priority and the inner plan conforms to its static form, whereas Fallingwater expresses his idea of an "unfolding" architecture that is an outgrowth of the life within. Through the ensuing transition between these two projects, Wright breaks beyond Hegel's Classical stage of art with its unity of form and idea, towards Hegel's Romantic stage of art where the expression of the Idea within dominates the external form. Hegel says that the true content of romantic art is absolute inwardness and its form is spiritual subjectivity in its independence and freedom.⁵⁰ But as such it seeks the negation of everything particular and external. This raises the question as to how the spirit in the Romantic stage does interact with the sensual since it would seem then to allude art altogether and make itself only accessible to thought. Hegel's reply is that absolute subjectivity proceeds into external existence and then withdraws itself out of this reality into itself again, but not without first shaping itself and leaving an aspect that can be represented by art.⁵¹ In Fallingwater, Wright would seem to come closer to Hegel's notion of rational agency superseding the hold of external facticity, winning an autonomous existence.⁵² It is in Fallingwater that the architect's subjectivity seems to attain a high level of autonomy with little in the way of external classical balance that directs the design.

This gives explanatory power to Wright's dynamically asymmetric forms, always seemingly in

⁴⁹ Note that while the front elevation of the house is very classically composed, the plan reveals an asymmetrical layout of spaces behind the front facade including more Romanesque protrusions at the rear of the house.

⁵⁰ Hegel, *Aesthetics* Vol I, 519.

⁵¹ *Ibid.*, 519-20.

⁵² *Ibid.*, 522

motion, seemingly pointing to the just beyond, just beyond spaces, niches, partial framing devices that are not meant to focus on the frame but rather on the frame creating the figure-ground relationship to create a larger whole, not negating the frame, but the frame and outer view being an integrated whole, a symbiotic gathering. The “just-beyond” quality is a reference to the infinite and the spirit. If Hegel’s Romantic theory of art connects the Romantic to the religious as Desmond alludes to, does Wright’s works contain within them a sense of the sacred or symbol of the religious as well? Was his an attempt to bring into architecture the experience of the sublime and the religious experience?

Wright’s architecture deals with the same issues Hegel raises with Romantic art and it also deals with the problems of modernism that Hegel foresaw. The Romantic stage of art is the stage most representative of the modern era with its self-understanding and where no sensuous appearance can fully capture the worth of rational agency.⁵³ Yet, as Richard Winfield points out, while there is a withdrawal into the inner dimension here, there is not a rejection of the engagement in the external; in fact, it is necessary to affirm and uphold the worth of their subjectivity in the same way that moral integrity may be an inner motivation that yet requires external action to realize right intentions.⁵⁴ The romantic disengagement of the inner subjectivity with the external allows for the modern break away from representational or mimetic forms of art, opening up the realm of the ironic, expressive, abstract, found art, etc. Because of this subjective inwardness, the romantic artist even more so now, must grapple with the boundaries of the content and form of art. According to Winfield, it is for this reason that Danto is not entirely off the mark by suggesting that modern (romantic) art converges with the philosophy of art.⁵⁵ While the romantic gives freedom not only to deny outward convention, it

⁵³ Richard Winfield, 1995, “Hegel, Romanticism, and Modernity,” *The Owl of Minerva* 27, 1 (Fall): 3–18, 6.

⁵⁴ *Ibid.*, 6.

⁵⁵ *Ibid.*, 16.

also allows for representation. Wright made clear distinctions between his theory and the European modernists. Wright was not willing to disengage into complete subjectivity as seen in modern art but held onto a connection to the natural world, but rather sought to express the Geist or “Idea” behind nature rather than a mimesis of nature itself.

Late in Wright's life, in 1957, he gave a talk on “The New Romantics.” In reference to the romantic idea in architecture, he says that it came to us from the eighteenth century but that it got confused in the nineteenth. He says:

We are trying to get it clear in the twentieth. And if we do get it clear in the twentieth, we will have an organic architecture, architecture being the last. We have had it in literature, we have had it in music, but we have not had it in architecture.⁵⁶

Although Wright's use of the word romantic is not necessarily the same as Hegel's use of it in defining his three stages of art, it is interesting how Wright pulls this notion of the Romantic as being necessary to the proper expression of organic architecture.

Hegel further subdivides his section on Romantic art into the five art forms. Of particular relevance, here is his discussion of the Romantic phase of architecture and its relationship to Wright. Although architecture is first symbolic, he also states that architecture can take the Classical or Romantic forms as well. Because architecture is the art that is purely external, what distinguishes it as Symbolic, Classical, or Romantic is whether its external form has its meaning within itself (Symbolic) or its form serves as a means to an end other than itself (Classical), or thirdly, whether in its subservience it also appears as independent (Romantic). Romantic architecture uses the external as means of

⁵⁶ Bruce Brooks Pfeiffer, *Frank Lloyd Wright: His Living Voice*, (Fresno, Press at California State University, Fresno, 1987), 92.

expression, but it withdraws into itself allowing the objective element to be shaped independently.⁵⁷

While Greek architecture is Hegel's exemplar of the Classical form of architecture, Gothic architecture is his representative for the Romantic stage. Hegel describes eight (at least) characteristics of Romantic architecture in his section of his treatise that bear consideration in relation to Wright's organic architecture. The following diagram below shows a parallel between Hegel's delineation of the Romantic stage of architecture on the left side with Wright's corresponding principles of organic architecture on the right.

Hegel: Wright

Enclosure as the defining characteristic: *Interior Space as Essence of Architecture per LaoTse*

Purpose formal transcendence: *Form and Function as One*

Organic wholeness and unity of the parts: *The Integrated Whole, Part-to-Whole Unity*

Continuity: *Plasticity*

Generated from Interior towards Exterior: *From Within Outwards*

Differentiated Interior Space: *Spatial Complexity and Mystery*

Impress of Idea upon Sensuous nature and retracting: *Concealing and Revealing, Prospect and Refuge*

Integral Ornament: *Integral Ornament*

Materiality less important than Idea: *Nature of Material*

Enclosure is a defining characteristic in the Romantic stage as compared to the Classical. The Romantic interior does not have a box-like form, and its real character transcends any specific end and, as perfect in themselves, stands there on its own account.⁵⁸ Hegel says that enclosure here serves to forget the external world of nature and the distracting in order to create a contemplative

⁵⁷ Hegel, *Aesthetics* Vol 2., 634.

⁵⁸ *Ibid.*, 684.

environment. Hegel is giving a certain autonomy to this space which doesn't need justification in functional necessity. There is clearly here the priority of the interior space within as the essence of the architecture, as opposed to the Greek temple which stood as object with space external to it. This corresponds with Wright's great discovery of Laozi where the essence of the building is not found in the walls or roof but in the space contained within. Wright states that the "sense of the room within, held as the great motif for enclosure, is the advanced thought of the era in architecture, and is now searching for exterior expression."⁵⁹ Wright claimed to have come in contact with Laozi's idea of the inner space as reality of the building when he read Okakura Kakuzo's *Book of Tea*. This book, written to an English audience, was published in 1906. Wright's description of the relationship of interior space to exterior form seems to be more a hybrid between Hegel's description of Gothic architecture's primacy of interiority as generator of exterior form and Laozi's idea of empty interior space since Wright does not seem to fully grasp (or accept) the Eastern idea of emptiness as will be discussed in more detail in chapter two. My view is that Wright first was familiar with Hegel's concept here and then, when exposed to *The Book of Tea*, saw it as confirmation rather than an entirely novel idea to him.

Wright's public buildings such as the Larkin building, Unity Temple, Johnson Administration, or Guggenheim had strong atrium-like spaces that likewise actually shut out the external world, contrary to Wright's expressed goal of blurring the separation of inside and outside, something he did do in most of his residential projects. This brings up an important question. Is there an inherent contradiction in Wright's goal of an interiority which corresponds to Hegel's romantic architecture and his declared desire for dissolving the box between inside and outside? Was there something more

⁵⁹ Frank Lloyd Wright, Andrew Devane, and Frederick Gutheim, *In the Cause of Architecture, Frank Lloyd Wright: Essays*, (New York: Architectural Record, 1975), 168.

central to his intention in these public buildings than the free flow of space from within to without?

Perhaps he knew that to open up and release these centralized spaces in these public buildings would have diminished the almost sacred quality of communal space contained within and its consequent contemplative character. Even in his residential buildings where the greatest openness to the outside is evident, it is instructive to see in them yet a great interiority and sacred interiorizing around the inner core of the home which was for him the hearth, which often included an inglenook.

Regarding purpose in architecture, Hegel states that in the Romantic stage:

...purpose disappears again and the whole is given the look of an independent existent. . . It has and displays a definite purpose; but in its grandeur and sublime peace it is lifted above anything purely utilitarian into an infinity in itself⁶⁰.

Here there is a glimmer of Kant's "purposiveness without specific purpose." Hegel is also stating here that Romantic architecture achieves something more than functional utility as it becomes an end in itself, which is not to deny that it still has purpose. Wright's idea that form and function are one and are inseparable, but must express beauty as its purpose is a close parallel to this concept. Whereas European Modernism emphasized the dualism of form following function, loosely after Louis Sullivan, Wright instead sought the unity of form and function which was more congruent with Hegel's notion. Not only is it more Hegelian, it is also philosophically more tenable. The idea that form follows function not only has a problem of causation (how does a function determine form?), but also of defining the boundaries of function.

Organic wholeness for Wright was the idea that the part becomes perfectly realized in the whole. He also referred to this as the part-to-whole unity, or the integrated whole. Consequently,

⁶⁰ Hegel, 685.

each part derives its meaning through its relationship to the whole, and the meaning of the whole is locked up in the constituent pattern of the parts from which it is composed. Similarly, Hegel states that:

...everything is lost in the greatness of the whole. This elevation above the finite, and this simple solidity, is its one characteristic aspect. In its other it is precisely where particularization, diversity, and variety gain the fullest scope, but without letting the whole fall apart into mere trifles and accidental details. On the contrary, here the majesty of art brings back into simple unity everything thus divided up and partitioned. The substance of the whole is dismembered and shattered into the endless divisions of a world of individual variegations, but this incalculable multiplicity is divided in a simple way, articulated regularly, dispersed symmetrically, both moved and firmly set in the most satisfying eurhythmy, and this length and breadth of varied details is gripped together unhindered into the most secure unity and clearest independence.⁶¹

Hegel's description above contains the idea of Wright's organic wholeness, or part-to-whole unity. This is not a simple, undifferentiated unity but is composed of diverse individual parts. The part is not totally subsumed into the whole where it loses its particular identity. Rather the part is in a relational organization with other parts which form a greater unity by the nature of their organization such that the whole is greater than the sum of its parts. An important aspect of the identity of the individual part, however transcends itself and is found in this greater whole. Formally, this means in many cases that the part is inflected to the whole instead of being a static, self-contained whole. For example, consider how a Gothic flying buttress is given to the whole and when detached from the larger whole is not capable of standing on its own. Its asymmetry inflects toward the greater whole in a way in which a symmetrical Renaissance arch does not do.

Another aspect contained in Hegel's quote above gives explanatory power to Wright's architectural works. Hegel's self-transcendence of art but within its own sphere indicates a transition

⁶¹ Ibid.

beyond the formal capacity to express spirit in the Romantic stage⁶². At best, the form, while bearing the signature of spirit also points beyond its materiality as it is inadequate to fully convey spirit's inward nature. Just as Hegel uses the example of Gothic spires leading the eye up to the infinite, so Wright's architecture embodies this idea of pointing beyond itself, beyond its material presence. Although Wright abhorred spires in church architecture (although, ironically not in other forms of buildings such as the Midway Gardens or Arizona Capital project), he accomplished the same result in the horizontal plane of extension as well as in his spatial conception which created overlapping layers of space that disappear around corners just outside of the line of sight leading the eye (and body) to the just-beyond. Wright's mature architecture reveals dynamically asymmetric forms, always seemingly in motion, seemingly pointing just beyond the at hand through spaces, niches, and partial framing devices that are not meant to focus on the frame but rather where the frame creates figure-ground relationships creating larger wholes. The frame as individual part is not negated, but the frame with outer view becomes an integrated whole, a symbiotic gathering. Wright's spatial construction is about the integrated whole, but in a way in which the whole cannot be seen all at once. Wright keeps areas of hiddenness which serve as this pointing beyond quality, which like the horizon can be sensed but never arrived at. This quality references back to Hegel's infinite spirit.

Hegel's continuity in the Romantic stage of architecture becomes Wright's plasticity. Hegel says that Classical architecture makes a clear and rectangular break between the beam and its support whereas in the Gothic this juncture is blurred as the column transitions into the arch in a continuous manner and is a defining characteristic of Gothic architecture.⁶³ Likewise, Wright made a great deal of his discovery of continuity in architecture with a similar basis. He describes how the post and lintel has

⁶² G. W. F. Hegel. *Hegel's Aesthetics: Lectures on Fine Art*, Vol. I (Kindle Locations 1320-1321). Kindle Edition.

⁶³ Hegel, *Aesthetics*, Vol 2., 686-7.

now been superseded by the idea of continuity due primarily to the new medium of steel which allows for the cantilever. His example is the tree branch that organically grows off of the trunk, much like the Gothic arch does its support, even though the external appearance of the two is distinct. This continuity is not only a structural concept but is also spatial and formal. Wright stated that structural plasticity allowed for the breaking of the box and the opening up of architecture into new spatial possibilities. An important new spatial quality to Wright was the very idea that there could now be a continuous spatial flow between zones in a building which connect while yet allowing for their own spatial identity.

Hegel describes Gothic architecture where:

the external shape, the decoration and arrangement of walls, etc., are determined from within outwards, since the exterior is to appear as only an enclosing of the interior... The interior is the already visible background in which the exterior is immersed...⁶⁴

Again, Hegel makes a distinction between the Greek temple and the Christian church where the Greek temple's form is driven by its exterior appearance and perfect form, while the form of the church is not generated externally but first internally with the exterior taking its form from the interior space. This is exactly Wright's idea, that organic architecture must proceed from within to without where the exterior form is the result of the inner outworking of the floor plan generated and extruded into the third dimension. Whereas Wright doesn't state any potential tensions in this idea, Hegel does point out that while this principle is true of the cathedral, there is an aspect where the exterior "acquires a form quite independent of the interior" when he refers to the vertical orientation of the exterior becoming the primary direction while the interior has a longer more horizontal extension. This point of course, does also apply to Wright's own architecture, and one could give examples of

⁶⁴ Ibid., 693.

such. For example, Unity Temple, although primarily about its central space, also presents an autonomous exterior expression of highly disciplined and proportioned piers, cornices, windows, and rooflines. Many earlier homes such as the Hardy house likewise present more formal external forms, and it is hard to tell whether Wright first conceived the exterior appearance or the interior plan.

Differentiated interior space exists as enclosure for the spirit in Hegel's Romantic stage of architecture. Here Hegel states that Romantic architecture constructs a building which exists as an enclosure for the spirit whose purpose is to "make spiritual convictions shine through the shape and arrangement of the building and so determine the form both of its interior and exterior." The implications of this, he says are several. First, the space of the interior "must not be an abstractly uniform and empty one that has no differences. Rather this space must be differentiated in length, breadth, height..."⁶⁵ The reason for this according to Hegel is that the "movement of the spirit with the distinctions it makes and its conciliation of them in the course of its elevation from the terrestrial to the infinite, to the loftier beyond, would not be expressed architecturally in this empty uniformity of a quadrilateral."⁶⁶ This has strong parallels with Wright's construction of space. As stated above regarding Wright's endowing the secular realm with the sacred, there are similar purposes served by the church and Wright's goals for organic architecture. Hegel says that the "elevation of the soul above the restrictions of existence" is a purpose of the Gothic space. Hegel perhaps does not give adequate reasons or a complete explanation of why the movement of the spirit requires differentiated space rather than uniform space, but clearly there is an aspect of a transcendent pointing beyond that is suggested through material means. At this point, however, Wright's complex architecture of subordinated partial framing devices and asymmetrical organization works to similar ends.

⁶⁵ Ibid., 687-8.

⁶⁶ Ibid., 687-8.

Prospect and refuge is the duality usually associated with Wright's space-making, but there is another associated duality that may shed additional light on this subject, the duality of concealing and revealing. Hegel does not use these terms, but they are implicit within his idea of the Romantic form of architecture. Hegel stated in his introduction to Romantic art that unlike in the Classical mode of art, one of the distinctives of the Romantic is the notion of subjectivity that not only proceeds into external embodiment but also withdraws itself out of this reality into itself again. It is an expression of the Absolute where the new task of art brings before contemplation not the inner into external embodiment but the withdrawal of the inner into itself, the spiritual consciousness of God in the individual. The individual person in his inner life thus acquires infinite worth as the eternal moments of absolute truth unfold into existence and collect again.⁶⁷ Wright claimed Laozi as a confirmation for his interiority of space. However, he did not say he derived it from Laozi since he had already been practicing it before discovering him. Perhaps Hegel is another, and perhaps more central reason, for the sacredness of Wright's inner spatial qualities. Wright believed, as did the nineteenth century transcendentalists he admired, in the spark of divinity contained within individuals and hence the value of individual creativity. Hegel explains something here which goes beyond the psychological value of prospect and refuge as explanatory power of Wright's architecture. Wright's spaces are neither about dissolving the distinction between inside and outside, even though he makes an important point about this, nor about pure containment of inner space disconnected from the exterior. The distinctiveness of his space and architecture is the tension he creates between these two poles. From the exterior, there is always something revealed of the inner realm and yet still concealed so as maintaining the identity of enclosure. This tension or alternating between concealing and revealing symbolizes, qua

⁶⁷ Hegel, *Aesthetics* Vol I., 520.

Hegel, the external embodiment and then withdrawal of spirit to inner self. Revealing is the external embodiment expressed by spirit while the concealing represents the withdrawal to the inner self, or hiddenness of the same from external view. Hegel says of this revealing that “the interior glints also through the shape of the exterior and determines its form and arrangement.”⁶⁸ Again, both Hegel and Wright are supporting the primacy of the interior over the exterior and attributing causation of exterior form to the interior identity.

The nature of materials is a key principle in Wright’s idea of organic architecture. He believed that every material had an essential character and needed to be used appropriately and honestly in keeping with that character. So, wood was to be used as wood, not painted over, but the grain and richness revealed for what wood really is. Stone, concrete, steel, brick, etc. also were to be used appropriately to their essential character. Wright said:

Bring out the nature of the materials, let their nature intimately into your scheme. . . .
Reveal the nature of the wood, plaster, brick or stone in your designs: they are all by nature friendly and beautiful⁶⁹.

Hegel makes reference to the materiality of Romantic architecture in the following section:

Now in architecture it is the visible, material, and spatial mass on which the inmost heart itself is so far as possible to be brought before contemplation. Given such a material, nothing is left to the artistic representation but to refuse validity to the material and the massive in its purely material character and to interrupt it everywhere, break it up, and deprive it of its appearance of immediate coherence and independence.⁷⁰

The thought is that the work of architecture has to struggle with matter as against an obstacle that is always only partially conquered.”⁷¹ So there is this sense of materiality in Hegel as a prison that

⁶⁸ Hegel, *Aesthetics* Vol 2., 687.

⁶⁹ Wright, Frank Lloyd, Bruce Brooks Pfeiffer, Gerald Nordland, Dallas Museum of Art., and Scottsdale Arts Center Association, *Frank Lloyd Wright in the Realm of Ideas*. (Carbondale: Southern Illinois University Press, 1988). 48.

⁷⁰ *Ibid.*, 696.

⁷¹ Desmond, “Gothic Hegel,” 239.

the spirit is trying to break free from whereas for Wright, the materiality is something to be celebrated and in unity with the larger formal idea. With the Gothic cathedral Hegel says that there is carving everywhere of the stone which spoke of a certain breaking past the bonds of the heavy massiveness inherent in stone into the “character of lightness and grace.”⁷² This carving served to negate the massive quality of stone into something that had the appearance of lightness and delicacy and in so doing was transcending the physical character of stone in order to convey this higher Idea in the romantic sense. This was antithetical to Wright who felt that stone’s essence was to be heavy and to be used as representative of that weight whereas lighter materials such as wood and steel should be used where lightness and grace were desired.

It should also be noted that this attitude toward honesty of material use was a hallmark of European Modernism as well. Yet, in many ways the International Style was closer to a Greek Classical ideology than the Gothic, as Henry-Russell Hitchcock has pointed out.⁷³ While Hitchcock agrees that Wright and pre-twentieth century architects had been led by Gothic aspirations, the new breed of modernists was turning to a rational “Greek serenity” instead. In Hegel’s system, material in the Classical stage was in balance with the Idea, Idea was not pushing the boundaries of the material as in the Romantic stage.

On this point of material use there seems to be a clear difference between Hegel and Wright. But on a deeper level, the contrast becomes blurred. The more significant issue may be whether the Modernist notion of materials having an “essential” nature is true (so that the architect can be honest toward its use), or whether, on Hegel, the essential nature of the material is found not within itself but

⁷² Hegel, *Aesthetics* Vol 2., 696.

⁷³ Hitchcock, Henry Russell and Phillip Johnson. *The International Style: Architecture since 1922* (New York: W.W. Norton, 1932), 24.

in its relationship to the whole, or in other words, in reference to the Idea and its telos.

The essence of something is its purpose or use. It cannot then be determined a priori, as is done in architecture. If the latter is true, one of the major tenets of modernist architecture, its insistence upon the “honest” expression of materials, erodes. It seems here that Wright was Romantic when working with spatial and formal manipulation but Classical when working with materials. This is further complicated in architecture because there remains in materials used for construction certain characteristics inherent in each material. Stone and concrete are strong in compression but weak in tension while wood and steel are strong in tension while being relatively thin and lightweight. There are certain ranges of values where various materials may best be used and only stretched beyond that range with negative consequences; however, there is also overlap of these values where more than one material can serve a given architectural purpose. Even so, taken to the extreme, it seems that a full honesty of materials in construction is not possible to achieve. The use of materials is also not limited to their structural function. Modern architecture relies on effects and surface treatments, whether it be Mies van der Rohe’s applied decorative steel beams to his Lake Shore Drive Apartment towers in Chicago, non-loadbearing marble slabs as interior space partitions at the Barcelona Pavilion, or more generically as millwork where only a fraction of an inch of thickness (backed up with particle board filler) constitutes the ‘authentic’ wood expression. The question then becomes, does authenticity reside in physical, material essence or in the sensuous expression of the Idea? Hegel seems to give a more realistic answer to this question than either Wright or the European Modernists if one interprets Hegel at a moderate level and one doesn’t view Hegel as negating the natural properties of the material entirely. For example, even in Gothic architecture, the stone is carved but it is not painted over. The surface quality is retained (unlike the originally painted Greek temples), and stone piers actually are authentically bearing real weight, even if taken to the limit of the material’s

ability. Given the centrality of the use of materials in architecture, the answer to this question has far reaching effects on architecture.

Hegel's theory of architecture on the one hand reveals a kinship of the Romantic mode of architecture with Wright's architecture; Wright may even be the best modern example of its embodiment since the Gothic era. On the other hand, Hegel's theory provides an interesting lens with which to view early Modern and even contemporary architecture. It causes us to ask the question as to what a Modern expression of Romantic architecture might look like in our age, if indeed neither Wright's architecture nor the International Style of architecture fully expressed it. Does Zaha Hadid's architecture of extreme plasticity without a strong material essence come closer to Hegel's romantic stage? Or will architecture always be 'weighed down' by its own materiality, requiring one to judge architecture as that which expresses the natural properties of materials?

CHAPTER 3

FORMALISM

In view of Wright's dialectical synthesis, his fascination with Japan becomes a mysterious (or romantic) 'other,' which he subsumed into his own developing conception of architecture. Wright's synthetic nature of the new and novel would not conflict with his architecture but enrich it and give it new life in contrast to the older western traditions which he felt had become devoid of a life-giving principle by the nineteenth century. Japan to Wright was not something to be imitated, but something to bring under his expanding concept of organic architecture. Yet, simply correlating a historical Japanese influence on Wright's thought and work is not the full purpose of this chapter on formalism. My purpose is to further build on the case that Wright's organic theory is at its root based on an aesthetic foundation. How Wright saw Japanese art, wrote about it, and incorporated various aspects of it into his own drawings and built work, reveals important information to this aesthetic basis.

This chapter begins with a discussion of Ernest Fenollosa because he serves as a bridge between Hegel's philosophy and Japanese art and architecture. From here, the development is along more formalist lines as both Japanese art and Wright's work are examined. This includes some basic historical information giving Wright's connections to the people and art forms of Japan and then continues with discussion of the spatial character of the Japanese print and its importance in Wright's work. I chose to use Gestalt perceptual theory as a helpful tool in which to analyze this spatial relationship, applying it to both Japanese print examples from Katsushika Hokusai and Utagawa Hiroshige as well as to Wright.

ERNEST FENOLLOSA

While there does not appear to be any direct mention of Hegel by Wright himself, what is known with more certainty is the connection Wright had with Ernest Fenollosa. Ernest Fenollosa (1853-1908) was an American art historian trained in philosophy at Harvard (1874). Originally hired to teach philosophy and political science at the Imperial University of Tokyo in 1878 (with the help of his friend Edward Morse), he soon became a spokesman for the appreciation and saving of traditional Japanese art during the Meiji period of modernization in Japan⁷⁴. Western viewers of Japanese art in the 1870s saw the lack of representational realism in traditional Japanese painting as something which made it more backward than its Western counterparts. Fenollosa, however, saw value in traditional Japanese art and its non-realistic approach. While Fenollosa was primarily trained in philosophy, he quickly gained interest in Japanese art and culture while in Japan, so much so that he was considered an international expert on Japanese art by 1884. It was at this time that Fenollosa's review of Louis Gonse's *L'Art Japonais* was published, revealing his own direct knowledge of Japanese prints as more extensive than Gonse's whose exposure to the prints was limited to those which made their way to Europe⁷⁵. He, along with his former student and associate Okakura Kūkuzō (1863-1913), helped to found the Tokyo School of Fine Arts and the Tokyo Imperial Museum (1888). He personally collected many outstanding works of art while in Japan which subsequently helped to establish the Boston Museum of Fine Art's Asian collection. In 1890, he returned to Boston to be the curator of their Oriental Art collection. Around this time, he also selected the Japanese art which was displayed at the

⁷⁴ As a good general reference on Fenollosa, see Lawrence Chisolm's book: *Fenollosa: The Far East and American Culture*. New Haven: Yale University Press. (1963).

⁷⁵ Nute, *FLW and Japan*, 20.

1893 World Columbian Exposition in Chicago with which Wright was familiar. He was dismissed from the Museum in 1896 due to a public divorce and remarriage, and then he returned to Japan as a professor of English literature at the Tokyo Higher Normal School where he stayed until returning to the States in 1900 where he lectured and wrote extensively. Fenollosa was a cousin of Joseph Lyman Silsbee, Wright's first employer in Chicago who was known to have collected Japanese art.⁷⁶

Fenollosa was first attracted to Herbert Spencer's ideas of faith in progress, perfectibility, and science. But he later drew more from Hegel's idealism whose idea of mind was ultimate and whose metaphysics didn't reduce to a mechanical materialism. Fenollosa would have been familiar with the *Journal of Speculative Philosophy*, which was launched in 1867 by William T. Harris with the goal of creating a new American philosophy which mediated the intuitionism of Emerson with the systematic approach of Herbert Spencer. The Journal marked the beginning of a systematic approach to aesthetics by American philosophers. One of the first articles to appear in the *Journal* was Bernard's "Analytical and Critical Essay on Hegel's Aesthetics."⁷⁷ Fenollosa also admired Emerson, and while he found in Hegel's analysis of romantic art a subjectivity sympathetic to Emerson's views, it was framed in a highly systematic aesthetic system. Hegel also provided more room for the place of the individual artist and for creative novelty than did Spencer's more reductionist, mechanistic theories.⁷⁸ It is in this idealistic tradition which Fenollosa's ideas are formed. Fenollosa taught that the nature of art required pressing through external appearances into the character of a work which lies within the object. This essence or character of the object in turn lies in the nature of the connections or unity within the work itself⁷⁹.

⁷⁶ Nute, 22.

⁷⁷ Lawrence Chisolm, *Fenollosa: The Far East and American Culture*. (New Haven: Yale University Press, 1963), 26.

⁷⁸ Chisolm, 25.

⁷⁹ Thomas Rimer, "Hegel in Tokyo: Ernest Fenollosa and His 1882 Lecture on the Truth of Art," in Marra, Michael ed. *Japanese Hermeneutics: Current Debates on Aesthetics and Interpretation* (Honolulu: University of Hawaii Press, 2002),

Fenollosa's essay, "The Nature of Fine Art," which appeared in *The Lotus* in 1896, provides several key points to his theory of art which coincides with Hegel's philosophy of romantic art, and is further seen reflected in Wright's own thought. Fenollosa states that the nature of fine art is not constituted by realistic representation, and that line, mass, dark and light, and color have a harmonic charm independent of any referent in the physical world, a "beauty and infinity of pure visual idea, as absolute and independent as the sound-idea in music."⁸⁰ He says that these "line-ideas" are the basic elements of all great art, independent of any symbolic content they may or may not carry. The artistic creation is primarily the creation of a pure idea in terms of line, dark and light, and color, and its having a representational function doesn't change this aspect.

In 1892, while writing on the subject of Chinese Sung painting, Fenollosa wrote that it had the perfect marriage on equal terms between the beauty in the subject and the beauty in the pictorial form, something he referred to as Synthesis, since every part and relation had been absorbed into the new organic product without remainder⁸¹. Fenollosa is here applying Hegel's philosophy of art to Chinese art, yet in a slightly modified way by here applying Hegel's three stages of art (Symbolic, Classical, and Romantic). In Hegel's system, a perfect balance between the subject and its sensuous form occurs in the Classical phase of art, so it seems that Fenollosa is making a statement here that Asian art (at least Sung painting), achieves this apogee of art, and is not limited to the Greek art in Hegel's system. Fenollosa gives to Asian art a high position that neither Hegel, nor the West in general, had done before, indeed that it offered something which could transcend Western modernism.⁸² Fenollosa also implies a dialectical interpretation to the resolution of Sung art by calling

⁸⁰ Nute, 200.

⁸¹ Clay Lancaster, "Synthesis: The Artistic Theory of Fenollosa and Dow." *Art Journal*, Vol 28, No. 3 (Spring 1969), 286-287.

⁸² Karatani Kojin, "Japan as Museum: Okakura Tension and Ernest Fenollosa," in Alexandra Munroe, ed., *Japanese Art after 1945: Scream against the Sky* (New York: Harry N. Abrams, 1994), 33.

it the Synthesis of the two into an organic product.

Fenollosa also makes reference to the unity of the whole, and a relational system following Hegel. He states that things are not related to each other in series only but in “mutuality of interrelation” such that a new whole or entity is produced out of this synthesis, and that a transfiguration into an organic wholeness is thus produced. Gestalt theory, developed later, similarly posits the self-organizing tendencies to construct whole forms instead of a collection of parts. Fenollosa seems to foreshadow the Gestalt ideas of Rudolf Arnheim when he states that parts are not perceived as parts without definite boundaries, boundaries which are shapes created by the quality of lines⁸³. The line boundaries of the Japanese print will also be seen as a key to a form of spatial construction which is not reliant on Western linear perspective. This will be developed further in the section on Arnheim and Gestalt theory. Per Fenollosa, a new significance and beauty comes about when these line-figures combine in such a way that the individual autonomy is blurred for sake of the emergent whole. He refers to this as “line synthesis.” This emergent property of the organic whole where a new entity is created which is greater than the sum of its parts is perhaps closest to the heart of Wright's organic theory of architecture, which he himself states is not something derived from raw biology or imitation of nature. It also argues for an aesthetic basis to Wright's idea of the organic, something which is a material independent, content independent criterion upon which a design can be judged. This should not be mistaken to construe that materiality or function are unimportant in Wright's system, as material nature and various functional criteria do have causal influence in the final design. It is, rather, a top-down approach to design where the designer is giving consideration to each part's qualities and characteristics so that the end result is a unity of both external effect and internal integrity.

⁸³ Nute, 204.

Wright states that the inorganic is “the unorganized” and thus “cannot live.”⁸⁴ And as Wright states in a 1950 speech, “... but we use the word organic to mean imbued with that quality which can live, in which the part is to the whole as the whole is to the part, the entity - that is what we mean.”⁸⁵ When Wright talks of an architecture that “lives,” he does not mean in a biological sense but rather in a formal and relational sense where the composition of parts is such that an emergent “entity” is created where it did not exist in the component parts themselves. Whereas Fenollosa seemed to be referring primarily to two-dimensional art (and occasionally sculpture) to illustrate his theory, Wright is translating this theory into the third dimension of architecture, which brings into being something things not addressed either in painting nor sculpture — namely interior space and functional necessity. If one reframes Fenollosa’s language about separating line-synthesis from representation in artwork as the separation of form and content, Wright was more nuanced about this divide in his architecture. Perhaps partly due to the nature of architecture being a functional art, Wright never admits to his organic architecture being less functional by being aesthetically holistic or beautiful. He saw the modernist notion of form following function (content) as being false, but neither would he say that function was to submit to form, for example, as Louis Kahn would more strongly suggest. Wright’s conclusion was that form and function were one, an ideal position in between two untenable extremes. Wright did make clear, however, that architecture created merely by “functional” forces, lacking in poetic imagination, was to proceed in the wrong direction.

While Fenollosa shared with Hegel a dialectical view of world history, Hegel saw Asian civilizations as less advanced than the Teutonic culture, which had further progressed toward the fulfillment of the

⁸⁴ Frank Lloyd Wright, *The Future of Architecture*, (New York: Horizon Press, 1953), p91.

⁸⁵ Frank Lloyd Wright, July 14, 1950; excerpted from speech reprinted in *Truth Against the World*, Patrick J. Meehan, Ed. (John Wiley & Sons, Inc., 1987).

Absolute Spirit. Hegel had not imagined the significance of Asian culture in his view of world historical progress. Fenollosa, on the other hand, clearly took a different stance with Japan (and Asia) and its place in this unfolding dialectic. Fenollosa saw in the rich culture of Japan and China greatness on par with the achievements of Greece and Rome. Fenollosa's alternative dialectical model included Asian culture in such a way as to enrich a world-historical view where East and West joined into a new and broader synthesis, reaching higher levels than either West or East alone could achieve. So rather than the East being sublimated in Hegel's system to an ultimate Western culmination, East and West are seen as complimentary opposites in tension which when brought together would create a new synthesis beyond either East or West. In the preface to his 1893 book, *East and West*, Fenollosa gushes with the possibilities:

The synthesis of two continental civilizations, matured apart through fifteen hundred years, will mark this close of our century as a unique dramatic epoch in human affairs. At the end of a great cycle the two halves of the world come together for the final creation of man.... Eastern culture, slowly elaborated, has held to ideas whose refinement seems markedly feminine. For it social institutions are the positive harmonies of a life of brotherhood. Western culture, on the contrary, has held to ideals whose strength seems markedly masculine. For it law is the compromise of Liberty with her own excesses, while conquest, science, and industry are but parallel channels of the overflow of hungry personality.... This stupendous double antithesis seems to me the most significant fact in all history. The future union of the types may thus be symbolized as a twofold marriage⁸⁶.

A practical result of this line of thought was brought about through Fenollosa's lecture given to the influential group *Ryuuchikai* (Dragon Pond Society) in Tokyo in May 1882. This lecture, entitled *Bijutsu Shinsetsu* (An Explanation of the Truth of Art), became an important point in time for a consciousness of the idea of fine art and aesthetics in Meiji Japan. It is also where the term *nihonga* (Japanese painting) was introduced, and where he suggested a form of Japanese art which encouraged original expression

⁸⁶ Ernest Fenollosa, *East and West*, (New York: TY Crowell and Company, 1893), v.

while built on past insights⁸⁷. In this talk, he states that fine art is not a matter merely of skillful craftsmanship, nor something which gives pleasure upon viewing it, nor a matter of the imitation of nature. Instead, the true nature of art is to be found within the object itself, beyond external appearance. It, like the human body, connects everything together and gives beauty to the whole, and so is capable of manifesting the Idea. Unity in a work of art gives a sense of beauty and is one element of the Idea.⁸⁸

Wright would reiterate Fenollosa's views in his own book on the Japanese print where he stated the priority of the aesthetic viewpoint which reflects Fenollosa's line-ideas and the ontological value of formal categories independent of their functional or symbolic meaning. Wright thought of beauty as having an "absolute and essential" quality rather than having a literal or representational meaning⁸⁹. Wright also discusses the idea of organic form as an organization in "a very definite manner of parts or elements into a larger unity—a vital whole."⁹⁰ Wright, unlike Fenollosa or Hegel, uses the words structure and geometry as the pure form grouped to build the Idea. But since he defines his use of the word structure not in its more common meaning but as the integrated whole, it remains within the boundaries of Hegel's and Fenollosa's theory, even if lacking in its own internal coherence as a definition. Wright also takes the term geometry to be the grammar of form, which also conveys symbolic value. For example, he says the circle symbolizes infinity, the triangle structural unity, and the square integrity.

While both the *nihonga* and *yoga* styles exist to this day, the line of demarcation between them is not always clear, and contemporary scholarship has raised the question as to whether *nihonga* has

⁸⁷ Chisolm, 56.

⁸⁸ Rimer, 99.

⁸⁹ Wright, *The Japanese Print: An Interpretation*, (New York: Horizon Press, 1967), 14.

⁹⁰ *Ibid.*, 15.

positioned itself outside of both originality and the criticality of discursive streams of contemporary art, in a protected isolation away from the dangers of the wider art world⁹¹. Thus, called into question is whether *nihonga* is able to be a living art form open to change or bounded in the past, frozen in a time and place out of sync with present culture. This can be seen as an outcome of Fenollosa's trying to simultaneously honor a traditional art form while also opening it up at the same time to creativity within a certain boundary required to maintain its own definition.

Fenollosa's stance as a Westerner trying to save and establish traditional Japanese art in the face of modernization in the 1880s seems to be recurrent in the work of Wright in the first decades of the twentieth century. Wright parallels Fenollosa's positions on the dialectical union of East and West and in elevating the value of Japanese art in the West. Perhaps even more important is their common stance which held that traditional Japanese art needed not only to be saved but its essence understood and used as a basis for further creative development. This middle position was not a complete rupture with the past, nor did it position itself as fixed in time and unchangeable. It was closer in analogy to the idea of a growing organism which grows from a common root over time, an analogy which Wright used often.

The term *bijutsu*, meaning art, was not coined until 1873. While Fenollosa saw traditional treasures of temple sculptures and paintings as something needing to be saved and put into museums as works of fine art, the Japanese at that time saw these works differently. Most often, these were related to objects of religious veneration or had value as decorative arts, as Christine Guth has indicated⁹². Fenollosa, while valuing Japanese and Chinese arts as superior to Western artistic realism

⁹¹ Lecture by Chelsea Foxwell (Assoc. Prof. University of Chicago Art History) at the University of Michigan Center for Japanese Studies, November 14, 2013. Also see Chelsea Foxwell, Chapter 6 "Transmission and the Historicity of Nihonga," in *Making Modern Japanese-Style Painting*, (Chicago: University of Chicago Press. 2015).

⁹² Christine Guth, "Kokuho: From Dynastic to Artistic Treasure." in *Cahiers d'Extrême-Asie*, vol. 9, 1996. Mémorial Anna Seidel. Religions traditionnelles d'Asie orientale. Tome II, 314.

yet provided a historical classification system. He introduced the idea of seeing Japanese art as “art,” and by this he was also introducing the Western notion of fine art where objects would be taken out of their use-context and displayed in museums for aesthetic contemplation. In setting up both the Tokyo School of Fine Arts and the Imperial Museum, this traditional cultural repository was in fact, the most modernistic school of westernization, founded by Westerners who were, ironically, trying to overcome Western modernity⁹³. This Western lens through which the art of Japan was viewed was shared by Wright as well. Wright saw in Japan great aesthetic achievement, mainly in its Edo (1603-1868) and pre-Edo periods. And Wright, as a non-Japanese-speaking American, could appreciate aesthetic qualities of their art and culture without knowing all the underlying cultural or language content of these works in themselves.

SPATIAL CHARACTER OF THE JAPANESE PRINT

Fenollosa, is a bridge between Hegel and Wright as discussed above. Fenollosa also took a formalistic approach to understanding Japanese art which was shared by Wright. This section examines the spatial character of ukiyo-e which will have implications in subsequent sections which connect this with Wright’s own sense of spatial construction and its application to organic architecture.

The tradition of Western art had from the Renaissance been steeped in linear perspective, sculpting of form with shadow, and the idea that the picture frame was a window into an illusion of realistic representation. Against this backdrop, the Japanese print had several distinctive features. First, there was no elaborate framing, the simple flatness of the print and its materiality were eminent.

⁹³ Michael Marra, *A History of Modern Japanese Aesthetics*, (Honolulu: University of Hawaii Press, 2001), 44.

There was no illusion created from looking through a physical frame. Furthering this sense of flatness, there was generally no construction of linear perspective as a spatial illusion of depth, except when this was incorporated at times through exposure to Western influence, particularly in the later landscape prints. Instead of linear perspective, flat, layered two dimensional planes overlapped one another giving the sense of depth but without locking in the viewer's eye to a single static position. These qualities of the Japanese print changed over time and particular intent of the artist. In the pre-Meiji period (1868-1912), however, even when Western perspective techniques were incorporated into the print, there seems to be a hesitancy to lock the image into a comprehensive linear perspective construction, but rather it was more often a collage of perspective effects along with the non-linear planar system. One earlier example of this is shown in figure 3.1 where Okumura Masanobu depicts the architectural framework in a perspective format, while allowing the space beyond to revert to a flat, planar depiction.



Figure 3.1 . Okumura Masanobu, Enjoying the Evening Cool at Ryōgoku Bridge, 1745. Museum of Fine Arts.

The spatial constitution and general composition of ukiyo-e has its roots in Chinese painting hundreds of years earlier. In her essay on the eleventh-century Japanese scroll, the *Tale of Genji*, Masako Watanabe has described how rooms were typically composed parallel to the horizontal borders of the image with one side of the room (or building) on a diagonal, creating a recession into depth, a technique used in the Southern Tang tradition of the Five Dynasties in China⁹⁴. As an example of this technique note the painting by Zhou Wenju, “Playing Go under Double Screens” (Figure 3.2).



Figure 3.2. Zhou Wenju, Playing Go under Double Screens. 10th c. China Online Museum.

Later, the device known as *fukinuki yatai* (the removal of roofs and certain walls) was used to better reveal multiple scenes in a story with a viewpoint roughly looking down into the scene⁹⁵.

⁹⁴ Masako Watanabe, “Narrative Framing in the ‘Tale of Genji Scroll’: Interior Space in the Compartmentalized Emaki.” *Artibus Asiae*, Vol. 58, No. 1/2 (1998), 117, 138.

⁹⁵ *Ibid.*, 117.

Japanese landscape painting before the Edo-period shares many features from the Chinese landscape painting from which it borrowed. Sesshū Tōyō's (1420–1506) *View of Ama no Hashidate* (1501–1506) is an example from this period (figure 3.3). An aerial or isometric view of the scene provides the viewpoint, but the mountains are treated as layered planes to derive their depth cues, similar to Chinese landscape painting. Unlike many Chinese landscapes, however, this painting is of a specific place (a bay on the Japan Sea coast to the Northeast of Kyoto) rather than an idealized scene common in earlier Chinese landscape paintings.



Figure 3.3. Sesshū Tōyō, *View of Ama no Hashidate*, c. 1502–1505. Kyoto National Museum.

Prior to the importation of Western linear perspective, and even afterwards, Japanese prints continued to show strong diagonal lines implying recession, but within an otherwise axonometric or isometric spatial structure. This was used not only in depictions of rooms and buildings but even in landscape scenes. For example, Utagawa Hiroshige's *Yatsukoji, Inside Sujikai Gate*, from his *One Hundred Famous Views of Edo*, retains many features of older spatial composition (figure 3.4).



Figure 3.4. Utagawa Hiroshige, Yatsukoji, Inside Sujikai Gate, from One Hundred Famous Views of Edo, Museum of Fine Arts.

A strong diagonal in the middle of the scene unites the foreground just outside of the border with the background at the far left edge. Another diagonal, this one composed of travelers in a line, proceeds from right to left near the bottom of the scene. Most of the buildings in view are seen parallel to the horizontal borders of the frame, and the viewer's position is from an aerial vantage point looking down upon the scene in front of him. In the series *Eight Views of the Parlor*, *Descending Geese of the Koto* by Suzuki Harunobu (1725-1770) in 1766, there is a foreground image with architectural background elements before the Western influence of perspective came to Japan. Note the combination of a horizontal parallel set of lines along with a strong diagonal in the

shoji panel that adds the sense of depth to the image without perspective construction (figure 3.5).



Figure 3.5. Suzuki Harunobu, Descending Geese of the Koto Bridges, from the series Eight Views of the Parlor, 1766. Museum of Fine Arts.

Another common aspect of these prints is that the human figures contained in them are not foreshortened and almost always appear frontally to the viewer. Nor are they seen from above as an isometric construction would normally require. Whether one is looking at a landscape by Hiroshige with people in the midground or background, an actor or bijinga print, the same two-dimensional quality remains. There is a resistance to depiction of people 'disengaging' from the plane of the print as they remain primarily flat, two-dimensional depictions without perspective constructions such as was common in the West where the human figure would be shaded and sculpted with an intentional

depth. Due to this construction, the line becomes central to the art as it is the boundary condition between one figure and another element in the image. This along with an often-sharp contrast of color between figure and ground give the Japanese print a very clearly layered construction.

Another important feature of the Japanese print is the lack of a strong Western type picture frame with its implication of viewing through a frame into an illusion of perspectival reality as one were looking out a literal window into a scene⁹⁶. In this Western sense, the material of the medium is intended to dissolve as the illusion of reality presents itself to the viewer. The physical picture frame, often elaborate and substantial, helps to create the break and contrast from the flat picture plane with the sense of looking through the plane of the picture to an implied image past the physical plane of the picture. Of course, this Western technique is an illusion of a reality, not an actual reality. Nonetheless, a stylistic realism or literalness is often the goal in this art form. This is not the case with the Chinese landscape painting or Japanese print where the image often appears to emerge from the material medium of the paper or silk and remains on its flat plane. And whether print, or scroll, or screen panels, the frame as a separating device is either missing or downplayed. Whereas the traditional Western technique often denies the picture plane, the Chinese and Japanese method is in unity with it, and its flat layering appear one with it materially. The irony here is that the Western method as mentioned above is an illusion of reality by denying the picture plane whereas the Japanese method is more real in the sense of the materiality and acceptance of the medium while at the same time it didn't attempt realistic depiction but poetic intent. For example, note Guo Xi's hand scroll, *Old Trees, Level Distance* (figure 3.6) where the image appears to slowly emerge from the silk, but the materiality of the silk remains an integral component of the composition in unison with the applied

⁹⁶ Erwin Panofsky. *Perspective as Symbolic Form*. Translated by Christopher S. Wood. (Cambridge: Zone Books, 1997), 27.

pigment on the silk.

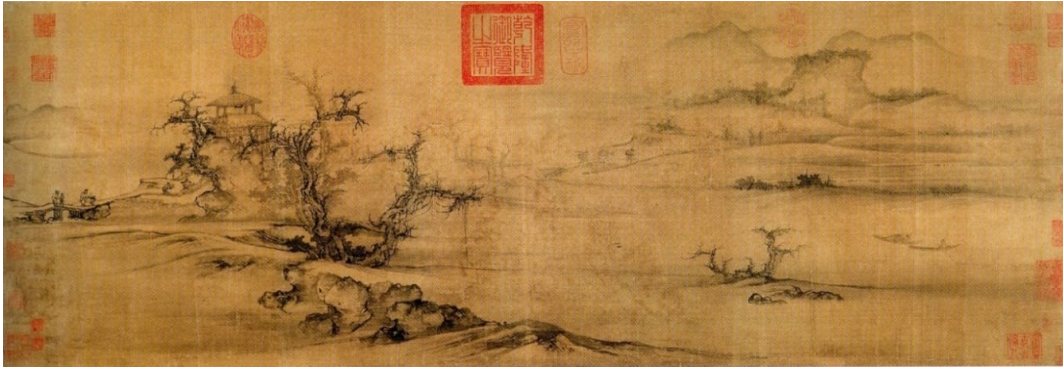


Figure 3.6. Gao Xi, Old Trees, Level Distance, ca.1080. Metropolitan Museum of Art.

Indeed, Wright seems to refer to the effect of the picture frame in his book, *The Japanese Print: An Interpretation*, saying that, "...a picture should be no imitation of anything, no pretended hole in the wall through which you glimpse a story about something. ...The message of the Japanese print is to educate us spiritually for all time beyond such banality."⁹⁷ Later, in 1931 at one of his Kahn lectures in Princeton, he expands on this idea and specifically implies knowledge of the Renaissance origins of Western style perspective:

The fact that the ancient art we have just been interpreting [Japanese] was never, in any phase of its industries, ruined by childish love of the picture. The 'picture' sense in art and craft came in with the Renaissance, as one consequence of the insubordination of the arts that disintegrated architecture as the great art. And before we can progress in our own machine produces as art, we too will have to dispose of the insufferable insubordination of the picture. ...We live in the pictorial age. We do not have childlike imagery in simplicity but are 'childish' in art, and whatever form our great art and craft in future may take, one thing it will not be, and that tuning is "pictorial." Even a Japanese print...never degenerated to the mere picture. Let us be thankful that the machine by way of the camera today takes the pictorial upon itself as a form of literature.⁹⁸

⁹⁷ Frank Lloyd Wright. *The Japanese Print: An Interpretation*, (New York: Horizon Press, 1967), 32.

⁹⁸ Bruce Brooks Pfeiffer, *The Essential Frank Lloyd Wright: Critical Writings on Architecture*. (Princeton, Princeton University Press, 2008), 177.

The Japanese woodblock print has certain technical limitations which don't allow it to have the same subtle gradation into the fabric of the medium as does a Chinese landscape work such as by Guo Xi above (figure 3.6). Wright, in fact, seems to have acknowledged that the technical limits of the Japanese print were part of its value and something which in itself is instructive⁹⁹. However, there is still a non-Western oneness with the picture plane through the figural nature of the layering of flat elements and the material craft of the image. For instance, in Hokusai's print, Umezawa Village in Sagami Province from his series Thirty-Six Views of Mount Fuji (figure 3.7), the entire composition is created from overlapping layers with no other attempt at perspective construction.

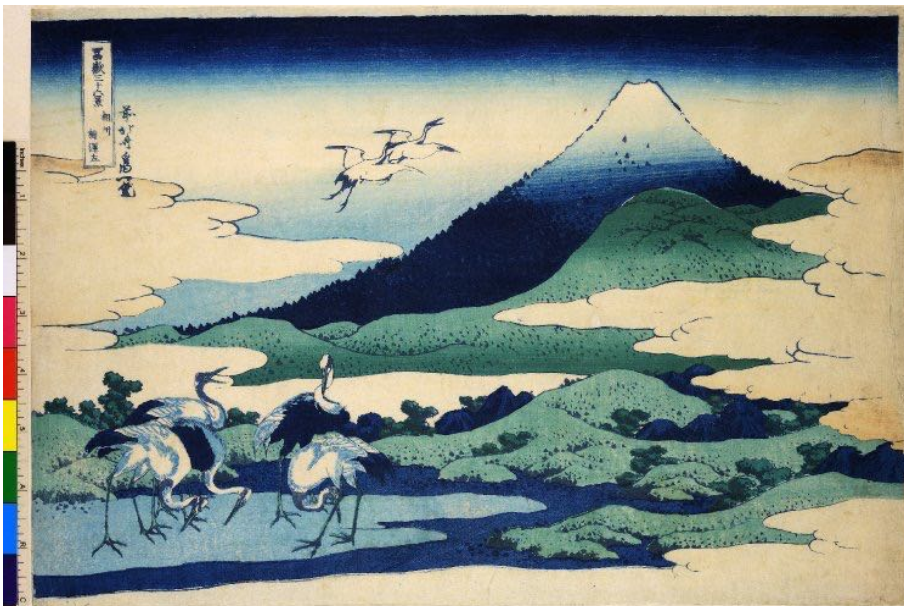


Figure 3.7. Katsushika Hokusai. Umezawa Manor in Sagami Province, from the series, Thirty-Six Views of Mt. Fuji, c.1830-1834. British Museum.

Here *bokashi* (subtle gradations in coloring) in the sky and parts of the mountains is used, but no attempt to treat the figures as sculptural or three-dimensional in the Western sense. It is as if each

⁹⁹ Frank Lloyd Wright and Bruce Brooks Pfeiffer, *Frank Lloyd Wright Collected Writings*, Vol I, (New York: Rizzoli, 1992), 150.

layer never leaves the picture plane and all depth perception is created by the process of overlapping layers or figures. Nor does the artist try to depict the figure of Mt. Fuji literally as in a photo. Nelson Goodman says in *Languages of Art*, "Pike's Peak dwindles dimly in a snapshot."¹⁰⁰ This is because a photograph's accuracy cares nothing of giving priority to the height of the mountain or its symbolic importance. In a photograph, the mountain recedes through foreshortening, while in an artistic rendering, the same mountain can be heightened to correct for this and also to better portray its symbolic value. The Japanese emphasis on compositional unity and harmony, allows Mt. Fuji to take the size and proportion the artist intends in order to recreate the "conceptual" or idealized portrayal intended rather than to be limited to the recreation of realistic or literal space. The Japanese felt the expression of the idea to be of a higher value than mere depiction of realism. Japanese scholar Timon Screech relates what Tani Buncho (1763-1841) wrote to Matsudaira Sadanobu:

I used to have a large number of Western pictures in my collection, but I tend to find them...short on real meaning (imi). When you try to appreciate a Western picture on a profound level you always feel there is something lacking.¹⁰¹

In E. H. Gombrich's book, *Art, Perception, and Reality*, he references Erwin Panofsky in relating the "Neo-Platonic idea of the genius whose eyes can penetrate through the veil of mere appearances and reveal the truth."¹⁰² Gombrich then brings the concept into twentieth-century perceptual psychology in claiming that:

Perception always stands in need of universals. We could not perceive and recognize our fellow creatures if we could not pick out the essential and separate it from the accidental—in whatever language we may want to formulate this distinction.¹⁰³

¹⁰⁰ E.H. Gombrich. *Art, Perception, and Reality*, (Baltimore, MD: The Johns Hopkins University Press, 1972), 2.

¹⁰¹ Timon Screech, "The Meaning of Western Perspective in Edo Popular Culture." *Archives of Asian Art*, Vol. 47, (1994), 60.

¹⁰² Gombrich, 2.

¹⁰³ *Ibid.*, 3.

Here is a key point — the Japanese print’s goal is in bringing out the universal as the proper expression of art and reaching beyond the veil of mere appearances as it were in order convey a greater universal idea. Art is a medium in which they convey a message rather than simply recording external appearances. In order to achieve this, as Gombrich states above, it is necessary to separate out the “accidental” from the essential. Frank Lloyd Wright clearly saw the importance of this point, and he referred to this as the “elimination of the insignificant.” As Kevin Nute points out, it is a point made earlier by the philosopher Hegel when stating, “... Hegel had described the same talent for ‘penetrating to the essence of external things’ in very similar terms when he suggested: ‘This natural gift...to seize the particular element of objects and their real forms...is the prime condition of artistic genius.’”

Quoting further from Hegel he writes:

Truth in Art...does not consist in mere fidelity in the imitation of nature. The real has been soiled by its mixture with the accidental, and Art must eliminate this defilement, and restore the contemplated object to its harmony with its veritable Idea¹⁰⁴.

A statement from Wright seems to closely parallel Hegel:

To imitate the natural modeling of the subject in shade and shadow—or merely to render realistically its appearance and position—would require certain dexterity of hand and a mechanic’s eye. But in the artist’s mind there was a living conception at work—the Idea.¹⁰⁵

One might argue whether the intent of the Japanese artist followed the same lines of the Hegelian view of art; however, the premise of this essay does not rest in the actual intent and motivation of the Japanese artist but in what Wright perceived as their intent and how that influenced his own developing theory.

¹⁰⁴ Nute, 105.

¹⁰⁵ Ibid.

There is another interesting aspect to Japanese spatial composition that is described by the Japanese scholar Henry D. Smith but is also backed up by the research of Gombrich. It has to do with the influence of time or motion on the perception of depth and space. Smith's article, "He Frames a Shot! Cinematic Vision in Hiroshige's One Hundred Famous Views of Edo," describes the work of Russian filmmaker Sergei Eisenstein (1898-1948). He saw in Hiroshige's composition a "hewing out a piece of actuality with the ax of the lens" as opposed to the staging of an event for the sake of a fixed observer. Eisenstein described how Hiroshige could create a sense of the moment by capturing a foreground element cut off by the frame of the picture and create a tension between foreground and background¹⁰⁶. This helped to give visual depth cues through layering. The example used in this instance was Hiroshige's Plum Garden, Kamata, from the series One Hundred Famous Views of Edo (figure 3.8).

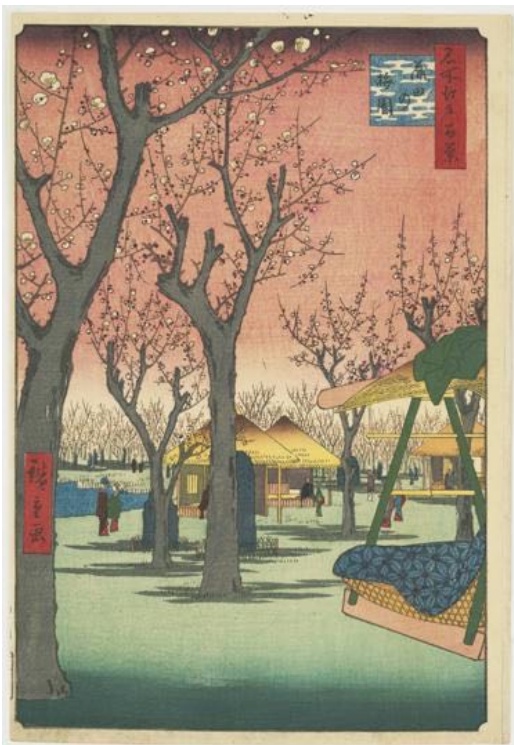


Figure 3.8. Utagawa Hiroshige, Plum Garden, Kamata, 1857. Chazen Museum.

¹⁰⁶ Henry D. Smith II, "He Frames a Shot!": Cinematic Vision in Hiroshige's One Hundred Famous Views of Edo." *Orientalism*, 31:1 (2000), 90-96.

The sense of time in visual perception is also discussed by Gombrich in his essay “The ‘What’ and the ‘How’: Perspective Representation and the Phenomenal World.”¹⁰⁷ Here Gombrich cites the Thouless experiment where a circular object is held obliquely (creating a steep oval) from the observer who then is asked to draw what he saw. Invariably, the drawn circle is less narrow than the actual perspective viewpoint would allow. The conclusion is that one tends to anticipate the effect of an “inspection movement,” the experience of moving around an object in order to better perceive it. In the Japanese print, where there is no perspective construction, a similar self-righting or correcting of view in anticipation of the actual phenomenology of perception is obtained through our motion in the real world, as opposed to the assumption of the Western linear perspective of a single frame with a single static viewpoint. To this I would add that a similar effect happens at a larger landscape scale, as seen the example of Hokusai’s Hakone Lake in Sagami Province, from his series Thirty-Six Views of Mt. Fuji. (figure 3.9).



Figure 3.9. Katsushika Hokusai, Hakone Lake in Sagami Province, from the series Thirty-Six Views of Mt. Fuji, 1830-1835. Chazen Museum.

¹⁰⁷ E.H. Gombrich, “The ‘What’ and the ‘How’: Perspective Representation and the Phenomenal World,” *Logic & Art; Essays in Honor of Nelson Goodman*, edited by Richard Rudner and Israel Scheffler, (Indianapolis: Bobbs-Merrill, 1972), 140-142.

Here there is a landscape scene with hills, mountains, trees, water, and clouds in it. All these are very flattened layers overlapping and creating many layers of depth to the image. In reality, trees and hills are very rounded and “thick” however. Yet the image is convincing. This is because in our actual experience of such landscapes the depth dimension parallel to our line of sight is much more foreshortened than the horizontal or vertical dimensions that we phenomenally perceive these as flat planes or layers. Enhancing this effect is the experience of our motion in such a scene (most dramatically experienced today by traveling down a road at higher speeds) creating the effect of these flattened planes sliding or slipping past one another with their rate of slipping proportional to their closeness to the viewer. With this time element as a real-world component of our experiencing of space, it can be seen how Western linear perspective, ostensibly more ‘realistic’, is actually lacking the temporal dimension as the perspective constructed is true only from one particular point of view at one moment in time.

In the latter period of ukiyo-e prints, Japanese artists began to incorporate aspects of Western perspective, although most often this was only done partially as it suited the artist’s artistic vision. Henry Smith points out that Hiroshige, an “armchair traveler,” relied on his landscape information from illustrated gazetteers known as *meisho zue* which provided detailed picture views of famous sites in a format typically from the traditional bird’s-eye view with buildings portrayed in typical isometric construction. Hiroshige transformed this into his single-sheet brocade prints (*nishiki-e*) with a new construction of space whereby he lowered the viewers point of view and established a horizon line within the picture, usually from one-fifth to one-half the way down from the top of the print. He also developed a novel “near-far composition” where he placed a dramatically close foreground object in

juxtaposition with a distant view.¹⁰⁸ This allowed the foreground to be in a flat-layered composition lacking linear perspective, a middle ground, often with linear perspective, and a background which returned to a flat, layered composition.

Screech also illustrates this Western spatial influence in describing Hokusai's Nihonbashi Bridge in Edo from the series *Thirty-Six Views of Mt. Fuji* (figure 3.10).



Figure 3.10. Katsushika Hokusai, *Nihonbashi Bridge in Edo*, ca. 1831, from the series *Thirty-Six Views of Mt. Fuji*. Museum of Fine Arts.

Screech describes how the scene of the people at the bottom avoids perspective depiction, while the elite merchant warehouses in the middle portion of the image are shown in Western perspective; however, interestingly, the upper area with Mt. Fuji and the Shogunal castle remains aloof, outside of

¹⁰⁸ Henry D. Smith II, "Hiroshige's Last Landscapes: A world Turned on End", in *Utagawa Hiroshige: The Moon Reflected*, (Birmingham: Ikon Gallery, 2007), 6.

the zone of perspective and lies in the dignity of the symbols of the state, reduced to flattened layers of symbolic and idealized representation¹⁰⁹. Not mentioned in Screech's article but strikingly similar in effect, is Hiroshige's Surugacho print from his One Hundred Famous Views of Edo (figure 3.11).



Figure 3.11. Utagawa Hiroshige, Surugacho, no. 8 from the series One Hundred Views of Famous Places in Edo. 1856. Chazen Museum.

Here again is a strong, one-point perspective construction in the view of the street leading straight to Mt. Fuji. And like Hokusai's print, Mt. Fuji is separated from the perspective middle by layers of

¹⁰⁹ Screech, Timon, "The Meaning of Western Perspective in Edo Popular Culture." *Archives of Asian Art*, Vol. 47, (1984), 67.

clouds as it emerges like a heavenly apparition in the distance yet dominating the composition. Mt. Fuji is portrayed as a single flattened layer, an iconographic symbol, pure and untainted by the lesser concerns below. In Hiroshige's print, however, the people are seen the entire length of the street, properly foreshortened as they recede into the distance. These two examples by Hokusai and Hiroshige are not uncommon instances of this period in ukiyo-e where perspective construction is used as a tool to help geometrize the proper recession and scale of the drawing, and yet it is clear that perspective is not allowed to dominate the composition nor allowed to diminish the representation of the ideal and the elimination of the insignificant. The casualness in which perspective is used but then abruptly stopped in a single image confirms the intent for artistic expression over the literal realism of the Western model and its pragmatic use when deemed useful to achieve a higher artistic goal.

WRIGHT AND JAPANESE AESTHETICS

While Wright was clearly interested in the art of Japan, my project does not involve the motives or intentions behind Wright's focus on this art, but rather on how the underlying similarity of spatial structures between the two forms of aesthetic expression might add to the explanatory power of this discourse. Yet, Wright has left a significant body of text on this subject. Is this narrative in agreement with his built architectural works? This analysis is a test of one aspect of that narrative.

While Wright's intentions may not be fully known in relation to Japanese art, the question of spatial construction can be triangulated from several directions to assemble a reasonable conclusion as to their correlation. What an artist intends to convey in his work may in fact not be realized due to several factors such as an inability to translate their intended goal into physical form, external circumstances and powers which counter that goal, or the strength of alternative symbols and readings

which obscure the artist's own intentions. Wright's affinity for the Japanese approach to art and design, however, is not in question. The record of his personal interpretation of the principles of the woodblock print through his book on the subject¹¹⁰, as well as countless references to the subject throughout his career, are available. While there may be disagreement with his interpretation of Japanese art and whether he was reading into it something different from the intent of the Japanese artists themselves, his interpretation would nonetheless affect his own work and theory for decades to come.

WRIGHT'S EXPOSURE TO JAPANESE ART

The relationship Wright had with Japan and Japanese art is well-known. Wright's fascination with Japanese art and culture began at the very beginning of his career and remained with him his entire life, as evidenced in his frequent Taliesin print parties in the 1950s where he would expound on the lessons to be learned from the Japanese print while showing off several of them from his own extensive collection. Frequently throughout his career, Wright would portray Japanese art and culture in a positive light while simultaneously showing contempt for much of the European model, whether it was traditional Renaissance architecture or modern International Style. He would also speak of a kinship between his own natural, organic strain of architecture and that of Japanese art and sensitivity to nature.

Wright was exposed to Japanese art before his first trip to Japan in 1905, such as with his exposure to the Japanese Ho-o-den pavilion at the 1893 World's Columbian Exposition in Chicago, and he continued his passion for Japanese art long after his last trip to Japan in 1922. While it is not

¹¹⁰ Frank Lloyd Wright, *The Japanese Print: An Interpretation* (New York: Horizon Press, 1967 (orig. 1912)).

known definitively if Wright ever met Fenollosa in person, it is highly probable, as he admired his views and wrote in 1917 that he had obtained his first Japanese woodblock prints, in particular the hashirakake format (tall and narrow pillar print), from him on one of Fenollosa's visits to the United States¹¹¹. Wright doesn't clarify whether he obtained these prints from a third party or directly, just that the prints were from Fenollosa's collection. He writes of this first exposure to the print and of Fenollosa as being "about 25 years" prior to this writing in 1917. This would bring the date to about 1892. If this date is true then Fenollosa would have been residing in Boston at the time, employed at the Boston Museum of Fine Arts. However, Kevin Nute has provided evidence of earlier Japanese influence on Wright, beginning as early as Wright's first employment in Chicago with Joseph Lyman Silsbee in 1887¹¹². As it turns out, Silsbee was a second cousin to Ernest Fenollosa. It was known that Fenollosa would lecture frequently in Chicago and often stay with his cousin Silsbee on these trips. It is also known that Fenollosa visited the United States for a fact-finding trip at the employ of Japan from the Fall of 1886 to the Fall of 1887. Nute suggests that a meeting of Wright and Fenollosa would be quite possible during this time as Wright was then working for Silsbee and had known him for about 2 years by then. At this point Wright would have only been 19 or 20 years old. Fenollosa also spent the summer of 1893 at the World's Columbian Exposition lecturing on Japanese art. He was active in Chicago again in 1895 before leaving for Japan. Fenollosa's assistant Arthur Dow whose influential book, *Composition* incorporated Fenollosa's art theory was closely connected to the Chicago scene, including being covered extensively in the Chicago art journal, *Brush and Pencil*, which often featured Sullivan and Wright. Additional evidence of this connection is through Frederick Gookin (1853-1936),

¹¹¹ Frank Lloyd Wright, "The Print and The Renaissance," *Collected Writings*, Vol 1, 149.

¹¹² Kevin Nute. *Frank Lloyd Wright and Japan: The Role of Traditional Japanese Art and Architecture in the Work of Frank Lloyd Wright*. (New York: Van Nostrand Reinhold, 1993), 22.

a well-known collector of Japanese prints and also friend of Wright. Gookin was associated with Fenollosa, Edward Morse, John La Large, and other notable scholars and collectors of Japanese art. Besides direct mention of Fenollosa by Wright, Wright also refers to Okakura Kakuzo's writings as well, particularly his *Book of Tea* which references Laozi's concept of space, something Wright would often mention as he recounts his breakthrough discovery of a new sense of architectural space achieved in his Unity Temple design.

The depth of Wright's knowledge of the Japanese print and the influence it had on him can be measured by his own writings on the topic, including a book devoted to the Japanese print. In addition to this, his activities as an important dealer in ukiyo-e, his own rendering style, and his body of architectural work over almost 70 working years provides much source material. He wrote in his autobiography "The print is more autobiographical than you may imagine. If Japanese prints were to be deducted from my education, I don't know what direction the whole might have taken."¹¹³ Late in his life at a Taliesin print party in 1957 Wright reminisced:

I remember when I first met the Japanese prints. That art had a great influence on my feeling and thinking. Japanese architecture—nothing at all. But when I saw that print and I saw the elimination of the insignificant and simplicity of vision, together with the sense of rhythm and the importance of design, I began to see nature in a totally different way.¹¹⁴

The role Wright played as a dealer in Japanese art is both significant and well-known. Pieces he purchased in Japan now make up significant portions of collections at the Chicago Art Institute, the Chazen Museum, and the Boston Museum of Fine Arts, among others. This became a significant source of income for Wright until he was fooled into buying revamped prints which he then sold.

¹¹³ Frank Lloyd Wright, *Frank Lloyd Wright: An Autobiography*, (Petaluma, CA: Pomegranate, 2005), 205.

¹¹⁴ Julia Meech. *Frank Lloyd Wright and the Art of Japan: The Architect's Other Passion*. (New York: Japan Society and Harry N. Abrams, 2001), 21.

When this was discovered it became a scandal which caused him to quit his dealership role in the Japanese print trade. After this point, he would draw from his extensive collection (much of which was purchased through his Imperial Hotel fees) to give as gifts to his clients, and students. Unfortunately, many of these prints were also confiscated by the Bank of Wisconsin in the 1930s when he was unable to pay on his debts. These prints, numbering around 4,000, finally became known as the Van Vleck collection at the Chazen Museum in Madison, Wisconsin.¹¹⁵

WHAT WRIGHT SAW IN JAPANESE ART

An important window into how Wright perceived Japanese art is provided by the small book he wrote on the subject, *The Japanese Print: An Interpretation*, in 1912. This book on the aesthetic principles of the Japanese print was in large measure stating principles which Fenollosa had previously formulated. In this book Wright reveals significant clues to his own developing theory of the organic. Wright felt that the Japanese print was also an organic thing. Part of this estimation was based on the integration of means to ends which he saw in the art and craft of the print. While he acknowledged the simplicity of this system, he also felt that the lack of such significance was why modern art was dying¹¹⁶. In *The Japanese Print*, he says that Western artists need to take a viewpoint unfamiliar to them, "the purely aesthetic viewpoint."¹¹⁷ Julia Meech points out that while certain scholars such as Frederick Gookin were interested in the historical dating of the kabuki performances depicted in various prints, most collectors, including Wright, were more interested in the aesthetic appeal of the

¹¹⁵ The best published source for these prints is the book published by the museum: *Elvehjem Museum of Art. The Edward Burr Van Vleck Collection of Japanese Prints*. (Madison: Elvehjem Museum of Art, University of Wisconsin-Madison, 1990).

¹¹⁶ Wright, "The Print and the Renaissance," *Collected Writings* Vol 1, 150.

¹¹⁷ Wright, *The Japanese Print: An Interpretation*, 13.

print. Not knowing the encoded information in the print (Wright did not know Japanese) encouraged a purely visual experience.¹¹⁸

Wright outlines what he refers to as a “structural” system underlying Japanese art, much in the same manner as the Hegelian concept of inner essence or “Idea” behind sensuous reality. For Wright, neither imitation nor realism is the goal for art, but rather to convey more abstract reality just lying “beneath aspect.” Wright then connects this inner structure to organic form, where a definite manner of parts makes up a larger unity or vital whole.¹¹⁹ Whether Wright was reading more into the Japanese print may be questioned, but the connections he makes between Japanese art and what he describes as the organic is fairly clear. The ideas of what constitute the organic play a strong role in his subsequent writings on the elimination of the insignificant and subsequent emphasis on the underlying “Idea,” the geometric essence in natural forms which can be brought forward through abstraction.

There are also several significant discussions Wright had regarding Japanese art and its connection to organic architecture which were recorded on audio tape, such as at his later Taliesin print parties in the 1950s. For example, in September of 1950 at a print party, he states:

When you once start with these prints, you never look at nature the same way after. You never have the scene quite the same way as other people who are looking at it who haven't seen these things. A certain natural selection and arrangement takes place in your own sense of the thing as you look. Certain realistic things disappear, and the whole scene comes more effective and simple because you know this art—that's the effect it has on you.¹²⁰

Here, Wright is stating something which has been said in various ways by others —the power pictures have on how we perceive and visualize, or in this case, the power of the Japanese print on how Wright perceived space. Wright's description of the prints' transformative power over

¹¹⁸ Meech, 2001. *Frank Lloyd Wright and the Art of Japan: The Architect's Other Passion*, 70.

¹¹⁹ *Ibid.*, 15.

¹²⁰ Transcript of Japanese Print Party at Taliesin, September 20, 1950. CR.7, “Frank Lloyd Wright at Showing of Japanese Prints,” 7.

perception are taking them from something merely to be looked at, to something to look through or by. Arguably, such an influence would be stronger and longer lasting than superficial stylistic relationships between the print and Wright's work. In fact, this is exactly what Wright claimed for himself when he says:

So here you have a new way of looking at the landscape. And the landscape has never seemed the same to me since I became familiar with the print. You're continually seeing differently; you're seeing, eliminating. You're seeing, arranging. You're seeing, I don't know exactly how to put it. Not in three dimensions, certainly, and yet perhaps that is the element of the third dimension made manifest by two. But you can judge for yourselves. My conscience will be clear as soon as I've revealed to you the source of this inspiration which came to me at a very important time."¹²¹

When recounting his experience in Japan designing the Imperial Hotel in his autobiography, Wright also stated that, "Yedo (Tokyo) was a presence always in which to search for the invaluable record of that time, in prints. A window through which I looked upon my own work."¹²² While he first relates how the prints have an influence on perceptual selection, he then makes the somewhat ambiguous claim that they also have the power to convey three dimensions through two dimensional images. He continues this discussion with an analysis of how they construct a sense of space:

See how simply they get in three planes; they rendered all this sense of distance, there is no lack of perspective here, as you'll notice. They're supposed not to have known perspective. They knew all they wanted of it — they didn't want much of it. Because perspective introduced an element which was not necessary to their feeling for beauty.¹²³

He is now stating more clearly how the prints achieve this perceptual transformation from two dimensions to three. They render distance without the mechanism of Western linear perspective. In saying this, Wright is essentially rejecting 500 years of Western tradition of linear perspective by

¹²¹ Ibid.

¹²² Wright, *An Autobiography*, 212.

¹²³ Transcript of Japanese Print Party at Taliesin, September 20, 1950, 10.

favoring an even more ancient way of constructing space — a layered, non-perspectival spatial construction common not just to Japanese art but to most non-Western and pre-Renaissance cultures. Curiously, at the end of his description, he states that perspective is not necessary to beauty, which was not the subject at hand, yet apparently plays an important role for Wright.

This gives clear evidence of his understanding that the Japanese two-dimensional art form is generating the perception of the third dimension. While at first, this may seem to be fairly prosaic, Wright considered it inspiration for him and for his way of seeing and constructing space. He is clearly interested in the idea of how certain characteristics (e.g. space) from a lesser dimensional construct (i.e. two-dimensional space) translate into a higher dimensional state (i.e. Three-dimensional space). He uses this same analogy to make his case that his three-dimensional space is somehow representing the fourth dimension:

Today, around the circumference of architectural thought, basic error still exists concerning the new concept I have stated of the good old third dimension—usually seen as thickness, weight, a solid. Sublimated by organic architecture, it is interpreted as depth. The depth-dimension—really a fourth now—the sense of space. Perhaps the fourth as sought by the European cubist? The element we call space given a new concept. Listen to Laotze again: The reality of the building consists not in the walls and roof but in the space within to be lived in." Witness organic architecture.¹²⁴

Wright states at several points that the third dimension is not to be seen as "thickness but as depth."¹²⁵ Neither weight nor thickness (one could also add mass or volume) defines this type of space interpreted through the concept of depth. He states that through depth we have:

... a penetration of the inner depths of space in spaciousness [which] becomes architectural and valid motif in design. With this concept of depth interpenetrating depths comes flowering a freedom in design which architects have never known before...¹²⁶

¹²⁴ Bruce Brooks Pfeiffer, *The Essential Frank Lloyd Wright: Critical Writings on Architecture*, 408.

¹²⁵ Wright, *A Testament*, (New York: Horizon Press, 1957), 130.

¹²⁶ *Ibid.*, 224.

What is particularly significant here is the idea of interpenetrating depths and the expression, motif in design. The idea of interpenetrating depths conveys a sense of a relational component to whatever it is which defines these depth layers, for it implies space seen through the framing of other spaces and their connectedness to each other. The idea of discussing space or depth as a “motif” is a curious word since it conveys an affective or stylistic nature which seems incongruent in relation to a geometric delineation of space. These terms will have more explanatory power when considered later in conjunction with the Japanese print and its techniques of spatial and depth representation.

Wright considered it a pivotal turning point in his grasp of space when he understood that the essential reality of architecture is this new sense of the space within as had been stated by Laozi thousands of years ago. Wright states that this “new” idea of building first consciously occurred to him in 1904 with his design of Unity Temple.¹²⁷ He considers space the “basic element in architectural design.”¹²⁸

Robert McCarter states that Wright designed Unity Temple only months after his first trip to Japan¹²⁹. This first trip to Japan actually occurred from February 14, 1905 to May 14, 1905. Then, citing Kevin Nute, McCarter states that it is hardly coincidental that the plan of Unity Temple can be directly related to that of the Taiyûinbyô temple complex at Nikko, Japan, which Wright visited and photographed on that trip. One problem with this explanation is that Wright actually had the design of Unity Temple well underway before his trip to Japan. There are several renderings dated 1904 which attest to this fact and that the plan configuration, overall design, etc. were well in place before the

¹²⁷ Frank Lloyd Wright, *The Future of Architecture*, (New York: Horizon Press, 1953), 224.

¹²⁸ Frank Lloyd Wright, 1957. *A Testament* (New York: Horizon Press, 1957), 224.

¹²⁹ Robert McCarter, *Frank Lloyd Wright: Unity Temple, Barnsdall House, Johnson Wax Administration Building and Research Tower*, (London: Phaidon Press Limited, 1997), 27.

Spring of 1905. Indeed, some significant features in the design had changed after his Japan trip such as his folding of the trim three-dimensionally rather than his typical (to date) method of framing the trim to the corners of elements in a more two-dimensional manner.

It is interesting to note that Wright, at least according to his own statement, wasn't as influenced by Japanese architecture as by the woodblock print. The same was said by Henry Russell Hitchcock in 1942 when discussing the Warren Hickox house and its flat panels under the gables: "He had now learned from Japanese prints—rather than from Japanese architecture—the secret of occult balance which had meant so much to the great European painters Degas and Toulouse-Lautrec."¹³⁰ This may seem a bit odd for an architect to be more influenced by the art of Japan than the architecture, but it also needs to be pointed out that Wright had an unusual artistic talent as seen both in his own drawings and his eye for everything artistic. In fact, while Wright was writing about the "pure aesthetic viewpoint," in Europe with the Bauhaus and CIAM¹³¹ movement the idea of architecture as an 'art' was being dismissed in favor of a more 'functional,' industrial, and 'scientific' stance.

Donald Richie, more recently, writes very similarly in his book, *A Tractate on Japanese Aesthetics*:

Realism in the Western sense of the word played small part in the realities of life as experienced by the traditional Japanese artist. The expectations of the artist's cultivated sensibilities did not demand mimesis. Rather, indication, suggestion, simplicity took the place of any fidelity to outward appearance. Both the aim and the result was an agreed-upon quality for which English has but one term: elegance. Elegance—a sense of refinement, of beauty in movement, appearance, or manners; a tasteful opulence in form, decoration, or presentation; a restraint and grace of style. Most of the components of Japanese aesthetics carry this

¹³⁰ Henry-Russell Hitchcock, *In The Nature of Materials: The Buildings of Frank Lloyd Wright 1887-1941*, (New York: Da Capo Press, 1942), 32.

¹³¹ CIAM (Congres Internationaux d'architecture moderne) organized by Le Corbusier and operated from 1928 to 1960.

connotation of elegance. The elegance of simplicity— beauty to be found in the texture and grain of wood and stone, in visible architectural structure, also in the precise stroke of the inked brush, the perfect judo throw, the rightness of the placing of a single flower. This beauty is both the expression and the result of an awareness that comes from a highly self-conscious regard of nature, as well as from an accompanying discipline that is one of the reasons the arts are rarely casual in Japan¹³².

The Japanese stance against realism or literal imitation of nature was quite possibly the most central principle Wright took from his experience with the Japanese print. Rather than literal description, nature was suggested, and the more subtle the suggestion the more tasteful the work of art, much as with haiku¹³³. With the ‘elimination of the insignificant’ the clutter of the inessential is erased away in order to reveal the essential Idea, the word used first by Hegel and often by Wright to describe this principle. This elimination is for the purpose of revealing the inner character of the work, or as Wright would call it, the inner structure. Wright wrote to landscape architect Jens Jensen:

I think you would be interested to see how a minority report, such as I might bring in with my experience in the study of structural Form as interpretation of nature, would compare with yours You are a realistic landscapist. I am an abstractionist seeking the pattern behind the realism—the interior structure instead of the comparatively superficial exterior effects you delight in. In other words, I am a builder. You are an effectivist using nature’s objects to make your effects¹³⁴.

Jensen’s designs would be considered naturalistic and organic to many people, but not to Wright. It wasn’t enough to imitate nature’s external forms; rather revealing the inner pattern and structure was of a higher order of creative work. Wright describes how this occurs in some detail in his book on the Japanese Print. Referring to the Western mindset, he says that “In art that which is really essential escapes us for lack of a ‘disciplined power to see.’”¹³⁵ Then he explains that “Japanese

¹³² Donald Richie, *A Tractate on Japanese Aesthetics*, (Berkeley: Stone Bridge Press, 2007), Kindle Edition (location 210-215).

¹³³ Ibid., Kindle Location 126.

¹³⁴ Donald Hoffmann. *Understanding Frank Lloyd Wright's Architecture*, (New York: Dover Publications, 1995), 25.

¹³⁵ Wright, *The Japanese Print: An Interpretation*, 15.

art is a thoroughly structural art...The realization of the primary importance of this element of 'structure' is also at the very beginning of any real knowledge of design. And at the beginning of structure lies always and everywhere geometry."¹³⁶ Sensing that his use of the word 'structure' may be misunderstood, Wright continues by explaining:

The word structure is here used to designate an organic form, an organization in a very definite manner of parts or elements into a larger unity—a vital whole. So, in design, that element which we call its structure is primarily the pure form, an organization in a very definite manner of parts or elements into a larger unity—a vital whole... that element which we call its structure is primarily the pure form, as arranged or fashioned and grouped to 'build' the Idea...Geometry is the grammar, so to speak, of the form.¹³⁷

So how does the Japanese artist exemplify this principle? He writes:

A Japanese artist grasps form always by reaching underneath for its geometry. ...he recognizes and acknowledges geometry as its aesthetic skeleton...it is also the suggestive soul of his work. A Japanese artist's power of geometrical analysis seems little short of miraculous.¹³⁸

Here, Wright seems to be referring to Hokusai's ryakuga haya-oshie drawing textbooks which describe how forms of things can be broken down into geometrical elements of circles and squares and primitive elements.¹³⁹ (figures 3.12 & 3.13).

¹³⁶ Ibid.

¹³⁷ Ibid.

¹³⁸ Ibid., 16.

¹³⁹ Ibid., 22.



Figure 3.12. Katsushika Hokusai. Ryakuga haya-oshie, Vol. I, Image 59. 1814. British Museum.



Figure 3.13. Katsushika Hokusai. Ryakuga haya-oshie, Vol. I, Image 7. 1814. British Museum.

In his book on the Japanese Print, Wright continues by explaining what he sees as the essence of Japanese aesthetics which is not only about the elimination of the insignificant, but it is about the perfect line or arrangement that is incapable of adequate analysis and must be grasped intuitively rather than analytically:

These simple colored engravings are a language whose purpose is absolute beauty, inspired by the Japanese need of that precise expression of the beautiful, which is to him reality immeasurably more than the natural objects from which he wrested the secret of their

being.¹⁴⁰

Wright's use of the word 'reality' here is not to be confused with realism or literalism, however, but rather an emphasis on a higher reality that lies beneath the surface of the visible. That he saw this in Japanese art is not surprising, for Japanese aesthetics involves the idea of *yugen*, meaning a mystery and depth, "what lies beneath the surface; the subtle, as opposed to the obvious; the hint, as opposed to the statement."¹⁴¹

Wright refers to the Japanese artist who by:

the very slight means employed touches the soul of the subject so surely and intimately that while less would have failed of the intended effect, more would have been profane...so these drawings are all conventional patterns subtly geometrical, imbued at the same time with symbolic value, this symbolism honestly built upon a mathematical basis, as the wood of the weave is built upon the warp. It has little in common with the literal... Fleshly shade and materialistic shadow are unnecessary to it, for in itself it is no more than pure living sentiment.¹⁴²

These statements reveal an essential influence on his own work. Wright's idea of an underlying structure or geometry became the basis for his abstracted forms, both in his decorative art glass and architecture as a whole. That Wright felt geometry was the essence lying beneath the surface appearance of things, and that geometric forms carried symbolic power, is clear. Wright also felt this was characteristic in the Japanese print. He also seems to conflate this with the underlying Idea. Hegel's use of Idea is not so narrowly focused, however. It is more expansive in its interrelationship with form. Idea impresses upon matter its own nature within matter. It does this more or less completely as the symbolic, classical, and romantic stages indicate.

¹⁴⁰ Ibid., 19.

¹⁴¹ Donald Richie, Kindle Location 613.

¹⁴² Wright, *The Japanese Print: An Interpretation*, 21.

In one of Wright's later print parties at Taliesin, lecturing to his students and showing them stacks of Japanese prints, he said:

Hiroshige did, with a sense of space, very much what we have been doing with it in our architecture. Here you get a sense of tremendous, limitless space. Instead of something confined within a picture... On what is your attention focused? Nothing.¹⁴³

Was Wright simply referring to scenes that depicted expansive views? Apparently not since even Western landscapes did the same. Was he referring to lack of a single point perspective and the focal point that produced? Or was he referring to the lack of the picture-window concept of the Western perspective where one peers through the frame into a miniature realization of an external world? Perhaps both. And regarding the frame, perhaps implied in his comments were the idea of the image going past the frame and the dematerialization of the border as Wright would often do in his own renderings as will be seen in the next section. Melanie Trede in her book on Hiroshige says something very similar to Wright when pointing out that:

In numerous prints, Hiroshige chooses the bird's eye view anchored in the Japanese painting tradition. But while our gaze falls on to a landscape from above, at the same time the over layering of pictorial planes generates space and depth... There is no fixed point to define a picture's centre; we are encouraged instead to let our gaze wander.¹⁴⁴

Because the planar, and often isometric, Japanese print does not freeze the pictorial space by anchoring it on the one (or two) point of perspective convergence and accompanying fixed position of the viewer, it is considered by Wright to be giving the impression of "limitless space" and lack of focal point. Furthermore, this is the type of space he claims he has been creating in his architecture.

Frank Lloyd Wright was an astute observer of the print, not only as an architect but as a

¹⁴³ Julia Meech-Pekarik, "Frank Lloyd Wright and Japanese Prints," *The Metropolitan Museum of Art Bulletin, New Series*, Vol. 40, No. 2 (Autumn, 1982), 47.

¹⁴⁴ Melanie Trede and Lorenz Bichler, *Hiroshige: One hundred famous views of Edo*, (Cologne: Taschen, 2007), 8.

successful dealer of prints. The prints to him were an abstraction of reality. In other words, while figural, it was not trying to be realistic. Wright saw that the Japanese print was “wresting the secret of their being,” from the objects of the natural world by bringing forth a representation which lies beneath the accidentals. This, as Wright saw it was more reality than the external world itself. This parallels Hegel’s relation between the ideal and nature in art. Hegel also shows this underlying aspect of human imagination in art as that which is more than external nature but an expression of universality yet in nature:

What in nature slips past, art ties down to permanence. The subject-matter is not just represented in the forms in which it is presented to us in its immediate existence; grasped now by the spirit, it is enlarged within those forms and otherwise changed. What exists in nature is just a single thing, individualized indeed in all its parts and aspects. On the other hand, our imaginative mentality has in itself the character of universality, and what it produces acquires already thereby the stamp of universality in contrast to the individual things in nature. In this respect, our imagination has the advantage that it is of wider range and therefore is capable of grasping the inner life, stressing it, and making it more visibly explicit. Now the work of art is of course not just a universal idea, but its specific materialization; but since it has been produced by spirit and its imaginative power, it must be permeated by this character of universality. This affords the higher ideality of the poetic in contrast to the formal ideality of mere making. The artist therefore does not adopt everything in the forms of modes of expression which he finds outside him in the external world and because he finds it there; on the contrary, if he is to create genuine poetry, he grasps only of the matter in hand¹⁴⁵.

Wright probably did not obtain his understanding of this directly from a reading of Hegel, but more likely through Fenollosa’s articulation of Hegel’s philosophy of art which Wright was familiar. Fenollosa, prior to Wright, conceptualized Japanese art in terms of the Western Idealism Wright operated in.

¹⁴⁵ Hegel, *Aesthetics* Vol I, 164.

THE INFLUENCE ON WRIGHT'S DRAWINGS

The previous sections involved the construction of space in the Japanese print and what Wright interpreted from these prints. Here in this section I will consider how Wright's interpretation of the Japanese print influenced his drawings. First, consider Wright's divergence from his mentor, Louis Sullivan, in regard to ornament. While Sullivan expressed ornament in flowery curves, Wright abstracted his ornament into geometric shapes, most often using straight lines (See figures 3.14, 3.15, and 3.16).

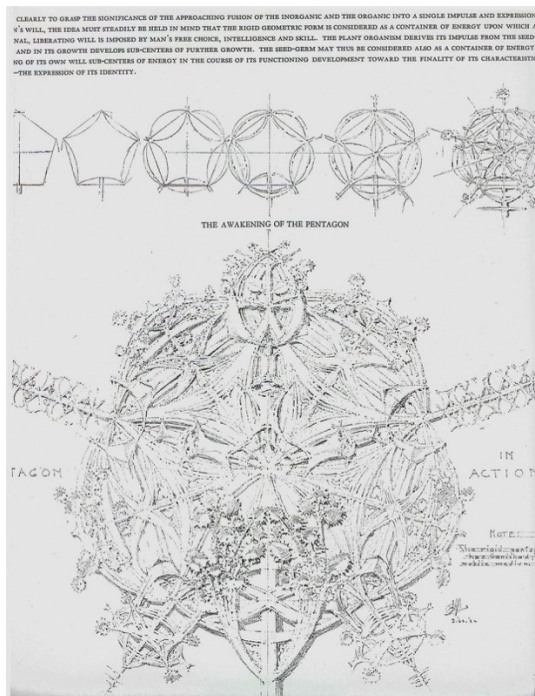


Figure 3.14. Louis Sullivan. Awakening of the Pentagon Ornament.

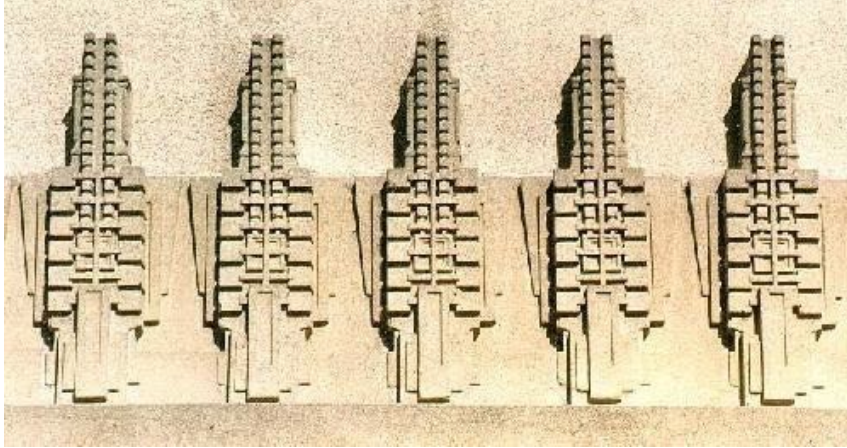


Figure 3.15. Frank Lloyd Wright. Hollyhock ornament on Barnsdall Home.



Figure 3.16. Hollyhock photo

This can be seen clearly by comparing Sullivan's Awakening of the Pentagon with Wright's design for the Hollyhock on the Barnsdall house in Los Angeles. Sullivan's ornament, while not literally derived from any real plant, is more "realistic" of flower forms than Wright's Hollyhock design even though the latter is actually derived from a real flower. Wright's purpose in his design was to see the underlying geometric structure of the hollyhock flower and interpret it in an abstracted geometric form, thus producing an end result that is unlike any real hollyhock and yet somehow expressing something essential to the inner structure of the real flower. Clearly some liberties are taken by

Wright in interpreting the underlying structure of the hollyhock flower that are not only due to its translation into a rectilinear form. For example, in Wright's motif the flower petals are aligned horizontally on the stalk rather than staggered as in the real flower. If geometry is the structural basis of abstraction as Wright claimed it was, it raises the question as to how the underlying essence can be determined objectively, and whether geometry itself is the proper basis for this abstraction process Wright actually used. Yet it does maintain what Wright emphasized as primary structure in the tall vertical stalk upon which the flowers branch into. Like the comment Wright made of Hokusai's depictions of Mt. Fuji, this is an idealized image of the actual visible object. Realism is not the goal. That Wright saw in the woodblock print the elimination of the insignificant may also have played a role in his own much more simplified ornament in comparison to Sullivan's.

A more direct comparison can be made between Japanese prints and Wright's own renderings and drawings since they are both similar mediums. Many similarities can be drawn between them, but the spatial and representational issues are pertinent here. In the section, the "Spatial Character of the Japanese Print," the quality of Chinese and Japanese construction of space was discussed where the image emerges on and remains on the plane of the medium of the print or silk, rather than constructing an illusion of peering through the picture plane with the illusion of perspective (figure 3.17).

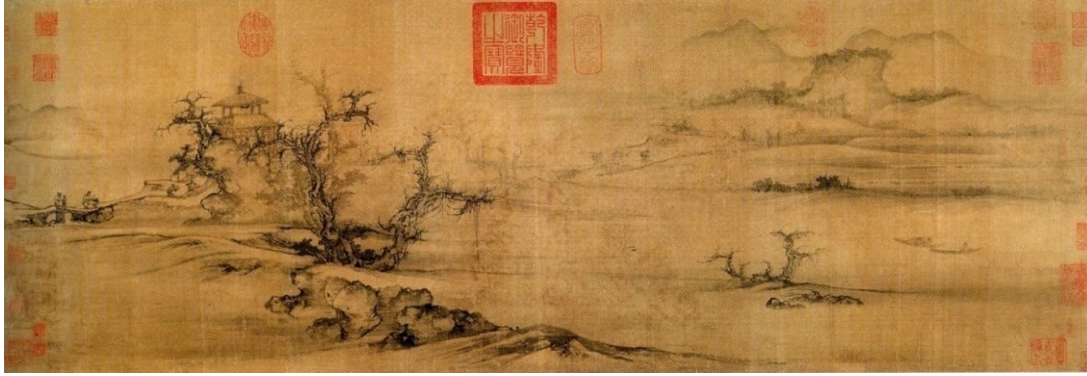


Fig. 3.17. Gao Xi, Old Trees, Level Distance, ca. 1080. Metropolitan Museum of Art.

The difference being the subsequent expression of the inner structure or essential idea being brought forth. Although Wright typically did not like his walls cluttered with pictures, he made exception for Japanese prints and screens. Perhaps one of the reasons for his dislike of typical Western-style framed pictures was how it created the illusion of a punched opening or hole in the wall, something contrary to his idea of organic architecture. However, with the Japanese screen and print (as seen earlier) the surface of the picture plane and materiality of the medium is maintained, and it rests more unified with the natural materials of the architecture around it. An example of this can be seen in an interior elevation drawing Wright did for the Beachy house where his inscription in the drawing shows that it is to house a set of screens by Kano Sanraku¹⁴⁶ (1559-1635) (figure 3.18).

¹⁴⁶ Julia Meech, *Frank Lloyd Wright and the Art of Japan: The Architect's Other Passion*, 184.

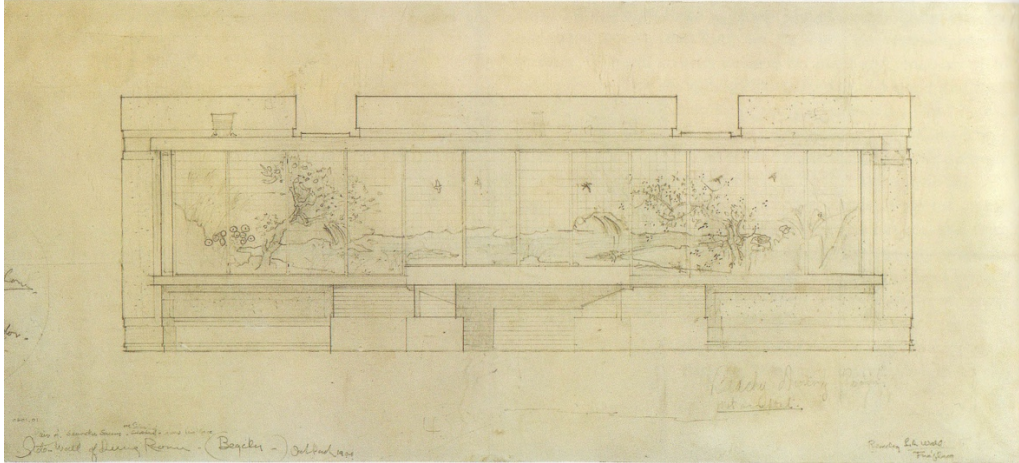


Figure 3.18. Frank Lloyd Wright drawing of mural wall for Beachy house, 1906.

He integrated screens into his homes as integral ornament in many other instances as well such as an Edo-period, six-panel screen in the Hollyhock home, various screens at Taliesin East, a Chinese hand scroll in the Bogk home, and suggestions of Edo-period Rimpa screens flanking the main fireplace in the Coonley house¹⁴⁷. Wright's drawing for the Doheny Ranch (figure 3.19), while showing a flattened spatial construction, seems more reminiscent of Chinese landscape painting than the Japanese woodblock print with its stronger contour lines and distinct coloration. Here, the drawing has only muted colors and the drawing seems to emerge from the paper and then fade back out rather than defining strong border frames as many ukiyo-e prints exhibit (see figure 3.20 for example of a Chinese landscape with these properties).

¹⁴⁷ Ibid., 181-85.

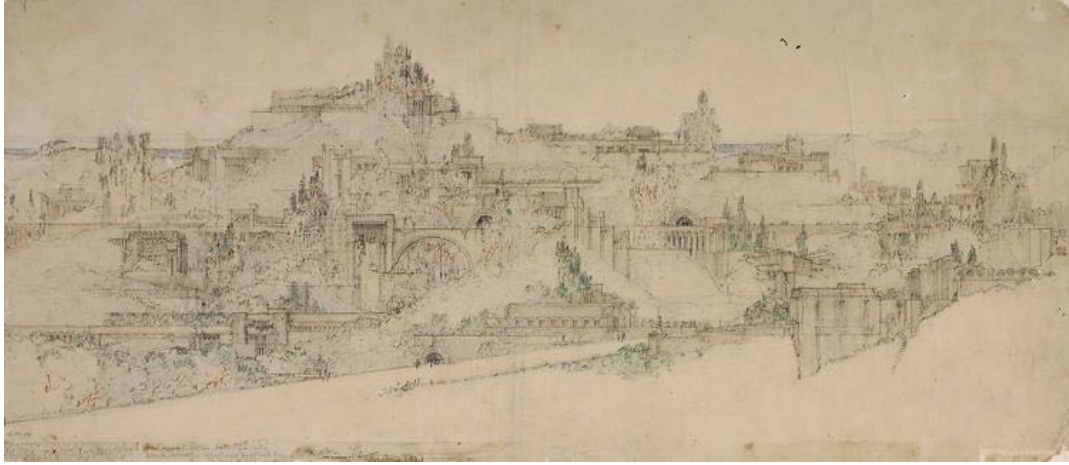


Figure 3.19. Frank Lloyd Wright, Doheny Ranch drawing, 1921.



Figure 3.20. Li Shi, Part of the Imaginary tour through Xiaoxiang, 12th century. Tokyo National Museum.

Wright's Doheny drawing is not rendered in a way to establish a complete photographic image bounded by a picture frame as if viewed through a window but fades out from the image of the building as it were into the suggested landscape and the medium of the paper. In this way, his drawing is very 'flat', and while he uses subtle perspective construction for building objects, the landscape and framing are flat and layered. The drawing is organic to the paper from which it emerges and fades into. A similar technique is used in his rendering of San Marcos-in-the-Desert project (figure 3.21) where the focus is on the building which emerges from the landscape which is not complete but implied as he uses figural lines which establish a sense of layering but then fade out

into the paper.



Figure 3.21. Frank Lloyd Wright. San Marcos-In-The-Desert, 1928. FLW Foundation.

What is left of the picture frame in this case is a partial rectangular frame at the top of the drawing which doesn't reach to the sides of the drawing but terminates into the building and landscape, giving the impression of infinite space extending beyond the drawing frame. Overall the effect has what Wright referred to as the elimination of the insignificant as the eye is drawn to the building itself with nothing else to distract from it. Even the landscape line elements heighten focus on the building and its relationship to nature. Similar in technique is the Booth house rendering (figure 3.22) set in the woods and emerging out of the picture plane with only small implied framing elements. While this drawing was done previous to the Doheny Ranch and San Marcos-in-the-Desert drawings, it seems to combine the Chinese subtlety and delicacy of line work which fades out before reaching the edges of the paper, along with the Japanese print's contour lines creating partial framing elements.

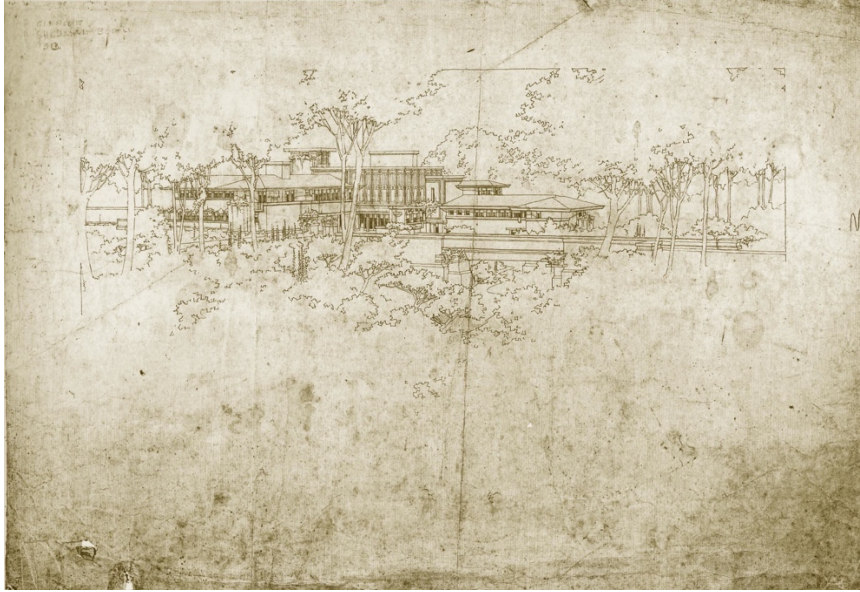


Figure 3.22. Frank Lloyd Wright, Booth House, 1911.

Wright's use of the woods as a masking device can be seen as similar to the common Japanese practice of using clouds to hide elements not intended to be viewed in order to focus attention on primary compositional elements. Compositionally, this is similar to Hiroshige's Surugacho print (figure 3.11), where clouds shroud Mount Fuji peripherally in order to focus attention on the symbolic power of the peak itself within. With the Booth rendering by Wright, the trees are not individuated but are intentionally incomplete at their outer borders (the borders of the drawing itself), while very deliberate contour lines at the inner edges of these trees help to provide spatial depth and contrast to the house itself which is highly rendered and detailed. The trees are used as a planar layering device, without perspective, even though the building itself uses perspective construction.

Even though Hiroshige and Hokusai brought the horizon line into landscape compositions, it is interesting to note that Wright actually made common practice of depicting his buildings in a bird's eye view, hearkening back to earlier Japanese (and Chinese) landscape methods. In the example of Wright's Barnsdall house (figure 3.23) the home is viewed in bird's eye view without a horizon line.

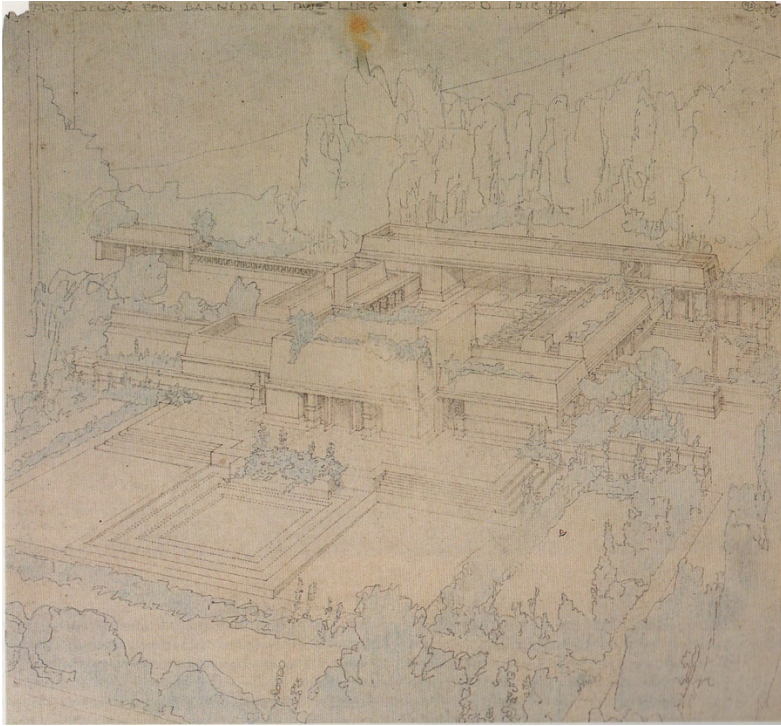


Figure 3.23. Frank Lloyd Wright, Barnsdall house birds eye view, 1917.

Even the building almost appears as if in isometric as most buildings were portrayed in Japanese prints before perspective construction, even though here there is a slight perspective construction to this building. Almost all of his mature style renderings have several things in common: 1.) they do not allow for a traditional western-style picture frame looking into a view - they forcefully break out of the frame. 2.) they avoid a photographic realism and often apply abstraction, generally to landscape and sky elements. 3.) renderings emerge from the medium in unity with it rather than denying it. Skies are framed in part but then cut off allowing the paper space background to become part of the composition. 4.) Although Wright drew his buildings with perspective, the buildings integrate into landscapes that transition into a layered, flat-plane construction, much like the Japanese print. 5.) Depth cues are in tension between the perspective construction and the figure-ground overlaps. In this aspect, Wright's renderings are "hybrids" much like the later Edo-period prints

of Hokusai, Hiroshige, and Kuniyoshi. However, Wright's construction of perspective applied to his buildings is very precise and accurate by comparison 6.) the "aesthetic viewpoint" is apparent as the entire compositions of the renderings are devised for their compositional intent rather than meant to be an actual image of what you would see if actually in front of the completed building in its setting. 7.) Unlike the Edo-period prints, Wright actually did use shade and shadow, but primarily limited to his buildings. 8.) His graduated skies using horizontal strokes of colored pencil is reminiscent of the Japanese technique of bokashi, or color gradients often seen in skies and landscape elements. (See figures 3.24, 3.25, 3.26, and 3.27).



Figure 3.24. Frank Lloyd Wright, Cooperative Homesteads, 1942.

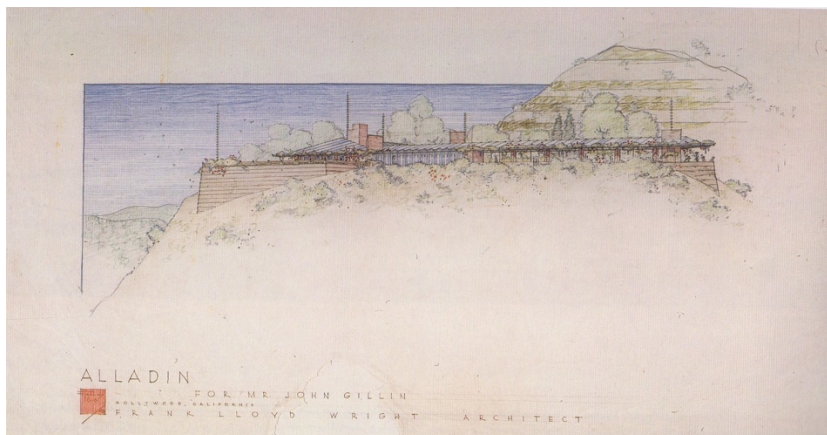


Figure 3.25. Frank Lloyd Wright, Gillin House, 1950.



Figure 3.26. Frank Lloyd Wright, Seacliff, 1945.

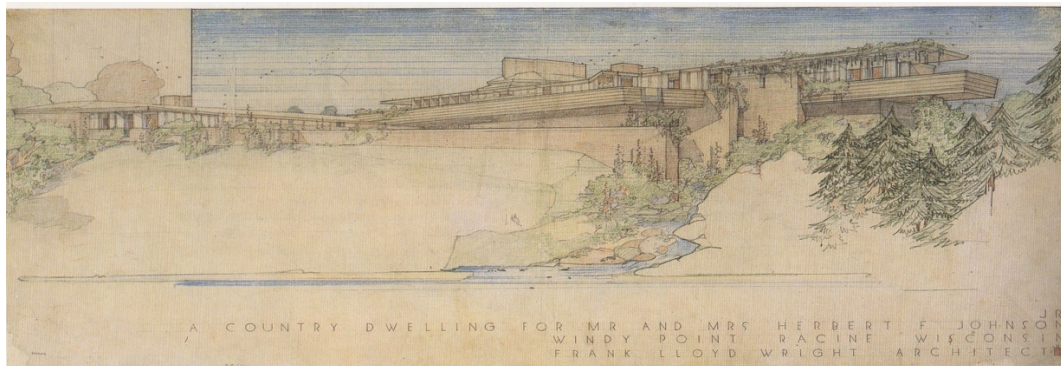


Figure 3.27. Frank Lloyd Wright, Wingspread, 1937.

THE INFLUENCE ON WRIGHT'S ARCHITECTURE

Regarding Wright's spatial organization in his architecture, Wright scholar, Neil Levine, has said about Wright's construction of space:

The radically different geometries [of Wright's post-Prairie period] emphasize the particularity of each project and appear to deny any form of consistency. But their very use depends on an underlying principle of order, common to all Wright's later work, which is the diagonal axis. Whether or not the diagonal is made explicit in the geometry of the plan, as in the Hanna House, it is always implicit in determining the spatial experience of the building and

its relation to the site¹⁴⁸.

Levine claims that the diagonal axis is the underlying geometric principle which determines the spatial order of Wright's buildings. The above reference to the Hanna house is a plan based on a triangular grid where the diagonal line would be quite obvious, but he also claims that even rectilinear plans by Wright have this diagonal line as a basis. Levine continues (see figure 3.28):

The Malcolm Willey House introduced two new developments in Wright's use of diagonality. The first is the multiplication of visual axes and their overlapping in space, resulting in a constant shifting of focus. One can now begin to distinguish not only between explicit and implicit axes but also between the objective, or compositional, axis and the subjective, or experiential, axis. The subjective experience of space is no longer coextensive with the axial definition of that space, or, as Wright's student Curtis Besinger remarked, "the vistas are generally oblique to and—in effect—independent of the geometry of the house. This independence suggests to the occupant a freedom of movement in any direction, for now the occupant is always the center of the space and not an onlooker. The diagonal fans out across the distant horizon and makes the slice of space palpable and its measure of distance instantaneous. The space is sensed in depth, not through an intellectually reconstructed series of layers or planes perpendicular to the line of sight, but immediately, instantaneously."¹⁴⁹

¹⁴⁸ Neil Levine, "Frank Lloyd Wright's Diagonal Planning." *In Search of Modern Architecture: A Tribute to Henry-Russell Hitchcock*, edited by Helen Searing, (New York: MIT Press, 1982), 245.

¹⁴⁹ *Ibid.*, 264.

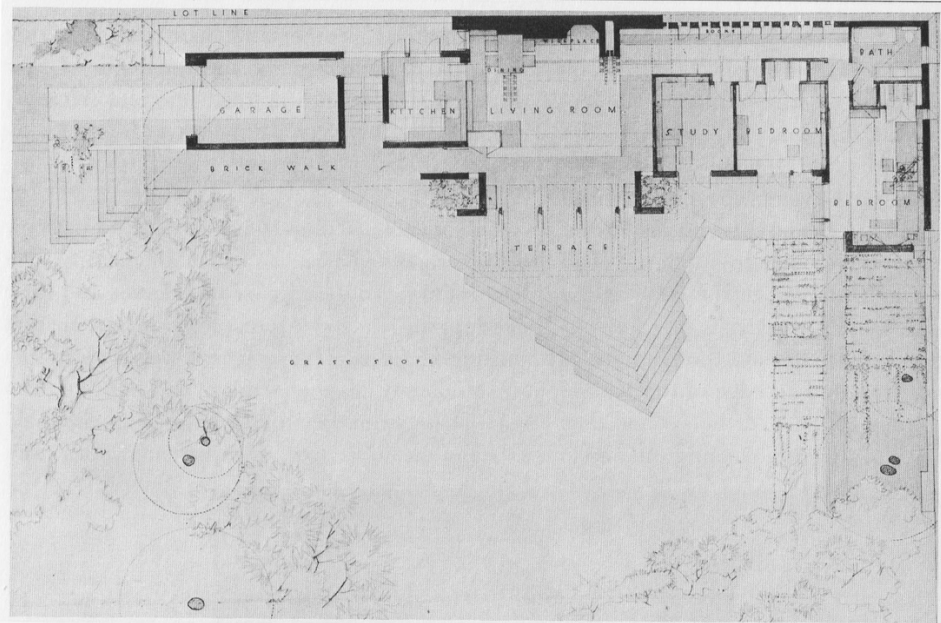


Figure 3.28. Frank Lloyd Wright, Malcolm Willey House, 1934. *Architectural Forum*, January 1938, 26.

It is interesting, however, that Wright himself never writes that he consciously used the diagonal as a spatial ordering device. Wright did say his architecture does spatially what Hiroshige's landscape art did. This in itself does not disqualify the theory, of course. One may show retroactively how implied diagonal axes can be overlaid on Wright's plans, but the question remains as to whether Wright designed his architectural spaces with this method in mind. Was it cause or coincidence? Both Hiroshige's landscapes and Wright's own renderings provide further clues. Wright seems to correlate Hiroshige's two-dimensional limitless space with his own three-dimensional space as expressed in his architecture, but how does this concept of spatial construction translate from the two-dimensional into the three-dimensional realm? There seems to me a correlation between the breaking of the Western-style picture frame with his own idea of breaking down the 'box' of architecture, which he often referred to as the 'destruction of the box.' Both involve the gaze of the eye being freed into "limitless space," and both primarily relate to aesthetics and perception. Wright did this with his two-



Figure 3.30. Mies Van der Rohe, Farnsworth House.

Beyond the opening up of diagonal space within the rectilinear plans is the shifting or sliding of architectural elements in relationship to each other. This shifting serves the purpose not just of breaking the “box” as Wright said, but to break the visual frame from the viewpoint of the perceiver within the architectural space. This is similar to the shifting layers of Hokusai and Hiroshige, or the figure-ground relationship as a depth-generator as described by Arnheim. Again, it is instrumental to keep in mind that Wright used the word ‘depth’ intentionally when referring to what was missing in traditional architectural space at the time:

To sum up, organic architecture sees the third dimension never as weight or mere thickness but always as depth. Depth an element of space; the third (or thickness) dimension transformed to a space dimension.¹⁵⁰

The rectangular rooms that break open serve a useful purpose—they serve as framing elements which establish a contour edge to set up the figure ground relationships which emphasize

¹⁵⁰ Bruce Brooks Pfeiffer, *The Essential Frank Lloyd Wright: Critical Writings on Architecture*. Princeton, 18.

depth cues— depth established by layering. The fact that diagonal views happen in these spaces is the inevitable consequence of this spatial construction rather than the cause of it. Wherever the eye is allowed to scan horizontally beyond the edge of a frame, by definition a diagonal view is created. The diagonal view results from the sense of limitless space as the eye is drawn beyond the edge conditions of the partial architectural ‘frames’ that Wright sets up. If indeed, as Levine says, “The space is sensed in depth, not through an intellectually reconstructed series of layers or planes perpendicular to the line of sight, but immediately, instantaneously [via the diagonal]” then it would be more direct not to have intervening walls at all but direct diagonal views through a more Miesian ‘universal’ space which would be more immediate. Yet Wright seems to prefer an openness that is seen in its relationship to closure; in fact, it seems that the open type of space Wright envisions cannot be understood except as juxtaposed with closure. Wright’s architectural works are well-known as having a strong sense of prospect and refuge, the desire for the refuge of shelter and enclosure under broad overhanging roofs and cozy inglenooks, and yet the prospect of viewing out from a place of shelter into a distant landscape. One example of this is his spatial composition at Fallingwater at Bear Run, Pennsylvania (see figures 2.31 and 2.32).



Figure 3.31. Frank Lloyd Wright, Fallingwater, 1937.



Figure 3.32. Frank Lloyd Wright, Fallingwater, interior of living room.

Known as a masterpiece of twentieth century architecture, Fallingwater is a three-dimensional composition of shifting and sliding rectangular planes and volumes. The voids occur in the interstices of these slipping solid elements where views can occur. Rectangular volumes are not allowed to rotate on the diagonal even though the result of their horizontal shifting creates voids along diagonal sight lines. Looking at figure 3.32 of the interior is instructive. From within the heart of the home near the fireplace hearth one has views straight out into the distance, or at least to the branches of its heavily wooded setting. At the same time the solid stone wall elements create a 'frame' that is not a closure to a box but a reference marker whereby the space (and eye) may flow out beyond to the side as well as straight out. In a house with practically no budget constraints, Wright chose to create a very low ceiling in the main large living space, essentially compressing the vertical space yet allowing the horizontal space to flow out and connect to nature. In the end Wright creates a space with the dual effect of satisfying the need for shelter while also allowing for "limitless space" to flow out in well-composed avenues. Here at Fallingwater, unlike his earlier more classically composed works, there is no preferred viewpoint for the eye inside the architecture, a one-point perspective from an

advantaged viewpoint is convincingly missing just as has been discussed with the Japanese print.

Yet even in his earlier Prairie-era architecture, there is evidence of spatial layering being cultivated. In his Coonley residence (figure 3.33) the living room displays a strong sense of enclosure as evidenced by the vaulted ceiling and central hearth.

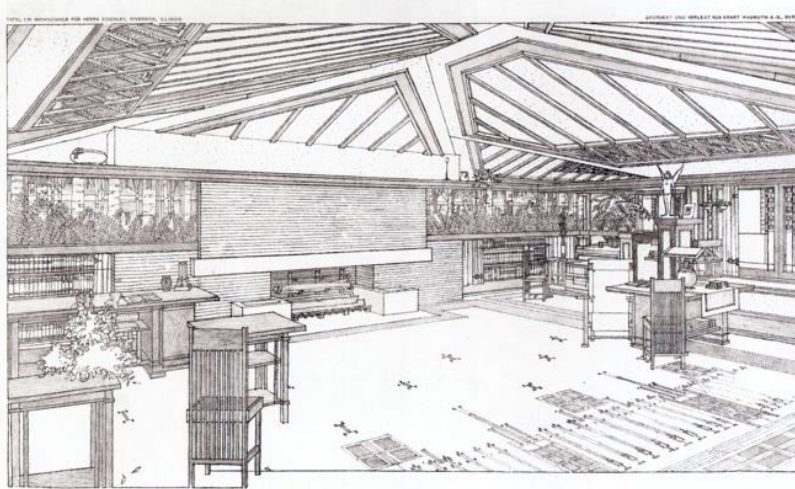


Figure 3.33. Frank Lloyd Wright, Coonley residence living room drawing. 1911.

He sets up a fairly centralized and self-contained space only to open it up at the sides and allow the space to slip past the borders or frame of that central space down the hallways. His use of trim work and layering of materials reinforce this spatial flow by drawing the eye out and around the edges of the room's spatial boundaries. Compare this construction of space to Le Corbusier's space in his naval zone business center rendering of 1938 (figure 3.34). The strong one-point perspective does indicate depth, but it lacks the spatial layering seen in Wright's works, nor the shifting of layers of space Wright derived from the Japanese print.

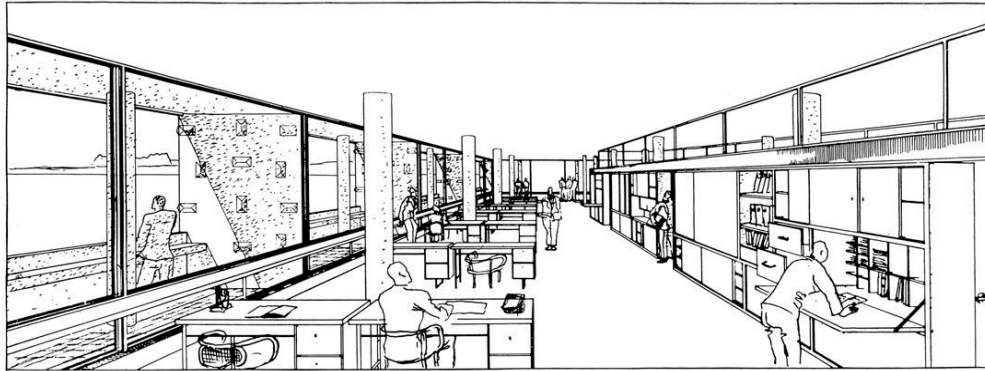


Figure 3.34. Le Corbusier, Naval zone business center drawing, 1938.

GESTALT THEORY APPLIED TO THE JAPANESE PRINT

ARNHEIM AND GESTALT THEORY

The figural, layered method of spatial composition inherent in both the Japanese print and in Wright's works can be understood through the work of Rudolph Arnheim (1904-2007) and his use of Gestalt theory. Rudolph Arnheim (1904-2007) was a perceptual theorist and Gestalt proponent who was perhaps best known for his book *Art and Visual Perception: A Psychology of the Creative Eye*. He wrote extensively about architecture as well, and his book *The Dynamics of Architectural Form* will also be used in this study. Arnheim studied under Max Wertheimer and Wolfgang Kohler at the University of Berlin in the 1920's. Arnheim took the early Gestalt idea of perception as organized wholes and applied it to art of various kinds, including architecture. Gestalt is the German word for form or shape and is the theory of mind which maintains that the whole has a reality of its own, independent of the parts, and the idea that vision is not a mechanical recording of elements but rather the apprehension of significant structural patterns. The Gestalt effect is the ability of our minds to generate whole forms

when perceiving elemental percepts such as lines, points, curves, and planes. Specifically, I will be drawing upon Arnheim's spatial constructs, best described in his book *Art and Visual Perception*, in conjunction with additional material from his book, *The Dynamics of Architectural Form*.

Arnheim states that all our three-dimensional perception of spaces is ultimately reduced into a:

two-dimensional projection on the retina. This does not mean that visual experience is primarily two-dimensional. The basic principle of depth perception derives from the law of simplicity and indicates that a pattern will appear three-dimensional when it can be seen as the projection of a three-dimensional situation that is structurally simpler than the two-dimensional one.

As long as the contours touch or cross but do not interrupt one another the spatial effect is absent or weak. However, when one of the components actually cuts off a part of the other, the perceptual urge to see a superposition becomes compelling because it serves to complete the incomplete shape.¹⁵¹

Arnheim gives a further description of how overlapping planes create depth:

Two-dimensionality as a system of frontal planes is represented in its most elementary form by the figure-ground relation. No more than two planes are considered. One of them has to occupy more space than the other and in fact has to be boundless; the directly visible part of the other has to be smaller and confined by a rim. One of them lies in front of the other. One is the figure, the other the ground.¹⁵²

And so, the method used in the Japanese print contains in its own symbolic logic the means for representing space that coincides with how human perception works. Other modern theorists such as the analytic philosopher Nelson Goodman have argued that Western linear perspective is a convention but by no means the only way of representing space. E. M. Gombrich says of this:

Nelson Goodman is certainly right when he protests that the behavior of light does not tell us how we see things. It is doubtful whether, standing in the cathedral, Brunelleschi could take in more than a fraction of the vista at a time; he had to change his focus and since the area of focused vision is very small, he had to sweep his eye across the opening thus obtaining a succession of different images, rather than one.¹⁵³

¹⁵¹ Arnheim, Rudolf. 1974. *Art and Visual Perception: A Psychology of the Creative Eye*. New , expanded and rev. ed. (Berkeley: University of California Press, 1974), 247-248.

¹⁵² *Ibid.*, 228.

¹⁵³ E.H. Gombrich, "The 'What' and the 'How': Perspective Representation and the Phenomenal World," *Logic &*

Arnheim lays out a theoretical framework for three-dimensional perception from a two-dimensional source which does not rely on the construction of linear perspective. All depth effects in our perceptual experience must be created by the nervous system and the mind. He says this is not only true in order to create a sense of space within a two-dimensional image, but also is true when we are looking at three-dimensional space such as in architecture or sculpture.¹⁵⁴ The simple idea of a naive realism of the perception of space gives way to the understanding that space is not something given in itself, but rather is created by "a particular constellation of natural and man-made objects, to which the architect contributes. In the mind of the creator, user, or beholder, every architectural constellation establishes its own spatial framework."¹⁵⁵

Arnheim brings in the connection to Asian art when he discusses the "space-building role of superposition in Chinese landscape painting."¹⁵⁶ The location of mountains or other objects is set up by the use of overlapping planes seen frontally rather than through a construction of linear perspective as is typical in post-Renaissance Western representation. He states that this type of occlusion always creates a visual tension where the figure which is occluded "strives to free itself from the interference with its integrity."¹⁵⁷

The development of central perspective occurred at only one place and time in human history, whereas other forms of depicting space, including the Egyptian hieroglyphic as well as isometric constructions, were invented in many various places and times independently.¹⁵⁸ If central perspective

Art; Essays in Honor of Nelson Goodman, edited by Richard Rudner and Israel Scheffler, (Indianapolis: Bobbs-Merrill, 1972), 132-133.

¹⁵⁴ *ibid.*, 269.

¹⁵⁵ Arnheim, Rudolf. *The Dynamics of Architectural Form: based on the 1975 Mary Duke Biddle lectures at the Cooper Union*. (Berkeley: University of California Press, 1977), 13.

¹⁵⁶ *Ibid.*, 251.

¹⁵⁷ *Ibid.*, 252.

¹⁵⁸ Arnheim, *Art and Visual Perception*, 283.

is the most realistic way to represent space, Arnheim asks why it was so late and specific in its development. His view is that it spoke of a dangerous development in Western thought which foregrounded scientific, mechanical reproduction in place of creative imagery.¹⁵⁹ This observation has interesting applications to Wright who preferred the Asian, non-Western depictions of space, and perhaps gives further explanatory power to his comments from the print parties above regarding how perspective is not necessary for beauty as well as how this spatial interpenetration is considered a motif for design.

Arnheim points out the paradox in Western perspective where on one hand it presents a centralized world with a focal point on the surface of the representation. But by increasing the illusion of depth this point withdraws into the distance, reaching infinity. This portrayal of space as a flow to a specific end also transforms the “timeless simultaneity” of traditional pre-perspective rendering into a happening in time. He states that the “world of being is redefined as a process of happening,” which was to foreshadow the Western conception of nature and human¹⁶⁰.

I have outlined six of Arnheim’s spatial/visual analyses below which are particularly relevant to the insight they bring to Japanese and Wrightian spatial construction.

I. Ontology of Space

One of the great ironies Arnheim mentions is that three-dimensional space is ultimately seen as a two-dimensional projection onto the retina of the eye. Physically, space is defined by the extension of material bodies or fields bordering on each other. The distances between material objects and the relationships between them are what we think of as space, and yet as Arnheim claims, ‘apart from the

¹⁵⁹ Ibid., 284.

¹⁶⁰ Ibid., 298.

energy that pervades it, space cannot be said to exist physically.’ The experience of space is ‘generated only through the interrelation of objects...Space perception occurs only in the presence of perceivable things.’¹⁶¹

2. The Contour Line and Rivalry

Arnheim describes that the simple closed loop causes a transformation from an independent one-dimensional line into a two-dimensional object where there is a distinct difference between the small, closed, surrounded space within the loop and the large unbounded space outside of it, in other words, a disc figure. A figure-ground relationship is thus established. Further, the area within the loop gives the impression of greater density than the area outside of it.¹⁶² (See figure 3.35).

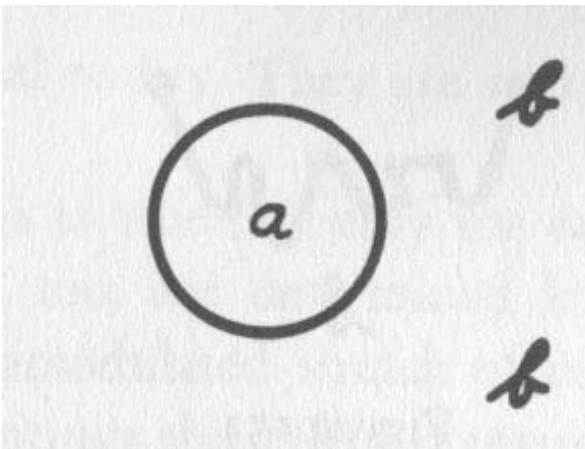


Figure 3.35: Rudolph Arnheim, closed loop of the contour line.

This effect is so strong, says Arnheim, that even Piet Mondrian was not able to eliminate the remnant of the distinction between objects and surrounding empty space, even though he tried. During the last years of his life, Mondrian renounced all references to physical subject matter, even to

¹⁶¹ Arnheim, *The Dynamics of Architectural Form*, 10.

¹⁶² Arnheim, *Art & Visual Perception*, 220-221.

shape except for undifferentiated straight bands. However, the law of simplicity worked to undo his attempts. When one-dimensional line objects are combined together, if the combination produces a simpler figure than the mere sum of separate lines would, it is then seen as one integrated whole.¹⁶³

Contour lines stand for spatial discontinuities, either of depth or direct of slant, or of texture, brightness or color. A line embracing an area creates a visual object. The larger the enclosed area, the weaker the effect.

3. Figure Ground

The idea of the contour line is foundational to Arnheim's next point of the figure ground relationship. He states that two-dimensionality is represented in its most elementary form by the figure-ground relation. One element has to occupy more space than the other and in fact has to be boundless. The directly visible part of the other has to be smaller and confined by a rim. One of them lies in front of the other. One is the figure; the other is the ground (Figure 3.36).

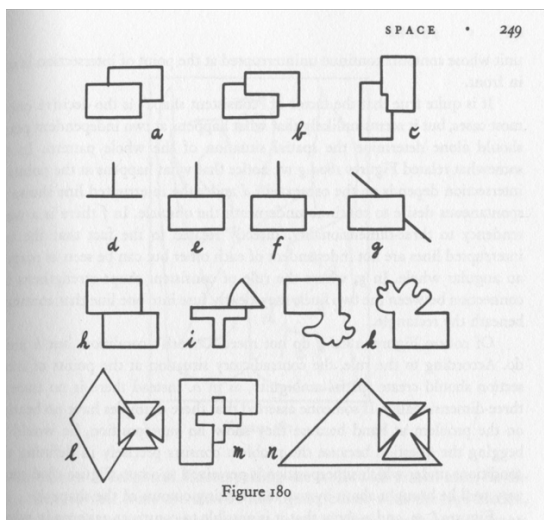


Figure 3.36. Rudolf Arnheim, *Art and Visual Perception*, p249.

¹⁶³ *Ibid.*, 219-220.

Drawing on Edgar Rubin's figure ground studies, the following rules apply:

- a. If the field consists of two horizontally divided areas the lower one tends to be seen as figure.
- b. Convexity tends to win out over concavity as figure.
- c. The number of depth levels in a given pattern is as small as conditions permit.

4. Frames

Besides contour lines and figure-ground is the concept of frames. Arnheim observes that traditionally in the Western tradition, a physical picture frame was interpreted as a type of window from which the observer looked through into a distance background, even though the plane of the picture was in reality more or less at the same plane as the frame. With the frame as figure, the entire picture served as ground in this figure-ground relationship.¹⁶⁴ With the development of modern art (as well as ancient Chinese painting), the depth of pictorial space became reduced and the picture became seen as an elaboration of the surface of the canvas. At the same time the picture switched from ground to figure while the frame was reduced to a mere contour. Arnheim also deals with the idea of frames in another of his books, *The Power of the Center*, where he shows that edges, whether of a building, a vase, etc. are also enclosures which generate "tension-loaded fields that reach into the outer and the inner neighborhood" and creates space and centers of energy.¹⁶⁵ With this in mind, he shows that the visual character of things is determined by their surrounding context — the less defined that surrounding context, then the object will be open to a number of possible meanings.

In Renaissance times the picture frame was considered a window through which the observer peered into an outer world. The opening was constrained but unbounded in itself. This means that the frame was used as figure with the picture supplying the underlying borderless ground, not only in

¹⁶⁴ Ibid., 239.

¹⁶⁵ Arnheim, Rudolf, *The Power of the Center: A Study of Composition in the Visual Arts*. New ed. (Berkeley: University of California Press, 1988), 51.

depth but laterally as the represented space extended beyond the actual picture, disappearing beneath the picture frame.¹⁶⁶ With modern art, the picture was no longer ground behind the frame but the figure with a minimal or absent frame.

Regarding architecture, Arnheim states that the “task of visualizing a three-dimensional structure remains a formidable one. The human mind receives all its visual information about physical space from two-dimensional projections on the retinae, and the flat images of plan and vertical section in architectural drawings conform nicely to that limitation of our sense of sight.”¹⁶⁷ He also states that a building will only make sense to the observer when he can “visualize any one of its dimensions in relations to all the others.”¹⁶⁸

5. Depth Perception

E. H. Gombrich made the observation that technology allows us to accurately calibrate for color but not for depth, which he calls the “ambiguity of the third dimension.”¹⁶⁹ The basic issue here is that the picture (or two-dimensional projection) must always be ambiguous when a solid is projected on a plane, while representational convention determines the method of portraying that depth in two dimensions. Arnheim states:

The basic principle of depth perception derives from the law of simplicity and indicates that a pattern will appear three-dimensional when it can be seen as the projection of a three-dimensional situation that is structurally simpler than the two-dimensional one.”¹⁷⁰

When contour lines do not interrupt each other, then the depth effect is weak; however, when

¹⁶⁶ Arnheim, *Art and Visual Perception*, 239.

¹⁶⁷ Arnheim, *The Dynamics of Architectural Space*, 59.

¹⁶⁸ *Ibid.*, 64.

¹⁶⁹ E. H. Gombrich, *The Image and the Eye*, (Ithaca: Cornell University Press, 1982), 247.

¹⁷⁰ Arnheim, *Art & Visual Perception*, 248.

one element cuts off part of the other, we interpret that uninterrupted element being in front of the one that was interrupted since it is the simpler interpretation. This method of depth through layering predated central perspective construction. Chinese and Japanese paintings and woodblock prints famously employed this technique of overlapping layers, and it is these examples that Wright actually claimed to have been strongly influenced by as discussed from his taped Sunday talk from 1954. (Figures 3.37 and 3.38).



Figure 3.37. Wang Hui, The Kangxi Emperor's Southern Inspection Tour, Scroll Three: ji-nan to Mount Tai, ca. 1698.

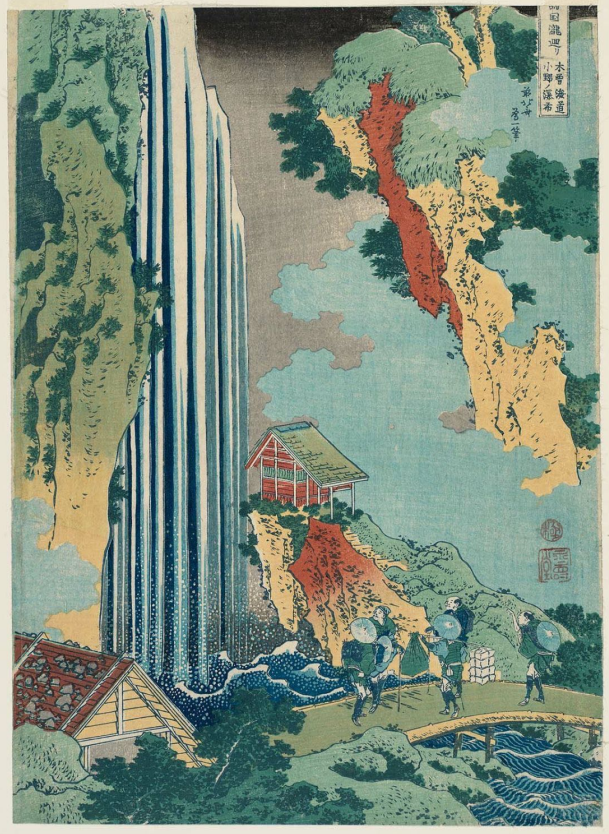


Figure 3.38. Katsushika Hokusai, The Waterfall at Ono on the Kisokaido Road, from the series A Tour of Waterfalls in Various Provinces, 1832. Museum of Fine Arts.

While layering of essentially two-dimensional planar elements would seem to lack the sense of true depth provided by linear perspective, the two-dimensional layers are less distorted than images generated by linear perspective and they also are more congruent with the two-dimensional nature of images projected onto the retina and could actually be considered more natural. While the distortion created by linear perspective is in actuality only accurate for a very limited and finite point of view, the depth by layers method allows for more ambiguity in observer position; this seems to be what Wright was referencing when he regarded Hiroshige's prints as being "limitless."

6. Central Perspective and Infinity

While flat and isometric drawing methods were developed in many times and places, central perspective construction originated in a specific place and time, namely, in the Renaissance by the Florentine architect Filippo Brunelleschi in 1415. While it now seems very natural and realistic to Western viewers, the limitations and distortions it represents need to be considered. Any perspective image is only accurate for one specific viewpoint and direction of view. The observation of any building requires motion throughout and around it in order to piece together a sequence of views into a larger whole in the mind. Gombrich refers to this as “inspection movements,” and Arnheim states that with “architecture we must constantly shuffle back and forth between the building as an object seen as a whole in space by a contemplating mind, and the building as an event in time experienced by man in action....The composition of a whole from relatively self-contained parts...enables the viewer to grasp manageable units, easily surveyed by the eye, and to attain an image of the whole by finding the relations between components.”¹⁷¹

Arnheim points out that neither “two-dimensional nor isometric perspective had explicitly faced the problem of boundaries of space. They implied that space continues forever in its tangible concreteness. With the introduction of central perspective, the artist includes a statement on the nature of infinity for the first time.”¹⁷² And with that, “It thereby transforms the timeless simultaneity of traditional, undeformed space into a happening in time—that is, a directed sequence of events.”¹⁷³ Of course, Japanese art was an expression of the former, both timeless and limitless in its isometric, non-Western character. Wright was aware of the sense of the infinite latent in Asian art. Wright said at a print party at Taliesin in 1950:

¹⁷¹ Arnheim, *The Dynamics of Architectural Form*, 130.

¹⁷² Arnheim, *Art & Visual Perception*, 297.

¹⁷³ *Ibid.*, 298.

Hiroshige did with a sense of space, very much what we have been doing with it in our architecture. Here you get a sense of tremendous, limitless space, instead of something confined within a picture... That's a great lesson for you boys to learn."¹⁷⁴

While Western perspective put the vanishing point, the point of infinity, within the boundaries of the image, the Japanese print in its isometric nature did not have such a centered focus and compression of the third dimension. The image would continue past the edge of the frame rather than centering on a point through converging lines. Given the many decades since his first exposure to the print, it is astonishing that Wright would up to the end of his life continue to show his prints as both revered and didactic artifacts to his apprentices and guests, reinforcing the importance they had on his conception of architecture and even how he perceived space and the represented image.

The Japanese print which he so admires is a very flat, two-dimensional image lacking in that depth it would seem. The Japanese print, while lacking the Western linear perspective technique, provided many cues for portraying depth, which Wright mentions above. An example of universal space, while visually emphasizing the converging lines of Western perspective, lacks the spatial framing and layering which both Wright and the Japanese artists utilized to convey depth. Wright, in fact, rarely if ever creates an open, plain space which doesn't allow for some dissolving or framing of edges in which background space may slip off out of view into the mystery of infinity. The fact that nature so often repeats this (consider a forest or meadow with its continual 'slippage' or dissolving of endpoints) quality gives further credence to Wright's claim of organic architecture as being a natural architecture. Wright would use these methods in his drawings and in his buildings. Rudolph Arnheim's gestalt perceptual principles shed light on the reasons why these work the way they do and how Wright's

¹⁷⁴ Julia Meech, *Frank Lloyd Wright and the Art of Japan: The Architect's Other Passion*, 230.

works connect to this tradition.

EXAMPLES OF SPATIAL CONSTRUCTION IN JAPANESE PRINTS

While Wright, as an accomplished dealer of Japanese prints, knew many of the Edo and pre-Edo period print artists, when discussing the spatial qualities of the print, Wright primarily referred to Katsushika Hokusai (1760-1849) and Utagawa Hiroshige (1797-1858) and their landscape works from the early to mid-nineteenth century. In the prints obtained from Wright in the Van Vleck collection, for example, the vast majority of the prints are from Hiroshige, a lesser quantity from Hokusai, and even less from various other Japanese print artists such as Suzuki Harunobu, Utagawa Kunisada, or Katsukawa Shuncho.¹⁷⁵ In his later Taliesin Print Party talks, Wright seems to refer to Hiroshige more often, but in his 1912 book on the Japanese print, he gives prominence to Hokusai and his Manga for presenting the idea of geometric abstraction and simplification to reveal the inner essence of the object. For this reason, I will limit the following discussion of the spatial construction and application of Gestalt principles to examples from these two artists.

The print by Hokusai, Amida Waterfall (figure 3.39), was selected by Wright for inclusion in his own book, *The Japanese Print: An Interpretation*.

¹⁷⁵ The Van Vleck collection is a collection of several thousand prints purchased by Edward Burr Van Vleck from the Bank of Wisconsin from Wright's own extensive collection. For the complete catalog see *Elvehjem Museum of Art. 1990. The Edward Burr Van Vleck Collection of Japanese Prints*. Madison: Elvehjem Museum of Art, University of Wisconsin--Madison.



Figure 3.39. Katsushika Hokusai, Amida Waterfall Deep beyond the Kiso Highway, from the series, Tour of Waterfalls in Various Provinces, c.1832-1833. Museum of Fine Arts (from the Spaulding collection purchased from Frank Lloyd Wright in 1913).

The analysis which follows is more about a way of seeing space which transfers two-dimensional spatial effects to three-dimensional spatial construction rather than a literal correlation between Wright space and the Japanese print. Again, this is what Wright himself said in so many words when he stated that “Hiroshige did, with a sense of space, very much what we have been doing with it in our architecture.”¹⁷⁶

Hokusai’s Waterfall print follows the traditional Japanese and Chinese form of landscape portrayal—there is no construction of linear perspective created to reveal depth or space, only layered planes in occlusion. The green leafy areas appear to be layered in front of the waterfall due to the principle of figural simplicity, where Arnheim states that we perceive (in this case) the convex

¹⁷⁶ Julia Meech-Pekarik, “Frank Lloyd Wright and Japanese Prints,” 47.

shape of the green hills to be a more complete figure rather than the alternative option of the blue waterfall's concave indentation being a normal shape of the waterfall if it were actually in front of the hills. On Gestalt theory, there is a rivalry of figure and ground possible; what perceptually creates the simplest reading of the image is what is interpreted. In this case, there is little ambiguity in determining what is figure and what is ground, or what is layered in "front" of the other.

I will refer to this principal as flat planes in occlusion, using Arnheim's language of gestalt perception. Depth is conveyed not by distortion of a receding object, but by the overlapping of planes, which in themselves, are paper thin and have no apparent thickness to them. This would not be seen as realistic as a photographic image would actually produce, although a photo taken from an extreme distance with a highly telephoto lens would begin to produce a similar effect.

Within the green, grassy areas of the print, further definition of depth is provided by the use of contour lines, where color contrast does not occur. Since there is no sculpting of form by shade and shadow as in the Western tradition here, its depth of form is provided by the visual cues that a progression of contour lines provides, as if to fragment the overall form into a series of flat overlapping planes. The contour line's importance is in accentuating edge conditions which create depth cues.

This print exemplifies what Wright spoke of as the third dimension being not one of "thickness" but as "depth"¹⁷⁷, for there is nothing in this print that has thickness to it, being composed of thin layered planes and contour lines. However, the sense of depth, being the critical element, is strongly conveyed. Note how increasing the power of a telephoto lens has a similar effect of compressing the sense of depth or thickness of objects while maintaining the size of planes perpendicular to the viewer (figure 3.40). This consequently has the effect of reducing the diagonal lines leading to a vanishing

¹⁷⁷ Wright, *A Testament*, 130.

point so that the resultant image looks less like a linear perspective construction and more like a flat composition of layered planes. This has the limit condition of reducing depth to contour lines as two-dimensional occlusions of planes behind them, the same as seen in the woodblock print (figure 3.41).

The reason that this compression of visual space adds to the sense of layering is because it also strengthens the visual contour separating one plane of space from the next through occlusion of layers. While the photo does not literally have a contour line defining these layers, the Japanese prints very much rely on contour lines to depict these planes, and the effect is similar. Wright acknowledged this when he spoke of the Japanese method using lines to depict figures rather than the Western method of shade and shadow.



Figure 3.40. Example of telephoto view of landscape.

Photo by Don Peters.



Figure 3.41. Katsushika Hokusai, Poem by Sangi Hitoshi, from the series One Hundred Poems Explained by the Nurse. 1836. Museum of Fine Arts.

The use of layers and flat planes in occlusion rather than the Western method of linear perspective is evident in this print as the method used to develop a sense of depth and spatial structure. Building on this foundation, Wright proposes something which will be key to his idea of organic space. This will be the translation of the two-dimensional layering just described into three-dimensional architectural space, as when he says that there is:

a penetration of the inner depths of space in spaciousness [which] becomes architectural and valid motif in design. With this concept of depth interpenetrating depths comes flowering a freedom in design which architects have never known before...¹⁷⁸

This ambiguous text gains some clarification when seen in light of another passage, also from his 1957 book, *A Testament*:

¹⁷⁸ Ibid., 224.

The 'depth-dimension—really a fourth now—the sense of space. Perhaps the fourth as sought by the European cubist? The element we call space given a new concept. Listen to Laotze again: 'The reality of the building consists not in the walls and roof but in the space within to be lived in.' Witness organic architecture.¹⁷⁹

He also states that the first conscious expression of this new reality in modern architecture was Unity Temple.¹⁸⁰ Viewed in conjunction with statements of Wright in his earlier book, *The Japanese Print* and several of his Taliesin print party audio recordings, several things can be gleaned from these statements. First, that three-dimensional architectural space and design can and should be informed by this sense of space that these Japanese masters displayed in their two-dimensional prints. One of the strongest connections he makes from the Japanese print to how one sees three-dimensional space was given in on June 20, 1954 from one of his taped Sunday talks where he states:

They were anti-realism, the Japanese print. Just as Froebel was anti-realism in training the young mind to see. So here you have a new way of looking at the landscape. And the landscape has never seemed the same to me since I became familiar with the print. You're continually seeing differently; you're seeing, eliminating. You're seeing, arranging. You're seeing, I don't know exactly how to put it. Not in three dimensions, certainly, and yet perhaps that is the element of the third dimension made manifest by two.¹⁸¹

He implies that learning how to see the Japanese print changes how you see the world.¹⁸²

Second, he indicates the creation of a certain hyper sense of depth in architectural space whereby the formation of the "interpenetrating" space itself becomes a valid "motif" for the architect. By definition, one cannot have interpenetrating space without there being multiple spaces in a certain relationship with one another—a relationship of spatial interconnectedness rather than disjointedness. A single

¹⁷⁹ Ibid., 155.

¹⁸⁰ Ibid., 224.

¹⁸¹ Transcript of Japanese Print Party at Taliesin, September 20, 1950. CR.7 "Frank Lloyd Wright at Showing of Japanese Prints," 7.

¹⁸² Ibid.

unified space will not suffice either, contrary to the assumption that his Unity Temple was all about the space within as simple void. Indeed, Unity Temple, while containing a large primary interior volume, is not a simple space nor single space, but is a complex interpenetration of a primary space with peripheral secondary spaces so that the perception of space does not end in the primary cubic volume.

Early on, when Wright championed the idea in his prairie-era of the “destruction of the box”, he was reacting against the traditional Victorian home where its interior rooms were self-contained and disjointed from each other. His prairie architecture started to dissolve interior walls and allowed spaces to flow one into another in a new way. While his Prairie work may be seen as the initial, furtive steps toward the logical conclusion of the destruction of the box, the total destruction of the box with the Cartesian universal space of the International Style, as seen in Mies Van der Rohe’s Crown Hall for instance, was never Wright’s primary goal, for without some degree of spatial framing devices and depth cues, there would be no interpenetrating space, nor an organic space as defined as an integrated whole in a part-to-whole relationship as Wright so often declared. This idea of interpenetrating depths is made a key component of Wright’s particular spatial construction and one of the distinctives which qualify it as organic.

Within this print of Hokusai, another aspect which can be seen is a certain progression of the eye from foreground to background from left to right in an alternating, zig-zag pattern. The destination in this case is the circular figural ‘object’, really negative space formed by flanking outcrops. This is not arrived at in a straight line, but through a process of concealing and revealing, as of a mystery slowly unfolding rather than frontally and statically on display. I will refer to this principal as concealing and revealing. This point may have some relation to the *interpenetrating depths* above as well. Whereas interpenetrating spaces describe the structural framework whereby we can perceive the

interconnectedness of spaces within a larger whole, the method by which our visual experience flows from one space to another, or from foreground to background, takes on a certain pattern which will be more strongly evidenced in the following Hiroshige print and the Schwartz house itself. The Japanese term *miegakure* comes closest to describing this concept. It literally means “hidden from sight,” or hide and reveal, and is often used to describe Japanese garden techniques which emphasize partial obscuring of elements seen along a pathway which both heighten the draw towards the revealing of hidden elements as well as to induce an illusion of distance.¹⁸³ This pattern will also be seen as I examine the Schwartz house in the case study following.

This Hokusai print is an excellent example of emergent figural identity as symbolic form. According to Gestalt theory as described by Arnheim, a closed loop creates a figure, and figures are distinguished by contrast from their field or background. Sometimes these are ambiguous and figure-ground reversals may occur, such as in Wittgenstein’s famous example of the duck-rabbit diagram, or the vase-face diagram above. In this print, the circular gap between outcroppings at the top of the waterfall takes on a stronger identity than the solid outcroppings themselves and thus become the figure while the outcroppings become the ground. The water cascading from this circle also takes on a figural identity in relationship with this circle. In fact, this circle is said to be symbolic of Buddha’s head from which the waterfall was so named.¹⁸⁴

Seen in the larger context of the non-Western mode of pictorial representation, Erwin Panofsky’s discussion from his book, *Perspective as Symbolic Form*, has relevance here. He discusses the Western form of linear perspective as that in which the homogeneity of geometric space is merely

¹⁸³ “Miegakure” JAANUS Japanese Architecture and Art Net Users System.
<http://www.aist.or.jp/~jaanus/deta/m/miegakure.htm>.

¹⁸⁴ In the collection of The Honolulu Museum of Art, where on its website it is described, “The falls are so named because the hollow from which it spills seems to resemble the head of Buddha. Its exact location is not known; it could have been a product of Hokusai’s imagination.” <http://honolulumuseum.org/art/8956>.

a determination of position only and has no independent content and no substantial reality.¹⁸⁵ In contrast our psychophysiological perception of space is non-homogenous and acknowledges the directions of organization such as front and back, right and left, and figure and ground. In the Amida-ga-taki Waterfall (figure 2.39), the inner essence and symbolic function of space and form count for more than its mathematical “realism,” as Wright wrote in the Japanese Print book, previously mentioned. This Hokusai print, more so than the Hiroshige prints following, foreground the symbolic function over the realist one, to the point of inverting the normal figure-ground relationship to emphasize the symbolic content.

The two Hiroshige prints below (figures 3.42 and 3.43) are in the Van Vleck collection and previously owned by Wright. These prints also display the type of spatial depth effects Wright makes reference to in his own talks on the subject. The Surugacho print introduces the novelty of a hybrid spatial construction incorporating elements of Western perspective which is interesting when considered with Wright's own hybrid rendering techniques.

¹⁸⁵ Panofsky, *Perspective as Symbolic Form*, 30.



Figure 3.42. Utagawa Hiroshige, Surugacho, no. 8 from the series One Hundred Views of Famous Places in Edo. 1856. Chazen Museum.



Figure 3.43. Utagawa Hiroshige, Mt. Arima in Settsu Province, no. 16 from the series Mountains and Seas in a Wrestling Tournament. 1858. Chazen Museum.



Figure 3.44. Mt. Arima print with arrows diagramming the zig-zag spatial flow through the layers.

Figure 3.43, Hiroshige's Mt. Arima, a late landscape print of Hiroshige, shows many of the same principles seen above in Hokusai's Amida gataki Waterfall, but created over 20 years later. While this image has many depth cues, it does not rely on linear perspective to achieve that effect, but rather through the principle of flat planes in occlusion. At least six layers of depth planes can be discerned in this print.

Similarly, the method of stacking of contour lines to create the impression of depth layers is evident in the mountain forms, very reminiscent of Chinese landscape paintings as discussed in the first print above. Again, while there is no apparent 'thickness' in this print, there is an abundant sense of spatial depth. With the traditional Western approach of linear perspective, that depth is produced by a distortion of geometries which converge at the vanishing point, such as a rectangle which becomes a trapezoidal shape. Arnheim directly takes up this aspect of Asian landscape art when referencing the "space-building role of superposition in Chinese landscape painting"¹⁸⁶ where he discusses the location

¹⁸⁶ Arnheim, *Art and Visual Perception*, 251.

of mountains or other similar objects being set up by the use of overlapping planes seen frontally rather than through linear perspective. He states that this type of occlusion always creates a visual tension where the figure occluded “strives to free itself from the interference with its integrity.”¹⁸⁷

Wright's idea of interpenetrating depths is significantly evident in this particular print. Once the multiple spatial layers have been acknowledged, this particular print can be interpreted as exemplifying interpenetrating depths also. This interpenetration can also be seen in the blue foreground river which flows toward the background and is then hidden on its way to Mt. Arima while conversely, the white color palette of Mt. Arima descends from the mountain on its way to the foreground before it is cut off at a bend in the mid-ground outcroppings. In fact, it is a very strong example of the type of spatial interpenetration utilized by Wright in so many of his works. What is salient here is that the print has set up multiple spatial zones or layers which, while partially occluded or hidden from view, yet are interconnected with each other. There is a complex interrelationship of these spaces, and the viewpoint Hiroshige has chosen from which to view them could be considered an ideal one to glimpse the multifaceted flow of space between these many zones.

In regard to the principle of concealing and revealing, like Hokusai above, this Hiroshige print shows a similar right to left zig-zag pattern of drawing the eye from foreground to the background goal of Mount Arima, here mostly hidden from view other than a simple contour line against a same-colored sky on the most distant spatial layer (figure 3.44). The idea of *miegakure* applies here through hiddenness and revealing which occurs on the visual path of progression, even though in a two-dimensional print (as opposed to actual architectural space), the process is static and implied. Arnheim states, “Overlapping shows hiding and being hidden in a particularly expressive way.”¹⁸⁸ Perhaps while

¹⁸⁷ Ibid., 252.

¹⁸⁸ Ibid., 124.

expressed in different words, this is what Wright had in mind when he referred to “a penetration of the inner depths of space in spaciousness...” There is a certain amplification of the spatial depth effect produced by overlapping planes and framing devices within an architectural space, something commonly practiced by Wright in his buildings. Whatever additional parameters are provided by the three-dimensional phenomenology of spatial experience (such as movement, haptic, auditory, kinesthetic), the visual experience of three-dimensional space is always also a two-dimensional projected image on the retina requiring interpretation. It is also evident that the depth effect (the “inner depths”) is enhanced by having more layers of spatial depth in a given volume whereas a single unified space of the same overall volume would lack the same quality of depth cues.

The depth effects produced by the occlusion of flat planes by definition produce the concealing of space which provide both a sense of mystery as well as an invitation for discovery of what lies behind the corner. This asymmetrical layering and concealing of space is common in nature and provides another reason why Wright's spaces might be considered “natural,” when compared against either traditional formal spaces or modern universal space. When considering emergent figural identity as symbolic form, this particular print does not have the same obvious symbolic metaphor that Hokusai's Amida Waterfall does. Yet the Hiroshige print is not an attempt at realism either. Each element such as the mountains, the river, and Mount Arima in the distance, have been simplified into a more basic figural representation which conveys a certain stance to their referents. The foreground outcroppings, for instance, are given to their role as if they were ranks of soldiers inflecting into both the river and the meandering pathway to Mt. Arima. Items extraneous to this purpose have been eliminated. The river, likewise, gives us the necessary information for its role leading up the pathway as well. The sky and grey foreground remain silent framing devices for what takes center stage. Wright referred to this aspect he saw in the Japanese print as the “elimination of the insignificant.” This, he further

elaborated, was a way of dramatization of the subject:

To dramatize is always to conventionalize; to conventionalize is, in a sense, to simplify; and so, these drawings are all conventional patterns subtly geometrical, imbued at the same time with symbolic value, this symbolism honestly built upon a mathematical basis, as the woof of the weave is built upon the warp. It has little in common with the literal.¹⁸⁹

The principles seen in the other prints above are also seen in the Surugacho print (figure 3.42). Flat planes in occlusion are here seen most strongly in the cloud forms and Mount Fuji. The middle section of cloud layering occludes the village buildings below it, saving the drawing from resolving the vanishing point problem in the two lines of buildings. Likewise, the contour line is seen in the same mountain and cloud forms and help define their edge conditions necessary for overlap. Perhaps to a lesser extent, the interpenetrating depths is seen here also, but primarily in the interaction between the gaps in the clouds and the mountain. The figural identity as symbolic form here is dominated by the presence of the idealized form of Mt. Fuji itself, simplified and regal.

However, with this print I want to introduce a sixth characteristic not evident in the first two prints, that of a hybrid spatial composition which combines the traditional Japanese method of layered planes with the Western technique of linear perspective. The Japanese term *uki-e* refers to pictures which incorporate Western perspective technique. In the Surugacho print, the two rows of merchant buildings recede into a one-point perspective where the vanishing point is occluded by the cloud cover. This covers a compositional “mistake” where it would otherwise be obvious that the vanishing point was not placed at the horizon line in proper relation to Mt. Fuji. As it stands, the print is a hybrid of two different spatial systems not resolved but rather the Western system seems inserted as a collage element, denying the Western system its demand for an all-encompassing rational order.

¹⁸⁹ Wright, *The Japanese Print: An Interpretation*, 21.

Indeed, this Western construct was seen in Japan somewhat suspiciously and often, where applied to a print, carried a connotation of hubris. This is another reason why Mount Fuji and castle are not shown in perspective while the merchant streets incorporate this technique (see figures 3.10 and 3.42).¹⁹⁰ The overall composition in such prints remains consistent with a non-Western, non-realist depiction of pictorial space and seems to correlate to the Japanese sensibility of inclusion of Western perspective in their art.

CASE STUDIES

The following three case studies are presented to demonstrate the application of Japanese spatial construction, Gestalt perception, and Hegel's architectural aesthetics to specific Wright buildings—Unity Temple (1907), the Imperial Hotel in Tokyo (1922), and the Bernard Schwartz house (1937). Unity Temple is instructive since it is the first example Wright gives where he claims to have created a new sense of spatial depth. The Imperial Hotel, while sometimes criticized for excess, yet provides a fully-developed example that shows Wrights' ideal of integrating ornament into his spatial system. Lastly, the Schwartz house in Two Rivers, Wisconsin, is included as a later Usonian example after his work in Japan had ended in 1922. While it does not have the overt methods utilized in the first two examples such as intricate wood trim banding or elaborate carved ornament, the question here is whether Wright's deeper sense of organic space and underlying principles from the Japanese print carries over to this genre in his work.

¹⁹⁰ Screech, Timon, "The Meaning of Western Perspective in Edo Popular Culture." *Archives of Asian Art*, Vol. 47, (1984), 67.

UNITY TEMPLE

Frank Lloyd Wright's Unity Temple is the building used in this example to which several of Arnheim's perceptual theories are applied. Built in 1907, it served as an early breakthrough project for Wright in which many of his design principles were confirmed in his mind (Figure 3.45). He also provides written description of his design process for this building, which provides invaluable insights. In his *Autobiography*, in the 1940s, he reflects back on this process, stating, "I have undertaken here, for once, to indicate the process of building on principle to insure character and achieve style, as near as I can indicate it by taking Unity Temple to pieces."¹⁹¹

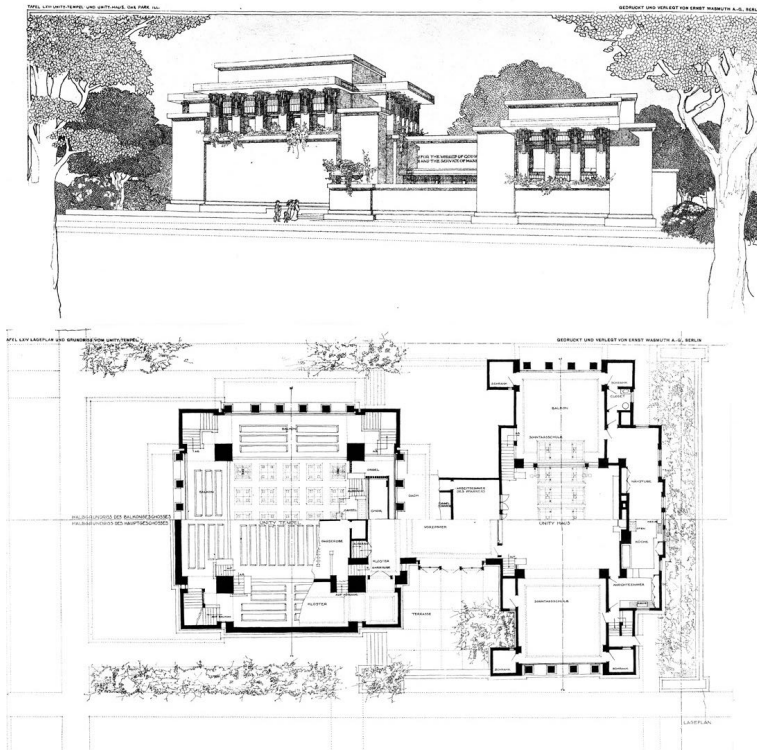


Figure 3.45. Frank Lloyd Wright, Unity Temple (1907) Oak Park, Illinois. As portrayed in the Wasmuth Portfolio of 1911.

¹⁹¹ Wright, *An Autobiography*, 160.

Others have also deconstructed this building to better understand its design principles. Neil Levine writes:

In the design for Unity Temple, undertaken during the construction of the Larkin Building, Wright gave a more positive cast to the enclosure of space, while at the same time relating the geometric forms of the building to certain traditional ideas of places of worship and to the spiritual meaning of space as place of communion and interaction. The bipartite arrangement of the Unity Temple complex therefore developed directly from the Larkin scheme. The main differences were in the relative size and hierarchical distinction of the two parts¹⁹².

However, Robert McCarter's analysis attributes its bipartite arrangement to that of the Japanese Taiyouinbyo temple at Nikko¹⁹³ (figure 3.46), an observation shared by Kevin Nute.¹⁹⁴ This comparison presumes a purely formal and typological similarity between the two buildings since their use (beyond them both generally being places of worship) and experience of the spaces is very different. The timing of Unity Temple bears noting given that its design began just months after Wright's first trip to Japan in 1905. In fact, Wright hosted a Japanese social at his home for the Unity Temple Club during its design and showed off his extensive Japanese woodblock print collection at the Chicago Art Institute.¹⁹⁵

¹⁹² Neil Levine, *The Architecture of Frank Lloyd Wright*, 40.

¹⁹³ McCarter, *Frank Lloyd Wright*, 27.

¹⁹⁴ Nute, *Frank Lloyd Wright and Japan*, 169.

¹⁹⁵ McCarter, *Frank Lloyd Wright*, 27.

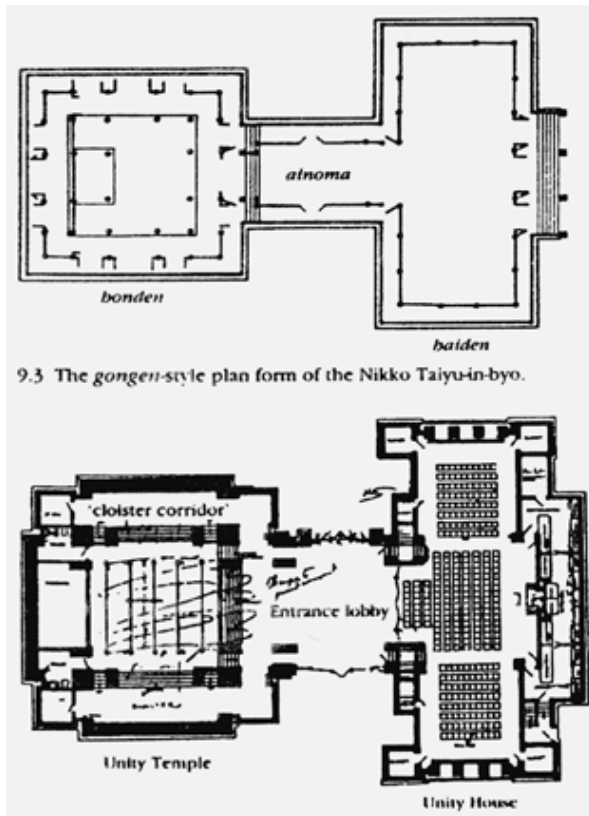


Figure 3.46. Floor plan of Taiyouinbyo temple at Nikko above Unity Temple below. Nute, p. 169.

McCarter also observes that Wright did not arrive at the final arrangement of folded planes and trim on the interior until the building was actually under construction.¹⁹⁶ I was curious whether this last-minute change might actually be the turning point for this breakthrough in other works, residential as well as commercial. I was not able to find any examples where Wright actually 'folded' the trim around the corner in a three-dimensional manner until after Unity Temple was built. He did not consistently apply this technique to his homes after Unity Temple, but it does appear that Unity Temple brings to light an important breakthrough in Wright's concept of space, which is substantiated by Wright's words as well. I have provided a visual timeline of his use of trim as a framing device before and after Unity Temple in Appendix A.

¹⁹⁶ Ibid.

For Wright, space in Unity Temple is the heart of the design as he states, “Let the room inside be the architecture outside so that it may be seen as the soul of the design.” This, as per Laozi, is that the essence of the room is not the walls but the void within. He claims the exterior massing is being impressed by the shape and flow of the space within, the true reality of the building, and that here at Unity Temple was his first conscious expression of it.¹⁹⁷ However, the void within is not a thing. It only has ontological value in what it is not. But space is perceived, per Arnheim, not as its own entity but as a relationship among the material, planar elements that are seen. So, in Unity Temple, the four strong corner piers and balconies set up a strong centered space based on two-way symmetry. The scale of this space is a function of the distances between them and their height. The ceiling, floor, balconies and floors, and intermediate planar elements resonate together in a particular relationship that defines the character of this space. Space may be considered as an entity such as negative figure-ground, but actually the space is better understood as a relationship among those physically defining elements—the distance from element to element in relation to their height, the relationship (i.e.: proportion) of ceiling height to width and depth of the main sanctuary, etc. (Figure 3.47).



Figure 3.47. Unity Temple interior

¹⁹⁷ Pfeiffer, *The Essential Frank Lloyd Wright: Critical Writings on Architecture*, 430.

Regarding this central void and Wright's understanding of the primacy of space it has, the contemporary Japanese architect Arata Isozaki makes a comment on Wright's understanding of Lao-tse. Isozaki claims that Wright missed the Taoist concept of omnipresent emptiness and instead had constructed a teleological internal space, which objectified its contents. An ontology based on nothingness was changed into a process of designing a specified space.¹⁹⁸ Isozaki does concede that architects are conditioned to regard form as intentional and tactile in any case, making an ontology of negation difficult. However, Wright was not one to be compelled to extract any external influences wholesale, and rather would adapt them to his purposes, which in this case was an American culture of democracy and individuality based on a Judeo-Christian ontology of presence rather than of absence.

Hegel's idea of romantic architecture has some implications, which coincide with Wright's here. For example, Hegel states that classical architecture prioritizes the external form while the romantic stage foregrounds the interior. In fact, in romantic architecture the exterior derives its form from the interior space.¹⁹⁹ Hegel goes so far as to say that the "purposiveness of a house, whether in respect of enclosure by means of side walls and roof or in regard to beams and columns, is only an incidental so far as the formation of the whole building and its parts is concerned."²⁰⁰ This parallels Wright's idea that Unity Temple's exterior was as an impression made from the interior space or his broader principle that the external form should not be applied from without but should naturally flow outward from the inner working out of the floor plan. Hegel's idea that the purpose of the

¹⁹⁸ Arata Isozaki, *Japan-ness in Architecture*, (Cambridge: MIT Press, 2006), 5.

¹⁹⁹ Hegel, *Aesthetics* Vol 2, 687.

²⁰⁰ *Ibid.*, 688.

architecture is not due to the individual elements such as walls, roof, or columns, but rather the interior space sounds much like Wright's conception of Laozi where the essence of the architecture lies not in walls and roof but in the space within to be lived in.

Wright, consciously or not, extensively used the contour line in his Prairie period; Unity Temple being one of his strongest examples of it with its use of narrow wood trim bands throughout the interior spaces. Simple applications of wood trim bands formed squares and rectangles on flat planes as if to further define each two-dimensional plane as its own identity. But late in the project (during construction actually) Wright had a breakthrough with the contour line and he wraps these trim bands around the corners of the piers, wraps them beneath the balcony walls, and wraps them across ceilings and up into skylights. Now planes which are separate elements suddenly become volumes with depth to them. Trim bands wrap around avoiding the corner wood trim piece in order to highlight the plaster as a sculptural element. Now the trim does not belong only on one plane but forces the eye to see depth, which is what Wright said he was doing. Ironically, the same contour lines seen at certain viewpoints tend to flatten out the element, actually compressing out the third dimensions. This occurs, for example, when looking towards a large column from the corner rather than the flat side of it. (Figure 3.48)



Figure 3.48. Unity Temple showing flattening effect of the column at the diagonal view.

With the contour line, Wright creates 'spatial discontinuities' as he fragments on one hand, only to unite all back together on the other hand. So why the effort? A simple plaster column with no trim reads as a three-dimensional element; nothing else is needed if the intent is simply to express a three-dimensional sculptural quality. While one might suggest that Wright hadn't yet reached his mature stage when he would eliminate most or all of the wood trim banding, this still doesn't explain why he chose this approach at this time when most contemporaneous architecture of the time lacked such trim bands yet expressed a sculptural three-dimensionality. Perhaps Hegel here brings in some insight. While Hegel is explaining his conception of romantic space referred to above, he also adds that this interior space "must not be an abstractly uniform and empty one that has no differences..."²⁰¹ He says, "what is required ... is a formation differentiated in length, breadth, height, and the character

²⁰¹ Hegel, *Aesthetics* Vol 2, 688.

of these dimensions.” This is in opposition to the unsuitable square space with plain walls and ceilings. He then makes the obscure statement that, “The movement of the spirit with the distinctions it makes and its conciliation of them in the course of its elevation from the terrestrial to the infinite, to the loftier beyond, would not be expressed architecturally in this empty uniformity of a quadrilateral.”²⁰² While Hegel is using the Gothic cathedral here as his example, the comparison here is not inappropriate given the use of Unity Temple as sacred space for worship and gathering. But beyond the building’s programmed use, what is of most significance here is the implication of the transcendent gaze and how it is enabled through materiality. That Hegel’s romantic stage of art is one where the transcendent has broken through is clear from his writings. That Wright is doing the same here seems likely. The fragmentation and dematerialization of form that takes place in Unity Temple cannot be said to reinforce Wright’s idea of the nature of materials being expressed ‘honestly,’ but it can be argued that this serves to point beyond sensuous materiality transcendentally to what Wright referred to as the idea within, “that inner harmony which penetrates the outward form or letter and is its determining character; that quality in the thing that is its significance and its Life for us—what Plato called the eternal idea of the thing.”²⁰³ This is also saying what JMW Mitchell said above regarding the image being not the literal picture of the thing but rather its inner essence.

Another observation Arnheim makes of the contour line is that its influence on the inner outlined surface varies with the distance so that the larger the bounded area by the contour line, the weaker its influence.²⁰⁴ The density of Wright’s use of trim bands in Unity Temple therefore speaks of the strength of the visual effect of figure-ground relationships to fragment one large space down into many

²⁰² Ibid.

²⁰³ Pfeiffer, *Frank Lloyd Wright Collected Writings*, Vol 1, 118.

²⁰⁴ Arnheim, *Art and Visual Perception*, 222.

independent units that nevertheless are in a relationship of continuity. While the trim bands create separate figural planes, they also draw the eye from balcony to column, from pier to skylight, etc., which further outlines the geometric order of the architecture.

Continuing from the discussion of Wright's use of contour above, these bounded planar elements trimmed in wood set up figures, and by necessity, ground relations. Space is not just about the trim turning the corner to express the fact that a column is three-dimensional—in fact the bent shape framed in trim sets up figures that visually float or separate from their ground behind them (even when they are on the same physical plane). It is depth layered upon depth, the abstraction he achieved with the Prairie style's fragmentation and decomposition of traditional form to create an abstract architecture of lines and planes in space, serving to dematerialize the structure whereby material substance is subordinated to the primacy of visual perception—the two-dimensional projection on the retina.

Figures 3.49 and 3.50 demonstrate Arnheim's idea of the contour and figure ground relationship when viewed from a small section of the interior of Unity Temple. Figure 3.49 is a grey-scale neutral photograph of one corner of the sanctuary showing the various trim elements as they form planes and wrap around corners. As Arnheim states, when one forms a closed loop, a figure-ground relationship is created where the area within the contour is considered figure and the surrounding field as background. In figure 3.50, the two highlighted yellow sections represent two panels formed from closed loops (actually rectangles) that form a visual plane or panel. With the ceiling panel shown, it plays the role of figure while the grey boarder area around it is the ground or field within which the panel sits. This provides a depth cue to the eye whereby the yellow panel can be seen as slightly projected from the background, even though they are on the same physical plane. Conversely, one may view the yellow plane as a hole or a void within a solid grey frame.



Figure 3.49. Unity Temple Black and White photo of corner of sanctuary space.



Figure 3.50. Unity Temple Colored panels showing figure-ground relationships.

The same is true with the folded yellow plane on the main column. Here the trim band sets up a strong sense of a folded plane, even though the two planes joining at the corner are as separate as the other corners in the building. The eye is forced to recognize the sculptural, three-dimensional aspect of this element. However, there remains the possibility of reading this (yellow) corner element as figure in front of the column field (green area), or as a void set back from the surrounding green field of the column. Similar exercises can be made for the blue and red sections shown which either represent two-dimensional planes or folded planes emphasizing the three-dimensional nature of the architecture. The play of imaginative perception allows different observers of a building to experience the same space differently.

Alluded to above, one of Wright's tenets of organic architecture is the nature of materials, and that materials be used in an honest expression of their inherent character. In Unity Temple, his primary material is reinforced concrete, that moldable material most freely to be worked into various forms. Ironically, the building is very different on the interior and the exterior. The exterior does convey as he says, the sense of materiality of the new material of reinforced concrete left exposed in the nature of the material. Yet the sense of this is almost totally lost when one is in the interior where trim bands and plaster walls effectively create a dematerialized reality of visual abstraction. The interior of Unity Temple which parallels his architectonic expression in his Prairie style homes, seems to depart from this dictum of the nature of materials when he uses the contour line (expressed in complex wood trim bands) to fragment the walls, columns, and ceilings into a multitude of elements that create a symphony of figure-ground plays into the visual field of the observer.

While it may seem Wright is being inconsistent with his theory of organic architecture, he actually is being consistent with Hegel's theory of Romantic architecture. Hegel seems to have already addressed this dilemma between materiality and formal expression in his philosophy of art as it

pertains to the Romantic stage in architecture where he states that:

...nothing is left to the artistic representation but to refuse validity to the material and the massive in its purely material character and to interrupt it everywhere, break it up, and deprive it of its appearance of immediate coherence and independence."²⁰⁵

In Hegel's system, it is in the romantic stage of architecture (as opposed to the earlier Symbolic and Classical stages) that Spirit or Idea triumphs over the external material object, which is incapable of fully expressing the idea. This is the opposite of the modern idea of the honesty of materials and that the function (as defined through physics) should define the final form.

Wright sublimates the whole to smaller frames of reference, which often identify with a smaller human scale but also serve as a framing device, which sets up viewpoints, which speak to the observer's place in the whole. Note that in figure 3.5I the observer's viewpoint under a balcony is at the periphery of the central spatial volume. This balcony compresses and individualizes the observer's own space which is connected to but distinct from the larger one. Visually, considered as a figure-ground study, the balcony and immediate foreground objects act as frame and figure, while the main volume serves as the ground.

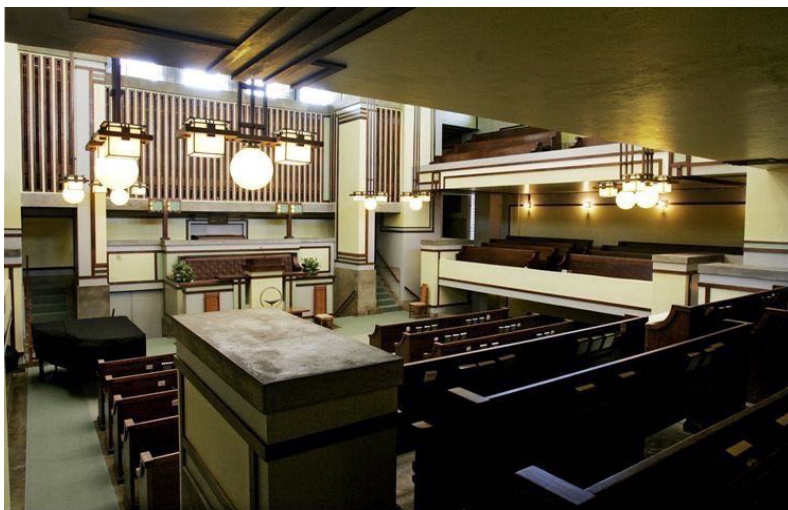


Figure 3.5I. Unity Temple: Spatial framing at balcony overhang.

²⁰⁵ Hegel, *Aesthetics* Vol 2, 696.

As Arnheim states, in a figure-ground relationship “one [of them] has to occupy more space than the other and in fact has to be boundless.”²⁰⁶ Wright continually sets up frames where figure-ground relationships will be noticed. The framing devices visually cut off the ground, which continues beneath the depth level of the frame. There is a type of mystery thus set up since the ground is indefinite, therefore potentially infinite. Edmund Burke refers to this when he said that there are scarcely any objects presented to our eyes which can be considered infinite, but since the eye is not able to perceive the boundaries of many things, they seem to have the quality of the infinite and produce the effects of the sublime on the observer.²⁰⁷ Burke also observes that agreeable sensations are better produced in the nascent and incomplete rather than the whole, “because the imagination is entertained with the promise of something more and does not acquiesce in the present object of the sense.”²⁰⁸ Compare this type of spatial framing with the International Style’s idea of universal space, seen in Mies van der Rohe’s Crown Hall at the IIT campus in Chicago. (figure 3.52). Here the volume, which is much larger than in Unity Temple, is perceived immediately and its boundaries understood completely. It both lacks the spatial framing devices used by Wright as well as the type of articulation and differentiation discussed by Hegel, which set up the transcendent gaze.

²⁰⁶ Arnheim, *Art and Visual Perception*, 228.

²⁰⁷ Edmund Burke, *A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful*, (New York: Rutledge, 1958), 73.

²⁰⁸ *Ibid.*, 77.



Figure 3.52. Mies van der Rohe; Crown Hall, Universal Space.

Wright said that one of the principles of organic architecture was the part-to-whole concept, or the integrated whole. This idea has validity in the visual sense as it enables the observer to tie together smaller percepts into a comprehensive whole. In Unity Temple, there is a simple overall organization clearly seen from the outside—two main volumes, which Wright termed 'bi-nuclear', the larger main sanctuary and the Unity 'House' enclosing support functions. Although composed of simple rectangular forms, their nested and hierarchical composition generates its rich complexity. On the interior, volumetrically, the space is simple and almost Beaux-Arts like. The sanctuary is a central cubical volume and yet it rewards exploration to the observer with a seemingly unending number of different, unique, and rich views. This perhaps is due in part to the obscurity at the periphery where views disappear behind framing elements, which lead one to Burke's comment above regarding the intrigue of the incomplete yet promising view.

The interior of Unity Temple gives physical evidence of these techniques in play. As a rich, layered space of balconies, levels, columns, its layering and depth cues are even further accentuated

by flat planes that decompose into figure-ground relationships whereby those flat planes have virtual depth to them. These in turn integrate into the actual depths of the building to create the complex and rich space that it is. Were one to simplify the interior of Unity Temple by taking away all of the trim and special articulation, one would have a fairly simple, static space, primarily depending on the depth cues provided by the overhanging balconies and shadowed recesses they create.

While central perspective had a certain scientific exactness to it, it does not serve to express the idea better than other forms of expression seen in Japanese prints, for instance. Hegel had emphasized the priority on the idea over the literal or accidental encumbrances, which only worked to obscure that essential idea of the thing. As contingent factors, they also lack the necessity inherent in the generating idea of the thing. In Wright's writings, he seems to reinforce this view.

This case study of Unity Temple has gleaned concepts from a philosopher and a perceptual psychologist in order to add insight into Wright's system of spatial construction. While this study has only touched upon a small fraction of the material that can be distilled from both Hegel and Arnheim, it does point to a method of correlating the broader metaphysical aspects of Wright's organic architecture with perceptual tools with which his built works can be analyzed at an elemental level to test Wright's philosophical statements. In Unity Temple, Wright was not true to an honest expression of materials due to his prioritizing of the dematerialization consistent with Hegel's romantic stage of architecture and the expression of the abstract inner essence.

Wright's spatial construction as seen in Unity Temple foregrounds aesthetic visual devices in the expression of transcendent principles important to Wright's organic theory of architecture. While Wright's idea of a natural, organic architecture is often confused with a biologically based or biomimetic methodology, Wright first uses the visual dimension to convey his metaphysical concepts. These same methods employed by Wright in Unity Temple and other works also seem to connect

innately to various generations of people who have experienced these works, and their rich, visual poetry.

IMPERIAL HOTEL

Some of the more standard lines of inquiry by which the significance of Wright's Imperial Hotel has been reviewed include a factual historic approach, a stylistic analysis of its place within the development of 20th century modernism, and the engineering record of how the building withstood the Great Kanto earthquake of 1923, the latter of which Wright himself spends considerable time developing in his *Autobiography*. However, I will be focusing my examination of the Imperial Hotel here from four vantage points chosen for the purpose of further defining the thesis of my project. These are Wright's synthesis of East and West, its spatial construction, its materiality, and the nature of surface and ornament in its design.

The Imperial Hotel (completed in 1923) was a significant project for Japan in its quest for modernization in the quest for stature in the eyes of the West. It was a national symbol and cultural center for interchange with western visitors. It was also a major break for Wright, coming at a time which helped revive his career from previous scandal. As mentioned previously, Wright had interest in Japanese art long before he started corresponding about the Imperial Hotel project in 1913. Even this was through the benefit of his connections in the world of Japanese print dealing, specifically through Frederick Gookin, who introduced him to the hotel manager Hayashi who was searching the world for architects. While the Imperial Hotel survived the Great Kanto earthquake of 1923, it finally

succumbed to the wrecking ball in 1968 to make way for a hotel with more space by rising vertically in an increasingly dense Tokyo city. What survives today is the entrance hall and reflecting pool which was moved and rebuilt at the Meiji Mura outdoor architectural museum north of Nagoya. I have visited this reconstruction at Meiji Mura, and while it contains some fascinating spaces within it, it is far from its original scale and grandeur, both in terms of its horizontal extension and its vertical scale. Its current setting in the countryside is somewhat curious also as it sits like a Mayan temple in a pristine natural surrounding. Originally, it carved out its own spatial boundary within a dense, urban landscape (Figures 3.53, 3.54).



Figure 3.53. Imperial Hotel Entrance Hall reconstruction at Meiji Mura museum.



Figure 3.54. Imperial Hotel, Tokyo, shortly before demolition.

It is my contention that the primary factor which disqualified the Imperial Hotel as an exemplar of Modernism in the early twentieth century is one of the most significant aspects of this project and the understanding of Wright's organic theory. This is its use of ornament, and more importantly, the place it held in Wright's overall system of organic architecture. As a contemporary critique of the building, Hitchcock writes:

The Imperial Hotel at Tokio [sic] done in 1916 has been Wright's largest commission. Yet the design, despite its admirable plan, as redundant, overburdened with unskillfully exotic ornament, and except where the quality of the materials is brought out, vastly ineffective. The interiors on which Wright expended apparently a considerable effort are incomparably worse than those however Louis XVI of any coeval Ritz.²⁰⁹

Applying the lens of rationalism as understood in relation to European Modernism, Hitchcock reads the Imperial Hotel as a throwback which exposes Wright's weaknesses in "his intellectual and

²⁰⁹ Hitchcock, Henry-Russell Jr. *Modern Architecture: Romanticism and Reintegration*. (New York: Hacker Art Books (reprint of Payson and Clarke, Ltd. 1929)), 115.

logical command of his problems” as he falls back on “his cult of ornament and embellishment.”²¹⁰

Like much of the early homogeneous approach to modern architectural history, it is often unable to properly place it within the stream in which Modernism developed. Other opinions of the building varied, both within and outside of Japan. The *Japan Advertiser* in 1922 acknowledged its originality, boldness, and artistic beauty, while at the same time predicting it would challenge old habits of thought²¹¹. While much of the Western criticism could be harsh, Louis Sullivan defended Wright’s design, seeing it as an “epic poem” which was not Japanese in style, yet a perfect complement for them and a building which evoked the pure human sense of joy²¹².

In the section on Fenollosa, it was seen how he used and modified Hegel's dialectic to argue for a new synthesis between East and West which would transform world culture. Wright's Imperial Hotel was his own supreme opportunity to express in brick and stone this theory with which he would have been familiar. The hotel quite literally was a site of social intersection between Japan and its international guests, which would make such a statement both relevant and also open to scrutiny. Wright stated that he was the first Western architect to do a project in Japan which was not merely the importation of a European design style. Wright felt that there was much to be learned from Japanese traditions and sought to design a building which respected those traditions and the culture of its people.²¹³ If Wright failed in this attempt, it certainly was not for lack of intent nor intensity of effort. While he was urged to heed the hotel manager Hayashi's advice to not offend the directors by creating something too modern, he also relished this opportunity (the largest of his career) to express the theory of organic architecture which by this point in his career was fairly mature. Certainly, the

²¹⁰ *Ibid.*, 117.

²¹¹ *Japan Advertiser*, 7 July 1922, from scrapbook, FLWA 1702.004.

²¹² Margo Stipe, “Wright and Japan,” *Frank Lloyd Wright: Europe and Beyond*, Anthony Alofsin, (Berkeley: University of California Press, 1999), 30.

²¹³ Wright, *Autobiography*, 214.

affinity of his work to Japanese aesthetics many years prior to this commission meant a project without any major change in direction from his own genre. He could design the hotel in the mode of the Martin house or Robie house with no additional innovation and it would be in fact sympathetic to Japanese culture and aesthetics. This fact makes it that much more important to see what unique aspects Wright brought into this hotel which he felt made it an appropriate example of this synthesis of East and West.

Importantly, it must be stated also that Wright was not simply looking to the Japan as he saw it in 1916-17; he clearly stated that he was also framing his view of Japan as an idealized version of it as seen through the window of the woodblock prints.²¹⁴ Wright saw Japan in the early twentieth century in confusion as to its own cultural identity and all too eager to copy the West. The project of modernization, while necessary, had also served to dissolve Japan's aesthetic purity, which he saw portrayed in the woodblock prints of the 18th and early 19th centuries. The prints were a window back in time, as the past was an important component in creating the new synthesis he sought. Wright saw his design as a great "transition-building"²¹⁵, to create a "transition-world" with a view to the spirit of the Middle Ages. Perhaps this reference to the Middle Ages is meant to reference Viollet-le-Duc, whom he admired, and his medieval rationalism, and hence a union of Western Rationalism and Eastern spiritualism. If so, this would reinforce a possible reading by Wright of Fenollosa's view of the dialectic between East and West. It was a transition building not only between East and West, but also between old and new. He states that he had to modify certain elements of the hotel's construction to accommodate hand labor and lack of certain machine processes he was used to having available. Lastly, in terms of transition, Wright felt that this building was a bridge linking his early and later

²¹⁴ Ibid., 212.

²¹⁵ Ibid., 224.

career.²¹⁶ Ken Tadashi Oshima has more recently noted that within a 1924 book published by the Imperial Hotel, currently in the Frank Lloyd Wright archive at the Avery library, is the text stating, “It is neither of the East nor of the West, but might fittingly be called a blending of the ideals of the two civilizations.”²¹⁷ This shows a Japanese reception of Wright’s goal not to simply bring in a western architectural import, but to create a synthesis of the two into a new form which could be called neither Western or Eastern imitation. This is in keeping with both Fenollosa’s and Hegel’s idea of the dialectic in which the synthesis is not an additive process but an integrative one, that of sublimation which brought forth a new entity, where the resolution occurs on a higher level than either the thesis or antithesis, which appear to be in conflict or contradiction.

Compositionally, Wright’s design for the hotel was laid out on a more traditional symmetrical floor plan (figure 3.55), which could be seen both as derivative of Beaux Arts architecture and also of Japanese temple architecture, such as the Byodoin, Ho-o-do, or Phoenix Hall near Kyoto (figure 3.56).

²¹⁶ Wright, *An Autobiography*, 194.

²¹⁷ Ken Tadashi Oshima, “Frank Lloyd Wright at 150: Unpacking the Archive,” film clip (New York: Museum of Modern Art, 2017), accessed: <https://www.youtube.com/watch?v=X4zjmMDEN00&t=39s>

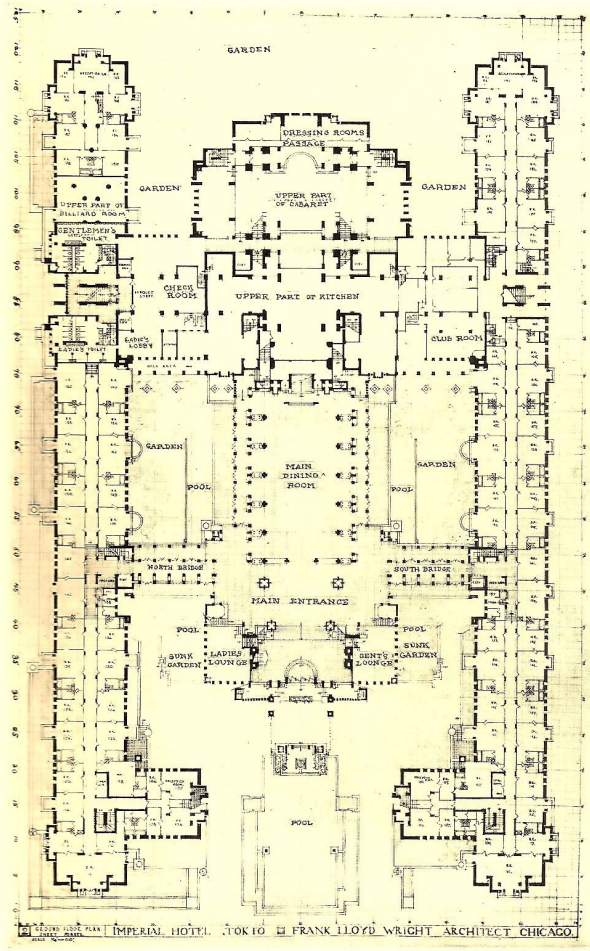


Figure 3.55. Imperial Hotel floor plan

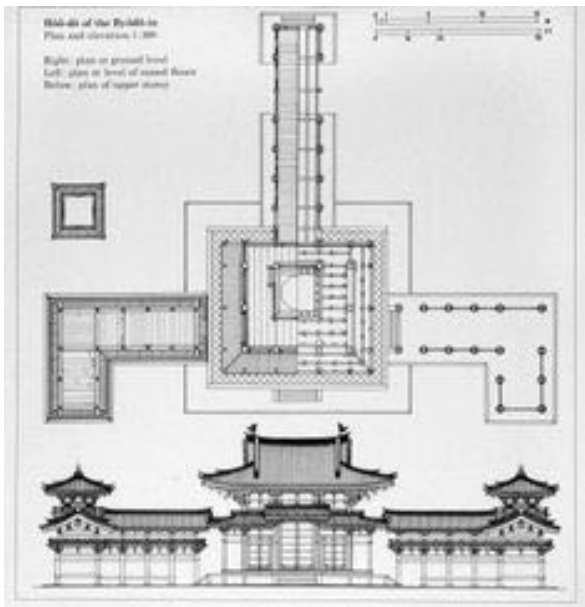


Figure 3.56. Phoenix Hall of Byodoin Temple in Kyoto

Hitchcock was not the only one critical of the design direction of the Imperial Hotel. David Stewart, writing in 1987 of the hotel, did not see in this work what Wright referred to as “doing in architecture what Hiroshige did with the print”, seeing its strong central perspective as antithetical to the Japanese spatial system. He also saw it as so highly ornamented as to appear scenographic and divorced from any context, including Wright’s own unique spatial sense.²¹⁸

Isosaki also references Wright’s sense of space when discussing his Imperial Hotel and how most Japanese people did not read this hotel as being Japanese in character. More important to this study, however, is the comment he makes in regard to the Imperial Hotel’s sense of space. Isosaki states that the Japanese sense of space is one of *flatness* which he says is derived by the lack of perspective, epitomized by the ukiyo-e woodblock print, something Wright was very familiar with and indeed said was influential in his own conception of space. Isosaki states regarding the Imperial Hotel, “Wright’s design entailed a conventional Beaux-Arts compositional scheme unrelated to the Japanese way of sensing space, in which depth comprises layers of planes without regard to graduated perspective.”²¹⁹ While there is truth in the Beaux-Arts comparison, I disagree that a Japanese sense of spatial layering is not in evidence here. And certainly, examples of Japanese symmetrical plan layouts show that this in itself is not a limiting condition for spatial layering. There is actually a tremendous degree of spatial complexity in the Imperial Hotel design, which happens to be organized upon the skeleton of the seemingly simple and classical plan composition. As seen in figure 3.57, the “Peacock Alley” space within the hotel shows a clear sense of spatial layering, even if it is the smaller scale of using structure

²¹⁸ David Stewart, *The Making of a Modern Japanese Architecture: 1868 to The Present*. First edition. ed. (Tokyo; New York: Kodansha International: Distributed in the U.S. by Kodansha International/USA through Harper and Row, 1987),82.

²¹⁹ Arata Isozaki, *Japan-ness in Architecture*, (Cambridge: MIT Press, 2006), 8.

to create spatial definition rather than a larger scale, asymmetric composition, as he is more known to do. These arched 'ribs' are mostly two-dimensional; they are thin planes set in a cascade of layers which add to a sense of depth. The trimmed out vaulted ribs here remind one of an ukiyo-e print of Danjuro which Wright as an art dealer purchased for William Spaulding and is now in the collection at the MFA (Figure 3.58).



Figure 3.57. "Peacock Alley" at the Imperial Hotel.



Figure 3.58. Katsukawa Shunsho, Ishikawa Danjuro V, 1778. Museum of Fine Arts (Spaulding collection, purchased from Frank Lloyd Wright in 1916).

Wright saw in Hiroshige and Hokusai a new way of spatial framing, a method of achieving spatial depth through two-dimensional framing and layering. This sense of depth was also accentuated by parts of images which reached beyond the edges of a frame, as was often done with Mt. Fuji in certain prints by these artists. When Wright recounted the design of the Imperial Hotel in his *Autobiography*, with a Western audience in mind, he focused on the technical aspects of his design and international honor of receiving this commission. Yet this design was a gift back to the Japanese people which reflected the lessons he had learned from these great ukiyo-e masters. Wright was pursuing the natural outworking of the organic principles which he formulated shortly before in his book, *The Japanese Print*. The Imperial Hotel's greatest achievement was its translation of the two-dimensional spatial devices of ukiyo-e into the three-dimensional medium of architecture. The Imperial design is a key moment in Wright's work where ornament and space are brought together into an integrated whole. This integration of two and three dimensions is usefully analyzed using Gestalt methods, as seen in the prior example of Unity Temple. Wright did this in the hotel in large part through his system of framing devices and two-dimensional ornament which is completed in the third dimension. The hotel is the concretization of the theoretical treatise he offered in *The Japanese Print*. Without reference to this book, much of the hotel's design could be misinterpreted.

Anthony Alofsin has shown potential influences from the Secessionist movement at play with certain frames in the hotel.²²⁰ This may indeed be true. However, more consistent and continuous with his immersion into Japanese art as expressed in his own writings, it seems that the framing devices employed on the hotel are a logical outgrowth of his ideas of geometric expression and spatial

²²⁰ Alofsin, *Frank Lloyd Wright: The Lost Years, 1920-1922: A Study of Influence*, (Austin: Innerforms LTD, 2009), 209.

framing. The front facade of the north bedroom wing at the hotel (figure 3.59) has a presentation of facade which is not unlike other works he produced in his Prairie era, including the Darwin D. Martin house for example (figure 3.60). Both designs incorporated a heavy masonry base which stops short of a low hip roof which visually floats above the masonry mass creating an upper visual horizontal void. Masonry is accented by thick cut stone caps and trim elements. Both also have vertical masonry piers as secondary compositional features which articulate the openings into the building rather than simple windows as punched holes in the wall. Yet uncharacteristically, in the Imperial Hotel, he uses a strong frame of Oya stone which picture-frames the central opening in the base of this facade. This seems somewhat incongruous for Wright at this stage of his career because it seems to come across as too flat and two dimensional for his mature Prairie style. It makes more sense if understood in light of the prints. The frame serves as the grounding upon which depth plays can be measured, much as in the Japanese print a figure which overlapped the frame was given exceptional spatial importance. It would seem to be an introduction to a spatial play which is only hinted at here at the exterior wall. Even here, the frame, accompanied by two articulated Oya stone columns, gives way to a deep visual void within, as if to hint to a depth of space within.

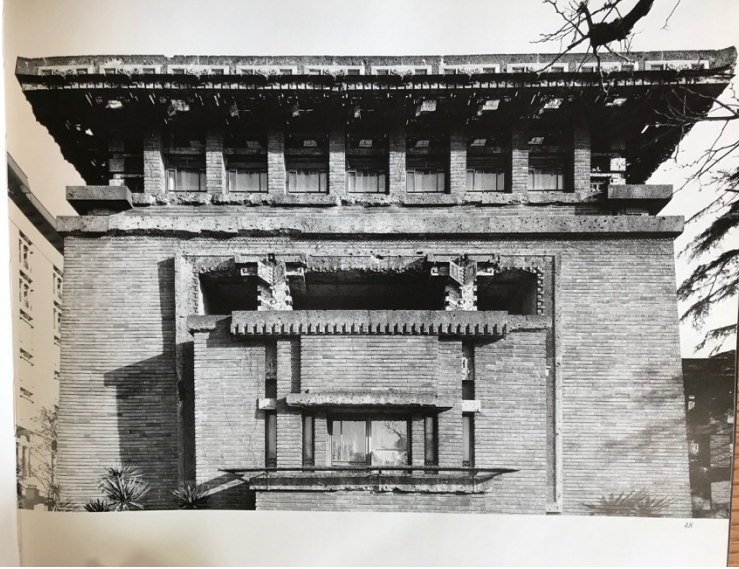


Figure 3.59. Frank Lloyd Wright, Imperial Hotel, front facade of north bedroom wing. 1923.



Figure 3.60. Frank Lloyd Wright, Darwin D. Martin house, 1902.

The fireplaces throughout the hotel are places which highlight ornament with its rich geometric texture highlighted by the wash of vertical light from the hidden coves above. (Figure 3.61). The brick acts as the backdrop from which the carved lava stone build upon. As if not content to be considered a mural or two-dimensional frieze as he did with the Coonley home fireplace, Wright lets the carved stone have depth and projection in the following fireplace mantel. Ornament is bridging into the third dimension in its sculptural quality. This is similar to how the Gothic cathedral's carved stone ornament

transforms surface into sculpture. But that Wright is intending something more here is seen below in a curious segment of ornament which hangs below the mantel on the right side. This would seem to be a gesture to the Japanese print, and specifically to the work of Hiroshige and Hokusai (figure 3.62). Wright was very interested in how these artists broke through the frame and border of the print and this fireplace feature seems to be a reflection of this aesthetic device.



Figure 3.61. Fireplace at Imperial Hotel.



Figure 3.62. Katsushika Hokusai, The Apparition of Mt. Fuji on the 5th Year of Korei from Manga Vol. I, 1814.

This ornament which transitions into the third dimension doesn't seem to be the final spatial use by Wright of ornament. A third level of spatial interplay would seem to be his use of broken or incomplete ornament which is incomplete in the planar dimension but finds its completion in the third dimension. This would be the ultimate expression of Wright's concept of organic ornament or integral ornament. This was seen in part in Unity Temple where he made the invention of folding his trim around the corner while simultaneously eliminating the corner trim to create the perceptual Gestalt characteristic of greater depth of space. Here in the Imperial Hotel he does this in carved lava stone where incomplete squares find their completion in the third dimension and where partial framing devices create more rich and complex Gestalt patterns by perceptually integrating themselves to architectural elements at greater depths. This particular ornamental piece further shows a blending of the two and three dimensional in its peculiar configuration of an urn which turns the corner and presents a fully three-dimensional aspect, while growing out of the two-dimensional ornament (figure 3.63). While the urn is a positive extension into space, it is contained in a grounding field which does the opposite by providing a Gestalt void. Yet even this void is inflecting to the third dimension as it wraps the corner as an expression of the depth dimension Wright sought and posited as evidence of organic space.

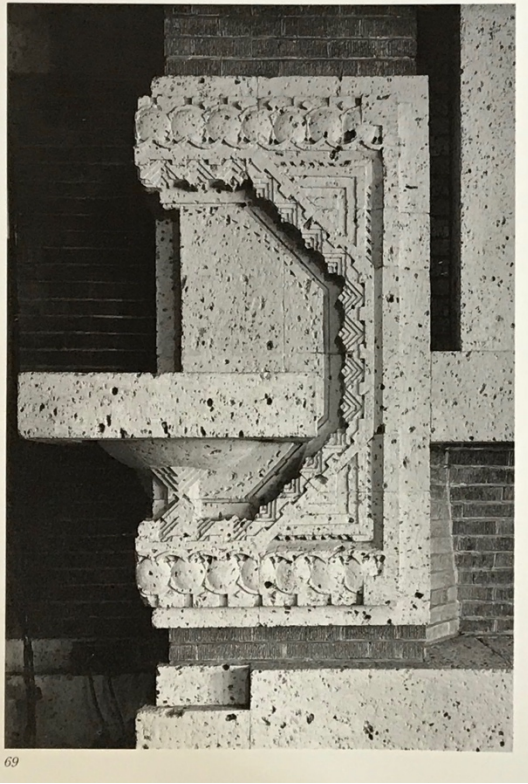


Figure 3.63. Frank Lloyd Wright, Oya stone urn at Imperial Hotel.

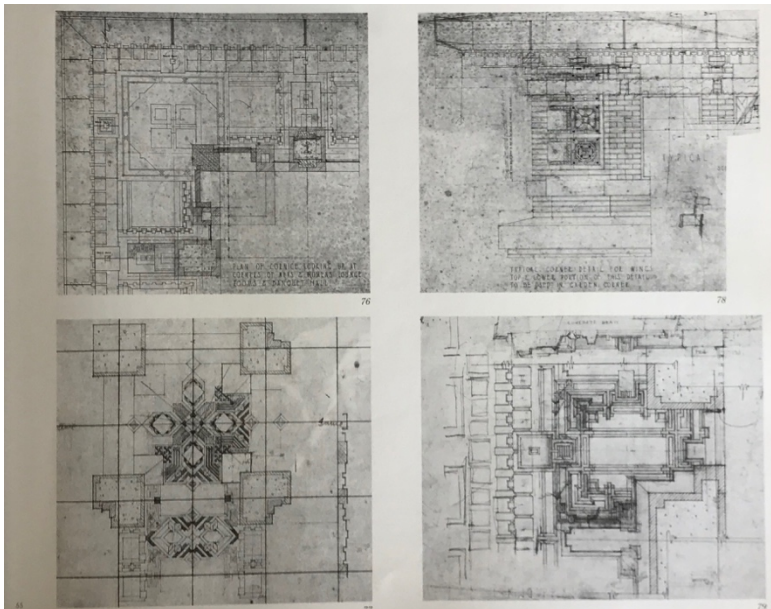


Figure 3.64. Frank Lloyd Wright, Ornamental details of Imperial Hotel.

Wright's drawings of ornamental details in the Hotel (figure 3.64) show ornament which seems to grow from within or as from a seed and expand outward in kaleidoscopic depth planes.

While the floor plan seems very rigid and symmetrical, the spatial experience is very different. Wright continually creates asymmetrical compositions with the ornament, which while incomplete in itself, inflects toward another element which forms a dynamic completion at a different spatial plane. As in Unity Temple which consists of a primary central space, Wright's play of organic space is taking place at the boundary zone of the main space, where it presents glimpses into natural light and garden spaces. This boundary zone is carefully dissolved so as not to present a simple, flat enclosure for the primary space but one in which infinite space is alluded to by the use of partial glimpses of spaces just beyond which are perceived incompletely, and thus invoke the sublime because a clear definition to the space is not discernible. Everywhere his ornament in this building expresses depth. While generally two-dimensional, the ornament's patterns have Gestalt depth cues designed into them. It is as if in motion, as if an organic organism growing from within to without, or like fractal pattern beginning small and ever increasing in self-similar growing patterns like a Nautilus shell spiraling outside itself.

Rudolf Arnheim describes the significance of framing devices to shape the perceived character of visual things which, without them, would be subject to an uncontrollable number of meanings. A top border presses downward while a bottom border presses upward. The character of an object can be defined only in relation to the context in which it is considered, which here is defined by borders and frames.²²¹ The common center of a visual pattern creates a field of force or gravitational field, according to Gombrich.²²² The Imperial Hotel presents framing devices which compress space by partially occluding an adjacent space but in such a way that spatial vectors (referencing Arnheim's language) exit the immediate space and keep it incomplete, drawing the eye and progression into

²²¹ Arnheim, *The Power of the Center*, 55-56.

²²² *Ibid.*, 58-59.

additional spaces. Yet Wright's insistence on the integrated whole keeps the goal of unity ever present. Wright's mastery of spatial tension between closure and openness is in large measure what makes his spaces compelling. He seems to put as much design effort on the smaller residual spaces and niches as the large grand spaces. For example, note the lobby of the Hotel below. Much as in Unity Temple, the column is the point of departure for his interpenetrating space. The upper column between lobby and main lobby in the partial plan below is the point where the next two photos are taken (see figures 3.65, 3.66, and 3.67). There is a floor height change between the two spaces and Wright creates a reentrant glass corner between this column and the small alcove and set of steps up to the side lounge at the corner. This is a boundary zone between the primary spaces of the lobby and the smaller peripheral lounge. Instead of wood trim bands creating the Gestalt figure ground shape relationships, here there is a much more elaborate lava stone trim and ornamental system. But like at Unity Temple, full geometric shapes are interrupted or left incomplete and the eye makes the resolution.

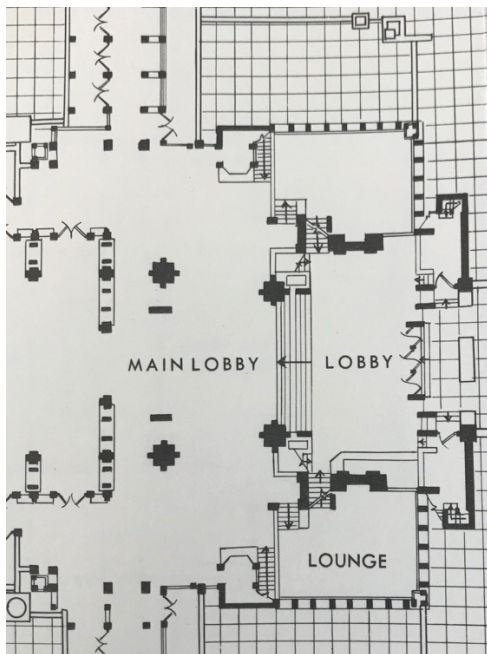


Figure 3.65. Frank Lloyd Wright, Imperial Hotel lobby plan.

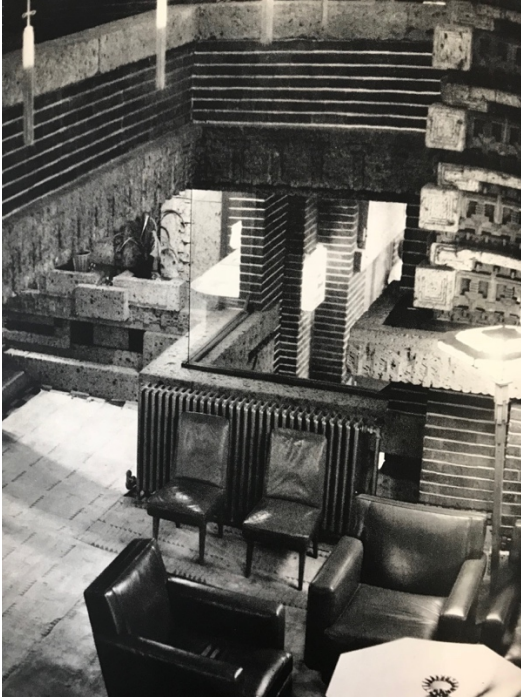


Figure 3.66. Frank Lloyd Wright, Imperial Hotel. Interior corner window at lobby area.

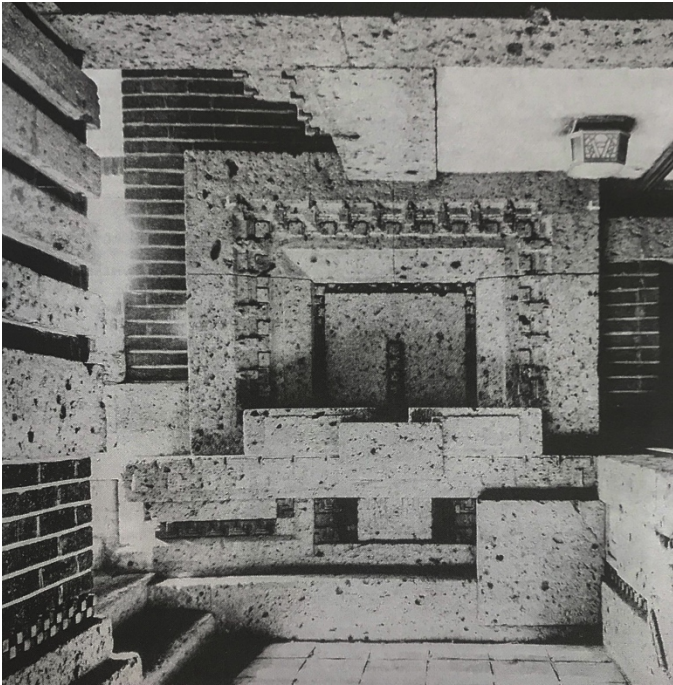


Figure 3.67. Frank Lloyd Wright, Imperial Hotel. Lobby looking to side alcove.

Wright's partial fragmenting of space occurs within a perceptual tension, where there must exist enough visual structure to be able to complete itself perceptually when seen in a fragmentary state, as

seen in the example below from Mondrian²²³ (figure 3.68). The mind completes the figure internally.

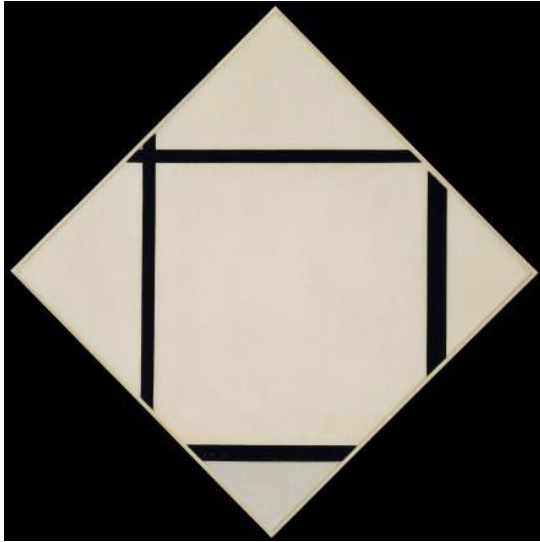


Figure 3.68. Piet Mondrian. Tableau I-Lozenge with Four Lines and Gray. 1926.

Given that frames and boundaries are central to the definition of space, Wright's comment about the essence of space here seems conflicted:

This dawning sense of the *Within* as *reality* when it is clearly seen as Nature will by way of glass make the garden be the building as much as the building will be the garden: the sky as treasured a feature of daily indoor life as the ground itself. You may see that walls are vanishing. The cave for human dwelling purposes is at last disappearing.²²⁴

If Wright's quote above is taken at face value, it would seem that the European modernist architects actually took this further than Wright himself did as they dissolved the boundary between inside and outside more completely with glass. But when one dissolves the wall or boundary between inside and outside one also dissolves the integrity of the "within" as interior space, as the

²²³ Ibid., 60.

²²⁴ Cary James, *The Imperial Hotel: Frank Lloyd Wright and the Architecture of Unity*, (Rutland: Charles E. Tuttle Company, 1968), 68.

perceptual borders and frames are eliminated. From his architecture, however, it is clear that Wright was not intending this as literally as it was rendered by European Modernist architecture. Rather Wright was seeking a partial interpenetration of inside and outside, one in which the sense of interiority could be maintained and yet there would be a connection between inside and outside which is natural and free-flowing. This would seem to be reinforced by his critical stance against the glass boxes of his European contemporaries from the 1920s to the end of his life as well by his own multi-layered, complex spaces.

Specific to the Imperial Hotel, Wright states its design was a metaphor for Japanese garden design which does not imply total openness and lack of boundaries, but rather an interpenetration of related but distinct spaces. Again, *miegakure* comes close to this idea, a partial occlusion and layering of spaces.

Wright saw the hotel as:

...a system of gardens and sunken gardens and terraced gardens—of balconies that are gardens and loggias that are also gardens and roofs that are gardens — until the whole arrangement becomes an interpenetration of gardens. Japan is Garden-land.²²⁵

Cary James's book on the Imperial Hotel spanned the period of its demolition in 1967. He presents a first-person experience of the spaces within the hotel as follows:

The concept of vigorous spatial reality results in the Imperial in a great orchestrated flow, alive in itself and taking life from the ornament and the materials around. It begins outside in the entrance court, where the long bedroom wings reach out past the pool to reshape this part of the city. Here is our introduction to this new idea of architecture; here in fact begins the space of the hotel. At the entrance, the infinite ceiling of the sky is exchanged for the low roof of the porte-cochere, the space is firmly defined, and with this definition passes through the entry into the first business lobby. There it opens out again into a low wide place. The space becomes interior without abruptness or effort; there is a sense of arrival, of a positive place, of a created area contained but not bounded. There are many such places in the Imperial, yet the nature of the space is never static; always there are half-seen vistas, always eye and body are drawn through and up and beyond.

The great flow, which began in the entrance court, continues up through this lobby and

²²⁵ Wright, "In the Cause of Architecture: The New Imperial Hotel," *Western Architect* 32 (April 1923), 42.

these corridors, past the dining room, up to the great cross-axis of the promenade beyond, and up and over a multitude of small dining rooms to the vast banquet hall over all. Even there no culmination exists, nor is there cessation in the movement, and through great glazed crossers the space returns upon itself. This grand complex flow is the centerline of the hotel, yet at every turn it is possible to leave the major spaces for minor ones. There seems always to be another turning into a farther space; volumes interlock, and short runs of steps lead up to new outlooks. There are constantly changing perspectives of the interior, and through openings at unexpected places come views of the gardens and of the long bedroom wings.²²⁶

Cary's presentation of the spatial experience seems to run contrary to what the more critical reviews above would indicate. The floor plans themselves do not seem to reveal this interplay of space, and the sections, while hinting at it, do not fully express it either. And yet Wright was able to create this within a classical planning system. This in itself is enough to raise the important point that organic architecture, according to Wright's system, is inherently neither traditional nor modern, but something which can supervene on either. It calls into question the standard narrative of the coherence of spatial interpenetration with stylistic Modernism.

In many ways, Wright himself sought the cutting edge of this Modernism, but perhaps the depth of spatial expression, as well as other tenets of organic architecture, are not necessarily enhanced with increasingly modern and minimalistic trends from the 1920s on. The argument can be made that at a certain point in minimalism the spatial layering and depth cues which are integral to Japanese spatial construction and understood through Gestalt perception, are lacking. To the degree which this is also coupled with a stylistic preference with Modernism would indicate that spatial depth in Wright's organic sense, is best achieved in a stylistic system neither too minimal nor too traditional. The Imperial Hotel's abundant use of ornament, while not fitting into Hitchcock's Modernist narrative, did provide opportunity to provide an integrated ensemble where line and contour, shape, planes and

²²⁶ James, 15.

layers, and space could be brought together to reveal Wright's vision of an organic whole where the second and third dimensions were integrated into a larger whole, and, contrary to Isozaki's comment, where he could take what Hiroshige was doing in two dimensions and translate it into the spatial dimension.

Within the Imperial Hotel's spatial organization, with its tension between the classical, symmetrical planning and the asymmetrical interplay of spaces, can be seen Arnheim's two tendencies of human composition, that of the centric and the eccentric interactions. He claims that the tension between these two opposing tendencies trying to achieve equilibrium are the spice of human experience, and the proper ratio between them is a relationship of the self-contained individual or group to the other. The primary center attracts or repels the outer centers and the outer centers in turn affect the primary one.²²⁷ In the Imperial perhaps these two tendencies are in a spatially compelling tension, as evidenced in Cary James's description of the spatial experience of the hotel.

Eventually, however, this phase of Wright's work which was epitomized by the Imperial, Midway Gardens, the Barnsdall home and the Bogk house would give way to a simpler expression more in keeping with the trending of Modernism, and as seen in his next works such as Fallingwater and his Usonian homes. Wright gave way to this movement, and yet one wonders what works might have been produced from this apogee of integration of ornament and space as seen in the Imperial.

To understand Wright's ornament is to understand his philosophy, and to understand the Imperial Hotel is to understand the pivot point building of his career which conveys his whole philosophy. It is the culmination of the concept of depth which may not have been again achieved to this degree.

Wright said of materials that:

I now learned to see brick as brick, to see wood as wood, and to see concrete or glass or

²²⁷ Arnheim, *Power of the Center*, 2.

metal. See each for itself and all as themselves. . . . there could be no organic architecture where the nature of materials was ignored or misunderstood. . . .Integration, or even the very word 'organic' means that nothing is of value except as it is naturally related to the whole in the direction of some living purpose, a true part of entity. My old master had designed for the old materials all alike; brick, stone, wood, iron wrought or iron cast, or plaster—all were grist for his rich imagination and his sentient ornament. To him all materials were only one material in which to weave the stuff of his dreams²²⁸.

The Imperial Hotel is a significant example for the examination of the nature of materials in Wright's system of organic architecture and its relation to Hegel's materiality in the Romantic stage of architecture. While it might seem, according to Hegel's description of decoration in his exposition on romantic architecture, that ornament denies the material nature of its construction, the primary purpose of ornament is that it transforms simple planar surfaces into that which expresses another level of meaning. In the case of the Gothic cathedral this purpose is to create contrast upon simple surfaces which reinforces an upward striving effect in its verticality. According to Hegel, the purpose is not to obscure the overall outline or unity of the building but to permeate the overall unity with a particularity of diversity which stimulates reflection.²²⁹ The Gothic cathedral's materiality as stone is not negated necessarily by this carving. What does the process of differentiation actually do which Hegel is not clear on?

On one level, Wright's plan for the Banquet Hall in the Imperial Hotel has a strong Gothic plan type when compared with the plan of Chartres cathedral, for example (figures 3.69 and 3.70).

²²⁸ Wright, *An Autobiography*, 148.

²²⁹ Hegel, *Aesthetics*, Vol 2, 695-6.

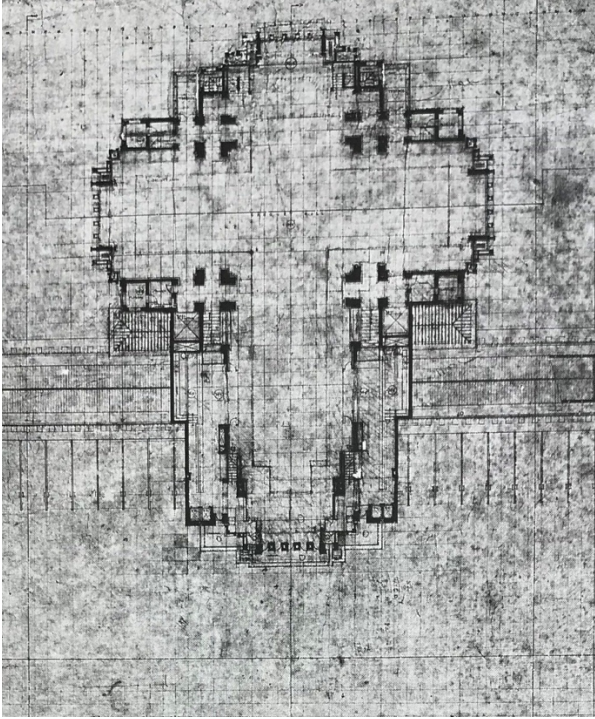


Figure 3.69. Frank Lloyd Wright, Imperial Hotel Banquet Hall floor plan.

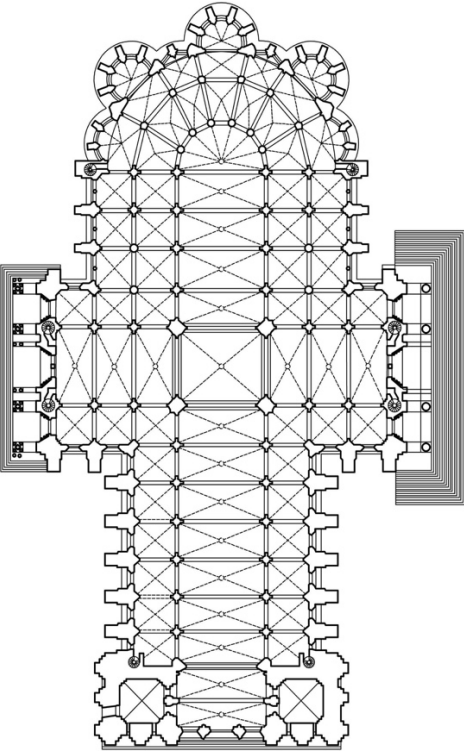


Figure 3.70. Floor plan of Chartres Cathedral, France. 1220.

While there are important and subtle differences, the overall unity of the plan is clear. And yet, similar to the Gothic cathedral, extensive ornamentation permeates the exterior and interior in a way which creates contrast and induces a visual direction to perception. While Gothic decoration most strongly was to reinforce a sense of verticality, here it reinforces not so much the vertical nor the horizontal but rather the more complex perception of spatial depth and the integrated whole.

Wright's use of brick in the Imperial Hotel seems rather uneventful given his use of it in other Prairie style projects completed earlier such as the Martin house. The actual technology of its use here, however, was very different. Rather than constructed of full bricks, the bricks here were more like tiles over a concrete infill, similar to thin-brick today. This shows the primacy of the aesthetic impact of the use of brick to Wright over its functional necessity. The aesthetic place of brick in the Imperial's design system was to act as field or background from which the highly ornamented lava stone would be foregrounded. The use of brick in his Prairie era works was sufficient texture to complete the wall surfaces, with the exception of smooth, cut stone accents. Often art glass panels or highly detailed wood built-ins would provide the highest levels of ornament in these designs. At the Imperial, the cut stone accents grow to take a much larger role in the decorative scheme.

The choice of using the indigenous Oya stone was Wright's, even at the surprise of his client who felt the use of this common stone questionable. It created interesting aesthetic and symbolic implications. Wright refers to the Oya as "carved lava stone" and perhaps another reason for its use is that, just like the pyramidal roof forms, the lava stone symbolically is derived from the Mt. Fuji volcano, and hence has been made sacred through its lineage. Wright is showing the Japanese not to call profane what is in fact sacred. The symbolism of the phoenix rising from the ashes seems to also present itself as a possibility; the symbol of death in the ash, has been reborn into a symbol for life of its culture. Out of the ashes of this destruction comes the birth and life of the new, here as the

celebrated and crowning material set upon more calm fields of brick.

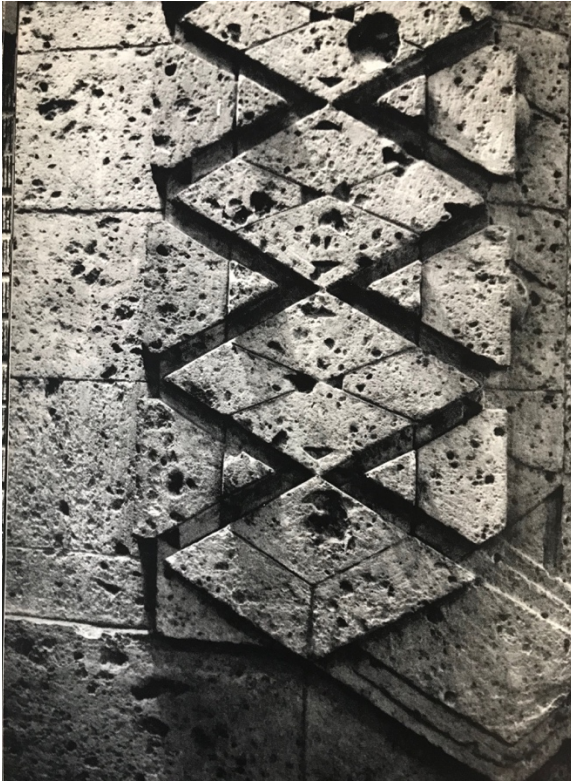


Figure 3.71. Frank Lloyd Wright, Oya stone detail at Imperial Hotel.

Aesthetically, the lava stone adds a depth of texture and an ultimate “earthiness” as if to deny a rationalistic, modernist sense of intellectual detachment. What can be more earthy than lava which comes up in fire from the depths of the earth? Nevertheless, this earthy and organic texture is held in tension by the precise geometric cut lines revealing its modularity and hence place within the larger system of the whole (figure 3.71). The preciseness of the forms is greater than the porosity of the material. What is unusual here is the coarseness of the lava pitting and random texture in relation to the scale of the geometric design. It feels at once ancient (as one might discover a Mayan ruin) and new as if Wright were attempting to make a statement connecting Japan to its ancient roots. In looking at the pictures of the spaces, the rich geometric surface ornament with its solids and voids, and many

shadows, seems to deepen the spatial sense, perhaps dissolving surface into space itself. The Oya stone itself contributes to this at the smallest scale. In this building, no surface is plain and smooth — all is differentiated and broken up, dissolved into the receding planes. Materiality is overlaid with geometric pattern more strongly in this project than others.

Everywhere his ornament in this building expresses depth. While generally two-dimensional, the ornament's patterns have Gestalt depth cues designed into them. It is as if in motion, as if an organic organism growing from within to without, or like fractal pattern beginning small and ever increasing in self similar growing patterns like a Nautilus shell spiraling outside itself.

Since overtly traditional forms are not used here, Wright seems to be striving for a more timeless, ahistorical, eternal statement, which embeds platonically pure geometric forms in the sensuous fabric of rough lava stone. Wright's apprentice on this project, Antonin Raymond, didn't see the ornament as Wright had and stated:

After a year of the work on the hotel I became quite bored. The principal cause of this was the endless repetition of Wright's mannerisms, his grammar, as he called it, to which I could add nothing, and which seemed to me so devoid of content, particularly in Japan.²³⁰

Perhaps he didn't understand the principle upon which Wright conceived his work, but the missing 'content' was Wright's purposeful way of communicating aesthetic value apart from the historical content of Japanese traditional ornamental forms. Wright felt that "abstract form is the pattern of the essential."²³¹ More like music, rather than representational art, the object of organic architecture was to express its own inner nature rather than to represent figural external content. Yet Wright says ornament is also a subjective element of architecture, which must be the case as he sees it

²³⁰ Nute, 154.

²³¹ Pfeiffer, *The Essential Frank Lloyd Wright*, 285.

as poetry created by human imagination which forms a unity between itself and the building proper:

...integral ornament—the nature-pattern of actual construction. Here, confessed as the spiritual demand for true significance, comes this subjective element in modern architecture. An element so hard to understand that modern architects themselves seem to understand it least well of all. So, this fourth new resource and the fifth demand for new significance and integrity is ornament integral to building as itself poetry. Ornament meaning not only surface qualified by human imagination but imagination giving natural pattern to structure...Integral ornament is simply structure-pattern made visibly articulate and seen in the building as it is seen articulate in the structure of the trees or a lily of the fields. It is the expression of inner rhythm of Form. Are we talking about Style? Pretty nearly. At any rate, we are talking about the qualities that make essential architecture as distinguished from any mere act of building whatsoever.²³²

Wright is creating a new system of ornament not based upon the classical orders of the Doric, Ionic, or Corinthian systems but upon geometric abstraction which he saw as underlying all form. While this ornament was geometric in an abstract sense, this didn't imply that it lacked the element of human intentionality, or the subjective sense. Wright saw it as a two-part system. Music to him was based upon mathematics, which was the abstract armature upon which through the subjective modulation was formed into art. Music, while at its core mathematical, could not be produced by mathematicians. Also, he described the idea of the warp and woof (weft) to describe an underlying geometric system (grid or otherwise) upon which the architect wove a design consistent with the basis of its being and yet modulated by the subjective hand of the artist/architect.

Wright's Imperial Hotel cut against the grain of the development of Modernist architecture in Europe at the time which was tending to further minimalism and reductionism. Not only did Wright's ornament appear excessive in comparison, but the subjective imprint of the designer also was contrary to the Modernist polemic of architecture being the science of building rather than the artistic endeavor of a single individual (despite the fact for instance that Le Corbusier was an artist and used

²³² Wright, *An Autobiography*, 346-347.

art integrally in his architectural process).

The Imperial Hotel is Wright's modeling of the principles he put forward in the Japanese Print book. It is an exercise in geometry as the basis of the design from the floor planning to the elevations to the details—especially the detailing. As such, Wright is making the statement that the bridge between east and west is to base design not on historical precedent but upon underlying geometry which is “neither East nor West” but is universally foundational to all world architecture. It would show the Japanese the way forward into the future but also at the same time looks back into the timeless past. Geometry is eternally relevant, Platonic forms are the beginning of architecture. Even so, art and architecture are not based upon a rationalistic determinism but properly have need of artistic expression which is not arbitrary but integral to the mathematical or geometrical basis of the form of art. Without this modulation from the architect/artist, architecture is mere building. Wright also used the analogy of spirit and matter to describe this same duality, stating that to separate the two is to destroy architecture as it is in life. To come full circle in this analysis, Hegel's romantic stage of architecture proposes a similar infusion of sensuous matter with spirit or mind, such that the subjectivity of spirit or mind upon matter is foregrounded. The classical stage of architecture in Hegel's system is closer to the Modernist European subordination of spirit to matter in the sense that the subjective component of architecture is attenuated.

SCHWARTZ HOUSE

Bernard Schwartz is the client who commissioned Wright for this home, but the actual design originated as Wright's solution "For a Family of \$5000-\$6000 Income," as published in the September 26, 1938 edition of *Life* magazine. The actual design was slightly modified for Mr. Schwartz for this particular location on the shore of East Twin River in Two Rivers, Wisconsin.

This home is representative of Wright's Usonian phase of architecture begun in 1937 with the notable Herbert and Katherine Jacobs house in Madison, Wisconsin. Unlike his earlier prairie-era residences around the turn of the twentieth century, his Usonian designs were meant to be affordable solutions for middle-class America, systemized on a grid layout and modular planning concepts. These tended to be very asymmetrically composed in comparison with the more classical ordering system of the prairie works. In 1940, after the Schwartz house was completed, Wright was quoted as saying that this home was "a strong, virile type, in which there is no predominating feature, but in which the entire is so coordinated as to achieve a thing of beauty."²³³ This is a good representative statement of his theory of organic architecture and his intention behind it. This reinforces his idea of the organic whole and the part-to-whole relationship which is also congruent with Hegel's idea of unity and the dialectical synthesis where there is a sublation of parts into the Idea. At the end of Wright's quote is the indication that his intention for this is the creation of beauty, which like an emergent property, is the resonant confirmation of a skillful and artistic composition of parts.

I selected the Schwartz home because it did not have the immediate external stylistic effects such as the low-sloped hipped roofs, fluted wood screening devices, or other more traditional elements

²³³ Mary Seidl, "Architect Frank Lloyd Wright Praises New Schwartz Home Here." *Two Rivers Reporter*, June 4, 1940, 5.

traditionally correlated with Japanese architecture. Wright's earlier prairie phase of architecture does have many of these similarities, but since my interest here is spatial and not stylistic, I wanted to use an example without such obvious connections (figures 3.72, 3.73). His Usonian homes were modern like its European contemporaries were, albeit with a sense of space which was distinctive. I believe this is a good case study to see if Wright's spatial constructions utilizing figured, layered elements continued past his obvious Japanese phase of involvement ending with the Tokyo Imperial Hotel commission of 1917-1922.



Figure 3.72. Frank Lloyd Wright, Schwartz residence as seen from rear yard. Photo Frank Lloyd Wright Wisconsin.org

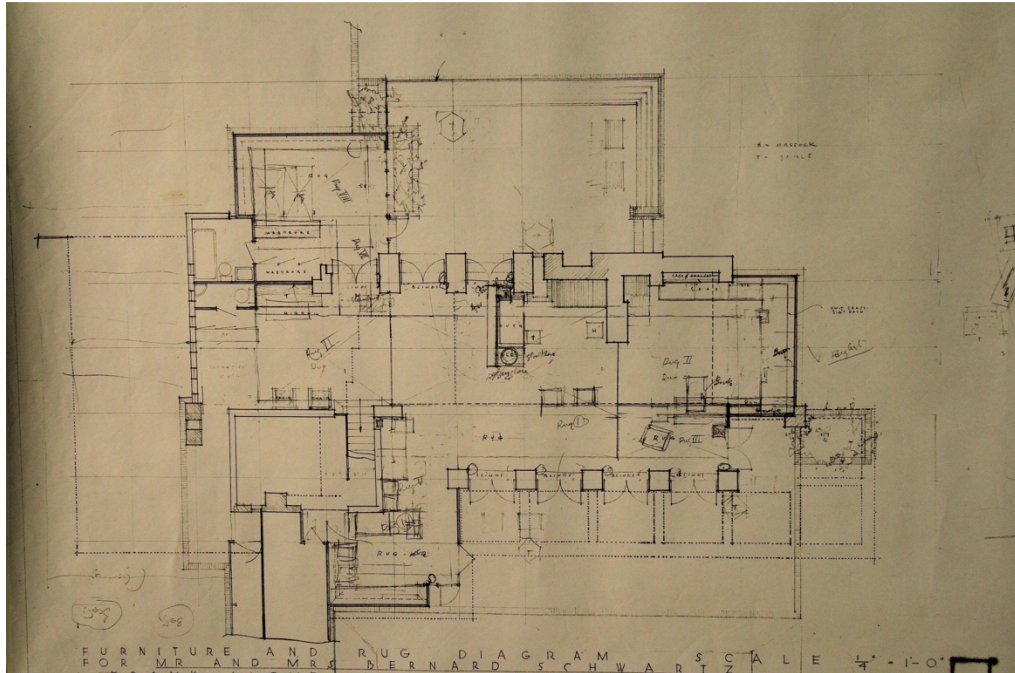


Figure 3.73. Schwartz floor plan with furniture layout shown (courtesy of Michael Ditmer).

For my spatial analysis of the home, I am primarily working with two viewpoints, the first from the entry foyer looking through the living room to the sanctum area (figure 3.74), and the other from within the living/sanctum area (figure 3.75).



Figure 3.74. Schwartz house. Photograph of view from entry hall looking down long view to living and sanctum area.



Figure 3.75. Schwartz house, Longitudinal View of Sanctum and Living areas. Photo by author.

My above observations of the Japanese prints will now be considered in relation to the interior space of Frank Lloyd Wright's Schwartz house. My empirical analysis of the Schwartz house is based on my own experience of the spaces within it and taking selected photographs which translate that three-dimensional experience into two dimensions, similar to what happens when an actual observer "sees" a two-dimensional retinal projection while standing in a three-dimensional space. My first photo position was chosen because it is the view which reveals the largest interior expanse of the house in one single view. The second and related views are from the end of the house with a view looking perpendicular to the first view and then back toward the foyer. While smaller close-up views can also be taken, fewer gestalt occlusion characteristics can be seen in one view.



Figure 3.76. Schwartz house, View from Foyer with Photoshop layering added by author.

In figure 3.76, I have overlaid planar elements to diagram the principle of flat planes in occlusion. The planes highlighted are the ones perpendicular to the main axis of view and thus are seen frontally. From this viewpoint, there are many depth cues which occur at a two-dimensional Gestalt level. The brick pier at the base of the stairway on the right gives a foreground plane from which to gauge depth as it occludes a portion of the view behind it. The series of brick piers on the left are quite deep and thus act in the same way as to occlude views behind them. The main fireplace hearth area is not only a focal point as it is in all Wright's homes, but here its flanking wall intrudes on the grand linear space and cuts off or occludes a complete view into the sanctum space just beyond. A similar process occurs in other planes as well. For instance, in this view the low overhead Cypress ceiling in the foyer gives way to the higher plane of the raised main ceiling over living and sanctum area. This change in level which is so characteristic of Wright's compression and expansion of space, serves to occlude a portion of the higher plane and thus it accentuates the depth effect or separation

between the two planes and ceiling heights. This is why Wright is so effective in his compression and expansion of spaces even when the proportionate change in ceiling height between two areas is actually not that great.

The second principle of the contour line is here less obvious than in the Japanese prints above since these architectural spaces do not literally have contour line work defining edge conditions. It is worth stating, however, that Wright was much more obvious about contour definition in his earlier Prairie period where he literally created elaborate geometries with thin wood trim bands which wrapped and sculpted forms and led the eye from space to space.

In Wright's discussion of interpenetrating depths which he wrote in *A Testament*, in 1957, he was reacting not against the old Victorian architecture, but the "stale derivatives of the straight-line, flat-plane effects" seen in then contemporary modern architecture which he said was derived from his organic architecture initially but that in the translation had lost the "depth-language" which his architecture embodied. Writing in 1957, he said that even after 50 years since he was building with this new idea of depth in mind, the concept was still "obscure" to the current generation of architects. Wright's form of depth was not to be mistaken for "thickness," but was an "element of space." He said this space is the "third dimension transformed to a space dimension" just before his statement above about the penetration of the inner depths of space in spaciousness. He also states that when sublimated by organic architecture, this third dimension interpreted as depth is "really a fourth [dimension] now—the sense of space." He then questions if this fourth dimension is what the European cubists sought out. This last note is an interesting one and may give some insight into his thoughts about space here, given the vague definition he gives to the third and fourth dimensions. Wright himself seems to be distancing himself from a rational exposition of space in his text. For, as Arnheim points out, space is not to be confused with an entity in itself, but rather it is simply the

relationships, proportions, and patterns of objects with various types of distances between them. To define space is to give identity to the relationship of objects one to another, whether they be buildings forming a courtyard or street, or the walls, ceiling and objects within a room. Wright, however, clearly is trying to convey more than a rational, mathematical definition of “depth” here. There is a symbolizing action taking place shaping a certain relationship to the world, as in Riegl’s human *Wollen*²³⁴, Ernst Cassirer’s symbolic forms, or Nelson Goodman’s symbol systems (*Ways of Worldmaking*). In Wright’s case, it is the primacy of interior space as a conveyor of deeper meaning or authentication.

Wright’s question as to whether the cubists were seeking out the fourth dimension is interesting in that cubism was a two-dimensional expression of something generally three dimensional but compressed from multiple viewpoints impossible to see at one vantage point in normal vision. If the cubists were trying to express something beyond the boundaries of two dimensions, then was he indicating that he was doing the same by trying to compress the fourth dimension within three-dimensional space? Of course, this raises the question of what definition of four-dimensional space was he referring to, four-dimensional Euclidean space, or perhaps Minkowski space-time where the fourth dimension is time? Perhaps more significant is the idea that he is trying to express a form of space which not only is free to interconnect spaces from without to within (exterior space becoming part of the interior space, etc.) and vice versa, but that there is a symbolic perception of such space qua that which performs the function of interconnecting spaces within a larger flow of space. If Wright’s multi-faceted interconnected, interpenetrating spaces are realized in built form then it is also necessary that a perceiver from a vantage point in three-dimensional space be able to see the

²³⁴ Panofsky, *Perspective as Symbolic Form*, 14.

compression of the “fourth” dimension from within the third dimension. It would appear that we see that here through the interconnectedness of spaces which have been partially cut off through the principle of flat planes in occlusion above. This would be a static space if there were only a floor, roof, four enclosing straight walls and an interior space which was a simple rectangular geometric shape. As in modern architecture, these walls may be all glass, letting the exterior space inside, but would still be as Wright says, “two-dimensional effects of the old static post and girder, beam and box frame type of construction.”²³⁵ As it is, the space has been subdivided in a way which retains the continuity of the space. From the foyer vantage point the main living room is seen, another space off to the right and just beyond the brick pier at the stair (dining room) is seen, and a glimpse of the sanctum, partially hidden in mystery, is viewed. Likewise, the home has an abundance of glass to connect to the outdoors as Wright is so well known for; however, curiously, notice in this view at least, how little of the outdoors one actually sees. Clearly it is sensed as light washes into the space from many various voids, but for the most part it is occluded also by the various brick piers and wall elements. Only upon walking into the space does the revealing occur in a sequential manner as brick piers and walls give way to views out between them into the outdoors. Through the use of occlusion of various planar layers, the sense of depth is enhanced, a depth within an interconnected (interpenetrating) continuous space.

The Japanese principle of concealing and revealing, *miegakure*, is an outworking of the above effects. Occluding planes create areas of hiddenness, which reveal themselves upon *inspection movements*, to use Gombrich’s term. Or in a static view, such as the photograph of the space above, there is a partial revealing and partial hiding of elements and spaces occurring at the same time. There

²³⁵ Wright, Frank Lloyd and Bruce Brooks Pfeiffer. *Frank Lloyd Wright: Collected Writings*. (New York, Scottsdale, AZ: Rizzoli, 1992), 218.

is a particular method this occurs in this space which is worth noting, as it parallels the pattern occurring in the Japanese prints above. A zig-zag pathway from foreground foyer to background sanctum occurs in this view as an asymmetrical and natural pattern. It is interesting to note that Wright extended the projecting brick wall from the main fireplace after the original design he had produced for the *Life* magazine house, and that this extension increases the sense of *miegakure* in the home (figure 3.77).



Figure 3.77. Schwartz house, Foyer view with path diagram overlay by author.

In the original drawings Wright did for the Life house submittal (figure 3.78), the large brick fireplace wall extension was much smaller and did not protrude so far into the main living space as it did in the final plan built for Bernard Schwartz (figure 3.79). The larger brick extension in the built plan both creates a more closed off space in the sitting/sanctum area and also hides more of this space from the view of the entry, living, and dining areas:

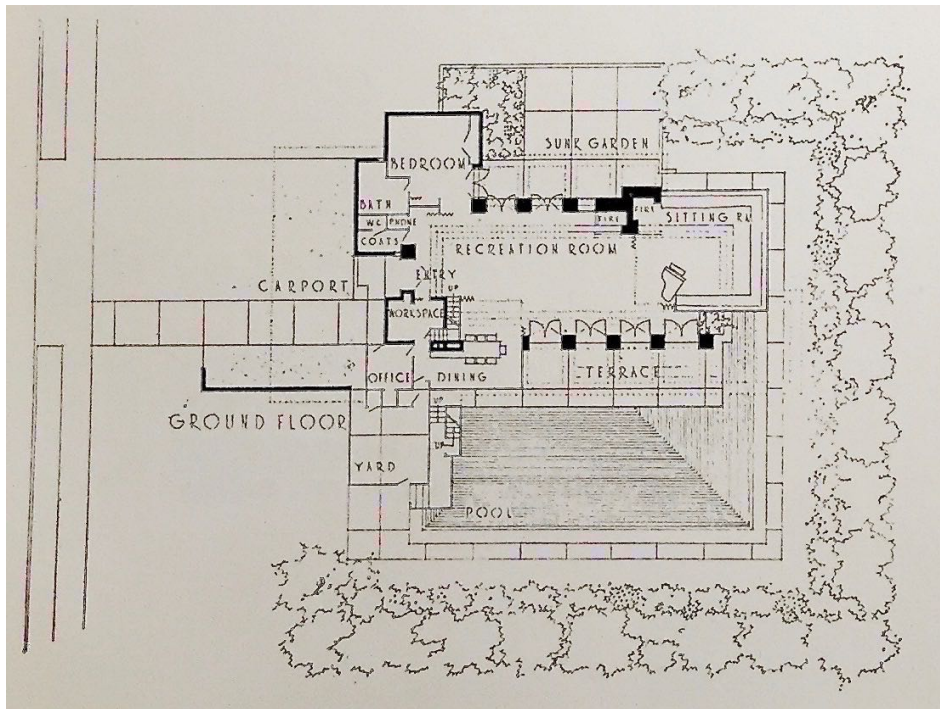


Figure 3.78. Schwartz house. Earlier version of the floor plan as it appeared in Life Magazine. 1938.

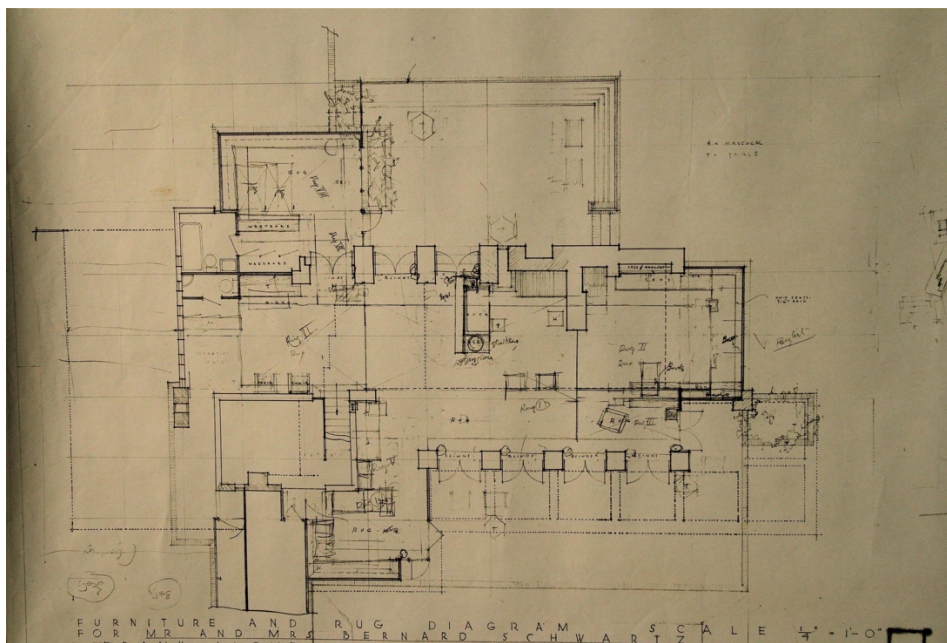


Figure 3.79. Actual floor plan as built for the Schwartz residence (courtesy Michael Dittmer).

The place of symbolic form in architecture as opposed to pictorial creations such as in the Japanese prints above requires a more nuanced understanding of the working of the symbolic. As a

starting point, Wright acknowledged the importance of the symbolic when he spoke of the “psychic” power of geometric forms to denote inner qualities such as infinity (the circle), integrity (the square), etc. He spoke of this both in his book *The Japanese Print: An Interpretation* and also when describing the creation of Unity Temple in his autobiography. In Unity Temple, he used the pure cubic form to symbolize integrity and unity. In the Greek Orthodox church in Milwaukee he based the design on the circle, a symbol of eternity and appropriate to the church. In the Trinity Chapel project of 1958, the design was based on the triangle, appropriate to the concept of the Trinity. A more precise understanding of symbolic form in art and architecture can be seen in a line of philosophers who wrote on this subject including Ernst Cassirer, Susanne Langer, and Nelson Goodman.

Writing about Nelson Goodman, Dr. Bob Schwartz states that “What we see is in part a function of what we look for, and pictures can inform our habits of looking.”²³⁶ Wright said essentially the same thing in 1950: “When you once start with these prints, you never look at nature the same way after. You never have the scene quite the same way as other people who are looking at it who haven’t seen these things. A certain natural selection and arrangement take place in your own sense of the thing as you look. Certain realistic things disappear, and the whole scene comes more effective and simple because you know this art.”²³⁷ Nelson Goodman outlines several ways in which we bring meaning into art and architecture by ways of worldmaking. Some of these processes which go into worldmaking include composition and decomposition, weighting, ordering, deletion and supplementation, and deformation.

Goodman states that architects contribute to the symbolic act of world making not only in the

²³⁶ Robert Schwartz, “The Power of Pictures.” *Nelson Goodman's Philosophy of Art*, edited by Catherine Elgin, (New York: Garland Pub, 1997), 190.

²³⁷ Transcript of Japanese Print Party at Taliesin, September 20, 1950. CR.7 “Frank Lloyd Wright at Showing of Japanese Prints,” 7.

physical means of making bricks but through the metaphysical process of creating symbols and symbol systems.²³⁸ Moreover, he states that it is not possible to create from nothing; rather to make a world is a process of remaking it²³⁹. While the question of intention needs to be considered, it is not unreasonable to conclude that Wright's perception of the Japanese print (among other things) had an effect on his worldmaking or creative acts. To use Goodman's ways of worldmaking listed above, Wright's description of how viewing the prints changes one's view of nature can be correlated to the process of weighting and deletion for example. Wright said the Japanese print is most significantly about the elimination of the insignificant, an essentialist stance of reducing in order to highlight the prioritized effect, thereby diffusing it with symbolic meaning. Goodman's method of "ordering" could be considered in Wright's use of *miegakure* in the zig-zag path of hiding and discovery which create another layer of symbolic meaning through built form. Wright through his architecture is creating within a symbol system which he developed and modified from several sources, one of which was Japanese art and his way of seeing them.

There was a greater experimentation with Western perspective brought into the late Edo-period prints in Japan. Hiroshige's *Suragacho* print (see figure 9 in section "Spatial Character of Ukiyo-e") is one example of this. In this print, the hybrid technique was not totally resolved, but was as a collage of the two systems. In the Schwartz house, there is a strong use of a grid as an ordering device seen in the concrete slab. Also evident is the strong sense of linear perspective as the eye is directed toward the sanctum in a one-point perspective view. The use of a modular planning grid, more precise and modern detailing, and flat roofs could be seen as a strong Western orientation rather than borrowing from Japanese architecture. While traditional Japanese architecture is different

²³⁸ Nelson Goodman. *Ways of Worldmaking*, (Indianapolis: Hackett Pub. Co., 1978), 100.

²³⁹ *Ibid.*, 103.

stylistically from Wright's Usonian oeuvre there are some commonalities such as the strong modular planning grid based on the tatami mat, and honest expression of natural materials. One could say that the Surugacho print was primarily a non-Western construction with the importation of a partial linear perspective segment while Wright's architecture is a completely resolved Western system which at the same time is relying on several of these Gestalt and planar effects to deconstruct the rigidity of the rational ordering system and bring in a non-Western component to modulate its expression of final form and space. Wright's idea of organic architecture as that which grows from within to without, as with nature, is both a complete system but also finds its modulation or expression being determined by something non-linear, organic, individualistic, and accidental.

The following sequence of images of the Schwartz house reflects a path of direction from the foyer area where the first photo above was taken, and then proceeds into the living area, approaches, and enters into the sanctum area partially hidden behind the main living room fireplace. This sequence of photos serves to represent the changing nature of viewpoints and their associated Gestalt characteristics.



Figure 3.80. Schwartz house, View from Living room to Sanctum area.

The photo in figure 3.80 highlights the large transverse plane of the fireplace brick wall and its partial occlusion of the sanctum space, thus providing a strong depth cue and visual separation to the two separate but interconnected spaces. The strong horizontal wood trim band at 7' high which serves as the edge of the lower ceiling to the right also continues into the sanctum to the left where it disappears behind the large brick fireplace wall. This serves both to provide a contour line expressing the difference in ceiling heights and also to provide a "tracing" element which accentuates the idea of continuity and interconnectedness of space which Wright values. This "horizon band" used by Wright since the Prairie-era work is a symbol of the destruction of the box in that it transcends individual room areas and continues throughout the entire home.



Figure 3.81. Schwartz house. View of Living Room fireplace and Sanctum area.

In figure 3.81, the main fireplace is now seen more frontally, and the sanctum space starts to come into fuller view; however, the smaller sanctum fireplace on the other side of the brick wall is still hidden from view. Transverse views are opened up to view such as the view of the exterior at the left of this photo which was previously occluded due to the sequence of brick piers. Similarly, a narrow sliver window between the fireplace and the adjacent brick pier begins to reveal a slice of the exterior view and washes natural light upon the side of the fireplace. What is most pronounced in this view is the strength of figure ground contrast produced by the low ceiling in the foreground which completely hides the upper ceiling and occludes part of the vertical surfaces being viewed. This again provides further depth accentuation.



Figure 3.82. Schwartz house, Sanctum area.

In figure 3.82, the large protruding brick wall is seen head on, and the smaller sanctum fireplace is first seen. As in the last photo, the strongest Gestalt element is the lowered ceiling in the foreground which offers a compressed space where the viewer stands and a strong depth cue to a higher space just beyond the edge condition of this lower ceiling. There is a small built-in desk on the right side of this photo just behind the silver floor lamp. Originally this extended out as a peninsula where the adjacent cushioned chair now sits. A photo of this desk was taken by Pedro Guerrero in October of 1940 shortly after completion of the house. This would have served to provide an additional layer of depth and to subtly close in the sanctum. According to research done by Gail Fox, this desk was removed in the 1970's²⁴⁰. The furniture plan below (figure 3.83) shows Wright's original intent for both this desk in the sanctum and a built-in couch in the main living area which was never

²⁴⁰ Author's correspondence with Gail Fox on March 22, 2016. Gail Fox has been doing research on the Schwartz residence for many years and also provided the Pedro Guerrero photo used which was taken with Wright's own camera.

built. Figure 3.84 shows Guerrero's photo of this area.

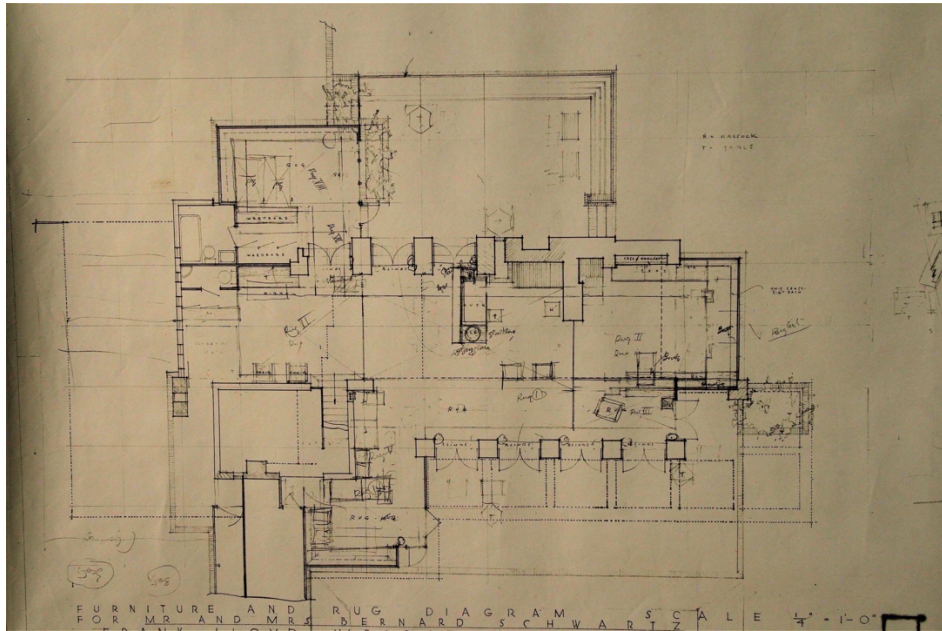


Figure 3.83. Schwartz house, Furniture plan. (Courtesy of Michael Ditmer).



Figure 3.84 Sanctum showing original desk extension. 1940.

Photo by Pedro Guerrero

Of additional interest is the characteristic that while foreground planes occlude more distant objects, sources of natural light, while themselves hidden, provide washes of unexpected light which creates a richer and more complex spatial experience. In this photo, the goal of our journey is reached, the sanctum, which is parallel to the hidden goal of the zig-zag path of the Japanese prints above. While a two-dimensional print is static and the goal never realized, here in architecture, the hidden goal leads the viewer on a path of discovery of concealed and revealed spaces. In this instance, Wright chooses an intimate built-in couch and bookshelves nestled around a corner fireplace as the place of arrival—not the grandest space in the house but an intimate space of gathering symbolizing the heart of domesticity, a meeting of subject and object, of natural and man-made, of the modern and the timeless.



Figure 3.85. Schwartz house, View from Sanctum looking back toward Foyer.

At the end of the sanctum (figure 3.85), the view is back to the entry foyer which is now partially occluded by the same large brick wall, this time seen as part of the sanctum fireplace. The

brick wall serves to preserve the intimacy of the sanctum. While still clearly a part of a larger space, the sanctum's spatial zone has been defined by objects in proximity as well as through occlusion of other space.

The three case studies above have been presented to demonstrate the application of Japanese aesthetics, Gestalt perception, and Hegel's philosophy of art to actual Wright buildings. This not only reinforces the claim that certain aesthetic principles have been employed by Wright, but also presents his methods of implementing these principles to built form. It has been seen that Wright used certain expressions of contours and layering more literally in his earlier work, such as in Unity Temple, where very deliberate use of trim bands created three-dimensional Gestalt effects which relate to the Japanese Print. The later Imperial Hotel can be considered an apex of his expression of these perceptual principles, even though it placed itself outside of mainstream modernism of the time by doing so. Lastly, the Schwartz home reveals a later expression which does not literally use contour lines to express layering but yet gives evidence to Wright's own words where he said that the print caused him to see differently. And it is in this way of seeing space that this and other Usonian-era homes gives evidence of an amplified sense of spatial depth which he claimed to be what organic architecture provided beyond his modernist contemporaries in Europe.

CHAPTER 4

FILTER

This section is included because without it an important resolution of Wright's organic architecture in relation to European Modernism would be missing. The intent of this section is not to make value judgments about European Modernism in comparison with Wright's architecture. Rather, it is included as a metric to refine what Wright meant by organic architecture through his own interaction with European Modernism. It is Wright's clashes in this arena where he himself provides clues to the distinctions between his organic approach and the European approach he was familiar with. Thus, this will not be a view of all European architecture nor all Modernist architecture but is here limited to the scope of Wright's own view of the movement. This is about FLW's idealism in confrontation with modernism, in particular how the latter took root in European architecture in the 1920s to the 1950s. This addresses whether, or how, Wright considered himself a Modernist architect, and how he reacts to Modernist strains when he encounters them. This will reveal something about his own philosophy and its genetic tracing. Hegel might be considered a doorway into modernism and this is the challenge. Modernism is not monolithic but exactly what Wright reacts to negatively is important to note. And what he accepts positively is equally important in reaction against traditional architecture. Where exactly is this middle way that Wright proposes?

WRIGHT'S EARLY INFLUENCE ON MODERNISM

Early in the twentieth century, Wright broke through the inertia of Victorian, Greek Revival, and other historic revival styles to pave the way for a new modern form of architecture. His Prairie style

of architecture was much more than a response to the flat prairie landscape on the outskirts of Chicago. What got the attention of the European architects at the time was what he did with the elements of architecture itself—his decomposition of walls, roofs, windows into crisp, planar elements. It involved both a fragmenting of these elements out of the common traditional stylistic fabric and recombining them into a new whole. There was a sense of geometric abstraction in his forms that caught the attention of these younger European architects such as Gropius, Le Corbusier, and Mies van der Rohe. These architects would later be responsible for the rise of the International Style of architecture in Europe that eventually would make its way into mainstream American architecture in the middle of the century.

It was not only in Wright's architecture, but in his writing and lecturing where he argued boldly for a new architecture for the new age of the machine. It would no longer be appropriate to keep imitating forms from the past, a past reliant upon hand-labored architecture. While the Arts and Crafts movement led by William Morris had reacted against the ills of the industrial revolution and sought a return to the authenticity of hand-crafted artifacts, Wright saw in them a dying movement and instead spoke of the art and craft of the machine.

His famous article, "The Art and Craft of the Machine" which appeared in *Brush and Pencil* in 1901²⁴¹ directly refers to Morris, as one who all love and honor, as an artist and great socialist; yet he couldn't see that "in the machine lies the only future of art and craft... a glorious future; that the machine is, in fact, the metamorphosis of ancient art and craft."²⁴² Wright argued that while the machine "born of greed" was a 'terrible engine of enslavement,' referring to the negative effects of the

²⁴¹ Frank Lloyd Wright, "The Art and Craft of the Machine," *Brush and Pencil*, Vol. 8, No. 2 (May 1901), 77-81, 83-85, 87-90.

²⁴² *Ibid.*, 77.

industrial revolution which Morris experienced first-hand in England, yet it would advance beyond this point to where it would “surely and swiftly, by its own momentum, undo the mischief it has made²⁴³.” Further, the machine would be an instrument of democracy as well as a means to wipe out meaningless toil and drudgery. While the machine would render obsolete the joy of the labor of one’s hands, it would in turn bring in “a robe of the ideal no less truthful, but more poetical, with a rational freedom made possible by the machine, beside which the art of old will be as the sweet, plaintive wail of the pipe to the outpouring of full orchestra.”²⁴⁴

In 1908 Wright wrote the influential, “In the Cause of Architecture,” and then in 1910 the *Wasmuth Portfolio* (*Ausgeführte Bauten und Entwürfe von Frank Lloyd Wright*) which was published and exhibited by Berlin publisher Ernst Wasmuth. This latter publication would have immediate impact on Gropius, Corbusier, and Mies, who all were essentially apprentices of Peter Behrens in Berlin at the time. Later, in 1946, Mies would reflect on this moment:

At this moment, so critical for us, there came to Berlin the exhibition of the work of Frank Lloyd Wright. This comprehensive display and the extensive publication of his works enabled us really to become acquainted with the achievement of this architect. The encounter was destined to prove of greatest significance to the development of architecture in Europe. The work of this great master revealed an architectural world of unexpected force and clarity of language, and also a disconcerting richness of form.... The dynamic impulse emanating from his work invigorated a whole generation.²⁴⁵

Yet, instead of being flattered by all this, Wright would emphasize the schism between his architecture and European modernism, a schism which only widened in his later years. In 1957, in *A Testament*, Wright both recognizes his influence on European modernism and his dissatisfaction with the result:

²⁴³ Ibid., 78.

²⁴⁴ Ibid., 83.

²⁴⁵ Mies van der Rohe, “A Tribute to Frank Lloyd Wright,” *College Art Journal*, 6, No. 1 (Autumn 1946), 41-42.

Nevertheless, the straight-line, flat-plane effects, the new shapes of shelter I had published in Germany (1910) and France (1911) have, by stimulating world-wide imitation and some true emulation, scattered far. . . . But as yet, no deep satisfaction. This “modern-architecture” we see as a negation in two dimensions. An improvement? Yes, but with too little evidence of the depths of the architecture conceived according to Principle, built from inside outward as organism. The essence of construction itself is yet haphazard or old-fashioned steel-framing of the box. Natural elegance, the true serenity (due to indigenous character) of an organic original seems likely to be lost sterilized by studied stylizing or by careful elimination of all ornament and pretty much all but the box-frame with a flat lid. The tranquil emphasis on space as the reality of the building is mostly missing. Parasitic practices appear everywhere, credit given to this or that new name. Always new names. But no matter how many, such derivations from the outside in all run dry²⁴⁶.

In this description, Wright provides a trove of reasons why he doesn't consider Modernism compatible with his organic architecture. This includes the implication that while European Modernists imitated Wright's early work, they didn't really understand it nor produce from it works of deeper meaning. Modernism did provide a form of simplification that Wright also proposed, but theirs was a different type of simplification, one of minimalism without an underlying expression of the essential underlying nature of the thing in a Hegelian sense. He also disliked their propensity for boxy architecture, the very thing he was attempting to break out of. Missing, too, was a real sense of spatial depth and character. Finally, he implicates the movement as an avant-garde, stylistically-driven movement marketing itself into popularity and hence missing the deeper connection to nature or the soul of man.

²⁴⁶ Bruce Brooks Pfeiffer, *The Essential Frank Lloyd Wright* (Princeton: Princeton University Press, 2008), 386.

WRIGHT'S OPPOSITION TO EUROPEAN MODERNISM

BOURDIEU'S MODEL OF CULTURAL COMPETENCE

The history of Wright's polemical battle against the European modernists extends at least from the 1920's until his death in 1959, and thus the underlying conditions of this conflict, maintained by Wright for so long, should provide important information to help position Wright's theory of organic architecture in relation to the modernism he encountered. It is not sufficient, as I will show below, to maintain that this opposition was solely due to his hubris and the maintenance of his public persona. I feel that framing Wright's clash with modernism by utilizing Pierre Bourdieu's work on cultural capital can provide additional insight into why he did not want to be identified with the avant-garde developments of modernism in Europe at the time. This section on Wright's opposition to European Modernism will thus deal primarily with the social aspects of this comparison while the following section on Comparisons between Wright's American Organicism to European Modernism will take a more formal approach.

Bourdieu's book, *Distinction: A Social Critique of the Judgment of Taste*, is a landmark study from 1979 that defines and outlines the workings of cultural capital in the determination of taste within a society. An alternative to economic capital, cultural capital was the distinguishing factor in the determination of taste classes in a society. The ideas of high-brow, middle-brow, and low-brow apply here, with the avant-garde being the territory of the high-brow. Here, however, I will be comparing Wright's American architecture with the European avant-garde to see how this distinction plays out in the middle of the twentieth century.

Bourdieu's premise in his book *Distinction* begins with the idea that a work of art only has meaning for someone who has the "cultural competence" or code in which the artwork is

encoded.²⁴⁷ On the very last page and sentence of the book's postscript he brings back this thought by stating that [Kant's] Critique of Judgment cannot be expected to uncover the social distinction which is at the heart of his judgment of taste and that no judgment of taste is actually innocent nor disinterested. The five hundred pages of text between lay out his argument for a distinction which is based upon class domination and rivalry. Others such as David Halle have critiqued this work as overextending its claims in the role power and status play in abstract art's taste culture. Halle contends that art is indeed influenced by status-striving but that it is not at all clear that this is even the dominant force in play in the consideration of art consumption.²⁴⁸ Still, Bourdieu's broader work is illuminating as a frame for this study of Wright and his relationship with an established elite culture, that of European modernism.

Bourdieu fundamentally claims, in opposition to Kant, that one cannot move from the primary stratum of ordinary experience into the secondary stratum of meanings and signification without possessing the concepts that go beyond the immediate sensible properties, concepts that are a common currency of an established cultural or taste class that has authenticated and valorized certain aesthetic traits and that allow one to interpret the stylistic properties within an artwork.²⁴⁹ In fact, central to the artist's positioning within the elite cultural class is through establishing his autonomy of production in his field of work. This autonomy gives primacy to "that which the artist is master, i.e., form, manner, style, rather than the 'subject', the external referent, which involves subordination to functions."²⁵⁰ The key concept he develops here which is also central to understanding the modernist break with tradition, is that this process of autonomy is such that there is a shift from art which imitates

²⁴⁷ Pierre Bourdieu, *Distinction*, (Cambridge: Harvard University Press, 1984), 2.

²⁴⁸ David Halle, *Inside Culture*, (Chicago: The University of Chicago Press, 1993), 119-138.

²⁴⁹ Bourdieu, *Distinction*, 2-3.

²⁵⁰ *Ibid.*, 3.

nature to an art which imitates art.²⁵¹ Art becomes self-referential rather than speaking a language inherent in nature or intuitive to the common man. Referencing Ortega y Gasser, Bourdieu says that the popular aesthetic is based on the continuity between art and life which implies subordinating form to function. This is in opposition to the autonomous art whose foundation lies not in some essential nature but within the particular artistic tradition of self-referentiality.²⁵² Ortega y Gasset's book, *The Dehumanization of Art* goes on to give us other clues which become important when trying to understand Wright's antipathy to European modernism. While Gasset's book is actually pro-modernism, he states that all modern art is inherently unpopular, and not just contingently so.²⁵³ It will always have the masses against it, but this actually serves the purpose of dividing the public into two classes: one very small group that are favorable to it because they understand it and the second group of the masses who neither understand nor appreciate the art.

GASSET'S MODERNIST RUPTURE

Interestingly, Gasset mentions that Romanticism (often attributed to Wright), in opposition to modernism, was the prototype of a popular style, first-born of democracy and coddled by the masses for whom classical art held no appeal.²⁵⁴ The ability to separate content from the aesthetic is what distinguishes the elite class, and because this ability is not accessible to everyone, Gasset infers that art's impulses are not of a "generically human kind" but for a "special class of men."²⁵⁵

Gasset provides a list of attributes characteristic of this Modern art. It tends to:

- I. to dehumanize art

²⁵¹ Ibid.

²⁵² Ibid., 4.

²⁵³ Jose Ortega y Gasset, *The Dehumanization of Art*, (Princeton: Princeton University Press, 1968), 5.

²⁵⁴ Ibid.

²⁵⁵ Ibid., 8.

2. to avoid living forms
3. to see to it that the work of art is nothing but a work of art
4. to consider art as play and nothing else
5. to be essentially ironical
6. to beware of sham and hence to aspire to scrupulous realization
7. to regard art as a thing of no transcending consequence.²⁵⁶

This list clarifies why Wright drew a battle line against modernism. While Wright's form of modernism was on a mission to let the "carcasses of ancient Architecture lie rotting beneath our feet" in order that such traditions might die, he yet he adds that this is so that "Tradition" may nobly live.²⁵⁷ Wright sees a continuity with the past but a culture that grows out of that which can express new forms relevant to the circumstances, not a rupture from the past which in its claim for novelty becomes autonomous.

Jürgen Habermas brings in a connection from modernist art to modern architecture, while at the same time bringing out an irony of modern architecture, when he states that functionalism was based on the idea that "forms should express the use-functions for which a building is produced," yet there was actually a false concept at play here since what modern architecture was actually doing was concealing the fact that it was based on an autonomous system of aesthetic rules.²⁵⁸ While the International Style and CIAM were based on the manifesto of form arising out of functional necessity much like the steamship, automobile, and airplane, according to Habermas, in actuality it was following the 'experimental trail of avant-garde painting.'²⁵⁹ In Bourdieu's system, the work of art is the objectification of a relationship of distinction, and once it becomes self-conscious as modern art

²⁵⁶ Ibid., 14.

²⁵⁷ Pfeiffer, *Frank Lloyd Wright: Collected Writings* Vol 1, 341.

²⁵⁸ Jürgen Habermas, "Modern and Postmodern Architecture," *Rethinking Architecture*, (New York: Routledge, 1997), 231.

²⁵⁹ Ibid.

does, it is defined by a negation or refusal of those baser pleasures that it is distinguishing itself from.²⁶⁰

Bourdieu is saying that these works of cultural creation, while they can be viewed from a purely aesthetic viewpoint, nevertheless function in society as a social relation and embodiment of distinction. Possessing these qualities confers a legitimization of one's status in a certain taste culture. It is the form of distinction which Wright opposed:

Something more than a mere matter of taste, a taste for cake! All we've had has been predilection in this matter of taste, and we've tasted until we're so taste full that it is only a question of "where do we go from here?" No wonder sensible Henry says, 'art is the bunk.' He is right; all that he has known by that name is no more than what he says it is... The corruption of our own sources of power and inspiration shames or amuses us when we try to go deeper. When we get the meaning of our shame we are disgusted—likely we turn from it all, but we come back to it again.²⁶¹

INTERNATIONAL STYLE AS AVANT-GARDE

The term "International Style" was coined by Philip Johnson and Henry Russell Hitchcock in their book, *The International Style: Architecture since 1922*, and its accompanying exhibit at the Museum of Modern Art (MOMA). The goal of this work was to assert that there was a new modern 'style' of architecture. Unlike those eclectic styles of past tradition which were applied like a garment and changed at will, the International Style was one which was promoted as a rational outgrowth of functional grounding. While some modernists such as Hannes Meyer were to go so far as to say that the need for proportions and aesthetics in modern architecture was unnecessary, Hitchcock does not endorse that approach, and states that even within the sphere of functionalist buildings there are still free choices the designer must make, and that within this range of free play lies the domain of the style

²⁶⁰ Bourdieu, *Distinction*, 227.

²⁶¹ Pfeiffer, *Frank Lloyd Wright: Collected Writings*, Vol 2, 50.

now known as the International Style.²⁶² Its family resemblance, despite the varied locations, would be the result of the true modern condition from which it rises.

Following from this, the International Style, in order to take its place of significance in the avant-garde high-class culture, needed to establish its identity as autonomous art even while it tried to 'negate' its role as an art in order to maintain the narrative of being the necessary and logical scientific outgrowth of the machine culture. Consequently, it became a style that was internationally applied, whether in northern Europe or in South America. Climate and local and regional particularities did not seem to apply to its functional formula.

Henry-Russell Hitchcock, in the book *The International Style* (1932) admits of the formation of a style which somehow achieves a unified expression even though it is derived from disparate individuals and experimentation:

Today a single new style has come into existence. The aesthetic conceptions on which its disciplines are based derive from the experimentation of the individualists... This contemporary style, which exists throughout the world, is unified and inclusive, not fragmentary and contradictory.... The appearance of a certain dogmatism can hardly be avoided. In opposition to those who claim that a new style of architecture is impossible or undesirable, it is necessary to stress the coherence of the results obtained within the range of possibilities thus far explored.²⁶³

This new style coalesced around three main principles: emphasis on volume rather than mass, balance rather than symmetry, and the elimination of ornament. While the Americans Philip Johnson and Henry-Russell Hitchcock coined the title "International Style" for the 1932 MOMA exhibit and subsequent book, they were essentially showcasing the European modernist architects. The decision to use these three principles to define the style necessarily cut off from consideration other

²⁶² Henry Russell Hitchcock and Phillip Johnson, *The International Style: Architecture since 1922* (New York: W.W. Norton, 1932), 36.

²⁶³ *Ibid.*, 19, 21.

contemporary architectural expressions that were based on other ideas, especially the organic strain that Wright practiced. The code of its distinction was being written by Hitchcock and Johnson, and Wright was aware of its consequences in placing him outside of its boundaries.

Hilda Heynen in her book, *Architecture and Modernity: A Critique*, questions how far the alliance goes between modern architecture and avant-garde art and literature of the same time period.²⁶⁴ Certainly architecture as an art form cannot be as autonomous as the art of painting. Architecture must obey all sorts of rules, from the law of gravity and physics, building codes, and financial limitations to name a few. Further, architecture isn't the domain of the isolated artist but rather of a collaboration of many people such as architects, engineers, contractors, financial institutions, etc. that need to come together to actualize any building. There are parallels, however, that can be drawn between the two that remain useful in our discussion that factor into Wright's reaction against the movement.

Heynen states that a whole range of intellectuals writing on modernity have shared the opinion that modern people experience themselves as "rootless" and not in harmony with themselves, lacking a frame of reference of norms and forms that are traditionally supplied in society.²⁶⁵ The early Modernist Adolf Loos, also saw this fissure between tradition and the modern condition, but said that it was the task of individuals and artists to look for a new basis of culture, not through a continuation with tradition, but through a new avant-garde. The art critic Clement Greenberg, who was so influential in adjudicating the avant-garde in high culture, called this new avant-garde, "the only living culture we now have."²⁶⁶ Greenberg's strong influence on modernism was to create a binary opposition between the two poles of the avant-garde and kitsch, with no real middle ground between

²⁶⁴ Heynen Hilde, *Architecture and Modernity: A Critique*, (Cambridge: MIT Press, 1999), 26.

²⁶⁵ *Ibid.*, 27.

²⁶⁶ *Ibid.*

the two.

While Wright, like the European moderns, may have rebelled against traditional architecture, this does not mean that he accepted the radical schism between the new and tradition nor the classification of avant-garde and kitsch. Wright saw a continuity with the past rather than an art that was autonomously ingrown and arbitrary in its own self-referential set of rules. If these rules did not speak to the deeper essential nature of man and nature, then there was something amiss in it. If the European modernist was rootless, then for Wright, being rooted into something beyond the artistic expression itself was essential.

In Bourdieu's analysis, an autonomous field of production and its accompanying aesthetic demands is part of a system of cultural competence, a competence which he states is based on a code. Such a code acts as a private language which is required to understand and appreciate the particular aesthetic system at hand. This code, however, is not something that is integral to a functional outgrowth of its basis of existence, for if it was it would no longer be autonomous but derivative. In fact, Bourdieu stresses this point when he states that the artist's autonomy over form, manner, and style must have primacy over function or even of representation or signification.²⁶⁷

Bourdieu also discusses this in his essay, "Outline of a Sociological Theory of Art Perception"²⁶⁸ where he outlines in more detail the process of the deciphering operation on this coded information. He states that the ultimate truth of a style, school, or author is not contained "as a seed in an original inspiration" but instead that it is defined and redefined as a signification within itself, in a continuous flux whose change is in accordance with itself.²⁶⁹ In this self-referential nature of modernism, it isn't

²⁶⁷ Bourdieu, *Distinction*, 3.

²⁶⁸ Pierre Bourdieu, *The Field of Cultural Production*, (New York: Columbia University Press, 1993), 227-228.

²⁶⁹ *Ibid.*, 229.

possible to acquire taste through universal principles, natural law, or common experience because the code doesn't reside in these but rather in the socially constructed system which serves to legitimize its own taste culture based on its own autonomous set of rules of interpretation. This is in direct opposition to Wright's view that maintains the operation of freedom which is based in a Hegelian idealism that arises from its rootedness in Nature, its ground of being. But by doing so, by using this measure, Wright also places himself in the class of the "commonplace," and the middle-brow.

Wright declared in 1931 that:

...this modern constructive endeavor is being victimized at the start by a certain new aesthetic wherein appearance is made an aim instead of character made a purpose. The 'new' aesthetic thus becomes at the very beginning old because it is only another 'appliance'. The French with all the delicacy and charm they seem to possess as substitute for soul, and with French flair for the appropriate gesture. Initiators of so many 'art movements' that prove ephemeral, they recognize the opportunity for another 'movement.'²⁷⁰

Again, this reinforces the notion that Wright would rather not place himself in the trendy cutting edge of fashion and taste if it means cutting himself off from its root that gave it birth. Or, another way of seeing it is that Wright was after something timeless and eternal, not 'ephemeral,' even though he very strongly promoted his narrative of being at the edge of innovation in architecture.

Of all the modernists, Wright seemed to focus the heat of his displeasure on Corbusier and France. He said regarding Le Corbusier: "Why do you link me with that man? I think Corbusier should have been a painter. He was a bad one but should have kept on. No painter can understand architecture."²⁷¹ While this hyperbole is typical of Wright, this statement may also be indicating that Wright placed Le Corbusier within the elite taste class typified through superficial aesthetic "formula" rather than through characteristics Wright felt were more intrinsic and enduring.

²⁷⁰ Pfeiffer, *Frank Lloyd Wright: Collected Writings*, Vol 2, 98.

²⁷¹ Robert Twombly, *Frank Lloyd Wright: His Life and His Architecture*, (New York: Wiley, 1979), 385.

Wright often refers to the International Style as “formula driven,” since he sees the same stylistic mode being applied in diverse circumstances. This is in opposition to his view that design should be highly individualized based on site particularities, regional differences, client individualities, etc. Bourdieu states that a “repeated perception of works in a certain style encourages an internalization of the rules that govern the production of such works but that these rules are not explicitly formulated in this way nor capable of being formulated.”²⁷² It is through a process of familiarization or connoisseurship within the sphere of the cultural works that is the primary driver of receiving this code. While his may seem contradictory, the formula Wright speaks of above is less of a formula in the scientific or functional sense as it is in the aesthetic sense, where a continual familiarization of its aesthetic and stylistic facets applied over and over as *if* it were by formula. In fact, the “formula” was the re-presentation of common aesthetic percepts consistent with Bourdieu’s theory. What this also highlights is the irony of the International Style which claimed to be functionally driven (non-autonomous) while yet carrying over a certain component of it (aesthetic style) which was both subjective and autonomous (i.e. Fashionable and avant-garde) and it was this component which was necessary in disseminating and popularizing it as a style and movement. This point, however, is missed on Wright as well. For instance, he says, citing Le Corbusier, that a house can be a machine to live in, but only to the extent that as a heart is a suction pump— “Sentient man begins where that concept of the heart ends.”²⁷³

So even Wright has to answer to the same dilemma that Bourdieu raises of the European modernists in terms of the pure gaze and autonomous art: if form does not arise directly from content/function, which Wright seems to argue that organic architecture does, then what does one

²⁷² Bourdieu, *The Field of Cultural Production*, 227, 228.

²⁷³ Pfeiffer, *Frank Lloyd Wright: Collected Writings*, Vol 2, 100.

make of Wright's statement above that in the case of Le Corbusier, a house is only a machine to live in in a base functional sense, but that the true home is implied to begin when that functional definition ends? For once one takes out function, then the form is shaped by one's sentient nature, and with it the presumption of the autonomy of the artist. It may seem that organic architecture and the International Style have in common the reliance on the pure gaze and the rule of the aesthetic form over content. But Hegel's view that spirit embodies matter producing form should be considered here. It is not that the goal is pure functional expression, but the expression of the "Idea" which, while containing functional content, is not limited to that. To Wright this is not to be autonomous or arbitrary, but rather rooted in the conditions of its being.

WRIGHT'S ROOTEDNESS IN NATURE AND HISTORY

But where the International Style implies a break between art and life in its autonomy, Wright emphasizes the continuity between art and life which according to Bourdieu and Gasset implies a popular aesthetic, the middle-brow taste. Wright was acutely aware of the taste cultures he traded in and whether he felt in or outside of particular ones. He himself used the word highbrow derisively when referring to Philip Johnson: "He is a highbrow. A highbrow is a man educated beyond his capacity."²⁷⁴ Of course, to Wright, Johnson represented the art establishment and gatekeeper to the avant-garde. He didn't identify with the elite highbrow art culture, and it would be too easy to say that that was because he was snubbed by the establishment and kept out by it. Johnson had acknowledged Wright as the greatest architect of the *nineteenth* century, taken as a snub by Wright and later admitted as such by Johnson. Although Wright was able to be included in the 1932 exhibit,

²⁷⁴ Twombly, 384.

it was more as a contrast to the European architects who were considered at the cutting edge of innovation, so he later declined and told Johnson that he insisted that “every trace of my name in connection with your promotion be removed.”²⁷⁵ His own architectural works and writings over many decades also gives reason to believe his stance was at least as much rooted in, and consistent with, principle as in personal emotion.

Regarding popular taste cultures, Wright was not exactly content with being labeled in the popular taste class either. In his Kahn lectures of 1931 he expresses his view of a modernism which is primarily a market-driven taste culture:

‘modernistic’ got itself here by way of the Paris market with Madame. It is all too modish, too thin, too soon empty—too illiberal, too mean. Our dyspeptic American souls hunger for realization, for a substantial ‘inner experience.’ Something more than a matter of taste, and we’ve tasted until we’re so taste full that it is only a question of ‘where do we go from here?’²⁷⁶

Later in *The Natural House* book, printed in 1954, He goes on to say that the “culture lag” in America where people try to outdo the house next door to them, where they mistake their “idiosyncrasies to be their tastes” and their “ignorance their virtue” is preventing the person or thing from being simple and natural, nor allowing for any “beauty for living.”²⁷⁷ He also derides the commodification of the style industry in popular culture. This commodification creates a condition where style and form are external affectations within the cultural landscape that serve to continue excess and bad taste rather than allowing for more organic and indigenous solutions from arising that are more suited to the conditions at hand.

Wright’s highly individualistic methodology, which precluded this process of appealing to fashion

²⁷⁵ Bruce Brooks Pfeiffer, *Letters to Architects*, (Fresno: Press at California State University, 1984), 91.

²⁷⁶ Pfeiffer, *The Essential Frank Lloyd Wright*, 189.

²⁷⁷ Frank Lloyd Wright, *The Natural house*, (New York: Horizon Press, 1954), 79-80.

and the avant-garde, was one of his limitations for further assimilation into popular culture. While his masterpieces were well known, they were generally not repeatable, and most mainstream architects took the more standardized route of modern architecture that followed after the European models. Although his work certainly had distinguishable traits, Wright did not repeat Fallingwater, Johnson wax, the Guggenheim, etc. So, he was going contrary to the aesthetic tastemakers which require a 'form' of high culture to rally around, which is considered autonomous art. The International Style had this — a formula, not as much for functional necessity as for popular marketing, an identifiable avant-garde distinction that would be considered the accepted norm of high-culture.

Bourdieu critiques the Romantic representation of artistic expression as an “inferior and mutilated form of the aesthetic experience” because it uses a code which is inadequate to convey the signification of the cerebral content of the work. This is the distinction between the aesthetic enjoyment from simple ‘aisthesis’ of the senses versus the delight obtained by scholarly deciphering. Without the cultural code, Bourdieu says that aesthetic response remains at the lower level.²⁷⁸ Wright would not have accepted the premise of this argument, however. He felt that there was a real need for a substantial ‘inner experience’ in perception, and his architecture continually provided sensory rich, tactile environments of engagement rather than cool, reasoned frames for detached contemplation. Le Corbusier said that a building must be “a clear, sophisticated statement...and it should stand in contrast to nature, rather than appear as an outgrowth of some natural formation.”²⁷⁹ Currently there is movement back towards a sensory-rich and phenomenological approach to architecture rather than the position of Bourdieu above in which the conceptual stands both separate and above the sensual. For example, the contemporary Japanese architect Hiroshi Nakamura who

²⁷⁸ Bourdieu, *The Field of Cultural Production*, 219-220.

²⁷⁹ Peter Blake, *Le Corbusier*, (Baltimore: Penguin Books, 1964), 27.

was recently honored in *Architectural Review's* Emerging Awards, writes, "I want to create richness beyond words, born from the dynamic relationship between architecture and body.... I do not want to place architecture on an academic pedestal, but design as such so it becomes something just over the skin or clothes."²⁸⁰ (figures 4.1 and 4.2)



Figure 4.1. Hiroshi Nakamura. Sayama Forest Chapel, Japan. 2013.



Figure 4.2. Hiroshi Nakamura. Sayama Forest Chapel, interior. 2013.

²⁸⁰ Taro Igarashi, "Spiritual Heights," *Architectural Review*, December 2015, "Spiritual Heights", 36.

The tension occurring with the International Style was that it needed to maintain the presumptive methodology of scientific necessity while yet needing to separate itself from that very same functionally driven mode in order to create and maintain its own cultural capital for an autonomous, avant-garde taste culture. In the 1940s this taste culture would make its inroads onto American soil, further concerning Wright, and at the same time introducing the cultural war between American pastoral individualism and European avant-garde taste makers. Wright would continue to use a theoretical opposition to their architectural principles and, increasingly, a polemical war of American pastoral idealism to oppose a European socialist approach being imported.

“World War II made the Modern Movement in America”, Andrew Shanken boldly declares in his book, *194X: Architecture, Planning, and Consumer Culture on the American Home Front*.²⁸¹ The rise of planning in America in the 1940s was carried out adapting many of the ideas from the International Congress of Modern Architecture (CIAM), a European modernist organization founded by Le Corbusier and other modernists. Both governmental and corporate marketing agencies were promoting and importing the ideas and taste culture of the Bauhaus. Famous European architects such as Mies van der Rohe and Walter Gropius also were emigrating to the United States and carried out influential practices as well as teaching positions at major universities.

Wright wrote back to Hendrik Wijdeveld, the Dutch architect responsible for the *Wendigen* series devoted to Wright, in 1947 where he said:

This country is over-filled with left wing modernists of whom you are one. There is Gropius, Corbu, Mies, Mendelssohn, Breuer, and others. They are still there with the negation I made in 1906 and the emphasis of the horizontal I practiced in 1910.

The breach between myself and these men has widened. They think, speak and work in two dimensions while idealizing the third and vice versa. I feel that I am as far beyond them now as I was in 1910 and their apostasy has only served to betray the cause of an organic

²⁸¹ Andrew Shanken, *194X: Architecture, Planning, and Consumer Culture on the American Home Front*, (Minneapolis: University of Minnesota Press, 2009), 10.

architecture in the nature of materials which believe to be the architecture of Democracy²⁸².

As European Modernist architecture made its way into America after World War II Wright still saw it as a betrayal of an American born organic architecture appropriate to its place. He states above its lack of an understanding of an organic spatial construction and a materiality which was applied internationally insensitive to indigenous materials.

Even earlier, in 1932 when Wright corresponded with Philip Johnson in conjunction with the MOMA exhibition of modern architecture, he told Johnson that he found himself “rather a man without a country, architecturally speaking.”²⁸³ That Wright felt architectural success should be an indigenous result of organic process is clear as he takes aim at any taste culture and those who work in the service of its promotion as he continues dialogue in a letter to Johnson:

Propaganda is a vice in our country. High power salesmanship is a curse. I can at least mind my own business, if I can get any to mind, and not compete or consort with what are to me disreputable examples of disreputable methods that will get our future architecture nothing but an “international style.” A cut paper style at that. I am aware of your sympathies in that direction, and of Russell’s [Hitchcock]—and was prepared to respect both of you in it until I see the taint of propaganda in the personal examples you prefer.

He then says that Le Corbusier is the “soul of [Johnson’s] propaganda²⁸⁴,” positioning Le Corbusier in the favored position of one of architecture’s primary taste-makers of the time, presumably delegitimizing Le Corbusier by delegitimizing Philip Johnson.

LEO MARX’S AMERICAN MACHINE IN THE GARDEN

²⁸² Pfeiffer, *Letters to Architects*, 107.

²⁸³ *Ibid.*, 89.

²⁸⁴ *Ibid.*, 89-91

From the time of his Wasmuth portfolio introduced into Europe in 1910, Wright was watching the progress of European architecture and his influence on modernism. It would become soon clear that the European architects were not going to be emulating his approach to architecture or theory as he saw them take certain elements from his Prairie work such as the abstraction of planar elements and a certain simplicity but they also took it to an extreme level of simplification which Wright felt were superficial “surface and mass” effects that lost the inner growth principle of organic architecture. When this movement began to make headway into the United States, first with Philip Johnson’s MOMA exhibition of modern architecture in 1932 and then later in the 1940’s, Wright would expand his defense of an indigenous American approach that was more and more framed in terms of a battle of national cultures, not just in terms of architectural principles. Leo Marx’s book, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (1967) gives some explanatory power to elements of the American story which were central to Wright’s ideas. It also sheds light onto Wright’s own stance to the machine’s role in architecture and how his view on this relation of man and machine differed from the European architects.

Marx describes how the pastoral ideal in America emerged as a distinctively American theory of society with its own approach and transformation to the impact of industrialism.²⁸⁵ The Jeffersonian Ideal of the rural garden metaphor had framed the nations’ perception of itself in relation to Europe as well as in relation to its own progress as it faced industrialization and modernization. As Oliver Goldsmith said, “The image of a rural order, neither wild nor urban, [was] the setting of man’s best hope.”²⁸⁶ Strains of this thought are very similar to Wright’s much later concepts for Broadacre City in

²⁸⁵ Leo Marx, *The Machine in The Garden: Technology and the Pastoral Ideal in America*, (New York: Oxford University Press, 2000), 4.

²⁸⁶ Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (Oxford University Press, Kindle Edition, 2000), 100, 101.

the 1930s, where he proposed an acre per citizen in a density that was neither rural nor urban, verdant and yet cultivated and geometized. (Figure 4.3).

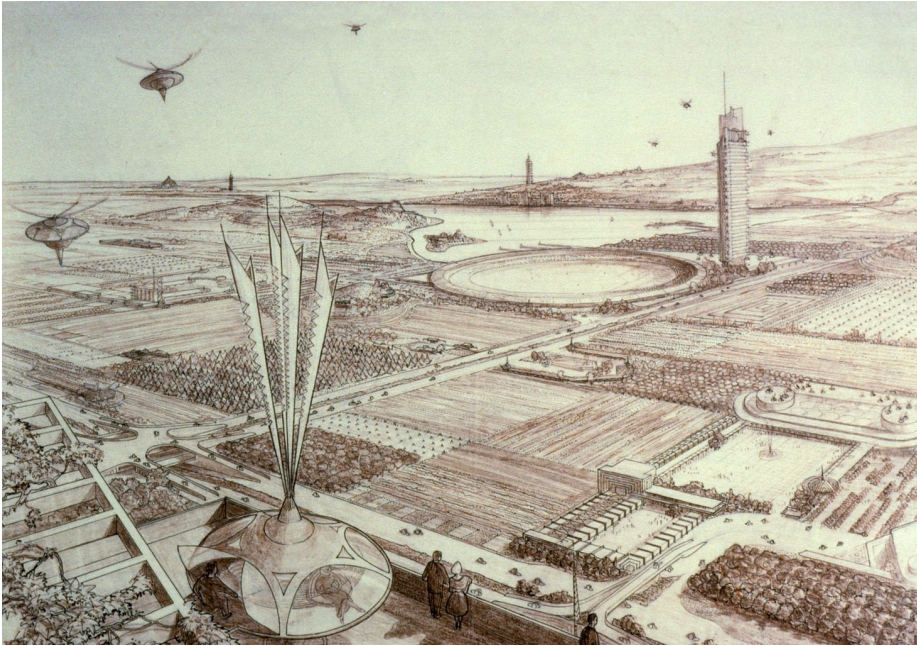


Figure 4.3. Frank Lloyd Wright, Broadacre City Drawing. 1932.

Thomas Carlyle, while acknowledging the advantages of machine production, also cautioned against society growing too mechanical in head and heart while neglecting those things that “spring from the inner resources of the psyche: the primary, unmodified forces and energies of man, the mysterious springs of Love, and Fear, and Wonder, of Enthusiasm, Poetry, Religion, all which have truly vital and finite character...”²⁸⁷ Hegel would call this state self-estrangement, the conflict between the social and the natural self.²⁸⁸ Wright quoted Carlyle often, such as in his 1900 essay, “A Philosophy of Fine Art,” and in his more well-known 1908 essay, “In the Cause of Architecture” where he quotes Carlyle, “The Ideal is within thyself, thy condition is but the stuff thou art to shape

²⁸⁷ Marx, 174, 175.

²⁸⁸ *Ibid.*, 175.

that same Ideal out of." Wright extracts from this his own propositions that place simplicity and repose as the measure of the true value of any work of art.²⁸⁹

While Wright did not approve of Jefferson's taste in classical and Greek architecture that he considered a tragic mistake which was antithetical to American principles, he did believe in the democratic ideal and the worth of the individual, stating that "Democracy was originally conceived as an organic unity, the free growth of many individuals as units free in themselves, functioning together in a unity of their own making." Even so, he at the same time chastised a "rugged individualism that now captains our enterprises and becomes the capitalist" as foreign to the ideal of individuality, which he saw as the difference between "selfishness and selfhood."²⁹⁰

Marx shows how Emerson is able to join an enthusiasm for technological progress with a romantic love of nature and contempt for cities. His combination of the Jeffersonian sense of the land as an economic and political force with a transcendental theory of mind may be called the philosophy of romantic American pastoralism.²⁹¹ As Marx points out, the objective of American society was the middle landscape of a rural nation exhibiting a happy balance of art and nature. But no one, not even Jefferson, had been able to identify the point of arrest, the critical moment when the tilt might be expected and progress cease to be progress."²⁹²

This pastoral archetype affirms that Europeans experience regeneration in America, a rebirth found in this nation's natural terrain and sublime virtue.²⁹³ This connection to the land was seen by Wright as providing a rootedness, yet in its negation, it caused him to see modern, autonomous architecture as a threat to the pastoral ideal and enduring value that transcended the arbitrariness of

²⁸⁹ Pfeiffer, *Collected Writings*, Vol 1, 87.

²⁹⁰ Pfeiffer, *The Essential Frank Lloyd Wright*, 241.

²⁹¹ Marx, 230.

²⁹² *Ibid.*, 226.

²⁹³ Marx, 228.

taste cultures. The European state, in contrast to the American pastoral ideal, fulfilled the sentiment that "...if unimproved nature is the location of all that we desire, then civilization as Europeans have known it can only signify a fall or lowering of man's estate."²⁹⁴ With the Jeffersonian notion of the redeeming virtue of the virgin land, the industrial revolution meant a "railway journey in the direction of nature" while at the same time the Westward expansion meant "casting off European attitudes and rigid social forms and urban ways."²⁹⁵

Yet Wright was not just parroting simple Americana. While Wright wrote against those forces which would place culture and taste within any socialistic or communistic impulses that threatened individual freedom, on the other hand, almost as a representative from the Frankfurt school, he would decry the commodification of manmade out as "a commercial item and cutting him off from his birthright by senseless excess and the demoralization of the profit-system"²⁹⁶ To Wright, the European model was about affectation in taste and culture rather than an inner, organic culture that was rooted in the American pastoral ideal. Even before the modern movement, this American contrast with Europe as the urbane center of 'high-culture' was evident and enough for Wright to oppose. During the modern movement, much of this contrast still remained. Europe was threatening to import its own taste culture into an America that was all too-easily forgetting its own heritage in the land and its free people. Beyond that, there was the poetic and artistic ideal reflected in various moments in American history which the European modern movement had rejected in its reductionist scientific stance on architecture and the rest of the arts.

²⁹⁴ Marx, 76.

²⁹⁵ Marx, 238.

²⁹⁶ Pfeiffer, *The Essential Frank Lloyd Wright*, 413.

COMPARISON OF WRIGHT'S AMERICAN ORGANICISM TO EUROPEAN MODERNISM

Early modern American architecture reveals a distinctiveness from its European counterpart. It was in the vein of organic architecture in America where its rootedness to place and nature contradicted the European International Style of modernism, where an emphasis on universal placelessness and a machine aesthetic held sway. This line is more complex in the example of Frank Lloyd Wright's approach to the machine, however. This section examines how the machine entered into the buildings of Wright during his career, and how his use of the machine and 'machine aesthetic' differed from his European contemporaries. I will examine three of Wright's buildings at various stages of his career to see how this attitude toward the machine is embodied in the works themselves.

DEFINING THE MACHINE

It is important to define in what sense 'machine' is used in this essay. There are two senses of this word I will be using that need to be distinguished; first, 'machine' in the actual functional use, and 'machine aesthetic' in the symbolic sense. In the first sense, the machine in architecture relates to the actual tectonics of construction. For example, the use of woodworking machinery to plane, cut, and form wood components, the use of prefabrication methods or components to reduce on-site labor, power equipment on site such as excavation equipment, power hand tools and the like. Within this category of the actual, would also be machines and machine technology that are built into the building itself. This includes new technologies of plumbing, electrical, the elevator, heating equipment, steel, and glass, for example. In distinction to this, the 'machine aesthetic' is symbolic of the machine and

contemporary technologies, and not literally part of the process of construction nor physically a part of the building. These are the designer's signs which signify referents such as the ideal of the machine, a perceived technological future signified in the work, or metaphors relating the work of architecture to machines such as steamships, automobiles, etc.

While Wright's address at the Hull House to the Chicago Arts and Crafts society in 1901 on the "Art and Craft of the Machine" may have seemed jarring to those sympathetic to Morris and the ideals of the Arts & Crafts principles of handcraft, Wright's exaltation of the machine was already a thoroughly imbedded attitude in American culture from the end of the eighteenth century and more fully in the nineteenth century. While William Morris and his English associates were continually reminded of the adverse effects of the machine seen in the blight of industrialized cities' crowded factories, soot from smokestacks, and poor working conditions for adults and even children, the United States had a very different historical assimilation of the machine, as has been examined by Leo Marx.²⁹⁷ The machine to America represented power to settle vast unexplored territories, and leverage to produce buildings, transportation, and agriculture where labor was much more scarce than land. Furthermore, the machine entered into the mythology of American geography as another instantiation of the same physical laws governing the solar system (visualized through the popular orrery of the time). The natural landscape, so predominant in America, was seen as the result of these mathematical laws, and thus there was not a contradiction between 'organic' nature and the machine. These were not polar opposites as often considered today. In fact, the European romantics such as Wordsworth, Coleridge, and Carlyle themselves helped to promote this attitude.²⁹⁸ While certain

²⁹⁷ Leo Marx, *The Machine in the Garden: Technology and The Pastoral Ideal in America*. (New York: Oxford University Press, 2000).

²⁹⁸ *Ibid.*, 162.

machines such as the steam engine were seen as European imports, the “purifying” power of the American soil was a part of this myth of the American landscape where this marriage of machine and nature was consummated.²⁹⁹ So, when Wright glowingly spoke of the machine as the “future of art and craft... a glorious future,³⁰⁰” he was not breaking new ground but standing upon the work of many who had prepared the way for him. His love of the land and the machine was an entirely American sentiment. An ‘organic’ synthesis of the two was not a conceptually foreign idea, yet the physical expression of this in architecture would be his contribution to bring forth.

In the “Art and Craft of the Machine,” Wright spends considerable space explaining how the machine in the form of the printing press has killed art as handicraft (to shore up his argument at this point against Morris’ reliance on handicraft art), and he admits it even killed the building, citing Victor Hugo’s Notre-Dame.³⁰¹ He then brings it full circle to show how the machine used in the hands of the forward-thinking architect is the key to architecture’s revitalization through “mastering the drudgery of earth that the plastic art may live.³⁰²” Curiously, Wright’s account does not actually rebut the claim that the printed word has dethroned architecture from its place of centrality in the medieval arts, even though he was fond of calling architecture the mother art. His perception of the potential of the machine seems to lie primarily in its ability to eliminate human drudgery and its ability to leverage power to architecture, thus extending our abilities of subjective expression through material form.

While this examination is not a commentary on modernity per se, the difference between Wright’s conception of the machine and those of the International Style stem in part from differing views of modernity. While Wright was offended that the avant-garde had not considered him a

²⁹⁹ Ibid., 158.

³⁰⁰ Frank Lloyd Wright, “The Art and Craft of the Machine,” in *Frank Lloyd Wright Collected Writings* (1894-1930), Vol I, (New York: Rizzoli, 1992), 59.

³⁰¹ Ibid., 60.

³⁰² Ibid., 61.

modernist but rather (by Johnson and Hitchcock) as a nineteenth-century architectural precursor to modernism, there is some truth to this rhetoric. When considering the rise of modernism and the avant-garde, one of its early proponents, Charles Baudelaire, claimed that modernity was of the transitory, the fugitive, and the contingent.³⁰³ As described by Hilde Heynen in her book, *Architecture and Modernity*, contained in the concept of modernity is the idea that there is no inalienable essence to the objective, and that modernity is a condition of 'homelessness.'³⁰⁴ Dwelling in the proper sense is now impossible in a modern, mobile and unstable society.

As a counter to this, Heynen considers the later theorist Christian Norberg-Schulz (following after Heidegger) who sees the need to reestablish a *genius loci*, concrete places that represent a 'returning home' to a 'place-based' dwelling.³⁰⁵ Of course, in the Modernist paradigm, even Schulz's holistic metaphysics is criticized as untenable. In this, both those phenomenologists following Schulz and Heidegger, along with Wright, would be seen as not within the modernist stream. The International Style thus positioned itself squarely within Modernity and with it partook of Modernity's nature of rupture and placelessness. Again, the rupture from tradition and history goes back until at least Baudelaire. Wright's position was one rooted in history ('a cause conservative') yet able to expand into new territories of technological progress as well as new creative artistic expression. This gives explanatory power to why Wright was set against both 'dead' tradition which didn't develop new forms, and Modernity which had no root, and thus all that was left was mechanism or machine without the soul of the artist.

³⁰³ Hilde Heynen, *Architecture and Modernity: A Critique* (Cambridge: MIT Press, 1999), 12.

³⁰⁴ *Ibid.*, 14.

³⁰⁵ *Ibid.*, 19.

THE ROBIE HOUSE

The Robie House in Chicago (1909) is generally considered Wright's ultimate Prairie home and the building within the *Wasmuth Portfolio* of 1911 which most influenced a younger generation of European modernists (figure 4.4). As Neil Levine points out, its intersecting, overlapping, and almost autonomous planes became an abstract symbolism of the image of the house much in the same way in which Picasso's cubist portraits fragment and abstract the normal reading of a face.³⁰⁶

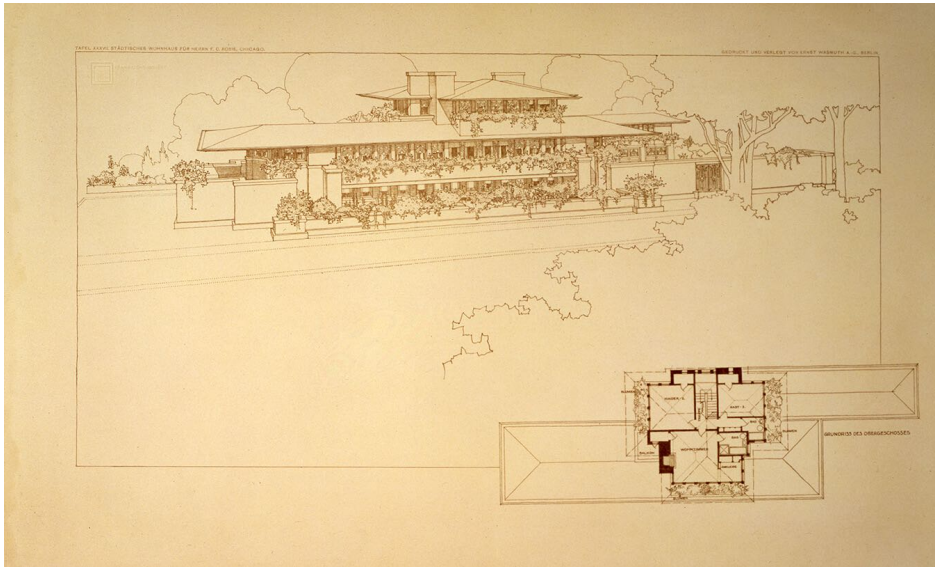


Figure 4.4. Frank Lloyd Wright, Robie house drawing from *Wasmuth Portfolio*, 1911.

At the same time, he adds, the Robie house combines the organic vitality and freedom of nature with the rational control and order of the machine. Levine's reference to the machine here is the second category I have outlined above, that of a symbol for the ideal of the machine nature, and in this case representing order and control. Another symbol of the machine which was conveyed by the Robie house was that of the ocean liner, or "Dampfer House" as Wright described it in his

³⁰⁶ Neil Levine, *The Architecture of Frank Lloyd Wright*, (Princeton, N.J.: Princeton University Press, 1996), 57.

autobiography.³⁰⁷ Perhaps this explains Wright's clear demarcation at the base where house meets lawn without extraneous plantings which would only break up the clarity of that horizontal line, just as a ship cutting through the water. This symbol can be seen even in the interior main space as one looks down the length of living and dining spaces with the rhythm of vertical window mullions and ceiling trim reinforcing this reading.

But what of the first category of machine in the Robie house, the actual use of the machine in its production and composition? Wright claimed that the machine would broaden artistic expression, not prevent it. Here, there is reason to believe that, at least in part, this is the case. Primarily through the use of steel, he was able to create his poetic statement of floating, cantilevering rooflines reinforcing the strong horizontality of the structure without heavy vertical supports at the corners. The Robie house also shows his use of wood trim inside which is straight-cut without volutes, crown moldings, and other excesses of the traditional styles of woodworking (figure 4.5).



Figure 4.5. Frank Lloyd Wright, Robie house living room interior. 1909.

³⁰⁷ Ibid.

Wright claims it is the machine which “teaches us that certain simple forms and handling are suitable to bring out the beauty of wood and certain forms are not; that all wood carving is apt to be a forcing of the material...”³⁰⁸ Wright’s glowing account of the machine even “made it possible to wipe out the mass of meaningless torture to which wood has been subjected since the world began,³⁰⁹” But here, Wright is attributing to the machine qualities it does not possess, personifying the inanimate tool as a force for better art and architecture. Yet actually, the machine does not teach us that the beauty of wood is better brought out by simple straight-lined forms —this is the judgment of the architect or woodworker; the machine is just as apt (as it has been abundantly used) to multiply volutes and other complexities through lathing techniques or other means which would be even harder to accomplish by hand. By trying to have it both ways, Wright was confusing the distinction between the intentionality of the artist/architect and the neutrality of the machine. On one hand, he was giving the suggestion of a mechanical determinism in which to argue his cause, but this weakens his later case in judging the machine processes of the International Style as without soul and beauty. The Robie house does indeed reveal hundreds of board feet of straight-lined Oak trim which leveraged labor through the machine. However, a house made in the Victorian style could also make the same claim if made with a similar use of machine fabrication. So, in this aspect the importance of the machine is clearly present and yet at the same time intentionally transparent.

Reyner Banham, in his book, *The Architecture of the Well-Tempered Environment*, makes the claim that innovations in mechanical environmental control, such as electric lighting and air-conditioning may be more valid tests of technological modernity than the commonly cited cases of

³⁰⁸ Wright, “The Art and Craft of the Machine,” 65.

³⁰⁹ Ibid.

steel or concrete use in construction. He examines the Robie house from an environmental control standpoint, describing Wright's early use of concealed radiators, lighting, roof overhangs, windows, and entry location and concludes that his inventiveness and total control over these elements was not to be matched "for decades."³¹⁰ He further states that while Wright's use of relevant technologies was done with enthusiasm but not dogma, the European modernists conviction that the machine was a cultural problem rather than utilitarian function required them to look for some new style as generated by each new technology.³¹¹ He then proceeds to describe the deficiencies of the "White architecture of the Twenties" where the promise of improved environmental quality was sacrificed on the altar of a geometrical machine aesthetic and the honest expression of everything.³¹² And so, the irony here is that a more pragmatic and subordinated use of the machine as incorporated by Wright in the Prairie homes was more successful than in the International Style where the machine aesthetic, or more properly the ideal of the machine, was dominant and fought against actual environmental comfort.

FALLINGWATER AND VILLA SAVOYE

The second building I will examine is the Kauffman house, more commonly known as Fallingwater, in Bear Run, Pennsylvania in 1937 (figure 3.6). By the beginning of the 1930s, Wright was far from the leading edge of the avant-garde as he had been with the Robie house. The International Style was fully formed, and the MOMA exhibition of 1932 was fresh in the public mind (which excluded Wright). Two of the major icons of the International Style, Le Corbusier's Villa

³¹⁰ Reyner Banham, *The Architecture of the Well-Tempered Environment*, (Chicago: The University of Chicago Press, 1969), 121.

³¹¹ *Ibid.*, 122.

³¹² *Ibid.*, 124.

Savoye (figure 4.7) and Mies van der Rohe's Barcelona Pavilion (figure 4.8) were only a few years old.



Figure 4.6. Frank Lloyd Wright, Fallingwater exterior. 1937.



Figure 4.7. Le Corbusier, Villa Savoye, 1929.



Figure 4.8. Mies van der Rohe, Barcelona Pavilion, 1929.

Joseph Connors feels that the classic moment when images of nature and the machine were given their most powerful expressions in Wright's writing was 1900-1901, and that the symbolism and sentiments he shared then would remain with him throughout the rest of his life.³¹³ Connors feels that Fallingwater flowed from these ideas and imagery first expressed around 1900. This was particularly evident, he adds, in his response to the International Style in the 1930s which he found "simultaneously, attractive because of its machine imagery and repulsive because of its neglect of nature."³¹⁴ While Wright did credit the European modernists with the positive effect of dispensing with excess ornament, I do not see him finding their work attractive because of their machine imagery, however. He would for the rest of his life deride the white cardboard box architecture on stilts which lacked any true sense of depth which he himself worked in. Wright could only take the machine

³¹³ Joseph Connors, "Wright on Nature and The Machine," *The Nature of Frank Lloyd Wright*, ed. Carol R. Bolan et al. (Chicago; London: The University of Chicago Press, 1988), 3.

³¹⁴ *Ibid.*

so far, lest one suffer the fate of those who “by way of machine worship, go machine mad.”³¹⁵

After Hitchcock and Pevsner had already written about Wright, Vincent Scully proposed a new argument regarding the counter influence of the Europeans on Wright in the 1930s.³¹⁶ Scully's view was that Wright set in motion factors which would make the International Style possible (around 1911) and then the reverse would happen when the European architects had published major works by 1929 which were not only available to Wright, but in fact provided the material from which his renewed burst of achievement would occur in the 1930s. Indeed, the 1930s were a renewal of Wright's work, just considering the Kaufmann house, The Jacobs Usonian house, and the Johnson Wax Administration building. Scully sees in Fallingwater overt signs of the International Style. He sees Le Corbusier's Villa Savoye in the “clean planes, the dark window voices with their metal details, and most of all, the spatial plays of curved against rectangular planes—very rare in Wright's work up to this time.”³¹⁷ Whether this is true, and to what extent it may be true, is difficult to prove. Using similarity to prove causation in architectural history is common yet problematic since there are multiple lines which can bring about similar formal characteristics. In any case, the difference lies between what is used and how it is used. The steel Hope's windows which Wright used on Fallingwater may indeed have been inspired by seeing this used in Europe. The manner in which many of these ‘machine’ symbols from Europe were used was very different, however.

Villa Savoye was a machine symbol raised on piloti on a flat grassy lawn, a rational statement of Le Corbusier's concept of the “machine for living.” This required conceptual clarity and contrast between the designed object and nature as backdrop. While the Modernist attitude was not opposed

³¹⁵ Ibid., 14.

³¹⁶ Vincent Scully, *Modern Architecture and Other Essays*, (Princeton: Princeton University Press, 2003), 54.

³¹⁷ Ibid., 62.

to nature, it was a nature viewed and framed by its architecture. It was a rational contemplation of nature as one would view an art object in the rarefied atmosphere of a museum. Wright's Robie house shared at least one aspect with Villa Savoye in this aspect of the machine — the Robie house, like a "Dampfer" in the water, made an abrupt cut into its site, a clear demarcation between nature and the building. This was no longer the case in Fallingwater where there is not only an 'interpenetration of spaces' to use Giedion's words, but an even further breaking not only of the 'box' of enclosure, but an interpenetration between the natural and manmade object. Wright allows the identity of rational form to be melded into nature. To this end he is helped by a very singular and dramatic natural site, but it is more than this; he also needs to continue nature's form and then juxtapose it with precise, machine like elements. This is where the building's stonework relates back to the site's stone as the ancient and timeless material upon which the smooth cantilevered concrete planes, crisp red metal windows, and glass elements join in a composition of heavy and light (floating), steel and stone, solid and void. Even as one views his floor plan, one is struck by how far he has allowed the identity of his normally very geometized plan to dissolve into the site. This is so much so that rarely does one see this floorplan imitated in other houses or buildings in the same way that Wright's tartan grid of the Prairie era or the various modular grids of his Usonian homes have been done. This plan resists being seen in the abstract but requires the site to complete its meaning, to give it closure.

PRICE TOWER AND LAKE SHORE DRIVE APARTMENTS

The last building to be reviewed here is Wright's Price Tower (1952-56) in Bartlesville, OK. (Figure 4.9), which will be compared to Mies van der Rohe's Lake Shore Drive Apartment towers of

1949-51 in Chicago, IL (figure 4.10). Unlike the dense, urban and high-cost land that the Lake Shore Drive apartment towers were built upon, the site of the Price Tower was very suburban, lacking in towers of comparable height. The Price Tower is 221' tall with 19 stories, while the Lake Shore Drive towers are 246' tall with 26 stories. However, Wright's client Harold Price had originally asked Wright only for a two-story building, and upon presenting his design for a 22-story building, they finally 'compromised' at 19 stories.³¹⁸ Wright's desire to see a tower accomplished seems evident here, as the only other realized tower he had actually built was the Johnson Wax research tower in Racine in 1949.



Figure 4.9. Frank Lloyd Wright, Price Tower, 1956.

³¹⁸ Bruce Brooks Pfeiffer, *Frank Lloyd Wright Drawings: Masterworks from the Frank Lloyd Wright Archives*, (New York: Harry N. Abrams, 1996), 120.

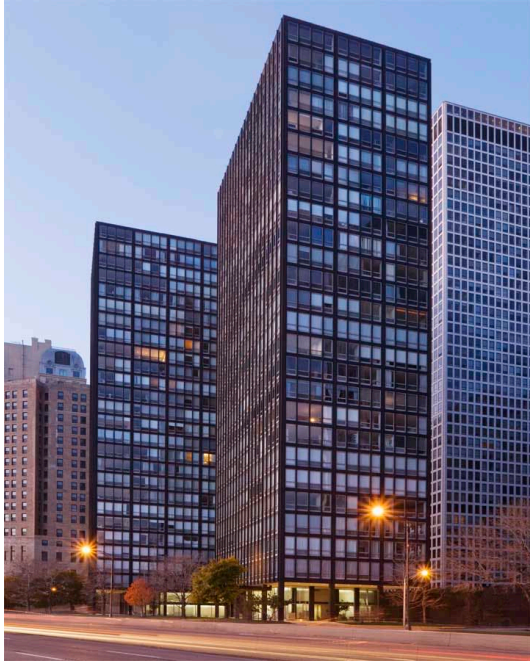


Figure 4.10. Mies van der Rohe, Chicago Lakeshore Drive Apartments, 1951.

The Bartlesville site, unlike the Kaufmann site, provided no outstanding natural features from which to inflect the design other than its flatness reminiscent of the Chicago prairie. Yet here he does not design in the horizontal but the vertical and expands the client's program to justify this. The skyscraper was a clear expression of machine power in late nineteenth century Chicago which Wright was so familiar with during his tenure at Adler and Sullivan. Here in Oklahoma, Wright would recall this symbol of machine power but now near the end of his career, transform it to his interpretation of the machine in the garden for the mid-twentieth century, and yet at the same time its conceptual foundation was unchanged from his essays from 1901 and, for that matter, was also congruent with the American unification of the machine within nature that went back before the nineteenth century.

The metaphor Wright used for this tower was likewise appropriate to its heritage: a tree; in fact, "the tree which escaped the crowded forest" as he would claim. Wright had explored this metaphor of the tree decades earlier such as his unbuilt plans for St. Mark's-in-the-Bouwerie Towers in New York (1927-1931). It is remarkable how similar that plan is to the Price Tower over two decades

later. Central to both designs, and including the Johnson Wax Research Tower, was the idea of the central structural core with taproot foundation and cantilevered floor plates. This was a perfect metaphor for the tree while at the same time a concrete technical expression of the symbol. The fact that it is rarely used in today's proliferation of skyscraper designs speaks to its lack of economic efficiency, but nevertheless, its poetic and expressive content is clear. Taking this metaphor further, this same central core, actually four clustered core units, was the circulation conduit for the flow of mechanical, electrical, and plumbing services, including the elevators for human circulation. (figure 4.11).

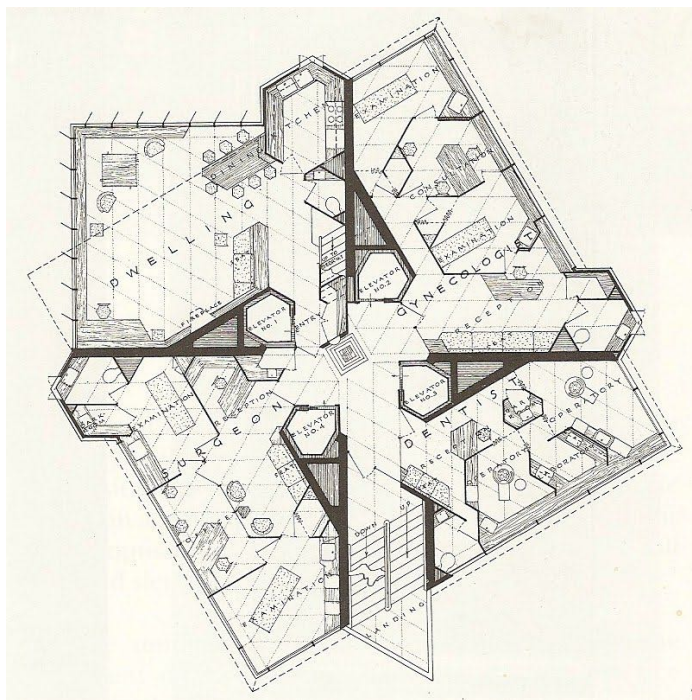


Figure 4.11. Frank Lloyd Wright, Price Tower floor plan. 1952.

Spatially and geometrically, the plan is based on square geometries intersecting with the 60-120° angles, not so common in Wright's work, but not unique to this design either. This results in a rather complex configuration of floor plans and also spatial volumes as he conceived this not as a

simple stack of horizontal planes but interspersed mezzanine levels which opened up alternating vertical spaces, much like he did in the Johnson Wax Research Tower. The exterior of this was a natural expression of the complex pinwheel geometries within and resulted in a composition which was dynamic, asymmetrical, and yet balanced, with complex rhythms and sides which were different from one another. In summary, the Price Tower exhibited both senses of the machine, actual and symbolic, and at once an expression of both the machine and nature without dichotomy nor contradiction.

Just like Villa Savoye is an instructive comparison to Fallingwater, so too is the Lake Shore Drive Towers to the Price Tower. While Mies by this time was a resident of the United States, he clearly represented the latest minimalist expression of the International Style that originated in Europe. As with Le Corbusier, the towers were expressions of the machine and of rational ordering. As these were built a few years prior to the Price Tower, Wright would have also been familiar with them when designing his own tower. Whereas Wright's geometric expression was dynamic and complex (recalling the Gothic paradigm), Mies' towers were static and simple rectangular prisms (recalling the Greek paradigm), slightly taller than the Price Tower. They also expressed a machine aesthetic symbolically, and certainly could not have been built without modern machine technology in actuality. They are often considered near the peak of functionalist architectural expression, an expression serious in its machine-like precision and disdain for applied ornament. Ironically this same symbolic expression of functionalism was wrought by the use of decorative exterior steel I-beams, and the uniform four-sided glass exterior is not able to adapt to climatic or solar orientation in the same way Wright's tower does through varied vertical and horizontal fins and shading devices and varied amounts of glass exposures. This again highlights the distinction of actual function (or machine character) from the symbolic reference to function (or 'machine aesthetic'). The more pragmatic

American version, at least as represented here, has more flexibility to adapt to actual conditions.

Early modernism utilized the myth that the machine was in some way determinant of form, but this was not actually so. Therefore, what remained was the aesthetic symbol of the machine; the machine as a symbol of the modern new way, severed from tradition. Wright's American version of the machine used the symbol of the machine as well, and yet it was rooted in an American ideal which both saw the pragmatic utility of the machine as well as its integration within the fabric of its cultural aspirations.

CHAPTER 5

MODEL ORGANIC THEORY

I have used my analysis of Hegel's aesthetics and Wright's practice as building blocks to develop the following model theory of organic architecture. A useful theory should be particular enough to provide guiding principles of design while founding it on a general base which is philosophically coherent. However, it should not be so specific as to simply be a style manifesto. While Wright may be the best example of a modern architect who more completely than anyone else has carried out such a project, Wright himself must not be the foundation upon which this framework is built. Such systems tend to be imitative of external stylistic traits of Wright's work and do not provide for real progress in the development of creative solutions for new circumstances of place, time, and technology. As such, my stance with Wright is to view him as an exemplar of a way to do architecture, rather than as a lawgiver for the same. Wright didn't claim to be inventing the timeless principles upon which great architecture was built but one who discovered them and appropriated them in a new way. The following framework for organic architecture, then, is an attempt to clarify and systemize those principles which pre-date Wright, are interpreted through Wright in many instances, and are relevant after Wright today as well. Because of its historical roots, this is not intended as another 'ism' or stylistic fad.

This dissertation is focused on the idea of *organic* architecture, a sub-set of the universal architecture in general. This word caused Wright misgivings, and it is necessary to define my use of that word here. First, I am using the term since this is the historical term used by Wright to describe

his mode of architecture. This model framework in turn builds upon this foundation going back to Hegel and earlier. Second, it is necessary to distinguish it from other modes of architecture such as Classicism and other forms of Modernism (both historical and contemporary) which are based on different premises than this system. Organic architecture is not a style, and yet properly done it should create works of architecture which are sympathetic to human thriving and a sense of beauty.

Organic architecture begins in the conceptual space between Kant and Hegel. Hegel, with credit given to Schiller, overcame the Kantian opposition between subjective thinking and objective things, between abstract universality and the sensuous individuality of the will. Kant could only express unity in the pure subjective ideas of reason with no demonstration of adequate reality³¹⁹. Hegel, following Schiller, went beyond this by grasping the unity and reconciliation as the truth, actualizing them in artistic production. It is in this organicism that the binary oppositions of both modernism and classicism are overcome and a third way is possible, including the inclusion of Eastern concepts of art and space as explored above. In much of twentieth-century architectural polemics, there has been the battle between the avant-garde and the rear guard, with the modernist avant-garde largely holding sway to the dismissal of those who would hold on to traditional and classical modes of architecture.

Unfortunately, such an atmosphere led to the polarization of theory where there was little middle ground between the two. The traditionalists tended to reject anything that was not done historically already while the modernists rejected any references to tradition or its principles. I am proposing, as I believe Wright was in fact doing, a framework which does not reject the past nor historical principles, and yet allows for creative expressions in each time and place based not on arbitrary impulses toward novelty, but on unchanging principles. This means that the resulting works of architecture are open to

³¹⁹ Hegel, *Aesthetics* Vol I, 56.

review by the entire culture they are being built in. Rather than art for art's sake which is not open to criticism, these works should meet tests of taste and beauty, among the myriad other technical and functional requirements any building must meet.

Foundational both to Wright's view and this proposed framework of organic architecture is the idea that the subjective sense of beauty is validated by objective qualities, and that the beauty of architecture is one of the means which dissolve and reduce to unity the concept and the material nature of the work. The outcome is an individuality that ties form and meaning inextricably together. When Wright stated that "form and function are one" he conveys this sense in a more refined and significant way than the early modernists who claimed that form follows function, which expressed a dualist system of opposition between form and content and created an avant-garde taste culture with self-referential rules. The aspect of unity in Hegel, with Wright following, is the root of the organic theory of the whole. One cannot find the truth of the work in a part but only after the whole is established.

As an aesthetic system, it draws upon Hegel's romantic stage of architecture, and more broadly his philosophy of art. Hegel's aesthetic provides the framework for the material manifestation of concepts (or the Absolute). Hegel's view avoids the "art for art's sake" of aestheticization as it reinforces the place of content, not just form. Further, the form is not arbitrary but is the outworking or unfolding of the idea manifesting itself in sensuous nature. The outcome is an individuality that ties form and meaning inextricably together. When Wright stated that "form and function are one" he has expressed this viewpoint.

The following framework for organic architecture has a more integrated structure than Wright used when conveying his theory of organic architecture as a list of tenets or principles which varied based on time and place. There is a hierarchy in the arrangement of my system as certain elements

are subordinate to others. With this nesting of principles, it is easier to see how many of Wright's principles are all an outgrowth of the idea of unity and the integrated whole rather than isolated concepts.

UNITY AND THE ORGANIC WHOLE

A work of architecture is a unified whole, and it is this characteristic which, more than any other, informs the aesthetic system of organic architecture. Any building (not just an organically designed one) must achieve a complex integration of many varied requirements into a bounded construction. This entails resolving functional, technical, and formal aspects into a cohesive entity. The structure must work together to hold up the roof and floors, walls must create closure to keep out bad weather, and so on. However, a designer may either achieve this integration poorly, leaving an end result which reveals conflicts, inconsistencies and disharmonies, or may intentionally express the conflicts and discontinuities as part of the style, such as was the case with Post Modernism (think, Robert Venturi's *Complexity and Contradiction in Architecture*) and Deconstructionism. Organic architecture affirms the intention that achieving a unified whole is part of the nature of architecture and is something which should be a primary goal, even if the ideal of perfect integration is impossible to achieve practically. Implied in this is a subordination of parts in a symbiotic relationship to one another according to the role each plays in the whole teleological expression of the building. The unified whole, both for Hegel and for Wright, does not reject Kant's dualism of freedom vs nature, form vs content, but integrates it into a higher unity. Whereas Kant's dualism left beauty in the realm of transcendent subjectivism, here the work of architecture brings about a dialectical reconciliation of subjectivity and objectivity through the sensuous appearance of Spirit (Geist), to use Hegel's term, expressing the Ideal of beauty in material form. The materiality of the work is not accidental to the

meaning or concept but part of the particular instantiation of it as a work of art. This means we cannot say that the meaning of a work of architecture is detached from and independent from its physical manifestation, even though it may also serve as a symbol for certain concepts. This also explains why a written narrative description of a building can never replace the physical instance of the building itself as a work of art. A narrative may describe the concept in part, but it lacks the material expression of it as well as the higher totality of the whole. This also implies that the physical materiality of architecture is woven into its final meaning. Whether a certain wall is made of brick, stone, wood, metal, or stucco is not incidental to the form, but together with the form, becomes part of the overall meaning expressed in the work.

Wright's claim that organic architecture is where the part is to the whole as the whole is to the part implies an integrated, rather than additive, concept of wholeness in the work of architecture. An aggregation of parts or bricolage is not organic in this system. Required is a relational subordination of the parts into hierarchical structure. This implies a specialization and individuation of parts in the proper place and proportion to give the whole its telos and unity. With Hegel, I would classify this as an open wholeness rather than a closed system. Whereas much Modernist architecture may seek openness without telos (e.g. a Deleuzian rhizomatic network of multiple, non-hierarchical entry points), there is here a closure toward entity. However, the entity is never truly closed upon itself because it is not complete in itself. The architecture of a building should have a relational subordination toward a whole or entity to be organic architecture. And yet, there is a "spiral" of greater scale and inclusiveness which indicates that the building obtains a more complete closure when considered (and inflecting towards) the land it is built upon. Fallingwater is a good example of form which is not complete in itself but gives deference to its site and even dissolves its geometric ordering grid into the site's natural features. In contrast Mies van der Rohe's Farnsworth home is a

complete entity in itself as a box on stilts hovering over its natural site. Nevertheless, it is not a closed unity because its grid system of universal space implies no real nested hierarchical system of part to whole.

DIALECTICAL SYNTHESIS

Hegel's dialectic is central to the concept of unity and the organic whole, including Wright's exercise of it. For Hegel, only the total is true and each stage or moment is partial. The totality preserves within it each stage or part that it has subsumed. In organic architecture, perfection of a part can only be judged in relation to the whole. Classical architecture often is built upon rules of symmetry where even the individual parts are seen to be symmetrical in themselves as if they need to be able to stand alone and have identity within themselves. In organic architecture, parts may be asymmetrical and incomplete in themselves, finding their completion at a higher level of completion in the whole entity. One can think of the parts of the body as examples of this. The human body may be symmetrical, but one hand is not in itself symmetrical, nor can it function as an independent entity. Further, its meaning cannot be fully understood apart from the rest of the body it is subordinated to. At the same time the whole is not the same unity without which each part supplies. Nor is the whole a combination of self-similar parts but an arrangement of often very disparate elements. The part gives service to the whole while the whole gives identity and meaning to the part. When Wright said that in organic architecture the part is to the whole as the whole is to the part, examples such as how a stained glass window pattern is mimetic of the overall floor plan of the house, or perhaps of fractal geometry which nests within itself copies of its geometry at varying scales comes to mind. This is an aspect of it, and yet it is not the complete meaning provided by Hegel's totality.

A dialectical understanding of unity, unlike the classical static view, states that there is a dynamic

movement towards the whole which at once overcomes but preserves what it takes into itself, like the spiral growth pattern of a shell or fern, referred to by Hegel as sublation (*Aufhebung*). Fractal geometry, while incredibly intricate, is a relatively simple formation of shapes made of parts similar to the whole in some way. Architecture is composed not only of self-similar geometries magnified by scale, but also contradictory and opposing elements which often do not mix well.

Architecture by its nature involves a tension of many opposing factors such as quality and budget, building codes and plan configuration, building program and aesthetic form, the need for closure from the weather and the desire for openness, structural requirements and spatial expression, among many others. Besides these binaries, Wright can be seen working with many others such as east and west (consider the Imperial Hotel), man-made vs natural, inner sheltering space vs expansive outward openness to nature, etc. The enduring aspect of Wright's genius is not so much in his novelty of invention as it is in his ability to synthesize disparate elements into a whole which is resolved at a higher formal order than the parts themselves. Thesis, anti-thesis, and synthesis. The various supposed influences on Wright's architecture, whether from Japan, nature, even European modernism, are not disqualifying factors since the compelling aspect of his work is in the synthesis of seeming opposing elements which are integrated at a higher order.

Hegel states that artistic genius is not the simple impression of inner spirit upon external reality. Rather it is the truth and rationality of the actual world which should attain external appearance³²⁰. This involves the artist abandoning his superficial "ideal" and entering reality itself, creating out of the abundance of life itself and not out of abstract generalities. This requires that the artist have a profound experiential knowledge of the medium in which he works. Wright saw "actuality as the intrinsic

³²⁰ Hegel, *Aesthetics* Vol I, 282.

romance of human creation,” where human imagination rendered the “harsh language” of structure into humane formal expression³²¹. In this he acknowledged the actuality of the medium of expression, denouncing cheap sentimentality (i.e. kitsch) while at the same time not succumbing to the reductionist mode of mere “mechanization of building” which emphasized the actuality of building while denying the place of human imagination upon it.

This in turn can be further understood in terms of a dialectic reconciliation of elements where the unity is purposely dissolved only to be recomposed at a higher level of order. This is in fact Hegel’s point in Romantic architecture when he states that the:

...majesty of art brings back into simple unity everything thus divided up and partitioned. The substance of the whole is dismembered and shattered into the endless divisions of a world of individual variegations, but this incalculable multiplicity is divided in a simple way, articulated regularly, dispersed symmetrically, both moved and firmly set in the most satisfying eurhythm, and this length and breadth of varied details is gripped together unhindered into the most secure unity and clearest independence³²².

Hegel’s description above seems to delight in the ability of art to reconcile and unify the most particular and individuated elements into a greater whole. Unity does not require a minimalism to achieve through the subtraction of disconcordant elements, but rather through the ability to bring into the work each individual part to a greater whole. The dialectic then shows us to not ignore the aspects which confront our design as negatives but to integrate them into a higher-level order.

Hegel’s dialectic has been used in support of more contemporary process-oriented, deconstructed and reductionist theories of architecture also. Bringing out the lacunae from the gloss of unity has been foregrounded in such deconstructionist or otherwise rhizomatic and non-humanistic approaches. Here, my framework makes a distinction again from these theories somewhat parallel to

³²¹ Pfeiffer, *Frank Lloyd Wright: Collected Writings* Vol 5, 61.

³²² Hegel, *Aesthetics* Vol 2, 685.

the section Filter and how Wright reacted against modernist theories, this for similar reasons, does not accept these reductionist theories. The difference I am making is that while I accept the deconstruction of elements allowing minor voices and dissonances to be expressed, the final goal is to recombine the various architectural elements into a greater whole and unity, to bring a certain closure, even while recognizing that at every scale, there is a larger context of scale in which the work of architecture is only a subset. A certain Kantian judgment of taste in beauty remains the test of success at this process or not.

Since Wright's time, deconstruction and critical analysis have entered architectural theory. A positive result of this has been to confront and break down naive unities/univocals that have been assumed uncritically. When one opens oneself up to the complexity inherent in any given design context through this dialectical process, they can create new unities of greater richness. This approach is distinct from that which seeks to amplify and celebrate the discontinuities, ambiguities and contradictions and leave them unfinished or open ended without seeking an open whole. The range of scientific, social, and critical developments since Wright's time should not be seen as a negation of the ideals expressed in Wright's architecture. Rather, these developments should be admitted and integrated into a larger, richer whole. This means that one cannot go back to Wright's works themselves. Another cycle of the dialectic is to work itself out in architecture. Currently, the critical and negative have held sway to deconstruct the univocal in architecture, leaving us with works which seem harsh, incomplete, or ugly. It is time for the resolving of these antinomies into greater wholes, re-establishing works of beauty not by returning to the same spot in the river but a new spot in the process of our current becoming.

An architectural unity should not be an artificial unity where for the sake of a grand gesture the parts do not have generative power nor authenticity. This creates kitsch. It is not believable as

architecture and does not convey the harder truths that the materiality and specificity of the individual parts bring to a whole. This is not an easy task and rightfully so a work can be considered a masterwork when this is approximated.

INTEGRAL ORNAMENT

Integral ornament is an outgrowth of the above principle of unity and wholeness and follows logically from its premises. To Wright, organic ornament is “structure-pattern made visibly articulate” as it is seen in the structure of trees or lilies of the field. When Hegel covers this topic in romantic architecture he brings to the forefront a few key ideas³²³. First, he states that one effect of ornament is to split up the unity of large masses of building so that the whole now presents in itself contrast. He does not say that the unity is dissolved by this, but rather that there is a more complex unity which arises from a tension of contrasts within a greater whole; this is another way of looking at a dialectic unity. The implication is that there is the need for both the larger unity as well as the smaller, particularity and individuality which the various decorative ornament provides. In his example of the Gothic church, he uses this idea to convey how the contemplation of the infinite and universal yet finds the finitude and concrete delineation in the sensuous realm. Yet it is important that the particularity of the sensuous ornament does not conceal the form of the larger unity but is permeated completely by the other. Here it is not clear if Hegel is saying that the ornament is permeated completely by the idea of the whole or whether the whole is permeated completely by the ornament. In Wright’s thinking, it is reflective and works in both directions since he stated that the whole is to the part as the part is to the whole. Abstract idea must be expressed in physical materiality

³²³ See Hegel’s *Aesthetics* Vol 2, 695-7.

in the same way persons have materiality and express our ideas through the corporeal. And materiality in reverse influences the mental realm.

Integral ornament, then, must be in a relationship with the whole rather than something arbitrarily applied or disjointed from it. This relationship of part to whole entails that it in some way contains within itself the idea or reflection of the whole while at the same time contributes a particularizing or individualizing aspect of bringing Geist to sensuous expression and concrete reality. An analogy would be what the prism does to white light where the unity of the white light is broken down into its constituent colors. The green or blue or yellow light was there all along in the whole but not recognized until individuated as its own particular color.

Adolf Loos, the early European modernist architect, felt that ornament distracted from the pure abstract form. As a return to Greek Platonism, he felt that the ideal dwelt in pure undifferentiated forms rather than in individual particulars. It is Hegel's and Wright's stance to hold unto the both-and of the abstract but also the particular which distinguishes it from the modernist stance of trying to eliminate the particular from the ideal. The resultant minimalism prioritizes intellectual contemplation at the expense of sensuous engagement. Hegel felt that if the individual parts of a work of art lack a life of their own, albeit in the unity of the whole, the work of art becomes cold and dead, since it is only through actual particulars in which the universal can be expressed³²⁴.

Like good prose, each subsection, paragraph, or sentence in its own way is contributing the greater whole. In a good work of architecture, the ornament contributes to the greater understanding of the whole.

Fay Jones Thorncrown Chapel is an example of the particularity of the 2x4 members upon which

³²⁴ Hegel, *Aesthetics* Vol 2, 982.

the whole unity is formed and yet it is the particularity of detail (ornament) which makes the place resonate. As designers, we create concrete expressions out of the conceptual realm of mind. The instantiations of these ideas face the actual world, interact with the actual world and are a form of world making in Nelson Goodman's terminology. The actual tests the conceptual to see whether the instantiation has a resonance in the real where the totality and the whole speak truth. Thorncrown chapel is a particularly good example of the place of organic ornament. It would not be Thorncrown with only the universal idea, a form of Miesian universal space. Here is a space where the universal and conceptual cannot exist without the particular and individual concrete expression of each part. There is no whole without what each part supplies and yet each part is subordinated into a hierarchical discipline which speaks of a unified whole. It is a brilliant example of a project which is both organic in Wright's definition of organic and yet stylistically is something different from anything Wright ever produced.

INTEGRAL TO SITE

In organic architecture, there are two paramount concepts which are in effect. First, the house or building takes its cues and form based on the site context. Secondly, the relationship of house to site is a continuum of the integrated whole but at the opposite end of the scale than ornament. The building is not a closed whole but is open to the site context in which the building inflects and achieves a greater dialectical wholeness.

Besides the obvious connections to the site, the more important principle that Fallingwater demonstrates is that architecture and nature should be in a unity of relationship, a greater whole, and this means that the architecture is not a stand alone complete entity in itself without nature and plant material. So, there should be some dissolving of the architecture which gives way to nature. This is

one of the reasons that Wright's works that do this are so intriguing and why he often rendered them with drooping vines and plants all around to soften the architecture — this is something that to the modernist would jeopardize the architecture, but not here with Wright.

In organic architecture, the house gives way to the site and to nature. Rather than a classical separation between house and site where plants are treated as something which cannot be allowed to blur the sharp edges of architectural expression, here the architecture inflects toward both the site as context and the site as the particulars of nature such as plants, water, stone, and light. The goal is to create a unity which is not complete with the architecture itself, but a unity where the house and the site together create a unity on a dialectically higher level.

Wright said, "In Organic Architecture then, it is quite impossible to consider the building as one thing, its furnishings another and setting and environment still another. The Spirit in which these buildings are conceived sees all these together as one thing³²⁵."

The modernist approach to nature is to view it through a pure and simple framed view which presents it to the intellect as an object of contemplation. While one can say that modernist architecture also is about a dialogue between architecture and nature, such as that relationship with the Farnsworth house on its natural site, it is a relationship at a distance rather than integrative. While one can call up the dialectic to understand the Farnsworth house in its setting, this is not enough since the dialectic can be used in all contexts. The important difference is that the organic approach is the integrated whole of the two while the modernist is the subtractive whole, or additive one of contrast. Is it better to view a wooded site from a minimalist glass box such as Phillip Johnson's glass house or from the Thorncrown Chapel? Thorncrown dares to present structure as abstract forest in view of

³²⁵ From the Preface to *Ausgeführte Bauten und Entwürfe* (Berlin: Wismut, 1910), 1963 reprint in *Buildings Plans and Designs* (New York: Horizon Press, 1963) 11.

real nature and in so doing at risk of the clash of the artificial standing up to the overpowering presence of nature all around it. And yet, somehow it succeeds at this very thing.

GROWTH PRINCIPLE

The dialectic also gives rise to the organic growth principle. As an open whole, there is a spiral growth pattern to the formation of wholes from the dialectic of opposites into greater synthesis. Hegel states that in romantic architecture "the external shape, the decoration and arrangement of walls, etc., are determined from within outwards, since the exterior is to appear as only an enclosing of the interior.... The interior is the already visible background in which the exterior is immersed..."³²⁶

Wright's concept of the growth principle in architecture closely follows the Idealist thinkers of the 19th century, including Goethe and Coleridge, in the life cycle of an organism and its innate development from within. With this, the idea of the seed was central to Wright's thought. Here the idea that the entire expression of the building is contained within a pattern (or in today's terms the DNA) which informs all aspects of the building. The expression of the seed is more important than its place in its life-cycle. Here, Wright never seemed to be concerned about adding on or modifying an already built building of his. A building should not only be dynamic rather than static in plan geometry, but it should be able to be dynamic through time. His Usonian homes are perhaps more suited to this than his early, classically inspired plans since they are based on a core and wing configuration which allows for easy extension without losing the core anchor point from which growth can radiate.

The growth principle also has implications for the initial design of a building. If a building is

³²⁶ Hegel, *Aesthetics* Vol 2, 693.

conceived as a seed planted that grows, then one would also be inclined to design the building from the “inside out,” starting from a primary core which could abstractly represent a tree trunk from which branches extend out. This in fact is what Wright often did both with his early Prairie style homes with their central hearths and extended wings as well as his later homes. The symbolic value of the fireplace mass as object at the core conveys more than just domestic warmth but also the seed and growth concept. This concept would seem to be at odds with Wright’s concept (in turn bringing up Laotze) of space as the central feature of architecture. Here, Wright’s atrium plan type with central space can be seen in such buildings as Unity Temple, the Larkin building, the Johnson Wax administration building, and the Guggenheim among others. Indeed, even in the hearth/core plan type, the tension between space and object is key. Wright’s ability to dialectically resolve these into intriguing spaces without losing the plan definition provided by the object mass is part of his genius in design.

CONTINUITY

Wright generally focuses his discussion of the principle of continuity in the context of it being an engineering innovation which he invented in architecture that superseded the old post and beam type of construction. Specifically, the cantilever was the means he created through the tenacity of steel and reinforced concrete to knit the building together more completely into an integrated and continuous structural whole. The survival of the Imperial Hotel in Tokyo is often used as a case in point showing its success and credibility. While the focus is often on the engineering, it is interesting here to see that Wright uses the engineering to substantiate its aesthetic qualities. The two he specifically mentions are

the cantilever's ability to get "planes parallel to the earth and emphasize the third dimension."³²⁷ The other important aesthetic import is that continuity allows ceilings and walls to be made one with floors, allowing a blurring of the lines of distinction between them. One of the most complete expressions of this in Wright's work is the Guggenheim museum in New York where the floors, walls, and ceilings are a continuous ramp of reinforced concrete. However, it would seem that the motivation for this continuity might not have been structural to begin with. In his early Prairie period, there are countless examples of this in play as an aesthetic device where he stops the wall material at door top height, wraps a wood trim band around the room/space horizontally at that point, and then paints the upper section of wall the same color as the ceiling color giving the impression that the ceiling is not just a flat plane but a folded plane wrapped down upon the trim band. This is accentuated even further when he folds wood trim bands from the ceiling unto these upper walls making them a continuous whole and separating them from the lower wall material/color. This was a completely aesthetic construction and had nothing to do with the materiality or ability of structure to make this work. It was a spatial device (Figure 5.1).

³²⁷ Pfeiffer, *The Essential Frank Lloyd Wright*, 221.



Figure 5.1. Frank Lloyd Wright, Living Room from the Francis W. Little House at the Metropolitan Museum of Art.

Nevertheless, the principle of continuity from an aesthetic standpoint allowed for the fragmentation and reintegration of various building elements of wall, floor, ceiling, column etc. to be done in a new and more varied way. I think it is this latter point which was more important to Wright than the mere progress toward a purely simple and continuous form, the Guggenheim notwithstanding. Further, this principle of continuity has the additional reinforcement of the principle of the integrated whole, or a top-down approach as discussed by Rudolf Arnheim where he states that order based on inflected components (such as Wright's lily pad columns at Johnson Wax) does not allow the isolation of any of its parts for separate consideration and calls for an observer to consider the design almost entirely from a top-down approach, that is proceeding from the whole to the parts, rather from a bottom up approach³²⁸.

³²⁸ Arnheim, *The Dynamics of Architectural Form*, 193.

FORM AND CONTENT

In a theory of organic architecture, the dualistic opposition between form and function must be considered an inadequate conception and a higher order of resolution must be sought. This dualism which was supported during the International Style Modernism was critiqued but the later Postmodern and Deconstructionist critical theories, along with analytic philosophy, and found wanting. Hegel, Goethe, and Wright do not make the mistake of positing conditions for causes, of claiming forms arise from certain functions. Wright's claim of form and function being one, seems to have stood the test of time and to be valid yet today.

There is an inseparability between purpose and architecture, and Hegel brings in a further key factor here. Hegel is interested in the transfiguration of purpose into art as an end for itself. This is the greater degree of freedom which is afforded in the romantic stage of art where idea does not limit itself merely to sensuous form, in fact form is not able to fully convey the spirit or free idea adequately. A building does serve definite purposes and yet it also stands as a work for itself. Their meaning does not reside merely in its external purpose, but in itself free of extrinsic purpose. The notion, even in much of current contemporary organicism, that forms follow from simpler and reductionist causes along a deterministic path, is not the path shown by Hegel. Utility is transcended and the building expresses the free and independent meaning of human spirit. The dialectical whole, while containing within it extrinsic purpose, is not by that determined. First, there is no one to one correspondence between any given function and subsequent form. Also, on Hegel, there is in romantic architecture the transcendent idea whose freedom is not adequately able to be conveyed in material form. An analogy may be instructive here. An AM radio signal (Amplitude Modulated) has a certain sine wave configuration based on its frequency. However, the mere carrier wave itself does not convey information content by itself. The modulation of amplitude in the sine wave provides the added layer

of information which makes it a useful medium for conveying content. Here information is the Idea of Hegel's system and that which modulates in and through the material medium of the building itself. It has not been shown how information content can arise reductionistically from lower order determinist means and so in architecture we have the integrated whole which is both/and: it both contains the elemental, functional requirements for its physical being but from the higher level of intentionality is informed by idea and concept, in this case by the designer.

Kant's purposiveness without any definite purpose fits in here also. The whole seems to have in itself a purpose which cannot be ascribed to extrinsic purposes themselves. Many organic architects such as Arthur Dyson, practice a metaphorical organicism, where architecture becomes a metaphor for nature. The Lotus Temple in New Delhi is one example of this [show figure]. While this approach brings in the symbolic, and expression of the idea into architectural form, I don't feel it contains the depth of the organic architecture conceived of by Wright or Hegel. Architecture is not merely mimetic of nature, even though it may include such illusions. Compare, the metaphorical examples, The Lotus Temple or the Sidney Opera house, with Wright's Fallingwater. The former can be considered mimetic of natural forms while Fallingwater is not mimetic either of the waterfall or anything in its natural setting — and yet it is organic. Organic architecture must be an integrated whole which integrates its natural site context into its design. Yet it does not need to be a mimesis of those natural forms, it can be something different and new.

REVEALING INNER ESSENCE

CONCEALING AND REVEALING

There is a higher order which reconciles Wright's seemingly contradictory expressions of space as externally directed (Usonian homes, etc.) and inwardly confined (i.e. Unity Temple, Guggenheim, etc.) which is presented in Hegel's romantic stage of architecture as well as in the Japanese concept of *miegakure*. Wright's ability to construct his spaces in this manner is a key factor in the experiential richness and intrigue of these spaces, and this model theory posits this point as essential to organic architecture. While Wright himself did not express this idea of concealing and revealing, it is actually one of the most important aspects of his architecture, one that Hegel's philosophy of art brings to the foreground, and thus gives evidence of the use of Hegel strengthening or completing Wright's organic theory.

In as much as one designs for the aesthetic appreciation of human persons (this principle may have no appeal to animals or robots for instance), this concept appeals to the inner and outer life of humans and its expression in the built environment. To reveal architecturally inner space from an exterior perspective is parallel to the inner life of persons being expressed in the external world. Yet in romanticism, the inner self is not only about one's position in the outer world through revealing but the return of the intellectual life into itself, withdrawing from the external world in hiddenness. It is here, on Hegel, that the inner person finds infinite worth in the eternal moments of absolute truth, both unfolding into the external realm and collecting again³²⁹. Architecturally this is expressed in forms which both reveal glimpses of the interior from the exterior without a total openness, and also from

³²⁹ Hegel, *Aesthetics* Vol I. 520.

the interior contain an essential interiority of space which maintains its spatial identity as such.

Revealing and concealing expresses this tension between the two realms which add to the dynamism of the experience of architectural space. According to Rudolph Arnheim, overlapping shows hiding and being hidden in a particularly expressive way³³⁰. This is where the concept of miegakure is particularly fitting. The Japanese idea of miegakure, meaning hide and reveal, was derived originally from Chinese landscape painting and more commonly relates to Japanese garden design today. In both cases the idea is that through layering of spaces to obscure or hide portions of the garden from view from any one point creating a series of interrelated views presented in sequence. The imaginative perception related to this is what enriches this experience. Wright's spaces reflect this in their many processional paths to and from the entrances and through the interconnected and yet distinct spaces within. The intrigue of Wright's spaces through seemingly random niches and obscured miscellaneous spaces actually contribute to this idea of concealing and revealing and the larger concept of the rhythm of spirit both manifesting itself in the sensuous realm and again concealing itself from the same. As was mentioned previously in the discussion on the Imperial Hotel, there seems to be a conflict with Wright's desire for both an interior sense of space per Laozi and his desire to break down the boundaries of exterior walls to provide for the continuity of space from outside to inside. In practice, this is resolved by architecture which contains both ideas, where the building appears closed from certain vantage points and also open from other viewpoints. Wright's ability to design with both concepts in view is part of the uniqueness of his architecture.

³³⁰ Arnheim, *Art and Visual Perception*, 124.

GEOMETRIC ABSTRACTION

Hegel says that the idea takes shape as ideal in sensuous form. The inner idea is the essence of the work of art that lie behind the accidents of external reality—the spiritual cause of form. Wright sought to translate this from the philosophical into the architectural, however, through geometry. There is an underlying organizational unity of the integrated whole in the organic (and Japanese art where he began to clarify this principle) which he called its structure. Underlying this hierarchical unity was geometry. All form can be reduced to its geometric components and all geometry was reducible to mathematics, its pattern. Music is also reducible to mathematics and yet this doesn't mean a mathematician can create music. The warp and weft was another popular analogy Wright gave for this idea. The mathematics of the grid of the warp was the basis for the generation of form. Wright used this analogy quite literally in his use of the grid as the underlying discipline from which he modulated his forms. While the mathematician may not be able to create music nor the layperson a rug from the warp, no good architect can create architecture without knowledge of its underlying basis in geometry. Geometric abstraction was a guide to prevent one from literal imitation of external form. Realism was not Wright's goal, but rather abstract form was the pattern of the essential and "spirit in objectified forms," which almost verbatim quoted Hegel. So, Wright's architecture was about revealing not the obvious externals but the underlying inner essence which was a seeking after expressing spirit in architecture.

While form could be reduced to geometry, conversely geometry connoted symbolic value which effected one's experience of architecture and in which was found "the soul of the thing"³³¹. To separate spirit and matter is to destroy both, Wright claimed³³². Similarly, with Hegel, art qua art is

³³¹ Pfeiffer, *The Essential Frank Lloyd Wright*, 67.

³³² *Ibid.*, 285.

not the imitation of nature, even though it will appropriate shapes, colors, and form often similar to nature's. Rather the highest role played by art and aesthetic symbols is the expression of spiritual content³³³.

The grid, the weave, the textile tectonic was the underlying order behind all that manifested in physical form to Wright. He saw in this underlying order as a generating grid/filter/device. The grid didn't determine the final result but it did give it the order and discipline which the freedom of artistic form would otherwise lose its authenticity without. Here freedom is married with order, the key. A wave as carrier but then modulated. Yet the modulations are confined to the wave so that one could say they are mere epiphenomenon of the wave, and yet the mechanism of the wave is not able to provide the information content which modulates itself. The same with the grid and with the weaving.

Fractal geometry is considered an organic form system of self-similar patterns. The use of the word was coined by Benoit Mandelbrot in 1975, so it would not have been familiar to Wright. The classic Mandelbrot set is generated by the function: $f(z_n) = z_n^2 + z_0$. It is practically scale less with its geometry unchanging whether the pattern occurs at nano-scale or astronomic scale. While this abstract mathematical function can create extremely intricate patterns and simulate natural forms such as tree branching, crystal formation, snowflakes and river beds, it is also extremely simple from an information content standpoint. On a human scale and for architecture, missing are codings for actual breaks in the length of walls, differentiated materials, and endless other functional requirements of even the simplest buildings. In itself, it is not able to produce what Wright has done with organic architecture, nor give us enough of a basis from which to develop a formal system of architecture.

³³³ Carter, Curtis. "Hegel and Whitehead on Aesthetic Symbols". Lucas, George R. *Hegel and Whitehead: Contemporary Perspectives on Systematic Philosophy*, (Albany: State University of New York Press. 1986), 241.

SIMPLICITY

Simplicity, almost from the beginning of Wright's career is a key component to his organic architecture. However, its centrality to the theory of organic architecture has nothing to do with a more modern notion of minimalism. He reveals much about this when discussing the role the Japanese print had on his conception of simplicity. Here he saw the "elimination of the insignificant" not as an exercise in minimalism but for the stated purpose of a "consequent emphasis on reality"³³⁴. Simplicity and the elimination of the insignificant is for the purpose of "seizing upon" the essence of the artist's creative idea, uncovering it so to speak from the accidental and the encumbrances that keep it from being expressed. The accidental and superfluous elements are in many cases the insistence upon realism which runs counterproductive to the expression of the ideal embodied in material form. While Wright calls upon Japanese principles in support of this idea, it is at essence also Hegelian, even if Hegel did not make the connection to Asian art to make this point.

Simplicity in this model theory of organic architecture then is not minimalism but rather the elimination of that which would distract from the essential goal of expressing the inner idea behind the building. This requires a discipline in which all forms and elements of the architecture must be resolved within the whole. This does not imply that complexities and tensions in the formal aspects be ignored or eliminated but that a larger order formal resolution be applied which integrates what otherwise would be the discordant element. Simplicity should serve to an overall sense of repose and harmony of the building in its setting. This simplicity is a matter of coordination while beauty due to the manner in which this coordination is affected. As Wright proposed, no thing is simple in itself but only as a perfectly realized part of an organic whole³³⁵. Simplicity entails eliminating that which is

³³⁴ Frank Lloyd Wright, *The Japanese Print: An Interpretation* (New York: Horizon Press, 1967), 19.

³³⁵ Pfeiffer, *The Essential Frank Lloyd Wright*, 196.

unnecessary but does not mean that “expressive changes of surface, emphasis of line, and textures of materials” cannot be used to make for a more eloquent and significant form³³⁶. In fact, additional lines and trim are often used in the service of harmonizing various elements which otherwise may seem disjointed or incongruous. As in Unity Temple, for example, extensive trim is used which changes the gestalt perception of space in such a way that planes appear folded and united rather than isolated.

Objectively, the interior of Unity Temple is anything but simple.

SPATIAL CONSTRUCTION

A model framework for organic architecture must answer the question of why space in particular is, or can be, organic. To Wright, it was one of the most central features of organic architecture. In the system I am outlining here, it is also not to be considered as a separate idea or principle but integral to the overall idea of organic architecture. Space is nothing but the relationship among things that physically exist. Things that are related can be organized into a manor which expresses a unity or disunity. A unified and integrated whole is organic. It then expresses what Wright referred to as entity, an emergent property where the whole is greater than the sum of its parts due to a dialectical arrangement which supersedes the opposites at the individual part level.

A key aspect of space in Hegel’s romantic stage of architecture is its interiority. There is a sense in which the interior space is prioritized and the exterior is blocked from anything which distracts from a contemplative environment, symbolic of spirit withdrawing into itself from the external sensuous

³³⁶ Ibid.

realm. As related by Wright through Laozi, the essence of architecture lies not in the walls and roof but in the space contained within. Here is reinforcement of the idea of the priority of contemplation and spirit or mind as prior to external embodiment. One facet of this is that it sets up sacred space, certainly in Hegel's description of romantic space in the Gothic church, but also in the praxis of Wrightian spaces, whether they be in public spaces or single-family residences. This is through the setting apart, marking a distinction between the profane and sacred through spatial definition. This requires physical boundaries as well as a processional sequence from the profane to the sacred. A space too easily arrived at is also too easily under-appreciated. Wright brought the sacred into the common realm of the home, and did not leave this kind of space only for monumental public buildings and so brought a form of decentralization and individuality to the sense of the sacred in architecture.

A second aspect of organic space congruent between Hegel and Wright is the idea of space being generated from within and then extending outward. One does not begin with the exterior and force an interior form but the very exterior arrangement of walls, roof and other elements is an expression of the inner aspect of architectural space. The interior is the visible background in which the exterior is immersed, in Hegel's words. Hegel appears to contradict himself when he states that the exterior "acquires a form quite independent of the interior," but this is perhaps reconciled by the perceptual differences of experiencing exterior space compared to the interior. The former is the perception of object, while the latter is the perception of a hollow. Nevertheless, the exterior form should be an outgrowth of interior organization and not the other way around, which is the classical mode of generating space.

A third quality of organic space is that it is differentiated which, to Hegel, exists as an enclosure for the spirit which makes its convictions expressed through the shape and arrangement of the interior and exterior. Even Hegel expressed that the interior must not be "an abstractly uniform and empty

one that has no differences³³⁷." Hegel expressed that this served the purpose of the movement of the spirit from the terrestrial to the infinite. As one looks at Wright's spatial construction with its layered planes of depth, they might see a parallel construction which serves a similar purpose of pointing to the transcendent, of a pointing beyond itself. This is accomplished by vistas that disappear behind corners or planes, niches in which space seems to disappear just beyond view. Rather than spatial dead-ends, the spatial loop must appear open-ended to the perceiver's eye. A box of a space is seen at once and is perceived to terminate at a known point. The use of layered planes in Wright's spaces hides the closure of space just beyond the glance of the eye which points to the infinite extension of space, even though practically, one knows that the building has finite limits. Here space does have a symbolic role of pointing beyond itself which gives it the ultimate depth which Wright sought. This also coincides with Wright's statement that he was always seeing space from the corner of his eye. The corner of the eye is outside of the focal zone of sharpest vision; it is where vision itself transitions out of our perception and disappears.

Western linear perspective portrays space as a flow toward a specified end (at the converging point of parallel lines) and so takes the timeless simultaneity of traditional space into a sequence of events. The flat, layered space of Japanese art which Wright preferred did not contain the convergence of space at a point but allowed it to flow beyond unconstrained and beyond the edge of the picture frame. Linear perspective distorts figures in the image, fixing them in place, so that they are only accurate from a singular viewpoint. It is this feature which Wright felt gave it greater depth, but it also kept the transcendent from being confined to a point, frozen in time and place.

³³⁷ Hegel, *Aesthetics* Vol 2, 687-8.

NATURE OF MATERIALS

Material essence is bound up on its telos and so one cannot rely only on its inherent “essence” apart from its end use in the whole. The modernist dictum, to which Wright participated in, regarding the honesty of materials has been shown impossible to follow completely. Each material has characteristics which include strength, texture, durability, weight, and color, among others. There are also ranges of these values which tend to make one material more suited to a specific purpose than another. And so, steel can be used to give greater structural capabilities than can wood, for example. Wright's use of wood was supported by his own narrative suggesting its derivation from the machine and the honest expression when in reality, his use of wood conveyed a certain aesthetic telos for wood that worked within his own system of design, that is, rectangular sectioned, plain surfaces which revealed the natural grain of the wood, even when these surfaces were only a veneer and not structural. His use of wood, or any other material, was predicated on a selected set of characteristics which were primary in a given application and context. This is actually nothing peculiar to Wright and is really the pragmatic way most architects incorporate materials into their designs.

The solution is not to abandon any theory regarding the use of materials, however. It is here that Hegel's system provides a useful framework. In the section above on Foundations, Hegel's view of materiality in the Romantic stage of architecture was quoted. He is not denying the inherent character of each material. But these material characteristics were to be superseded by the impression of Idea. He also brings in the concept that the independent identity of the material was to be subordinated into this higher Idea, or the whole. Hegel's romantic version of materiality at first seems a contradiction to Wright's purity of material expression, but it is compatible when each material is being used with a sensitivity to its individual nature, a nature which is partial and contributes to the whole, but its full meaning is not found apart from the whole. The whole, in turn, is the aesthetic concept or

telos of the work of architecture. If the whole is derived from what each part contributes and yet each part finds its meaning in the whole, it would seem to be an impossible task for the designer. And indeed, it is parallel with Wright's dictum that form and function are one. While true, it is yet an impossible goal only partially realized in any given work.

The fuller expression of the value of each material is seen in its integration within the whole design. For example, in the Johnson Wax administration building Wright combines the crisp and light weave of glass and metal framing at the entry to the building with the heavy baked clay of the immersive field of brick and limestone accents throughout. His vertical module brings the various different materials together into a unity they would otherwise not have, each being seen as part of a larger symphonic display. It is considered mastery when the architect is able to bring out the fullest expression of each material in an appropriate way within the whole.

To speak of the honesty of materials will not give a final solution. Louis Kahn asked what a brick wanted to be. There is a partial essence or natural use of each material. Yet this essence is not determinate of its final form. There is a range of possibilities which are integral to itself and its individual identity. With Wright, sometimes the purpose of a material may be structural— to create a cantilever by the use of steel. Yet that steel is not to be seen or expressed directly in its own materiality. Other materials like wood trim or veneer may provide no structural purpose and it is to be seen and is visual. Brick might be used in a heavy load bearing wall but he also used it suspended and cantilevered over a large opening as well in opposition to gravity and load bearing. Brick has a module that fits into a larger wall, but the module may also be united into a larger model which also ties into the window mullions and other vertical or horizontal modules or grid system. What is actually required structurally today in building construction is far less than what we want to build. We don't need large load bearing walls and yet we may want these for symbolic or aesthetic purposes.

CHAPTER 6

CONCLUSION

This dissertation has examined Wright's theory of organic architecture from an aesthetic basis, or more accurately, through the lens of Hegel's philosophy of art, in order to provide a more precise account of the organicism produced and argued for by Wright. Current accounts and examinations of Wright's architecture often fail to grasp Wright's approach when they frame it from current methodologies and biases rather than from the historical frame of reference in which Wright worked. One of the largest areas of difference is the current bias toward a reductionist methodology rather than through the top-down holistic approach of Wright and the Idealists he associated with. This makes Wright's narrative often sound anachronistic to contemporary observers. Yet, when his historical foundation is properly examined and understood, much more of Wright's system becomes clear, and this dissertation has built its case on that premise. Once properly understood, Wright's theory can then be evaluated for its relevancy to current practice.

This study has shown that Wright brought art and architecture together in his work; he saw architecture through art and art through architecture. In his holistic system, both were elements of the larger organic view of life. While this dissertation has not been an exhaustive analysis of all the forms of art that Wright borrowed from, this study of the role Japanese art played in Wright's work is centrally important to understanding his development of organic architecture and spatial construction. Wright's cooption of Japanese art contributed to his overall theory of organic architecture which fits into his larger system following the contours of Hegel's philosophy of art. Even as Wright admitted seeing space through the lens of the Japanese print, he also interprets the Japanese print through the

lens of Hegel's idealism. Both come together in Wright's system of organic architecture. Both provide a path to the beauty he sought through the belief that the artist's role was to bring into material form the Idea or Spiritual essence lying just beneath external reality. While later periods have often placed emphasized on the discontinuous, the contradictory and the fragmented in art and architecture, Wright, as Hegel, felt the artist's role was to purify the work of art from the accidental in order to present not a literal reflection of reality but idealized, even abstracted forms. With both Hegel and Wright, a central part of the message of the work of art is its wholeness and unity. If this is applied naively by the architect, it can be criticized as forcing solutions which deny underlying complexities of function and program, resulting in architectural expressionism or even kitsch. More recent work has tended to the other extreme of highlighting the discontinuous and fragmented, and abandoning the goal of unity and beauty. Wright's approach is significant today in that it shows a way through this problem. This dissertation sheds light on something lost to our time to present a way forward, a middle way, uniting the timeless with the current. Part of this is the re-affirmation of the aesthetic basis, broadly defined.

The introduction states that one of the goals of this dissertation is to write the theory of organic architecture which Wright himself did not write. Hegel has provided a foundation for the understanding of Wright's organic theory of architecture since it gives a proper historical window with which to position it. However, Hegel's philosophy of art also serves to provide a more systematic and solid structure upon which to consolidate and complete what is both lacking in Wright's theory and what was never properly structured. This consolidation of Wright with Hegel is in a sense a further synthesis, resulting in a theory of organic architecture which can serve as a model for ongoing discourse and practice. The model theory of organic architecture presented herein is an outline for this, as it both lays out a structure in which Wright's organic theory can be understood, and also a

system of organic architecture which can be applied today. This is based on a philosophy of art rather than a style, method, or technology. As stated in the beginning of this dissertation, we do not know if Wright deliberately borrowed from Hegel or not, even though the similarities are clear. This dissertation closes that gap by intentionally bringing to the foreground those elements in Hegel's theory which complete Wright's organic theory. The model theory of organic architecture here presented, however, is a beginning, not an end, of this endeavor. It is a skeleton which needs to be fleshed out in further detail, inviting further expansion.

This dissertation has framed Wright's thought on the historical foundation provided by Hegel's system, traditional Japanese art, and early twentieth-century Modernism. In limiting my project to these three areas, it is realized that this cannot give a complete view of all the antecedents of Wright's theory nor an adequate account of its continuing living heritage into the present time and future. Further research could be done both prior to Hegel (Plotinus or Aristotle for example) and after the middle of the twentieth century up to the present-day practice of organic architecture. Such a study in contemporary organic aesthetics would need to go beyond the obvious practitioners who are following Wright's style more literally to those who may not adhere to Wright's theory at all and yet are expressing designs which fall within the philosophical roots from which he designed. Ultimately, the more important factor will not be whether or not a certain aspect is found in Wright's theory but rather its place in a larger explanatory theory which coheres to both the real and the ideal, that is, that which is informed by the physical and programmatic requirements of its being while yet expressing the ideals of beauty and unity. The first speaks to authenticity and the second speaks to its resonance to human aspiration.

This dissertation has not focused on the biases Hegel personally held which favored Hellenist art and culture and unfavorably prejudiced other non-Western cultures, including the Asian. This is why

the inclusion of Ernest Fenollosa's views in this study are an important bridge to Wright's thought and system. Fenollosa did what Hegel did not do in regard to Japanese art, while yet interpreting Asian art through Hegel's philosophy and showing it compatible with his system. Much of Wright's own theory of the organic can be traced through Fenollosa, thus revealing a second-hand assimilation of Hegel.

Because Wright was not just a theorist, but also a practitioner of architecture, a testing of his theory against the material works he produced is needed to confirm, explain, and nuance his theory. This is why a formal analysis of his works was included to provide further clues as to the architect's priorities and congruence to his system. For example, the formal qualities seen in both Japanese art and Wright's architecture provided a clearer understanding of Wright's discussion of "organic space." Unity Temple thus is seen not merely as an exercise in intricate trim banding typical of his Prairie era, but the expression of a greater sense of spatial integration and freedom using cues from Japanese non-linear planar spatial devices, which was here analyzed through the Gestalt perceptual tools from the work of Rudolf Arnheim.

Both Hegel's philosophy and Edo-Period Japanese art hold strong bonds to the past, whereas the Modernist rupture with that past and ideology threatened Wright's own foundations. Even though there has been a resurgence of interest in Hegel in the last 40 or 50 years, Wright lived into first half of the twentieth century, and he lived to see the Idealism he espoused fall out of favor as positivism, pragmatism, naturalism, and analytic philosophy took its place. Yet in the face of this, Wright never changed his philosophical foundations even while changing the external style of his buildings. Much more could be written about that aspect alone — does Wright's varied expressions of design give evidence of the strength of his relatively unchanging theoretical foundation upon which they were based?

Wright's animosity with the European modernists should be seen as more than just a polemical

battle of one needing market his trademark or to maintain his ego — it was a natural outcome of competing philosophical foundations, and Wright, through his architectural creations, would attempt to show that his system of organic architecture was not antiquated but in every way able to present new, innovative architectural solutions. These designs would prove two things; one, that his work would be as technologically innovative as the Modernists, and two that his rootedness in the past and nature would provide a timeless depth and integrity that the Modernists were not producing.

There is some irony in that Wright may be as misunderstood today as he was in the first half of the twentieth-century, even after decades of discussion and hundreds of books being written on his life and work. Current attempts to bring Wright into the twenty-first century to show him relevant to today's popular issues have also risked divorcing him from the aesthetic roots from which he thought and practiced. This dissertation's significance is to bring Wright into contemporary discourse while framed in this fuller context. Without this he will continue to be misunderstood and misrepresented. But perhaps more importantly, something critical in the knowledge of how to design in our time with the sense of wholeness and beauty that is still admired in his works will otherwise be missing.

The largest impact of this work might just be its mediation between modernity and tradition. It provides a middle way between extremes of traditional classicism and contemporary abandonment of cultural connections to historical meanings. Classicists today largely reject contemporary experimentation in architecture, while contemporary practitioners see Classicism as both dead tradition and stifling of creativity. Wright's example provides a middle way, one which does not sever roots to the past and yet allows for new and creative expressions in each culture and circumstance. Neither the modernist reductionist bottom up view nor the traditional top-down view should be seen in isolation from each other but rather these polarities need to be synthesized into a new whole which contains both rather than eliminates one or the other. This requires thinking at a higher level,

and to first recognize that these two binaries are not absolute but limited, and that the liability of opposites requires a new relational unification. As beauty was a test of good architecture for Wright, it might be instructive to reconsider its value in our age as a way to re-humanize the works which current technologies are bringing forth.

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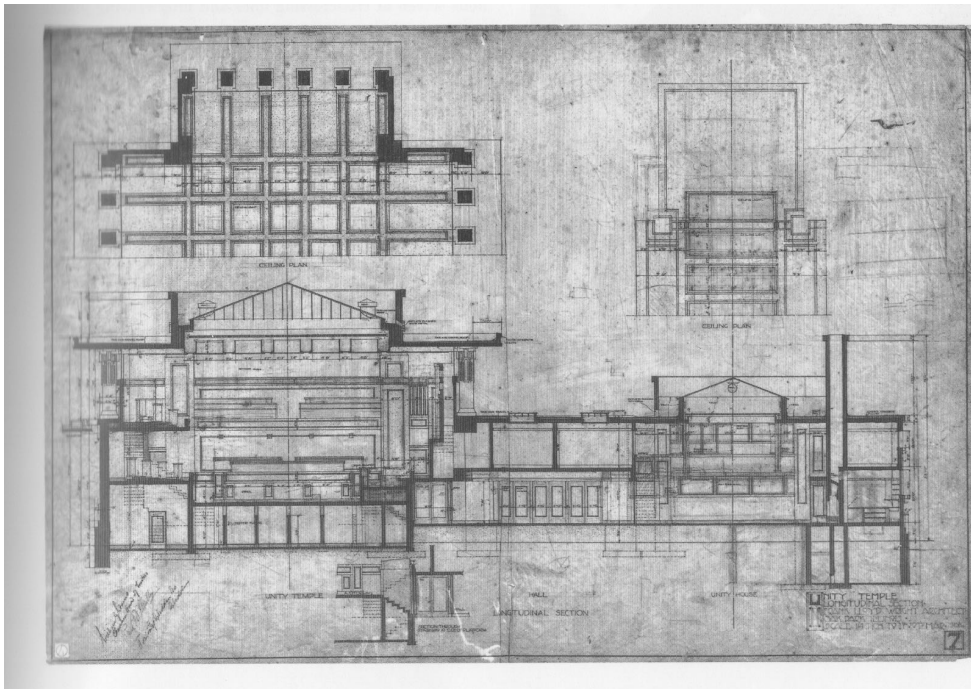
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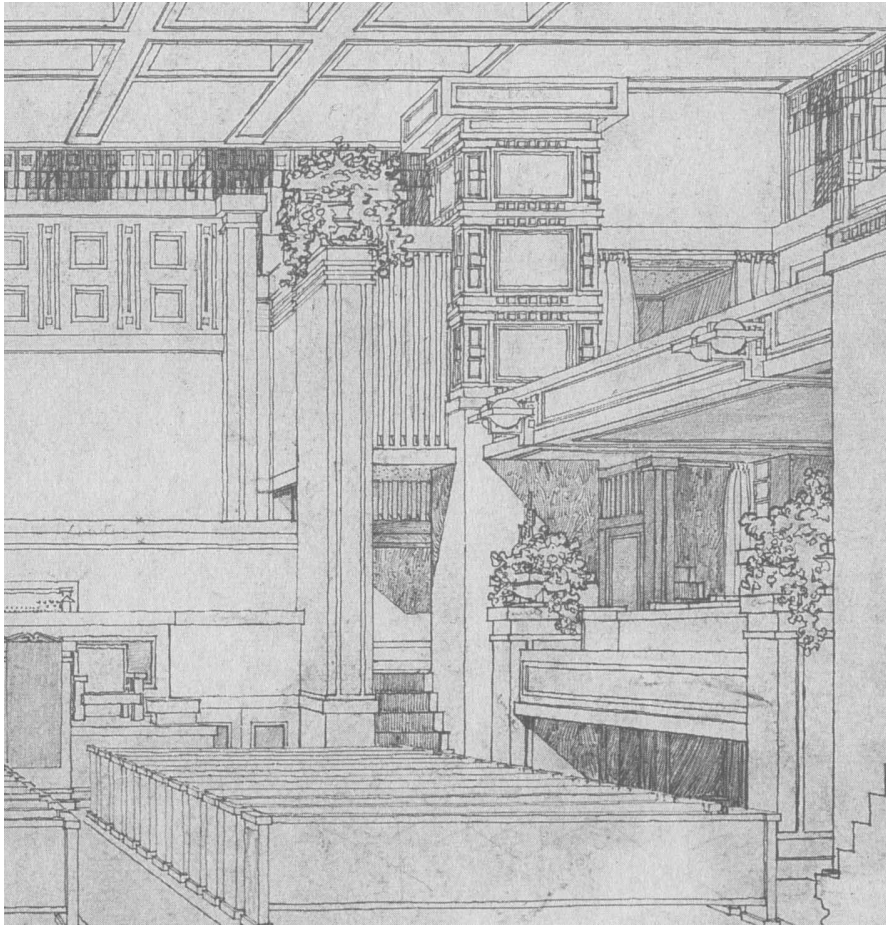
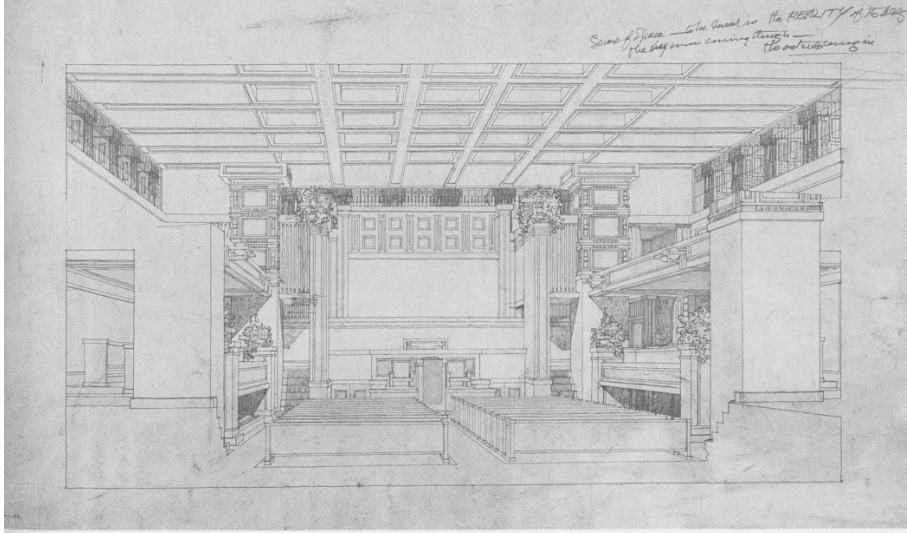
APPENDICES

APPENDIX A—Visual Timeline of Wright's change in corner trim reflecting a new spatial understanding.

Unity Temple (1905-1908)

In working drawings dated March 1906, Wright shows piers with picture-framing at the corners:







But during actual construction, Wright changed the trim to wrap around the columns as if the planes were folded out of their 2D frames, thus denying their materiality and setting up a transcendency. This use of trim does more than emphasize the 3D nature of form or planar folding, it also reaches back in depth to integrate other planes into the whole composition, forcing the eye to see this as transcendent in 2D, realized in 3D.



A Comparison to other Wright projects before and after Unity Temple:

Hendersen Residence, 1901: showing traditional corner trim:



Thomas Residence, 1901: Notice corner trim at wall corners and upper soffit:



Willits Residence, 1901 Again, all corners are trimmed out in wood:



Cheney Home 1903: Similar corner wood trimming:



Tomek House, 1907:



Coonley house 1907. All corners are conventionally framed, except in the right photo where a very subtle folding of the corner occurs:



The ceiling and fireplace area reveal his new approach. The typical way to trim the ceiling would have been to put the major trim pieces at the very peak and hips, but Wright pulls the trim away from these in order to express the void rather than the positive object (wood trim). By this he is favoring space over object and revealing the ceiling as floating planes, hovering in an overall relationship to one another and still, as Levine says, "Wright's fragmentation and decomposition of traditional form could be used to create an abstract architecture of lines and planes in space."



Also with the fireplace, the flanking sides are not simply a bi-partite division of the wall into an upper and lower half, but the upper half clearly is meant to be read as infinite void, negative space reaching out to the horizon:



Robin 1908: Even the Robie home shows framed corners. However, the soffits show evidence of planar wrapping defined by the trim:

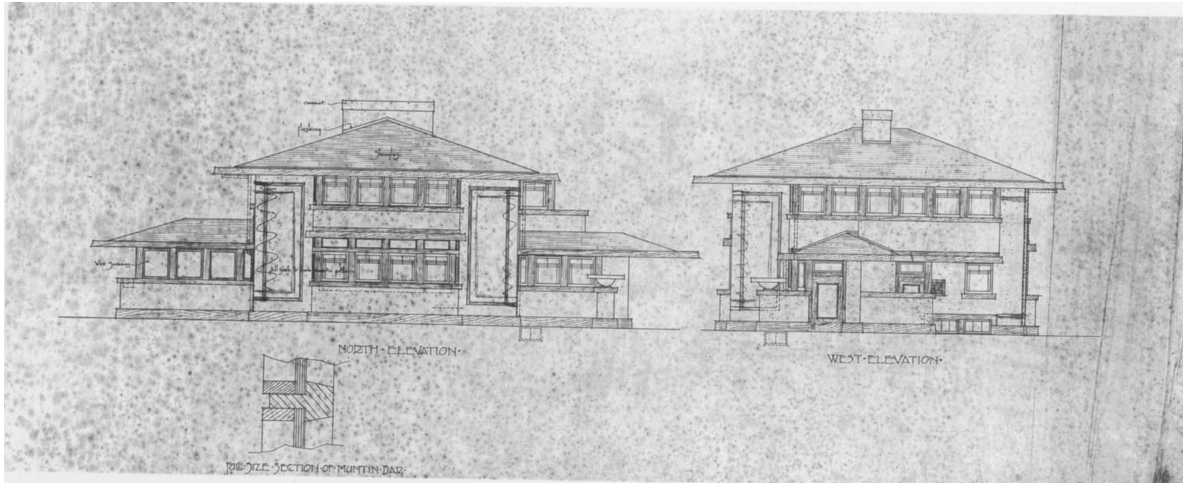


Hunt House, 1907. Note the more traditional picture framing trim at the corners:

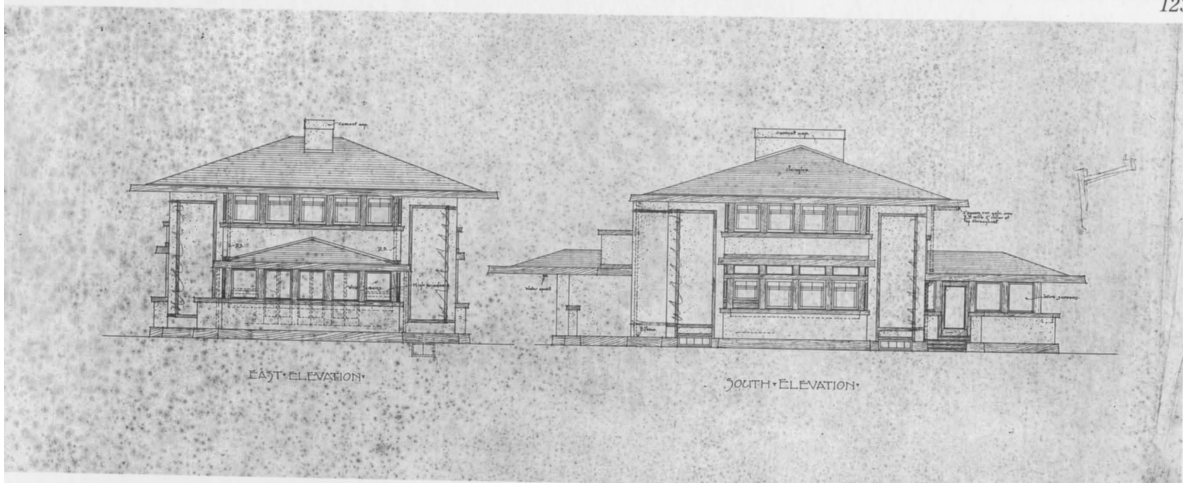


Stockman 1908: The Unity Temple columns writ large on the exterior as the trim wraps around the corner thus expressing the three-dimensional nature of the corner. However, the interior trim is conventionally framed at the corners:

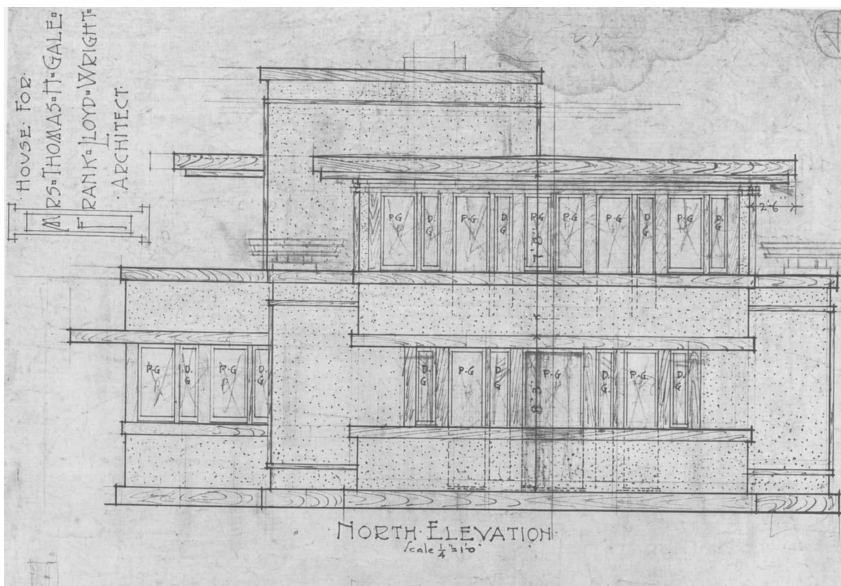


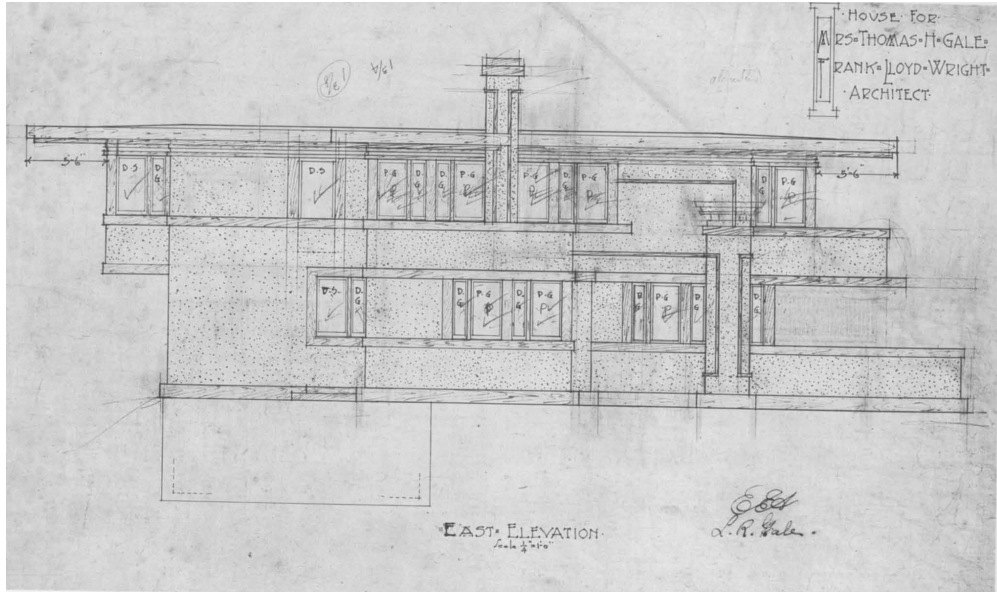


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Gale House 1909: precursor to Fallingwater:





APPENDIX B: STRATUM HOUSE, Spring Green, WI

Applying the Model Theory to an actual building.

The Stratum house is a single-family residence being designed for a 65-acre parcel with rolling hills and woods in Spring Green, just a few of miles south of Frank Lloyd Wright's Taliesin (figure 1). The client, a recent widower and his children, had owned the property for 30 years, and it holds a special place with his family. The client also came to me specifically looking for something "Wrightian," which was appropriate to this location and the desire for a building that was one with the land. This included being able to survey the wonderful vista from this hilly terrain. A three-story house was requested for this purpose. Part of the challenge of the design was to keep a more horizontal sense of repose with the landscape while still providing this view (not to mention meeting the applicable zoning regulations). This appendix is a brief review of this project, still on the boards, in its relation to a design which incorporates many of the principles of the model theory of organic architecture outlined in chapter 5.

I. Unity and the organic whole. It begins with the idea which is instantiated in material form, particularized for site, program, and its own formal and technical characteristics. One of the primary conceptual ideas from which this house is generated is the horizontal movement, growing out of the hill, just below the crown, towards the northeast. As the primary horizontal plane stretches in this direction, the ground simultaneously falls away with the hill down into a ravine. This primary horizontal plane is also the level of the green roof which ties to the hill at the southwest end of the house. This is the upper floor. Two levels underneath this floor open up as the ground declines. The linear orientation of the house is to provide the longest side of the house with the primary views to the northeast.

The house achieves a unity with the site. That is, the house subordinates its form to conform to the particular land contour it is built upon. It is not a unity of uniformity. The house does not try to imitate the landscape. Rather it is a dialectical unity of opposing formal characteristics — the soft rounded landscape with grasses and trees, and the straight-lined, hard materials of the architecture. The unity in the sense of the integrated whole, then continues in descending scale. The unity of the building within itself is the next order. The house is named Stratum, symbolic of the rock outcroppings common to the unglaciated Southwest Wisconsin region. The primary element signifying this is the upper green roof level and surrounding parapet which sets up the primary horizontal datum for the rest of the house. It sets up viewing places on the green-roof balconies on the upper level but also continues within the house, inverting the order, to become a balcony which looks down into the main two-story hearth space (see figure 2). The house and garage are actually separated. There is no interior connection between the two. This allows for a courtyard between the two elements which provide an intimate scaled outdoor area as juxtaposition to the expansive scale and views which the site itself possesses. This itself dialectically enhances the experience of the site by resolving this tension. The garage and house, being separate, yet are united under the whole which is the green roof stratum above it. Each has its own identity and yet both conform to the larger unity of the main element. The part-to-whole integration continues down in scale as seen in the stair details, window mullions, and millwork which all reinforce the horizontal stratification theme. A vertical module of 16" and a horizontal module of 4' also reinforces a unity. This is also expressed reflexively where one element repeats another element but as a mirror image or change in scale such that there is a relationship set up between the two which creates an emergent whole. An example of this can be seen on figures 3, and 11, the perspective of the north side where the primary stratum of the green roof (seen here as a stucco covered L-shape element starting from the garage) is mirrored by the

nested smaller L-shape stucco element beneath it. Both are three dimensional elements which wrap inward so that this relationship doesn't occur only in a flat two-dimensional plane but is continuous. Continuity, both of line and of space, is one of the principles which Wright taught and which is in evidence here. More will be discussed about the spatial aspect of this in point three ahead, but continuity is also seen here in the use of the cantilever, which was one of the primary devices which Wright used to express this aspect of the theory.

2. Concealing and revealing. As mentioned previously, one of the major tensions of Wright's spatial construction is the simultaneous desire he has for breaking down the box by opening up the inside and outside of the building with the contradictory desire to make space in the sense of a great interiority. Hegel expressed the romantic stage of architecture as one where the inner self is expressed in the outer material world (revealing) but also the withdrawing of the self into itself in hiddenness where eternal moments of absolute truth unfold. Architecturally this is expressed by forms which reveal glimpses of the interior (generally by expanses of glass or other voids) and also by interior definition of spaces created by walls and elements which define that interiority. Further, it has been stated here that Arnheim claimed that overlapping planes show hiding and being hidden in a particularly expressive way. Miegakure was the Japanese expression of a similar concept. These are expressed in the Stratum house as well. The front approach of the house (see figure 4) presents a more closed, fortress-like exterior. There are glimpses of glass and the interior, however. The main entry is also revealed slowly as one approaches the house, meandering and then finding the main axis of the house upon which the front door is located which then leads to the deeper interior spaces within (figure 5). While much of the upper level with the bedrooms opens up to the external views, the primary interior space of the house is the two-story living room hearth area. This space is a

purposeful dichotomy in itself. It is arrived with three steps down into a slightly sunken floor space and large fireplace. It is also the end of the processional hall from the front door, and light from both sides fills this space in the daytime, along with the vertical space bringing light down into it from above. Yet, the space is intimate as seen in figure 6. The light primarily washes the layered planes of the hearth perpendicularly so that the spatial definition is maintained. Figure 9 shows something of the dual nature of interiority and externality. The inner warmth of the core of the house is seen from the outside in this view in the lower half of the image while the cool exterior expansiveness is suggested in the upper level above.

3. Spatial construction. It was seen how two-dimensional planar layering and framing devices amplified spatial depth in Wright's organic architecture. Figure xx shows the living room hearth as seen from the dining area. While the living room and dining room could simply be one continuous space as is often done in open floor plans today, the goal here was to create a greater sense of arrival and interiority to the space at the hearth, even while it is one of the most open spaces in the house (open above, open to the front hallway, open to the stairway, and open to the outside through major glass areas on either side of it as seen in figure 7) The stone wood framing device between dining room and living room is one element that adds a layer of spatial definition. The lowering of the floor level and flanking built-ins below also contribute. The fireplace itself is multi-layered. Whereas Wright's early homes had built-in inglenooks, this house has an implied inglenook. The large stucco wall surface above the fireplace continues up to the upper floor clerestory and allows light to wash down its face. But the stone of the fireplace itself is set back another plane behind it so that another plane of space is set up at the fireplace and a concealing strip light can wash down the stone face for added texture. The end result is that the living room and dining room are an integrated space, along

with the kitchen and other zones, but they retain the identity of a particular kind of space in each area. On a smaller scale, spatial framing occurs in other areas also. For example, both the master bedroom and the master bathroom layer the space creating transitions to adjacent areas (see figure 10).

4. Integral ornament. Integral ornament can be seen in the details which reflect the strata theme such as in the main living room area where horizontal wood slats serve as lighting devices, cover structural columns, and become details of the stair structure (see figures 6, 8).

While this particular project does make knowing references to Wright's own style, it doesn't do so in a merely imitative way but through the outgrowth of the principles just mentioned. And so, it also has unique characteristics which Wright did not do. These principles applied to other places, circumstances, architects and times can yield unique results while having a common heritage.

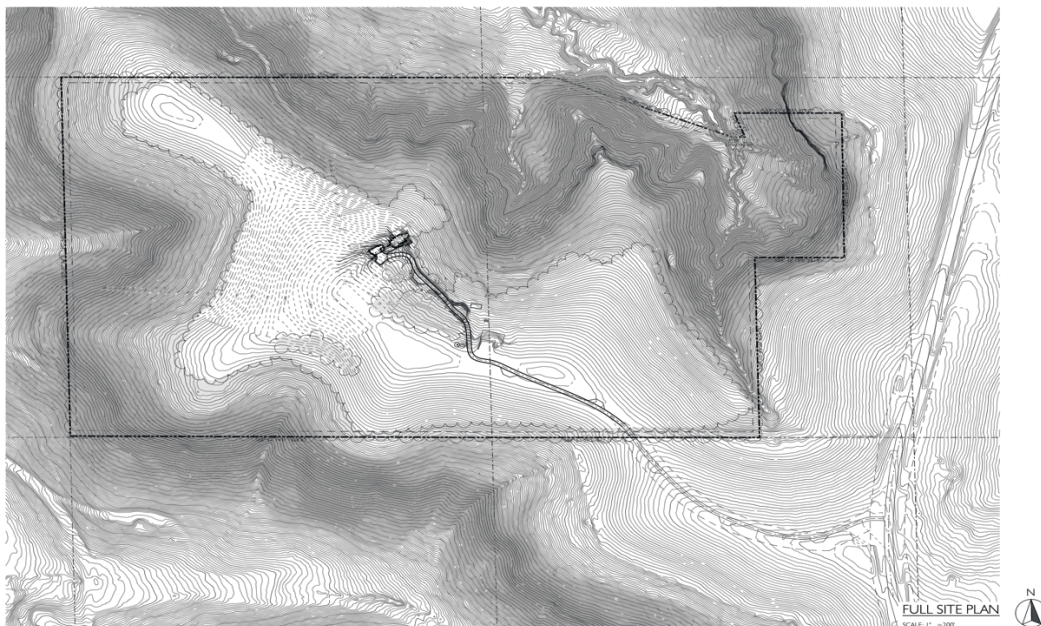
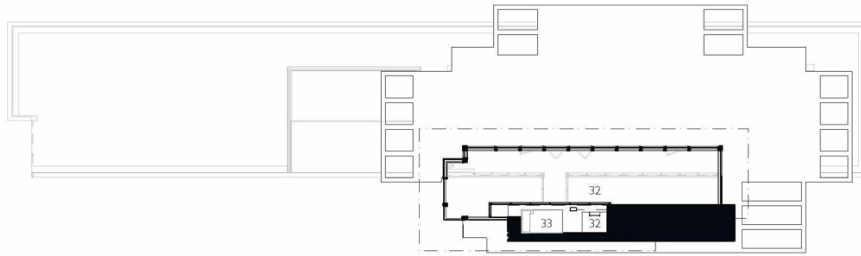


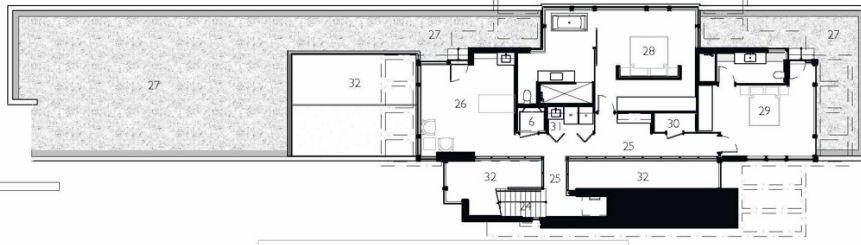
Figure 1. Site Plan



CLERESTORY KEY
33. NEST

CLERESTORY PLAN

SCALE: 1/16" = 1'-0"



UPPER LEVEL KEY
25. HALL
26. STUDIO
27. GREEN ROOF
28. MASTER BEDROOM SUITE
29. BEDROOM SUITE 2
30. MECHANICAL
31. LAUNDRY
32. OPEN TO BELOW

UPPER LEVEL PLAN

SCALE: 1/16" = 1'-0"



MAIN LEVEL KEY
11. GARAGE
12. MUDROOM
13. LANDSCAPED COURTYARD
14. COVERED WALKWAY
15. ENTRY
16. POWDER ROOM
17. BREAKFAST
18. KITCHEN
19. DINING
20. BEDROOM SUITE 1
21. LIVING ROOM
22. FIREPLACE
23. HALL
24. STAIR

MAIN LEVEL PLAN

SCALE: 1/16" = 1'-0"



LOWER LEVEL KEY
1. STAIR
2. HALL
3. STORAGE
4. MECHANICAL
5. LIBRARY
6. ELEVATOR
7. RECREATION
8. PATIO
9. BATH
10. EXERCISE

LOWER LEVEL PLAN

SCALE: 1/16" = 1'-0"

Figure 2. Floor plans



Figure 3. North exterior perspective view



Figure 4. South front approach to house.



Figure 5. Entrance approach to house



Figure 6. Living room hearth area

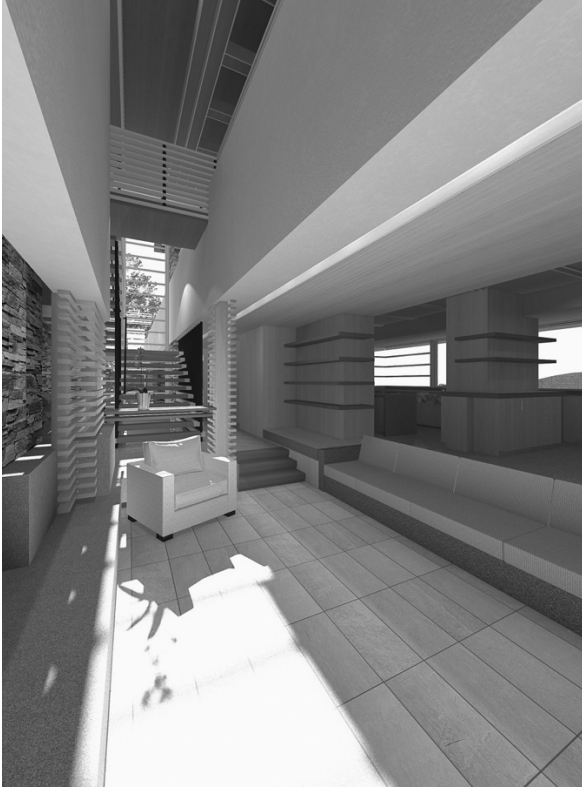


Figure 7. Living room hearth area looking towards stairway

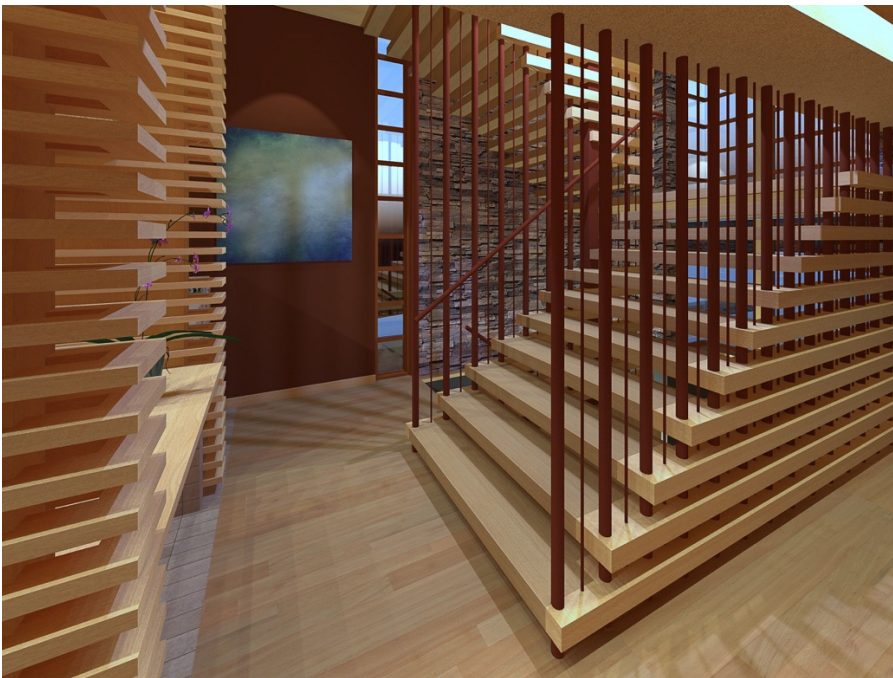


Figure 8. Stairway

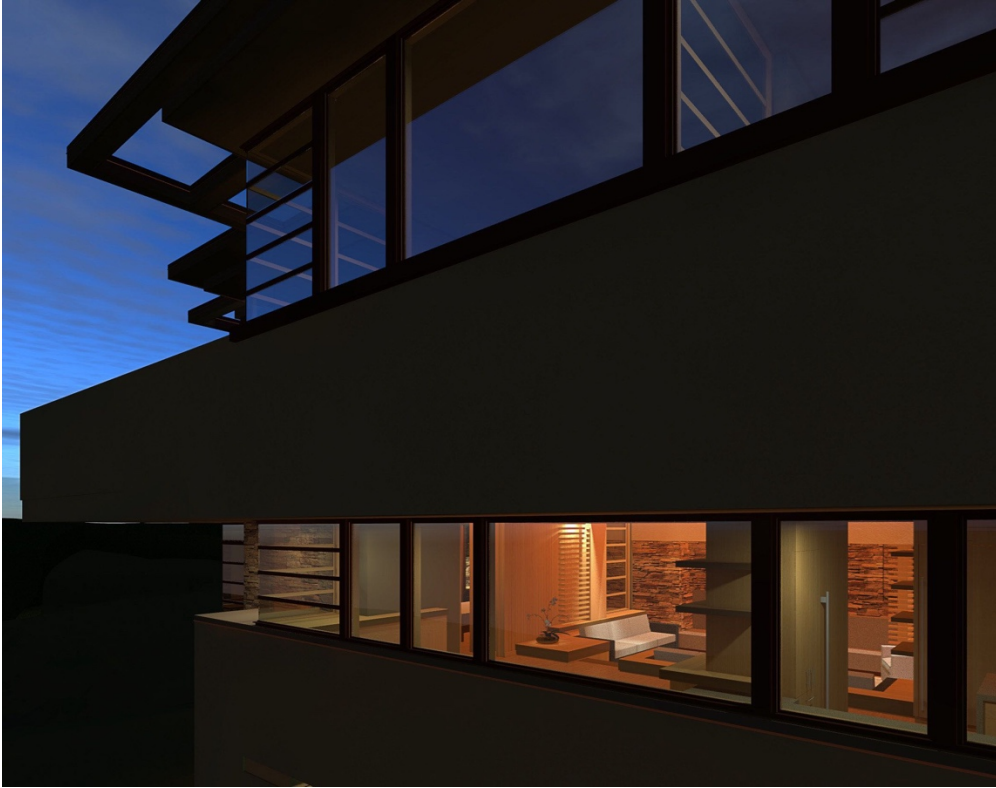


Figure 9. Dusk view looking into living room (below) and master suite (above)



Figure 10. Master bathroom vanity with shower beyond



Figure 11. View of northeast corner of house from below

CURRICULUM VITAE

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High Honors in the Major
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Dissertation Title: *The Aesthetics of Frank Lloyd Wright's Organic Architecture: Hegel, Japanese Art, and Modernism*

Professional Experience

- 32 years' experience in the field of Architecture
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- NCARB certified (#66275)
- American Institute of Architects (AIA) member
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- "Wright Thoughts" column author in FLWW Newsletter
- Adjunct Professor, UWM School of Architecture
- Expert Witness work (1990-present)
- Founded Genesis Architecture in 1992
- 1990-1992 Junge & Assoc.- Glendale, WI/ Project Manager – staff architect
- 1986-1990 Shepherd Legan Aldrian Architects - Wauwatosa, WI/ Project manager

Teaching Experience

- Adjunct Professor, UWM SARUP 2011 to 2013
Fall 2011 – 685/885 Modern Organic Studio
Spring 2012 – 420 Studio
Fall 2013—410 Studio
- Teaching Assistant during graduate school (400 level design studio, 510 structures)
- Dissertation focus – The aesthetic basis of Wright's organic theory of architecture

- Design Theory and Philosophy – Organic Design, Aesthetic Theory

Presentations

- “The Wright Space: From the Japanese Print to the Jacobs and Schwartz Homes,” Talk presented at the Annual Frank Lloyd Wright Building Conservancy Conference, Madison, October 2018.
- “The Wright Space: From the Japanese Print to the Jacobs and Schwartz Homes,” Talk presented at UW-Milwaukee Art History Colloquium, Milwaukee, September 2018.
- “Frank Lloyd Wright’s ‘Japanese’ Architecture.” Guest lecture for UWM Art History 462-Frank Lloyd Wright, October 2017. Professor Kay Wells.
- “Wright’s Spatial Construction: Through Hegel and Arnheim.” Guest lecture for UW-Madison Art History 468 – Frank Lloyd Wright. April 2016. Professor Anna Andrzejewski.
- “Principles and Projects of Frank Lloyd Wright” given at the St. John’s Frank Lloyd Wright 150th Anniversary Conference, August 2017.
- “Current Influence of FLW” presentation given at the St. John’s Frank Lloyd Wright 150th Anniversary Conference, August 2017.
- “Inspired Design: The Art of Natural Detailing.” Presentation given at annual Metropolitan Builder’s Association conference, Milwaukee, 2012.
- “Innovate, Create and Succeed with Smaller Homes.” Presentation given at annual Metropolitan Builder’s Association conference, Milwaukee, 2013.

Articles

- “A Path Back to Beauty: Preserving the Meaning of Wright’s Words,” in SaveWright Vol 9 no 2, the Magazine of the Frank Lloyd Wright Building Conservancy, Fall 2018.

Awards

- WAIA Honor Award 2010 – Educator’s Credit Union, Milwaukee
- Milwaukee Mayor’s Design Award 2010 – Educator’s Credit Union, Milwaukee
- Milwaukee Home Magazine’s “Best of Competition Award 2009” – Arrowhead Residence
- Milwaukee Home Magazine’s “Best New Custom Home 2009-Gold Award” - Arrowhead
- Milwaukee Home Magazine’s “Best New Custom Home 2006-Silver Award” –New Prairie
- Better Homes & Gardens 2001 Home of the Year – Home for Healthy Living. Home built in Des Moines, IA.
- Innovations in Housing Competition 1992 Grand Award (1993 BH&G Home of the Year) Home built in Seattle, WA
- Best in American Living Award (BALA) 1993 Grand Award
- Innovations in Housing Competition. 1989 Grand Award (1990 BH&G Home of the Year) Home built in Atlanta, GA.

Publications and Recognition- Professional Work

- Better Homes & Gardens Magazine
- Fine Homebuilding Magazine
- Progressive Architecture Magazine
- Residential Architect Magazine
- Milwaukee Home Magazine
- Concrete Homes Magazine
- Updating Classic America Ranches, Taunton Press
- Updating Classic America Bungalows, Taunton Press
- Celebrating the American Home: 50 Great American Houses from 50 American Architects, Taunton Press
- The New Bungalow Kitchen, Taunton Press
- Additions for Great American Homes, Taunton Press
- Wright and Like Tour – Racine 2010 (Christensen Residence)
- Wright and Like Tour – Lake Geneva 2007 (Arrowhead Residence)
- Wright and Like Tour – Racine 2004 (New Prairie and Ellsworth Residences)