POETRY AND THE ART OF BUILDING
Goethe's Morphology as applied to Architecture

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Cover Illustration: Goethe in the Countryside, Silk Screen: Andy Warhol, 1981.
Dedication

This thesis is dedicated to Alane Ingrid Clay for her companionship and laughter that made much of this work such a pleasure.
Acknowledgements

Where do I start?! Considering that work first began on this over five years ago, there are many people I'm indebted to. First of all, I would like to thank my advisor, Dr. John Templer, for his continual support and consultation. Discussions about thesis often turned into wider discussions about just about anything, making those meetings both fun and informative! I would also like to thank my readers for their patience and support, Prof. M. Frascari for his last-minute involvement and Prof. Bruno Zevi for his long-distance involvement from Rome, Italy.

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Of course, without my parents' strong moral and sometimes financial support, this would never have become a reality. They will perhaps be the only ones as glad as I to have this finished.
Without the vigilance and assistance of Lyn Powderly in the Graduate Office, I may never have graduated. The staff at the Interlibrary Loan office tracked down some of the most obscure books ever written. And finally, I would like to thank Diane and all the other typists involved for their skill and patience in wrestling with such a formidable beast.
Notes on Translations

German has a peculiar plastic character, due in part to its complex but additive grammatic structure. Unlike English, word endings, not word order determine the sentence organization. Words can be joined together with wild abandon and plastered with prefixes and suffixes to form new words. Phrases and even paragraphs can function as modifiers. Yet worst of all, main verbs have been known not to appear until the end of page long sentences.

The majority of the German quotes in the text have been translated by someone else. In the cases where no translation existed I provided one, placing the original German in a footnote for reference. For the prose this was adequate; however the poetry presented a real challenge, especially in light of German's malleable structure. I hope, in the case of the poetry, I was able to faithfully convey the original idea if not always a comparable rhythm and character.
The central point and the very basis of his existence was poetry as a kind of life-force, increasingly active and developing inwardly and outwardly. Once this is grasped, all the apparent contradictions can be resolved. The drive of this force is unceasing, and if it is not to devour itself for lack of material it has to be directed outwards; once this is done, since it is active and not contemplative by nature, it is bound to begin to work on what it comes upon. This accounts for the numerous wrong turnings taken here toward painting and art, for which he was not fitted by nature; towards active public life for which he had insufficient adaptability; towards the sciences, for which he lacked the necessary staying power. But because his approach to all three was based on self-adaptation and development, and he tried in each case to come at the true nature of what they had to offer and at the unity and elegance of form that would fit them, even these mistaken endeavors were fruitful in outer life and in the life of the mind.

Johann Wolfgang von Goethe, Self Description, 1797
INTRODUCTION

The search for form constitutes a common quest for many disciplines. The biologist, the poet, the composer, the architect; anyone involved in a creative endeavor seeks knowledge of form as it pertains to their field. Yet factors involved in the study of form are so complicated and interdependent that, solely from the logical scientific method, it would never be possible to create art or make an intuitive discovery. The poetic link is missing.

After compiling the intricate treatise entitled, Notes on the Synthesis of Form, in which every factor that might influence the design process is juggled into a master creation, the architect-theorist Christopher Alexander abandoned this strictly functional approach. In its place came a lyrical, vernacular approach to design recognizing and improvising on time tested patterns as solutions to the logically conflicting criteria which generate form.

The study of form throughout history has oscillated between the static versus dynamic extremes. The static, iconic world view of the Middle Ages gave way with some resistance to the notion implied in Darwin's evolutionary theory that form was a pattern formed in the dynamic equilibrium of internal and external forces. Yet these ideas had been in existence in far earlier times often couched in mythological symbolism and remain an integral part of eastern philosophy. The writings of Pythagoras abound with the notion of change, adaptation and flow as do the writings of Plato, Ovid and Orpheus. In our own age, it wasn't until empirical science, coupled with this earlier intuitive knowledge, that the organic notion of form could once again be considered.

The poet Samuel Taylor Coleridge (1772-1834) provides a concise description of these two extremes:
The form is mechanic when on any given material we impress a pre-determined form, not necessarily arising out of the properties of the material, as when to a mass of wet clay we give whatever shape we wish it to retain when hardened. The organic form, on the other hand, is innate; it shapes as it develops itself from within, and the fullness of its development is one and the same with the perfection of its outward form. Such is the life, such the form. Nature, the prime genial artist, is equally inexhaustible in forms. Each exterior is the physiognomy of the being within, its true image reflected and thrown out from the concave mirror.¹

The distinction between static and dynamic form in the abstract is closely related to the distinction between classicism and romanticism in the realm of architecture. It is a distinction fraught with misunderstandings and oversimplifications no less than that about the terms themselves. The architectural theorist, Dennis Sharp, states the case as follows with respect to modern architecture:

There are two main strains in modern architecture, both discernible as polarities, but both distinct opposites as bases of design. They have been there since the outset and they have been disguised by and often confused by various definitions. Some people have referred to them as divisions between the Classic and the Romantic, between the Dionysian and the Appollonian, between reason and intuition and most recently in this century, between the rational and the organic.²

This inquiry began as an investigation into the nature and extent of this type of distinction and as part of an effort to better understand the works of those modern architects whose approach to form would be 'organic' in the sense Coleridge described. The architects included: Hugo Haering, Hans Scharoun, Rudolf Steiner, Alvar Aalto, Louis Sullivan and Frank Lloyd Wright. Other architects come to mind; Erich Mendelsohn, Antoni Gaudi and Charles Rennie Mackintosh among them, but in theory and practice the first group revealed a marked similarity in intent and hence became the vehicle for exploration into this topic.
Upon closer scrutiny of these architects and their works, evidence of strong philosophical ties soon became apparent. Common sources of influence and inspiration and a similarity of language all indicated that they all shared, to varying degrees, a common conception of man's relationship to nature and a distinct philosophy of form from which their seemingly disparate individual expressions took structure in the context of their own personalities and cultures.

In his essay, *The House as an Organic Structure* (1932), the German architect Hugo Haering writes:

> Life is not given to the work by fashioning the object, the building, according to a viewpoint alien to it, but by awakening, fostering and cultivating the essential form enclosed within it.3

This is a direct application to architecture of the more general philosophy of form as expressed by Coleridge. The English poet in turn serves as one of the links between the German thinkers and the American Transcendentalists. Compare this to similar language used by Wright and Sullivan:

> An organic form grows its own structure out of conditions as a plant grows out of the soil: both unfold similarly from within.4

> All life is organic. It manifests itself through organs, through structures, through functions. That which is alive acts, organizes, grows, develops, unfolds, expands, differentiates, organ after organ, structure after structure, form after form, function after function.5

Within this exuberant language, the structure of which itself reflects the same principles, is an implied functionalism - the Sullivan adage, "... form follows function." Yet this is not the functionalism of the modern movement, but a principle by which beauty and life in architecture derive from an underlying response to function while simultaneously transcending its mean
requirements. Neither the scientific functionalism evident in the works of such architects as Mies van der Rohe or Buckminster Fuller, nor the unrestrained organic forms of Bruce Golf achieve this balance. Here an analogy to Classical and Romantic principles can be made. The philosophy of form, being investigated here involves a synthesis is of the two.

What are the sources of this approach to form? It is surely a product of evolutionary theory, but has its roots in the writings of the ancient philosophers. Aristotle defines the wider context of form being investigated here:

Concerning any part of structure under consideration, it must not be supposed that it is its material composition, to which attention is being directed, but the relation of each part to the total form. Similarly, the true object of architecture is not bricks, mortar or timber, but the house; and so the principal object of natural philosophy is not the material elements, but the composite thing, and the totality of the form, independently of which these elements have no existence.⁵

As form in this sense is not bound to a particular discipline, those interested in the wider context of form come from a variety of disciplines.

For the American architects, the Transcendentalists were the major sources for organic theory. Thoreau and Emerson reveal similar attitudes and approaches to form. Thoreau's aesthetic principles as applied to architecture could have been written by either Sullivan or Wright:

What of architectural beauty I now see, I know has gradually grown from within outward, out of the necessities and character of the individual, who is the only builder; out of some unconscious truthfulness and nobleness without ever a thought for the appearance; and whatever additional beauty of this kind is destined to be produced will be preceded by a like unconscious beauty of life.⁷

The ideas expressed by the Transcendentalist philosophers however, can be traced back to distinctly German origins. The English writers, Carlyle and Coleridge, are mainly responsible for introducing these ideas to the English-
speaking world. Yet all refer constantly to one main source; to "the greatest German," as Wright described him.

Goethe today is known primarily as a poet, but in his day, he was also renowned as a scientist, historian, philosopher and politician. The study of form was certainly not unique to Goethe, but he did coin the term 'Morphology' or the science/study of form to describe his endeavors. In addition, his historical vantage point at the beginning of the modern age gives his ideas special relevance while still maintaining a link to the ancient philosophers.

Thus, in this round-about way, Goethe's morphology as applied to architecture became the actual topic of this thesis. The focus, however, has always remained the same: to investigate the nature and cause of form in the abstract sense and to study the transformation of the idea into built form according to those principles.

**Principles of Morphology**

Goethe defined the term, Morphology, as the "formation and transformation of organisms." This science derived in part from his own theory of poetry, but largely from his own direct observation of nature and research in natural history. As in the Aristotelian sense, form is an interdisciplinary concept, not a static shape:

If we wish to introduce a morphology, we must not speak of form (Gestalt), but rather, whenever we use the word, think of an idea, a concept, or something fixed only for the briefest moment.

That which is formed is promptly re-formed, and if we expect to achieve any kind of vital contemplation (Anschauung) of Nature, we must keep ourselves flexible and malleable, according to the example with which she precedes us.
The means by which he made his scientific investigations differed totally in concept from that of many of the important scientists of his day and indeed from Western scientific tradition in general. This critical difference in approach led to frequent misunderstanding and criticism of his scientific work and his impatience with empirical scientists such as Newton (1642-1727) or Albrecht von Haller, both of whom he criticized for having a too detached scientific method.

This complaint is best summarized in a verse from *Faust*:

He who would study organic existence  
First drives out the soul with rigid persistence;  
To the parts in his hand he gives title and class,  
But the spiritual link is lost alas!10

By virtue of his primary orientation as a poet, he believed that experience was the only method through which an understanding of the forces underlying natural phenomenon could be obtained:

Goethe always takes the path of experience in the strictest sense. He first takes the objects as they are, and while banishing entirely every subjective opinion, seeks to penetrate into their nature; he then creates the conditions under which the objects can appear in reciprocal action, and watches to see the results. He seeks to give Nature the opportunity to bring her laws into operation under especially characteristic circumstances, which he brings about; an opportunity, as it were, to express her own laws.11

With this technique of observation, Goethe strove for a deeper understanding of the natural process by deducing the essence of the organism as reflected in its outward form. Rather than analyzing an object with strict empirical methods after it had been removed from its environment, Goethe studied the object in its own habitat as an interactive whole, which included himself. Thus, he sought to break down the artificial distinction of subject versus object, a distinction he believed impeded true understanding.
One result of such an investigation was entitled: An Attempt by J. W. von Goethe, Privy Councilor of the Duchy of Saxe-Weimar to explain the Metamorphosis of Plants. As a model of his approach to natural science, it is the best known and studied. It is also characteristic, that along with this treatise, he published a poem by the same name (See Appendix B).

In the case of the plant, Goethe found one idea to be active within the changing external phases of growth:

It had occurred to me that the organ of the plant which we ordinarily designate as leaf, the true Proteus lay hidden, who can conceal and reveal himself in all forms.12

This idea in its first immediate physical sense is the TYPE, (Typus). By variations on this primal construct every aspect and kind of a plant could develop:

It is a becoming aware of the form with which nature, so to speak always plays, and in playing brings forth manifold life.13

This concept was so real to Goethe that he believed in the existence of an actual archetypal plant from which all other plants had developed. At first he began searching for actual vestiges of such an archetype on his botanical excursions. The primitive structure of a palm in the botanical gardens in Padua, Italy proved so inspirational to his theory that it is still known today as 'Goethe's Palm' (Figure 1). But he soon came to the realization that the archetypal plant was something ideal to be held fast only in the mind.

Polarity (Polaritaet) is the principle of morphology by which this inner idea is made manifest, form being the result of a dynamic equilibrium between the inner characteristics of the type and external conditions.

External forces such as light, climate, soil, etc. in interaction with internal forces; a specific case of the plant type, produce the outward form of
1. Greenhouse containing Goethe's Palm, Padua, Italy.
the plant characteristic of both its area and genus. The changing nature of this balance produces an external transformation of form which Goethe termed METAMORPHOSIS (Metamorphose). Metamorphosis is a key principle in morphology in that it conceptually relates seemingly diverse outward forms back to the original type form providing a line of continuity throughout the various stages of growth. This not only relates the leaf to the flower within a single plant, but also different plants within the vegetable kingdom:

To Goethe, the single alterations are various expressions of the archetypal organism, which possesses within itself the capacity to take on manifold forms and which at a particular time takes on that form which is best suited to the conditions of the external evolving world.¹⁴

Metamorphosis itself follows a pattern in the growth of the plant. In a series of metamorphoses a particular leaf form expresses itself in ascending stages. Goethe divided this into a threefold alternating process of unfolding and involution in which the plant transforms from seed to leaf, leaf to flower, flower to seed, forming a complete cycle (Figure 2). This tendency in metamorphosis towards progressive articulation of a theme is known as AUGMENTATION (Steigerung).

This progression does not form a closed cycle, but can be represented as a spiral whereby the synthesis of opposing forces produced a yet more refined solution. Goethe tabulated several of these forces in a variety of disciplines according to their vertical or spiral tendency.¹⁵
GOETHE'S URPFLANZE

Stages of the Plant

7 Seed. Contraction.
6 Fruit. Expansion.
5 Sexual Organs. Contraction.
4 Corolla. Expansion.
3 Calyx. Contraction.
   (Stem contracts towards calyx)
2 Stem. Expansion.
   (Cotyledons. Duality appears.)
1 Seed. Contraction.
   Roots not included in Goethe's scheme.

2. Stages of the Plant, Goethe's Urpflanze.
Specific to the plant, form and growth derive from the opposition of vertical and spiral tendencies. (Figure 3)

Goethe's preoccupation with form and its causes was also characteristic of his era. The Swedish botanist, Linnaeus (1707-1778), had begun classifying the plant world according to species and genus rather than arbitrary medieval methods. The French botanist, A. P. de Candolle, also developed a morphological model of plant form from his research. Goethe was well aware of Linnaeus' work, but had already formulated his own ideas on the metamorphosis of plants before learning of Candolle's work.

Yet, Goethe was preoccupied less with the minute analysis of field data than with an organic synthesis. His primary orientation as a poet gave him an overview of all the arts and sciences, and he always sought through experience to gain a symbolic interpretation applicable to all disciplines.
Thus Goethe never sought cause and effect in natural phenomenon, but instead sought to bring objects into relationship with others in such a way as to reveal their significant aspects. Morphology then was a methodology of comparative analysis intended to illuminate different aspects of a common idea - but never an explanation of phenomenon as such. 18

Once the principles of morphology had been derived, Goethe sought to apply them to other areas of natural science including zoology, geology, cloud formation and color. His method of comparative analysis can be seen in his own sketches. (Figures 4-8)
4. Variation of Leaf Type, Drawing: J. W. von Goethe.
5. Variation of Spinal Type, Drawing: J. W. von Goethe.
8. Variation of Cloud Type, J. W. von Goethe.
In the rigor and universality of his approach, Goethe's efforts to found a science of form can be compared to Leonardo da Vinci's (1452-1519) approach to studying natural phenomenon and its relationship to art and aesthetics. (Figures 9-11)

**Poetry and Morphology**

Goethe's poetic gift not only gave him a broader vision of the arts and sciences, but also a method of presenting his scientific research beyond the strictly empirical. Myth and allegory within poetry provided him a means of discourse in symbolic form which often explained the principles of morphology more successfully than technical description. The myth of Orpheus is an
important theme in Goethe's morphological poetry. The descent to the underworld in search of the root of things, is analogous to morphology which seeks knowledge of form from basic principles. It is not coincidental that this is also the underlying theme of Goethe's best known dramatic work, *Faust*¹⁹, based on a well known German legend. (Figure 12)

In his edition on natural science entitled, *Concerning Morphology, (Zur Morphologie)*, Goethe published a series of poems which relate to the text and further explain various aspects of morphology, often in a broader context than that being discussed in the text. The last five of these poems represent all the operating principles of Goethe's science in mythical form.²⁰

**Daimon, (The Daimon, individual Life-Force)**

Planets and sun in high conjunction o'er us,  
The day that first advanced us to creation,  
Sealed us ourselves at once, and all before us  
Falls the law of that initiation.  
Sibyls and Prophets uttered it in chorus:  
Will we or nill we, we must hold our station.  
No power on earth, no time-scale can disfeature  
Impress of form that grows, a living creature.)

**Tyche, (Chance)**

Yet round these rigid limits seems to waver  
A shifting force whose breath and play enfolds us.  
Our actions come to have a social flavor:  
Not loneliness, our fellows' presence molds us.  
Sometimes we're in, sometimes we're out of favor;  
It's all a game — as such, it scarcely holds us.  
But silent seasons have fulfilled their turning;  
The lamp awaits a light, to set it burning.)

**Eros, (Love)**

And then it comes! — One comes, from Heaven darting,  
Who rose from ancient void to that high seat,  
Hovering, a springtime breeze of feathers startling  
Forehead and breast that feel that airy beat;
Always upon the wing, but not departing—
O whence these pangs, so strangely bitter-sweet?
Most loves are held in common and commotion;
Great hearts alone pursue the one devotion.)

Ananke, (Necessity)

Now, back to what the stars' designs predicted,
We feel the law's compulsion and constriction;
Wish is but will, duty-bound and restricted,
Whim's will-o'-wisp exorcised by conviction;
Out of the heart the dearest is evicted;
"I want," "I would," are bent by Must's infliction.
Thus, after years, to freedom's semblance winning,
We're but more straitened than at our beginning.)

Elpis, (Hope)

Yet these bronze walls, these boundaries unbending,
Though they stand rock-like, centuries together,
They and the soul's despair at last have ending;
There's one who rises free of any tether;
Lent wings by her, we're airborne and ascending,
With her, through ceiling-fog and rainy weather.
Known everywhere, all tracts of the globe remind
us.
One pinion-stroke — and aeons lie behind us!)21

Morphology and Aesthetics

The effort being made all along in Goethe's research in natural science is
to abstract from nature a model for creative achievement. If this model can be
successfully applied to another discipline, such as poetry or art, the result will
have the character of a natural object. In other words, due to an adherence to
morphological principles, the result will have a natural beauty and living
character. Here is where the corollaries can be made between nature and art.

Through the insight gained as to the relationship between form and idea
in natural phenomenon, a science of aesthetics can be developed as either a
guide in the creation of art or as a method of art criticism. Goethe wrote a
series of critical essays on art structured along morphological lines.

The essay: To what extent may the idea, that beauty is perfection with freedom, be applied to organic nature (Inwiefern die Idee: Schoenheit sei Vollkommenheit mit Freiheit auf Organische Naturen angewendet werden koenne), 1974, discusses the link between beauty in nature and beauty in art. If an object responds to function alone, it cannot be beautiful. Nor can a purely decorative object without purpose be beautiful. Natural beauty comes about by a balance between the fulfillment of function and expression of freedom and exuberance beyond that which is necessary. Thus a flower is beautiful in that while fulfilling its necessary biological function, it achieves a degree of expression always appropriate and related to the original idea but shifting the focus from the purely necessary. In short, natural beauty arises via a non-obvious conformity to law.

In the realm of art, a painting that merely imitates nature cannot be beautiful. But if in its depiction it expresses the essential idea while simultaneously conveying an added insight and interpretation it can also achieve a morphological beauty.

Of the arts, architecture most clearly demonstrates this principle as it must have a functional element. A purely practical building such as a warehouse or silo is rarely beautiful, as it is rarely necessary to proceed beyond the utilitarian requirements. Yet such buildings are often extremely instructive, as they serve as a basis for creating beautiful architecture. This is because the functional element of many more important building types is often lost in inappropriate embellishment.
Morphology and Architecture

Of all the arts, architecture held the most sway over the German poet. This was due in part to an experience in his youth as a student in Strasbourg. When he first saw the immense facade of Strasbourg Cathedral, it triggered an emotional reaction within him so intense that he wrote an equally emotional essay about the experience. This essay has also come to symbolize the first awakening of his literary genius, as well as heralding the birth of the Gothic Revival in Germany.

As Goethe became more acquainted with the history and theory of architecture, he soon realized that it was a discipline ideally suited to illustrate his morphological process as applied to the arts:

Architecture constitutes man's highest achievement in that it leads quickest and most directly from material to form, from matter to physical representation.23*

Goethe approached his study of the art of building with the same thoroughness he applied to his study of the natural sciences. In a letter from Rome to Johann Gottfried von Herder (1744-1803), Goethe explains his conception of architecture as yet another phenomenon of nature: "Architecture and sculpture are no different for me now than minerology, botany and zoology."24** It was also in Italy where Goethe found the key to applying his same method of intuitive observation to architecture. Just as Goethe sought to define the Archetypal Plant (Urpflanze) in botany, the Archetypal Animal (Urtier) in zoology, he now sought the Archetypal Hut, (Urhaus); the primal

*Sie (Die Baukunst) fuehrt am schnellsten und unmittebarsten von der Materie zur Form, vom Stoff zur Erscheinung and entspricht dadurch der hoechsten Anlage im Menschen.

**Nun ist mir Baukunst und Bildhauerkunst wie Mineralogie, Botanik, und Zoologie.
structure from which architecture had evolved. The same method of comparative logic was applied to buildings in the search for the essential aspects of their external form. (Figure 13) Again, he was not alone in this preoccupation and was well aware of Laugier's concept of the primal hut, Milizia's investigation of type forms and Giambattista Vico's organic approach to art theory. Yet it was Goethe's unique synthesis of poetry, science and art that gave added depth and universality to his approach.

Aside from his theoretical interest in architecture, his personal desire to be an artist gave him a solid background in the practical aspects of art. While in Italy, he studied and practiced drawing techniques, proportional systems, and perspective systems under a variety of famous German expatriot artists. Of the multitude of sketches and drawings done throughout his lifetime, many are directly concerned with architecture. It is also a theme which crops up periodically in his literary and poetic work.

Throughout his life, Goethe studied architectural theory, both ancient and contemporary, collected plans of his favorite works, and worked on his own theory of architecture. The apparent swings in orientation, from the romantic German gothic to the studied Classicism of Palladio, have caused many scholars and critics to peg his architectural theory inconsistent, arbitrary and consequently of little value. A fate also shared by his scientific works. Yet in light of his morphological viewpoint, these swings do not indicate any dichotomy, but rather emphasize an interest in underlying principles unbound by the stricture of style. The observation of an idea from apparently conflicting viewpoints, a major characteristic of his approach, was his method of more clearly expressing the true nature of an idea.25
It was precisely this relationship of idea and function to physical form that Goethe found more completely expressed in architecture than in any other human endeavor. Seen in relationship to his underlying philosophy of form and dialectical thought process, Goethe's incomplete attempt to establish a theory of architecture may be considered an indispensible basis for an organic theory of architecture.

Yet this theory did not remain untested. Goethe's unique position as the Minister of Cultural Affairs under Duke Carl August of the Duchy of Sachsen-Weimar-Eisenach enabled him, together with hand-chosen court architects, to put his theory into practice in the many architectural projects under his jurisdiction.

The aim of this thesis is to illustrate how Goethe applied his principles of morphology to architecture both in theory and practise. As this process occurred throughout his lifetime and is integrally related to his own evolving philosophy, a chronological structure has been used to emphasize this development and the ongoing relationship between theory and practice. Occasional digressions from this structure are employed to further illuminate a particular point.

It is hoped that such an exhaustive study of this approach to architecture by a particular person and time will aid in a better general understanding of an organic theory of architecture. A subsequent investigation would focus on the relationship of Goethe's morphology and the philosophy of form held by the organic architects of our own century; the point from which this study first began.
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Clearly, the eye develops from the objects it has seen in youth.¹

Goethe, in "Italian Journey"

CHAPTER I
CLASSICAL VS. ROMANTIC: THE FORMATIVE YEARS

Environment as a formative factor in creative development is a recurring notion in Goethe's thought. Therefore, it seems appropriate to place him in the context of his own birthplace. Frankfurt in the mid-eighteenth century was a thriving, independent trading city. Its architecture was conservative. Unlike that of other German cities, Frankfurt's architecture bore little Italian or French influence. The Baroque and Rococo styles were viewed as too flamboyant for the settled merchant atmosphere.²

Goethe was born in 1749, in a medieval townhouse on the Hirschgraben near the center of the city. A typical example of medieval Sachlichkeit,** windows were placed where needed as allowed within the construction system. With a variety of shapes and materials, it represents a type of unpremeditated functional expressionism.

To reflect his Father's increased status as Councillor to the Crown, the house was remodeled in 1755. The two adjoining medieval structures (Figure 5) comprising the family home were connected and given a single, more sophisticated 'Renaissance' facade. The classical treatment of the renovation

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¹Es ist offenbar, dass sich das Auge nach den Gegenständen bildet, die es von Jugend auf erblickt.

**Sachlichkeit is a notoriously difficult word to translate. Sache means thing, and the word therefore taken literally means 'thingness' or rather 'thinginess'; it is usually translated as matter-of-fact, realistic, sober, objective. It had been given currency as a slogan in matters of art and design early in this century.
3. View from across the River, Frankfurt am Main.

4. Map, Frankfurt am Main, 1749.
5. House in which Goethe was born, Frankfurt, Before and after the Alteration.
with equally spaced windows, axial symmetry, and central entrance all bore little relationship to the reality of the interior space. What previously had been an expression of interior function now became the representation of social position.3

The dichotomy expressed here is symptomatic of the era in which Goethe grew up (the Enlightenment versus Romanticism, Classicism versus Gothic, Mechanistic versus Dynamic) and is present throughout his writing. A comprehension of his view of the history of art as polar modes of expression constantly alternating in dominance, and his attempts at their synthesis in the creation of a higher reality, is crucial towards understanding his approach to architecture.

In his autobiography, Truth and Fiction (Dichtung und Wahrheit), Goethe relates his childhood fascination for his Father's collection of architectural engravings (Figure 6):

Inside the house my gaze was mostly drawn to a series of views of Rome with which my Father had decorated an anteroom, engraved by some accomplished forerunners of Piranesi... Here I saw daily, Piazza del Popolo, the Colliseum, St. Peter's Square, St Peters both outside and inside, Castel Sant' Angelo and so many others. These images made a deep impression on me.5*

Throughout his early life the allure of Italy's great art and architecture remained strong and in 1786 proved too great and, as we shall see later when, on a feigned visit to Karlsbad, Goethe made his secret departure for Italy.

*Innerhalb des Hauses zog meinen Blick am meisten eine Reihe roemischer Prospekte auf sich mit welchen der Vater einen Vorsaal ausgeschmueckt hatte, gestochen von einigen geschickten Vorgaengern des Piranesi... Hier sah ich taglich die Piazza del Popolo, das Coliseo, den Petersplatz, die Peterskirche, von aussen und innen, die Engelsburg und so manches andere. Diese Gestalten drueckten sich tief bei mir ein.
Leipzig, where Goethe began his university studies, was a lively, modern city compared to provincial Frankfurt. Here, the exuberance of Baroque and Rococo was still in full swing. Although a career in law had been planned for him, Goethe became increasingly disenchanted with his law studies and began devoting more time to the fine arts. Unsure in which area of art to concentrate, he sought a broad base and began studying drawing, etching, and engraving, became active in the theater, and intensified his literary efforts. Goethe's drawing instructor, Adam Friedrich Oeser (1717-1799), was a close friend of Johann Joachim Winckelmann (1717-68), one of the founders of art history as an area of academic pursuit.

Goethe's early orientation to art and architecture stems largely from his study of Winckelmann's writings, which depict a noble development and calm grandeur of classical art. Contemporary architecture was perceived as decadent compared to the classical. Winckelmann was also the main protagonist of Neoclassicism in Germany, and his writings on classical art had already influenced many of the contemporary German architects, including Carl Ferdinand Langhans (1782-1869), Friedrich August Krubsacius (1718-1790), and Friedrich Wilhelm von Erdmannsdorff (1736-1800). Goethe particularly admired the work of David Gilly (1748-1808) in Leipzig where Neoclassicism was a welcome reaction to the exuberance of Baroque and Rococo.

Goethe's awakening interest in and knowledge of architecture prompted him to propose an alteration in the main stair of his Father's house in Frankfurt to increase the spatial feeling of the hall. He also made some derogatory remarks about the oriental rugs and over-decorated mirror frames, sending his Father into a rage.
Goethe was already actively sketching at this time. The influence of his childhood drawing teacher, as well as Oeser in Leipzig, is clearly discernible. Among the multitude of subjects, many of the sketches indicate a distinctly architectural predilection.

In addition to his studies in the arts, his study of science, particularly alchemy, the precursor of modern chemistry, was to have a significant effect on the formulation of his later ideas. Many of the concepts which he later applied to morphology derive from this early acquaintance with the 'kingly' science.¹¹

Reacting against the exuberance of the late Baroque period, Goethe, from most indications, seemed inclined towards the emerging Neoclassicism in art and architecture. Yet his early fascination with Claude Lorrain and the Dutch Illuminist painters of the seventeenth century also show an appreciation for romantic art.¹² His art and drawing courses under Oeser and study of Winckelmann's theoretical writings, led him on a search for the meaning behind art in an effort to understand the seemingly conflicting impressions of his external environment. It is significant, that of the series of events which led him to an insight into the nature of art and polarized his latent talents, the major one was an architectural experience.
REFERENCES


2. Ibid., p. 7.

3. Ibid., p. 3.


9. Ibid., p. 6.

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LIST OF ILLUSTRATIONS

1. Northside of Roemerberg, Frankfurt am Main, Painting: C.G. Schuetz the Elder, 1754, oil on canvas.


3. View from across the River, Frankfurt am Main.


5. House in which Goethe was born, Frankfurt, Before and after the Alteration.

"With what unlooked-for emotions did the sight surprise me, when I stepped before it. A sensation of wholeness, greatness filled my soul; which, composed of a thousand harmonising details, I could savour and enjoy, yet by no means understand or explain. So it is, men say, with the bliss of heaven." ¹

Goethe, in On German Architecture (1772)
1. Section of Octogon Superimposed on Plan of Spire, Strasbourg Cathedral.
How freshly it sparkled in the morning-scented brilliance! How jocundly could I stretch out my arms towards it, open my eyes to the great harmonious masses quickened into numberless small parts! As in works of eternal Nature, down to the minutest fibril, all is shape, all purposes to the whole.  

Goethe, in "On German Architecture" (1772)

CHAPTER II

THE SHOCK OF STRASBOURG

Strasbourg Cathedral is the symbol of Goethe's first outburst of genius. His experience with this sublime facade gave him insight into the system of law underlying the apparent confusion of the natural world. The glimpse into the mysteries of nature he gained from architecture underlies Goethe's conviction as to the pedagogical function of art and the importance of architecture itself.

What led to this emotional revelation which Goethe recorded in his famous essay, On German Architecture (1772) D.M. Ervini a Steinbach? Firstly, his traditional, classical education up to this time in the arts, his conservative judgement, and his provincial environment left him unprepared for the raw expressive power of one of the first real Gothic buildings he had ever seen. Gothic from the point of view of the Enlightenment was a barbaric art form, Rococo being the preferred style of the Enlightenment architectural philosophy. Indeed, the Renaissance mentality considered all the architecture of medieval Europe as Gothic, a term of abuse for the tribes that were thought to have brought about the destruction of the Roman Empire that they so admired.

*D.M. Divis Manibus, an inscription to the blessed spirits on Roman tombs.*
Goethe came to Strasbourg in 1770, where he continued to study law without great enthusiasm as well as alchemy and attended lectures on medicine, surgery, and political science. During his 17-month study he met Johann Gottfried von Herder (1744-1803). This meeting of minds provided the necessary philosophical background to Goethe's sudden appreciation of Gothic architecture, the result of which catapulted Goethe from obscurity into the realm of greatness.

Herder extolled the elemental beauties of primitive poetry, art, and literature. Johann Georg Hamann (1730-1788), a German philosopher in the same mold as Rousseau and Kant, was his only German mentor, the majority of influence coming from England through Shaftsbury, Ossian, and Young.
Herder's influence was undoubtedly in contrast to Goethe's earlier Neoclassical sympathies. One of his major efforts was challenging the foundations of Renaissance literary theory, leading the way for a new literary expression which became characteristic of the Sturm und Drang movement. Herder praised Shakespeare over all the great writers, particularly for his anticlassical dramatic form. He composed an essay which set out to establish Shakespeare as as great a representative of the Elizabethan era as Sophocles was of his own, the difference in expression reflecting the contrasting characteristics of their respective cultures. This then served as a model for Goethe's essay and was published in the same magazine, Von Deutscher Art und Kunst. Herder, paradoxically, was no advocate of Gothic architecture, yet when confronted with the primitive power of Strasbourg Cathedral, Goethe suddenly became aware that "Herder's ideas about nature and creative genius could become a key to a new understanding of Gothic Architecture." This intuitive leap from literature to nature to art is characteristic of Goethe's method, and reveals his interest in the form underlying all created objects, the focus of his science of form, morphology.

The purposes for which Goethe's essay were written are two-fold. One emotional purpose was the expression of his newly-found appreciation of the 'primitive' strength of medieval architecture reflecting the principles of the Sturm und Drang movement of which Goethe had become a member. The more rational purpose was to refute the teachings of Marc Antoine Laugier (1713–1769), which Goethe regarded as narrow and academic, contrary to the spirit of intuitive creation. Johann Georg Sulzer (1720–1779), a German architectural theorist with a viewpoint similar to Laugier, was also a target of his attack.
The clash of classical and romantic viewpoints is exemplified by Laugier, representing the French Enlightenment, and by Goethe and Herder, representing the emerging Romantic Movement. In the preface to his Essai sur l'Architecture (1753), Laugier maintains the "the essential beauties are independent of the customs, the senses, and the conventions of men." This viewpoint represents an aesthetic based on ideal beauty removed from any contextual interaction. Herder, on the other hand, argues for the validity of different art forms within their respective cultures. Goethe, in turn, applies this same logic to Erwin von Steinbach.* The portrayal of Erwin von Steinbach as the sole architect of Strasbourg Cathedral, and of Gothic architecture as the true German style are both patently false. Yet these historical inaccuracies often used to criticize Goethe's essay are a product of its polemical nature and are its least important aspects. Why then, is this seemingly exaggerated, overly emotional, and somewhat naive essay of such tenacious value? Here, perhaps for the first time, the traditional shackles of cultural and temporal determination have been shaken loose and thrown aside. Goethe arrives at an understanding by intuitive observation independent of the circumstances, transcending the limits of a particular age, ideals or rules. He penetrates directly the creative core, and as a result, his essay praises everything that is creative, shaping, and plastic. It is the beginning of a new theory of architecture which continues to evolve throughout Goethe's life.

In his General Theory of the Beautiful Arts (1771) (Allgemeine Theorie der Schoenen Kuenste) Sulzer postulates:

In order to answer the question which architectural style is the best, one could reply as follows: for temples, triumphal arches,

*Erwin von Steinbach was actually the architect of only the first stage of the cathedral.
"... it rises like a most sublime wide-reaching Tree of God, who, with a thousand of boughs, a million of twigs, leafage like the sands of the sea, tells forth to the neighbourhood the glory of the Lord, his master."

Goethe, in On German Architecture (1772)
3. Facade, Strasbourg Cathedral.
and great monuments, the ancient style is the best; for palaces, 
the Italian, but infused with Greek exactitude; for residential 
purposes, however, the French style is most appropriate. It was exactly this type of eclectism against which Goethe reacted in his essay, 
which evokes the need for a creative, representative architecture, reflecting contemporary culture. Erwin, as the Father of the German Master Builders, was the symbol of this new creative force and Gothic became the new representative style.

Goethe may be considered one of the first pre-modern theorists in his plea for functional architecture. The concept of functional necessity elevated to art is a basic tenet of his developing aesthetic theory. In a fictional conversation with the architect, Erwin reveals the nature of this process:

"Why art thou astonished?" he whispers towards me. "All these masses are there of necessity, and dost thou not see them in all the elder churches of my town? Only I have raised their arbitrary proportions into harmony. How above the main porch, which lords over two smaller ones to either side, the wide rose-windows opens, answering to the nave; and commonly but a hole for daylight, how, high above the bell loft asked for smaller windows! All that was necessary; and I shaped it into beauty."

Goethe likens beauty in nature to that perceived in the facade of Strasbourg cathedral, both of which are outwardly confusing, yet inwardly coordinated and bound by a system of laws. This external riot of form was repugnant to the Enlightenment. Even Goethe harbored preconceptions about the Gothic style:

Under the Gothic heading, I piled, like the articles in a dictionary all the synonyms misunderstandings of the confused, the unregulated, the unnatural, the patched up, the botched, the overladen, which had ever passed through my head.

*Wenn man fragt welche Bauart die beste sei, so koennte man antworten: fuer Tempel Triumphbogen und grosse Monumente sei die alte Bauart, die beste; fuer Palaeeste die italienische, aber mit der griechischen Genauigkert verbunden; zu Wohnzwecken aber die franzoesische.
Yet, he was able to penetrate the profusion of outward form and perceived the wholeness and grandeur of medieval architecture.

Goethe stressed the character rather than the beauty of the Gothic:

Now this characteristic art is the only true art. If, out of ardent, united, individual, independent feeling, it quickens, unconcerned, yet unconscious of all that is strange, then born whether of rough savageness or civilized sensibility, is whole and living. Countless degrees of this may be seen among nations and individual men. The more the soul rises to the sense of those proportions which alone are beautiful and of eternity, whose main chords can be proved, whose secrets only felt...

Character results from a harmony of the individual parts within the orchestration of the whole. A proportional system is one means of achieving this quality. The Gothic Master Builders designed the great cathedrals using a variety of proportional systems based on the golden mean (Figure 4). In theory, the sense of character arises from the intuitive perception of this organization without direct intellectual cognition.
One of the major areas of disagreement between Goethe and Laugier revolves around the concept of type and reveals Goethe's aversion to the dry rationalism he perceived in French aesthetic theory:

What does it profit us, O neo-French philosophising connoisseurs, that the first man who sensed his needs, rammed in four tree-trunks, joined up four poles on top, and topped all with branches and moss? (Figure 5) From that thou dost decide what is proper for our needs today as if thy new Babylon were to be ruled by thee with innocent patriarchal fatherliness.

He goes on to assert:

Column in no manner is a component of our dwellings. Rather, it speaks against the essence of all our building. Our houses do not arise out of four columns in four corners; but from four walls and four sides, which are there instead of all columns, exclude all columns, and where men stick them on, they are a burdening superfluity.  

Goethe saw the wall rather than the column as the original element in northern architecture, which he believed had evolved from a different model (Figure 6) more representative of German culture.

In an allegory to the Prometheus* legend, Goethe proposes an alternate model:

Begin with the branches
Drive these here
On angle into the earth
And these on the other side, here.
And bind them at the top,
Then again two behind.
And one straight across on top−
Now place the branches from top to bottom
Down to the ground.
Bind and weave them
Cover the perimeter with sod
And more branches over that
Until no sunlight
No rain or wind can possibly penetrate!
Behold, dear Son shelter and home.  

*In Greek Mythology, Prometheus is the god responsible for handing down to mankind the gifts of civilization and the arts, among them architecture.  

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5. Laugier's Version of the Primitive Hut.
Erst ab die Aeste
Dann hier rammle diesen
Schief in den Boden hier,
Und diesen hier so gegenueber.
Und oben verbinde sie
Dann wieder zwey hier hinter hin.
Und oben einen queer darueber-
Nun die Aste herab von oben
Bis zur Erde.
Verbunden und verschlungen die
Und Rasen rings umher,
Und Aeste drueber mehr,
Bis dass kein Sonnenlicht
Kein Regen, Wind durchdringe!
Hier lieber Sohn ein Schutz und eine Huette.21

The derivation of an Urhaus, or primal hut, was of contemporaneous
concern in architectural theory, yet Goethe saw its significance as the idea
behind the created object, serving equally well as a model for the classical Greek
temple or the Gothic cathedral. In subsequent maturation of his philosophy and
theory, the type concept assumes a central role, especially in morphology, linking the creative process in architecture back to its roots in nature.

Goethe returned to Strasbourg several years later. His enthusiasm for the Cathedral had by no means diminished, but his style of description was already more reflective and analytical. The resulting essay, *Third Pilgrimage to Erwin's Grave*, in July 1775, was structured after the form of traditional devotion manuals; the stages of the pilgrimage corresponding to the platform levels of the Cathedral tower. At each subsequent stage, a clearer view is attained of the interrelationship of nature and art. In the essay, Goethe compares the facade of the Cathedral to the sublime nature of the Rhein Waterfall at Schaffhausen and the Swiss Alps:

Thou art one and living, begotten and unfolded, not botched and patched together. Before thee, as before the foaming falls of the mighty Rhine, before the gleaming snow-caps of the eternal mountains, as in view of the serene expanse of lake and, grey Gotthard, of your cliffs of cloud and wild ravines, as before every thought of creation, stirs in the soul what in her is also creative power. The soul rhapsodizes, clawing up the paper with her scribbles, in the worship of the creator of eternal life, of the all-embracing, inextinguishable feeling of that which is, and was, and shall be.

The insight Goethe gained in Strasbourg set the stage for his subsequent endeavors. The characteristics of organic law which he first sensed in the facade of the cathedral, became the focus of his later research in both the arts and sciences. Theodor Hetzer writes in his essay, *Goethe and the Plastic Arts* (Goethe und die Bildende Kunst):

The Plastic Arts are now placed in relation to the entirety of human life, he responds to them as to everything, to the clouds, the stones, the plants, the affairs of men, agriculture, trade,
even sea travel. The concept of unity he gained in Strasbourg now encompassed his entire life.24*

*Die bildende Kunst wird zum Ganzen des menschlichen Lebens in Beziehung gesetzt, er achtet auf sie, wie er auf alles achtet, auf die Wolken, die Steine, die Pflanzen, auf das Tun u. Treiben der Menschen, den Ackerbau, den Handel, selbst die Schiffahrt. Der Begriff der Einheit, den er in Strassburg gewonnen hat umfasst nun das ganze Leben.
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2. Ibid., p. 158.


9. Ibid., p. 45.


16. Ibid., p. 158.


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LIST OF ILLUSTRATIONS

1. Plan of Octogon superimposed on Plan of Spire, Strasburg Cathedral, begun 1276.


3. Facade, Strasbourg Cathedral, Strasbourg.


In my valley it is coming to be more and more beautiful, that is, my relationship to it is changing, getting closer and more enjoyable because I am padding and adorning the little neglected places with loving hands and am always committed to attaching and securing figures of art, with the greatest care to dear, ever obliging nature.1*

Goethe, in a letter to J.H. Merck, August 5, 1778

CHAPTER III
THE WEIMAR PARK: POETRY AND LANDSCAPE

After graduating as solicitor from the University of Strasbourg in August 1771, Goethe returned to Frankfurt and set up legal chambers at his family home on the Hirchgraben. During the next four years, Goethe worked on a number of books, including Faust, which was to occupy him throughout his life. The success of the The Sorrows of Young Werther made him famous throughout Europe.2

In 1775, Goethe was invited by Duke Carl August of Sachsen-Weimar-Eisenach in Weimar to discuss a possible advisory position. Evidently charmed by the provincial capital, Goethe moved there the following year entering Weimar state service as a Counsellor of Legation.3

The Duke provided him a small garden house in bad repair, with an accompanying garden, along the banks of the River Ilm, just beyond the town walls. The house and surroundings were well-suited to Goethe's love of nature and he became an avid gardener as well as an amateur botanist.

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On a trip to Berlin and Potsdam, Goethe stopped over in Worlitz to visit Prince Leopold Friedrich Franz of Anhalt-Dessau (1740-1817), a friend of Carl August, and see the recently completed Worlitz Palace by Friederick Wilhelm von Erdmannsdorff (1736-1800), who had an advisory position with the Prince of Dessau similar to that held by Goethe.

The palace (Figure 3) was one of the first examples of English Palladianism transplanted onto German soil. Executed by the prince's court architects, it bears a marked resemblance to Claremont Palace (Figure 4) in Surrey, England by Henry Holland, completed only five years earlier. Franz and Friederick had travelled together to England to see the contemporary Palladian works, as well as to Italy to view actual works of Palladio.

Palladianism thus came to Germany via England, rather than directly from Italy. Palladio's works themselves, having been eclipsed by the high Baroque architecture of Bernini, Borromini, and Rainaldi, had had little influence outside of Northern Italy. In England, however, Palladio had found an early and consistent following with such architects as Inigo Jones (1573–1552), in the early seventeenth century. However, it was not until the end of Wren's influence that the real epoch of Palladianism began in England, led by Lord Burlington and Colin Campbell. From here, it spread to Germany through Palladian treatises and sketchbooks such as Vitruvius Britannicus (edited by Campbell), and by royal patronage, typified by that of the Prince of Dessau.

In addition to importing architecture, the Prince also had a Romantic Landscape Garden built in Worlitz, following the current trend in England. Goethe was enthralled by the Worlitz Park, which he describes in a letter to Frau von Stein:

> It is unbelievably beautiful here now. Yesterday evening, as we traversed lakes, canals, and glades, it touched me to think how the Gods have allowed the princes to create a dreamworld around themselves. You are totally captivated as by the reading of a fairy tale. Totally in character with the Elysian Fields, one part flows into the next in the most rational diversity, no height attracts your eye, bringing attention to any single point you can wander around without questioning where you came from or where you are going.7*

Goethe was particularly sympathetic to this type of English Romanticism through his association with Herder and the influence Shakespeare had on his own

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literary works, particularly Faust. Rousseau’s nature cult also played a large role in Goethe’s relationship to nature during this period. In addition to these philosophical inclinations, Goethe had also studied the works of Christian Cajus Laurenz Hirschfeld (1742-1792), a professor at the University of Kiel who was largely responsible for transplanting the ideals of the English Garden to Germany. Therefore, it isn’t surprising that he preferred the Romantic Landscape Garden over the formal Baroque gardens more prevalent in Germany at that time. Concerning the impetus for the Weimar Park (Figure 5), Goethe wrote:

The Park in Dessau aroused the desire to create another which could be accomplished with originality as the contextual circumstances weren’t similar; a flat, open, watery region having nothing in common with a hilly varying terrain. One had to distill the essential qualities from it and investigate what was suitable and so the Weimar Park came into being.

Goethe loved the ramshackle garden house (Figure 6) he had been given to live in by the Duke in 1776, and promptly set about renovating it and drawing up plans for an English garden to replace the unkept grounds. The garden itself was divided into a lower area around the house and an upper area on the steep slope just behind the house. With trellises covering all four sides, the house itself became part of the changing landscape (Figure 7). Along winding paths, Goethe placed garden benches (Figure 10) he had designed himself and small landmarks such as the “Stone of Good Luck”, symbolizing the force of a powerful life-consciousness (Figure 11).

*Der Park in Dessau erweckte Lust der Nacheiferung, welche um desto originaler sich hervortun konnte, als die oertlichen Gegebenheiten sich nicht aehnelten. Eine flache, freie wassereiche Gegend hatte mit einer huegelig abwechselnden nichts gemein. Man musste ihr den eigenen Reiz abgewinnen und untersuchen was einer jeden zieme, und so entstand der Weimarer Park.*
5. Site Plan and Legend, Weimar Park, 1796.
Arrogant 'tis surely not,
This house in quiet garden spot,
All the friends who visit here
Never fail to find good cheer. 15

Green florescence, seeds self-sown,
Slender trees, towards heaven have grown.
While in the mind, as in the seed
Care, creation, and growth proceed. 16*

Goethe, written under an illustration of his Garden House
"My roses are blooming up to the roof."17**

Goethe, in a letter to Charlotte von Stein
7. Trellis with Roses, Garden House.


Soon Goethe's influence reached beyond the private realm of his own garden into the adjacent Ilm Valley. To commemorate the drowning of a young girl from the royal court, near the float-bridge, he designed a memorial integral with the landscape (Figure 12). With the help of the court gardener, he transformed a rock outcropping just up from the bridge into what Wieland*** described as "a wonderfully artificial, gracefully wild, secluded yet not isolated kind of sculpture in rock and grottos."14****

The erections for the open-air birthday celebration for Duchess Luise on July 9, 1778 marked the inception of the Weimar Park proper. A devastating fire at the residential palace had left the court ill-equipped to handle such an event, so Goethe decided to stage an outdoor fest. Originally planned for the Baroque garden below the palace along the Ilm, at the last minute the party had to be moved, due to flooding, to higher ground. In a matter of three days, Goethe, with the help of the court gardener and workers, created a small hermitage consisting of a stage and simple straw-covered wood hut. An existing tower for powder storage was transformed into a bell tower and the south wall of an earlier garden was made to look like a ruin and named the Luisenkloster (Luise Cloister), after the Duchess.19 The dramolette performed there for the occasion, utilized immediate elements in the landscape, as well as distant views

*Uebermutetig sieht's nicht aus, Schlanker Baeume gruener Flor,
Hohes, Dach und niedres Haus; Selbstge pflanzter wachs empor.
Allen die daseibst verkehrt Geistig ging, zugleich alldort

**Meine Rosen bliehen bis unters Dach...

***Christoph Martin Wieland (1733-1813) Poet, brought to Weimar as tutor to Carl August's son, Editor of Der Teutsche Merkur.

****. . .eine wunderbar kuenstliche, anmutig wilde, einsiedlerische und doch nicht abgeschiedene Art von Felsen- und Grottenwerk.
12. Rock Gate, Weimar Park, 1778.
as a backdrop. This contrasted with the tradition of Baroque garden plays where the stage and seating area was separated from the surroundings with partitions.20

Following the success of this event, Duke Carl August became actively interested in the creation of an English landscape garden at his court. The temporary straw-covered hut was replaced with a cabin clad in bark shingles (Figure 14) serving as his bath house and occasional night quarters. With the help of fragments from the ruins of a nearby castle, an old shooting wall was transformed into a romantic ruin (Figures 15-17) symbolizing nature reclaiming the works of man21.
17. Ruins, Weimar Park.

18. Pathway Along Ilm, Weimar Park.
In the next several years, elaborate planting, new paths and landscaping (Figure 18) financed by the Duke transformed this once neglected valley into a true park. Following the precedence of the English parks, monuments, grottos, memorials, etc., (Figure 20-22) were scattered about at appropriate locations. In 1782, Goethe's epigram, Loneliness was hewn into a rockface near a small secluded grotto. In the "Genius huius Loci" stone (Figure 23), based on classical models (Figure 19), the snake symbolizes the life-spirit and guardian of a place, while the bread represents an offering of gratitude.\(^{22}\)

Goethe was not without criticism for this new landscape style and realized its tendency to excessive sentimentality and picturesqueness.\(^{23}\) In the comic drama Triumph of Sentimentality (Triumph der Empfindsamkeit) 1778, he good-naturedly mocks the stereotype of the overdone pleasure park filled with everything from Chinese pagodas to obelisks and labyrinths. This preference for a more natural treatment led to increasing disagreements with the Duke over further improvements, and after 1783, Goethe had little more to do with the
20. The Three Columns, Weimar Park.


24. Roman Edifices in Ruins, after Claude Lorrain, 1772.

During the years after 1783, Goethe became increasingly preoccupied in his research in plant, animal, and human morphology. One important result was the discovery of the intermaxillary bone in the human skull, which indicated an evolutionary link between man and the animal kingdom. Yet, the individual examples of Goethe's experimentation, valid or otherwise, are secondary to the central search for form in nature's creative processes, the Weimar Park being no exception. Wieland referred to the park as "Goethe's new Poem." The influence of poets and artists such as Alexander Pope and Claude Lorrain on landscape design was significant during this period. It is not surprising that Goethe himself was an avid admirer of Claude Lorrain and owned two of his
drawings. The 'Ruins' in the Weimar Park may have been inspired by the imaginary ones in Claude Lorrain's "Roman Edifices in Ruins" (Figure 24) (compare to Figure 17). However, Goethe's participation, in light of his morphology, has an added significance, which transcends the level of external influence.

Goethe's interest in Palladio stems from this decade between 1776 and 1786, and is closely related to his activity in landscape architecture. He was introduced to Palladio through Prince Franz and Erdmansdorff who had themselves travelled to Italy to see his works, and it was not long before Goethe too felt the urge to travel southwards.

Many other forces contributed to Goethe's irrepressible desire to travel to Italy. During these years, he had been formulating his ideas on the interconnection of nature, art, and science through the concept of form expressed in his writings, experiments in landscape design, as well as his scientific research. He felt Italy to be the perfect surroundings in which to test his evolving theories. However, his mounting ministerial duties hindered any extensive leave of absence.
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19. Ibid., p. 77.
20. Ibid., p. 77.
25. Ibid., p. 85.
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1. Goethe in the Countryside, Painting: Tischbein, 1787.
So beautiful, natural, functional, and true! What a great understanding the ancients had! I have always hated arbitrariness. Whatever does not have a true, inner existence, has no life and cannot be instilled with life. It cannot be great nor ever become great.1*

Goethe, Terni, Italy, October 27, 1786

CHAPTER IV

A RETURN TO THE SOURCE: THE ITALIAN JOURNEY, OR GOETHE IN ARCADIA

Rome in the eighteenth century was the symbol of culture for the western world, the source of inspiration in art, and, above all, the center of the architectural world. Italy, herself, was a land not only full of classical treasures and untold works of art, but also a land of dramatic, changing landscape which provided inspiration for so much of her achievements. The tradition of an Italian tour was well established by Goethe's time. Young artists in search of first-hand experience inevitably gravitated southwards. One of these was Albrecht Duerer who was a strong influence in Goethe's approach to art.2

Aroused by his Father's accounts of his own travels in Italy and surrounded in his family home by engravings depicting Rome's great piazzas, buildings, and monuments, Goethe was predisposed in favor of Italy at an early age.

After ten years in service to the Duke, Goethe had grown increasingly restless, finding his ministerial duties oppressive in light of his own expanding

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*So schoen, natuerlich, zweckmaessig und wahr! Diesen grossen Sinn den die Alten gehabt haben! So verhasst waren mir immer die Willkuerlichkeiten. Was nicht eine wahre, innere Existenz hat, hat kein Leben und kann nicht lebendig gemacht werden; und kann nicht gross sein und nicht gross werden.
research in art and science. A variety of factors made an extended trip to Italy particularly compelling at this time. His study of Palladio made him increasingly aware of the importance of experiencing the buildings at first hand. His morphological research in the fields of botany and geology, on which he had concentrated over the last several years, could be significantly substantiated in a radically new region and climate, yielding additional clues to the essential forms underlying natural science. Yet, most important of all was his desire to become an artist, a step he had contemplated ever since his university days when he was unsure in which area of the arts he could best express himself. In July of 1786, Goethe set off for Karlsbad, a bohemian spa where he had previously enjoyed the mineral baths. Under the pretense of an extended summer cure, he organized his trip while in Karlsbad, and in August departed secretly for Italy.

Goethe's sojourn in Italy was fundamentally a journey into new experiences as well as a confirmation of previously developed ideas and theory. It was also a journey leading to self-realization. His method of observation, which he practiced and refined while in Italy, is implicit in the kind of remarks made throughout his journal and letters later published in 1829 under the title, Italian Journey (or me in Arcadia!). This method of observation derived from his morphological research in which subject and object lose their individual identity in the act of perception and nonsubjective seeing is aided by intuitive judgement. Goethe found that in the clear light of Italy, the results of this method were greatly enhanced. Although derived from his studies in natural science, Goethe's method applied equally well to art and architecture, and it is in reference to this that Goethe remarks in a letter to Herder from Rome, dated
December 29, 1786 that, "Now I treat Architecture and Sculpture like minerology, botany, and zoology."\textsuperscript{6*}

In his approach to objects, Goethe explains, "I just keep wandering around and around and observe and train my eye and inner sense."\textsuperscript{7**} From this point of view, there is no paradox between Goethe's exaltation of Gothic architecture as symbolized by Erwin's cathedral and classical architecture of Palladio and the ancient Greeks and Romans. Goethe's comments concerning the arbitrariness of some northern medieval architecture applies to a style without inner purpose for its outward form. It is not a sign of an impending swing from romanticism to classicism. What Goethe sought and responded to was an architecture true to underlying natural principles; an architecture organic in spirit, balancing inner purpose with external context and transcending both into the realm of poetry.

As a general guide, Goethe brought along the Volkmann's \textit{Historical - Critical Reports from Italy} published in Leipzig, 1770,\textsuperscript{8} and specifically for art and architecture, Winckelmann was his primary guide. The first important monument of antiquity Goethe saw was the Roman amphitheater in Verona (Figures 2, 3). His reaction to it is characteristic, illustrating both his method of observation and his orientation to architecture as a natural object.

At first, he was disappointed to see it empty and complained of its scalelessness, realizing the full impact could only be attained when an event was in progress. While observing the area, he perceived in its outward expression the

\textsuperscript{*}Nun ist mir Baukunst und Bildhauerkunst wie Mineralogie, Botanik und Zoologie.  
\textsuperscript{**}Ich gehe nur immer herum und herum und sehe und übe mein Aug und meinen inneren Sinn.
2. Roman Amphitheater, Verona, Drawing: Palladio, 1540.

3. Roman Amphitheater, Verona.
functional precedent underlying it, and hypothesized a sequence of events resulting in such a structure:

When anything worth seeing takes place on flat ground and everyone runs up to see, those behind try with whatever means possible to get above the people in front. They climb on benches, roll up barrels, drive up with wagons, lay boards across from one to the other, occupy a neighboring hill, and before you know it, form a crater.

If the event happens often at the same place, light bleachers are built for those who can pay and the rest of the masses make out as best they can. In this instance, the general need to satisfy is the architects task. Through art, he prepares such a crater as simply as possible so that the people themselves constitute the decoration.*

The functional determination of form, simple in execution and without extraneous ornamentation; often assumed to be a wholly modern conception, is opposed to the trend of eclecticism and formalism within the Neoclassical movement with which Goethe has often been associated. The correlation between the formative impulse of natural activity and art is integral to Goethe's evolving architectural theory. Here, in the amphitheater, a natural function has been reified through art, the closer the correspondence the more appropriate and characteristic. Thus, from Goethe's point of view, nature and art become one. Art accomplishes the necessary with the same means as nature.

Goethe was less enthusiastic about the Roman Theater in Verona (Figures 4, 5). He criticized the proportions of the columns and the

*Wenn irgend etwas Schauwerdiges auf flacher Erde vorgeht und alles zulaeuft, suchen die Hintersten auf alle mogliche Weise sich ueber die Vordersten zu erheben: man tritt auf Baenke, rollt Faesser herbei, faehrt mit Wagen heran, legt Bretter hinueber und herueber, besetzt einen benachbarten Huegel, und es bildet sich in der Geschwindigkeit ein Krater.
Kommt das Schauspiel oefter auf derselben Stelle vor, so baut man leichte Gerueste fuer die, so bezahlen koennen, und die uebrigs Masse behilft sich, wie sie mag. Dieses allgemeine Beduerfnis zu befriedigen, ist hier die Aufgabe des Architekten. Er bereitet einen solchen Krater durch Kunst so einfach als nur moeglich, damit dessen Zierrat das Volk selbst werde.
4. Reconstruction Drawing, Roman Theater, Verona.

5. Plan, Roman Theater, Verona.
inappropriate juxtaposition of orders. But it was here while wandering about the scattered remnants from classical antiquity set out in the forecourt, that he first sensed the creative spirit of the ancient builders: "The wind emanating from the ancients' graves was laden with a fragrance as if it had passed over a hill of roses."10*

Vicenza, the birthplace of Palladio, was the major pilgrimage stop along Goethe's route to Rome. When he arrived there on September 19, 1786, he could do nothing before seeing Palladio's buildings: "I arrived here a few hours ago and have already walked through the city and seen the Olympic Theater and other buildings by Palladio.11**

The first building he described in his journal is Palladio's Olympic Theater (Figures 6, 7, 8):

The Olympic Theater is an ancient theater realized in miniature and indescribably beautiful, but compared to ours it seems like a refined, wealthy, well-educated child compared to a clever man of the world, who although neither as elegant, nor as rich, but still well educated, knows better what he can accomplish with his means.12***

Goethe's favorite building by Palladio was Casa Cogollo (Figure 9, 10, 11), a small townhouse along a busy street in Vicenza where Palladio supposedly lived himself:

Among Palladio's buildings there is one I have always been partial to; it is reputed to have been his own house. Close at hand it is much more than pictures would indicate. I want to

*Der Wind der von den Graebern der Alten herweht, kommt mit Wohlgeruechen wie ueber einen Rosenhuegel.

**Vor einigen Stunden bin ich hier angekommen, habe schon die Stadt durchlaufen, das Olympische Theater und die Gebaede Palladio gesehen.

***Das Olympische Theater ist ein Theater der Alten, im kleinen realisiert und unaussprechlich schoen, aber gegen die unsrigen koemmt mir's vor wie ein vornehmen, reiches, wohlgebildetes Kind gegen einen klugen Weltmenschen, der, weder so vornehm, noch so reich, noch wohlgebildet, besser weiss, was er mit seinen Mitteln bewirken kann.
6. Plan, Olympic Theater.

7. Proportional Diagram, Proscenium.

8. Section, Olympic Theater, Vicenza, Palladio, 1580.


11. Longitudinal Section, Casa Cogollo, Palladio, 1558-62.
have it drawn and rendered with the colors that materials and age have given it. Don't get the impression that the architect built himself a palace. It is the most modest house in the world with only two windows separated by a wide space that displaces a third window. If one were to have it reproduced as a painting showing the neighboring houses it would still look pleasing in the way it is inserted between them.13*

His main guide to Palladio's buildings, besides a small publication he bought in Vicenza,14 was Bertotti Scamozzi's Le Fabbriche e i disegni di Andrea Palladio (1776-1783), illustrated by the author. It was an extended version of Palladio's I Quattro Libri dell' Architettura (1570) of which Goethe later obtained a copy in Venice, produced by the English Counsul Joseph Smith between 1770-1780.15 While in Vicenza, he visited Scamozzi (possibly a descendant of the architect, Vincenzo Scamozzi (1548-1616), a student of Palladio),17 who was still working on copper engravings for a second edition of his book and received a brief introduction to Palladio's works.16

Goethe's evolving conception of architecture is illustrated by his comments on the Basilica (Figure 12) compared to the medieval fortress sitting alongside it:

It is indescribable how Palladio's Basilica looks next to an old castle-like building strewn with dissimilar windows, all of which, the tower included, the architect certainly must have ignored. Somehow, I must come to a conclusion because here again I find unfortunately what I'm fleeing and seeking side by side.18**
Remarks such as these have been taken by a number of critics as an indication of a change of orientation from Gothic to Classicism. Yet, taken in context of his overall viewpoint, this remark is more likely an attack on the type of formalism as proposed by Laugier and Sulzer.

On the 20th of September, 1786, Goethe visited the Villa Capra (Figure 13) for the first time:

Today too, I saw the famous Rotunda, the country villa of the Marchese Capri. Here the architect could do whatever he wanted and he almost made it a little too extravagant. Nevertheless, I also had occasion here to marvel at his magnificent genius. He placed the building so as to adorn the region. From afar, it really looks exquisite, close at hand I have a few humble reservations.19*

Concerned with its extravagance he remarked: "Perhaps architecture has never been driven to such heights of luxury."20**

His uneasiness with the building lay in its apparent lack of practicality. He observed that the stairs' vestibules occupy more space than the house itself, and although he admired the proportions of the interior space he doubted whether the living space would even be adequate as a summer vacation house.21

He was more enthusiastic in his criticism of it as an ideal object. Walking around the building, he praised the dynamic transformation of the massing and the play of elements. He was most receptive to the villa's fulfillment of its symbolic purpose as a monument to the holdings of the
Marchese Capra, gazing out in the four cardinal directions into the surrounding land also owned by the Marchese, representing the desire to keep his possessions undivided within the family.22

The inscriptions* on the four pediments inspired Goethe to take up a similar theme in his novel, Wilhelm Meister's Theatrical Mission, where the Rotunda symbolizes an ideal palace displaced to Lago Maggiore representing Mignon's nostalgia for Italy:23

Do you know the house, its roof on columns resting,
The hall how it glitters, the rooms to light attesting;
And marble statues stand and look at me
My poor child, what has someone done to thee?
Do you know it perchance, Away! Away!
With you, my dear Master, there would I ever stay.24

Kennst du das Haus? Auf Säulen ruht sein Dach,
Es glänzt der Saal, es schimmert das Gemach,
Und Marmorbilder stehn und seh'n mich an:
Was hat man dir, du armes Kind, getan?
Kennst du es wohl? Dahin! Dahin
Möcht ich mit dir, o mein Gebieter, ziehn.

On the way to Venice, Goethe stopped over in Padua where he purchased his own copy of Palladio's I Quattro Libri dell' Architettura.25 Here, in the university's botanical garden, while contemplating a palm plant (Chaemersops humilis), he came to the realization that perhaps all plant parts could be developed out of one type form, the basis for his essay: The Metamorphosis of Plants:26

To wander about among a vegetation which is new to one is pleasant and instructive. It is the same with familiar plants as with other familiar objects: in the end we cease to think about them at all. But what is seeing without thinking? Here, where I am confronted with a great variety of plants, my hypothesis

*Marcus Capra Gabriellis filius qui aedes has arctissimo primogeniturae gradui subjicit una cum omnibus censibus agris vallibus et collibus citra viam magnam memoriae perpetuae mandans haec dum sustinet ac abstinet25
that it might be possible to derive all plant forms from one original plant becomes clearer to me and more exciting.\textsuperscript{27}

This search for a typal origin of phenomena is the \textit{modus operandi} of Goethe's perceptive observation. Just as he sought the archetypal plant from which all plant forms could be derived, so he sought the archetypal house from which all building types could be developed.\textsuperscript{28} His concern for this is already manifest in his essay on Strasbourg Cathedral where he takes such exception to Laugier's dogmatic derivation of the primal hut. The observation of embodiments of the type under a variety of different circumstances led him to a clearer understanding of the underlying idea. For Goethe, a work of nature as well as "a work of art reaches perfection outside of its phenomenal presence, the best lays in the idea."\textsuperscript{29*}

Goethe arrived in Venice on the 28th of September, 1786. Here, too, Palladio's works were foremost in his mind, especially the \textit{Convento della Carita} (Figure 14) with which he was familiar from Palladio's books. Expecting to see the whole project, he was disappointed to see only a small portion completed. What intrigued him about the monastery was the use of the Roman House type as the design concept (Figures 15, 16), which Palladio himself explains in his treatise. He explored the building thoroughly, as he put it, "wandering around within the great concept of Palladio,"\textsuperscript{31} and returned several times during his stay in Venice. A spiral stair (Figure 17) next to the chapel particularly caught his attention:

\begin{quote}
About a small stairway (a spiral stair without a column in the center which he himself praised in his work) which succeeds miraculously - I believe I have said nothing. You can believe that when Palladio said that it succeeds well, he was saying
\end{quote}

\textsuperscript{*}Ein Kunstwerk hat seine Vollkommenheit ausser sich, das Beste in der Idee.
"It seemed to me that when he was giving consideration to a piazza, a height and breadth, a church building which already existed, an old house, all of which he was going to put a facade upon, that he had thought: How are you going to bring this to the most noble form? You are going to have to break up this or that little detail, here or there an incongruity will remain, but will allow the building as a whole to have a noble style and you will be working for your own pleasure. And thus did he have in his soul a complete picture of what he wanted, and he brought it forth even though the site was ill-suited for it and he had to truncate and mutilate it. Still, for me, the wing of the Carita is so precious because even in it, his entire spirit soars. Were it finished, it would perhaps have been the finest piece of construction ever built in the world."30

Goethe, Venice, October 5, 1786

17. Oval Stair, Convento Della Carita.
nothing. Indeed, it is nothing except a spiral stair, but one which a person never grows weary of going up and down.32

Of Palladio's churches, Goethe preferred the facade of Il Redentore (Figure 20) to that of San Giorgio (Figure 18). The basis for this criticism derives from the problems inherent in combining the interior expression of basilica-type form with the exterior image of the classical temple with which Palladio preferred to represent his churches.33 Goethe noted the same inconsistencies in the facade for San Francesco della Vigna (Figure 19).34

Goethe's approach to Palladio reveals a well-based knowledge of his life and works. On viewing the actual buildings, he reacted to his preconceptions and adjusted them as necessary. It is also apparent that he observed Palladio from a unique, non-dogmatic point of view with which he confronted all observable phenomena. Palladio, like Goethe, was a keen observer and diligent taxonomist of the classical language of architecture, and Goethe perceived him as an artist who, like himself in literature, fully understood the elements of his medium. His ingenious combinations of these elements according to an underlying system of
laws coincided with Goethe's views on morphology. It is at this level that Goethe's appreciation of Erwin's Gothic and Palladio's classicism is compatible.

In Palladio's handling of diverse elements and synthesis of conflicting themes irregardless of established canons, Goethe saw the poetic quality of his architecture: "There is really something godly in his work, fully the force of a great poet, when out of truth and deception forms a third element that enchants us."35* Goethe felt an affinity for the poetic nature of his work and identified in Palladio his own creative efforts.

Palladio's sense of type and its transformation corresponded to Goethe's evolving theory of art and architecture as a second nature. In Palladio's studies of the classical orders (Figure 21), the sequence follows a taxonomical ordering system in which the simple vernacular Tuscan order progressively evolves into the more detailed, composite order, each with their own appropriate proportions. This methodology of understanding the interrelationship of objects appealed directly to Goethe's way of thinking, explaining his overwhelming concentration on Palladio to the exclusion of many other important architects.

Palladio's transformation of the type-form in the Olympic Theater and the Convento della Carita correspond to Goethe's theory of poetics. The villas also follow a progressive metamorphosis of an ideal type-form as illustrated in a comparison of plans by Wittkower (Figure 22).

With the churches Goethe was most preoccupied with the fusion of the classical temple front onto a facade expressing the interior nave and side aisles of a traditional Basilica, i.e., the balance of inner function and outer image. The conflicts inevitably arising could only be overcome with what Goethe referred to

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*Es ist wirklich etwas Goettliches in seinen Anlagen, voellig die Force des grossen Dichters, der aus Wahrheit und Luege ein Drittes gebildet hat, das uns bezaubert.

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22. Variation of Palladio's Villa Type (after Wittkower).
as the 'poetic quality' of his architecture. The same applies to combining walls and columns, which he had so denounced in his essay, On German Architecture, from 1772, yet after having studied Palladio's work, he conceded: "It is almost impossible to combine columns and walls without awkwardness but the way he (Palladio) has worked them together makes you forget this."36* Thus, the degree of plasticity of the walls and the organic flexibility of the plans modulating the type implicit within, gave Palladio's work a morphological aesthetic to which Goethe was so responsive.

Searching for a better grasp of architecture which threatened at times to elude him, Palladio provided the insight. Goethe proclaims that in his study of the Four Books on Architecture that: "The scales fell from my eyes, the fog dissipated and I recognized the objects,"37** and even went so far as to admit: "I feel myself alas, but behind in my knowledge, but at least I know the way Palladio has opened it to me, and the way to all art and life as well."38

Goethe did a number of sketches of the classical orders (Figures 23, 24) often directly from Palladio's book. Through studying Palladio, sketching, and observing, Goethe finally felt he was making some headway in his efforts to understand architecture:

My architectural studies are progressing daily; if you are thrown in deep water you learn how to swim. I have already rationalized the column orders and can already indicate the why. Now I can remember the numbers and proportions which previously as pure abstractions had always remained incomprehensible and unretainable.39***

*Säulen und Mauern zu verbinden ist ohne Ungeschicklichkeit beinahe unmöglich aber wie er (Palladio) das durcheinander gearbeitet hat, macht es vergessen.

**...es fallen mir wie Schuppen von den Augen, der Nebel geht auseinander und ich erkenne die Gegenstände.


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23. The Classical Orders (after Palladio), Drawing: Goethe, 1786.

Throughout the remainder of his travels, Palladio served as Goethe's guide to the architecture of the ancient Romans and introduced him to Vitruvius. In Venice, having bought Vitruvius' Ten Books on Architecture, a 1758/59, Italian edition compiled by Bernardus Galiani, Goethe remarked: "Now I have my own Vitruvius which I must study to be enlightened."  

Having arrived in Assisi, Goethe headed straight for the Temple of Minerva (Figure 25) that is described in Palladio's book. He was especially interested in the siting of the temple on the hillside, which he described in detail:

Since I read in Vitruvius and Palladio how towns should be built and temples and public buildings sited, I have had a great respect for such things. The Ancients had a great natural gift for it. The temples stand about half way up the hillside, where two hills meet on the level which is still called the Piazza. This itself rises slightly, and is intersected by the meeting of four roads, which form a somewhat compressed St. Andrew's cross: two from below and two from above. The houses now opposite the temple blocking the view from it were probably not there in ancient times. If you imagine them removed, you have a view to the south over a rich and fertile country, and at the same time Minerva's sanctuary will be visible from all sides.

Goethe's attention to detail indicates his growing comprehension of classical design principles. He was intrigued with the unusual siting of the temple by what it revealed in the adaptation of the type to new conditions:

The bases of the columns and their plinths seem to rest on pedestals, but this is only apparent, for the socle is pierced in five places, and at each of these five steps ascend between the columns and bring you to the level on which the columns stand and from which, too, you enter the temple. The daring idea of cutting through the socle was just right, for as the temple is situated on a hill, the flight of steps would otherwise have been carried to such a height as to have lessened the area of the temple itself. It is impossible to tell how many steps there

*Ich habe nun einen Vitruv, den muss ich studieren, dass ich erleuchtet werde...
"At last we reached what is properly speaking, the old town, and look! the laudable structure stood before my eyes: the first complete monument of Antiquity I had ever seen. A modest temple, as befits so small a town, and yet so perfect, so well conceived, that it would be an ornament anywhere." 

Goethe, Foligno, October 26, 1986
were originally, for, apart from one or two, they are all choked up with rubble or cemented over. Reluctantly, I tore myself away from this sight, resolving to call the attention of architects to this building so that an accurate drawing of it may be made. For I shall again have occasion to remark what a sorry thing tradition is.

He realized from Palladio's sketch of the temple (Figure 25) in which the pedestals are shown on the floor level, that Palladio probably didn't see it first hand. In his own sketch (Figure 26) he shows how the stairs had actually been placed between the pedestals.

On his way to Rome, he visited in Spoleto the Roman aqueduct which also served as a bridge:

This is now the third work I have seen of the ancients and it has that same great feeling. Their architecture is a second nature

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concerned with civic purposes from which came the Amphitheater, Temple, and Aquaduct.44*

On November 1, 1786, Goethe arrived in Rome, the objective of his Italian pilgrimage. Here he turned his attention more towards sculpture and painting within the framework of his overall perspective. Yet, he remained attentive to the monuments of classical Rome.

Upon seeing the Colosseum (Figure 27), familiar to him from engravings in his Father's house, he was most moved by the eloquent correspondence of structure and function that he had already observed in the Verona amphitheater. Goethe described the Colosseum as so great that it cannot be contained in the soul46, yet this greatness is not just the result of its immensity, but more importantly, the expression of purpose transformed by art.47

With the Pantheon (Figure 28), Goethe was intrigued with the greatness of the interior. Here Goethe sensed the timeless power of a simple, clear interior space, modulated by an underlying proportional system. Goethe visited other ancient ruins in and around Rome, the Pyramid of Cestius (Figure 29), the Palatine Hill (Figure 30), and the Vesta Temple at Tivoli (Figure 31), as well as later works such as St. Peter's and the Capitol, sketching and observing in preparation for a later synthesis. Again he admired the expressive function of the aqueduct (Figure 32).

However, he spent the majority of his time in Rome, studying painting and sculpture. He was fascinated with the works of Raphael, Michelangelo, Titian, among others. At every available opportunity, he also observed the plant.

*Das ist nun das dritte Werk der Alten, das ich sehe, und immer derselbe grosse Sinn. Eine zweite Natur, die zu buergerlichen Zwecken handelt, das ist ihre Baukunst, so steht das Amphitheater, der Tempel und der Aquadukt.
"We came to the Colosseum at twilight. Once one has seen it, everything else seems small. It is so huge that the mind cannot retain its image; one remembers it as smaller than it is, so that every time one returns to it, one is again astounded by its size."45

Goethe, Rome, November 11, 1786
"Sometimes I stand still for a moment and survey, as it were, the high peaks of my experiences so far. I look back with special joy to Venice, that great being who sprang from the sea like Pallas from the head of Jupiter. In Rome the Pantheon, so great within and without, has overwhelmed me with admiration."

Goethe, Rome, November 19, 1786
"Here (Rome) nothing was created by chance; chance only destroyed. Everything that is standing is magnificent. Her ruins are venerable, for even in their wreck, one can still perceive their ancient symmetry; and the great forms of her modern churches and palaces have reembodied it."\textsuperscript{52}

Goethe, Rome, 1787

"The ruins of the great aquaduct are most venerable. What a beautiful, great objective it was to provide water for people by means of such a tremendous construction."

Goethe, Rome, November 11, 1786
life, rock formations, social customs, and even the weather patterns. While sketching Raphael's Villa Madama (Figure 33), he took notes on the difference in form between vegetation in a semi-tropical zone and that of his own temperate climate. Concerning his wide base of learning experience, he compared himself to an architect:

I am like an architect who wants to build a tower, but has laid a bad foundation. Before it is too late, he realizes it and gladly tears down what he has already brought out of the earth. He wants to enlarge and refine the plan, to prepare the ground, and already looks forward to the stability of the future building.

*Die Resten der grossen Wasserleitung sind hoechst ehrwuerdig Der schoene, grosse Zweck, ein Volk zu traenken durch eine so ungeheure Anstalt.

**Ich bin wie ein Baumeister, der einen Turm auffuehren wollte und ein schlechtes Fundament gelegt hatte; er wird es noch beizeiten gewahr und bricht gern wieder ab, was er schon aus der Erde gebracht hat, seinen Grundriss sucht er zu erweitern, zu veredeln, sich seines Grundes mehr zu versichern, und freut sich schon im voraus der gewissern Festigkeit des kuenftigen Baues.
While in Rome, he associated with a group of artists, among them Philip Hackert (1737-1807), Angelika Kauffmann (1741-1807), Wilhelm Tischbein (1751-1829), and Heinrich Meyer (1760-1832), who were his frequent travel companions. The portraits they did of Goethe show the contrasting aspects of his personality. In Tischbein's "Goethe at the window of his apartment on the Corso," (1787) (Figure 34), he is shown in a relaxed contemplative mood characterizing his mode of passive observation. Kauffmann’s drawing of "The Muses Around Goethe's Bust" (Figure 35), as well as Tischbein's "Goethe in the Countryside" (Figure 1) show a more classical pretentious pose. Goethe greatly enjoyed their companionship on trips, often enlisting their advice and assistance in improving his sketches.

Along with help from his artist friends, Goethe took lessons in perspective drawing (Figure 37). He also copied the technique of artists he admired as evidenced by his sketch, "A Corinthian Capital after G. Piranesi's Le Antichita' Romane" (Figure 36). Luckily enough for posterity, Goethe realized his dream of becoming an artist himself was unrealistic and that his natural talents lay elsewhere: "I am too old for the fine arts and so whether I dabble around a little bit is one and the same. My thirst is quenched, I am on the right track with observation and study; my pleasure thereby is peaceful and moderate."*54*

After his long stay in Rome, he headed south for Naples in the company of Tischbein. From there they made an excursion in March 1787 to Pompeii.


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34. Goethe At The Window of His Apartment on the Corso.

35. The Muses Around Goethe's Bust.
36. Corinthian Capital (after Piranesi), Drawing: Goethe, c. 1787.

37. Two Point Perspective, Drawing: Goethe, c. 1787.
Goethe was immediately struck by the small scale of the buildings and simple windowless houses. He had previously noticed this house type in the area around Naples, consisting of a one-story windowless structure with only one door facing the street from which to get light. He recognized the precedence for the type from his observation of Pompeii where even the villas seemed: "more like models and doll houses rather than buildings."

Goethe's next major architectural experience occurred in Paestum (Figure 38) in the company of the landscape artist Christoph Heinrich Kniep (1755-1825). The force of this experience is typical of his approach to art and architecture. When he concentrated on one type of form, he entirely overlooked everything else, and would be taken by surprise when something new broke into his consciousness. This is how Strasbourg affected him in the context of Neoclassicism, Palladio in the context of Gothic, and now, Greek architecture in the context of Roman.

By the time Goethe reached the Temple of Segesta in Sicily on April 20, 1787, he exhibited a much more receptive orientation to and knowledge of Greek architecture. He discussed in detail the clues indicating that the temple had never been completed, requiring insight into the methods of Greek construction.

In Girgenti (now called Aggrigentum) (Figure 39), Goethe appreciated the more mature style of the temples compared to those of Paestum. He was especially interested in the materials both of the surrounding terrain of the temples themselves, noting the character of their deterioration and lamented some insensitive attempts at restoration.

He was fascinated by the process of aging and the extent to which the original intent could still be conveyed by the ruins. In an analogy to organic decay, he described the ruins of the Temple of Jupiter as lying "scattered far and
"At first sight they excited nothing but stupefaction. I found myself in a world which was completely strange to me. In their evolution from austerity to charm, the centuries have simultaneously shaped and even created a different man. Our eyes and, through them, our whole sensibility have become so conditioned to a more slender style of architecture that these crowded masses of stumpy, conical columns appear offensive and even terrifying. But I pulled myself together, remembered the history of art thought of the age with which this architecture was in harmony, called up images in mind of the austere style of sculpture—and in less than an hour I found myself reconciled to them and even thanking my guardian angel for having allowed me to see these well-preserved remains with my own eyes. Reproductions give a false impression: architectural designs make them look more elegant and drawings in perspective more ponderous than they really are. It is only by walking through them and round them that one can attune one's life to theirs and experience the emotional effect which the architect intended." 57

Goethe, Paestum, March 23, 1787
38. Temple of Neptune, Paestum, Etching: Piranesi, 1777.
"This temple (Temple of Juno) stands on a foundation of weathered rock. From this point the city wall ran due east along the edge of a limestone hill which falls in precipices to the shore plain. The sea which once washed the base of these cliffs must have receded to its present shoreline in a fairly remote age. The city walls were partly built of quarried stone and partly hewn out of the solid rock. Behind those walls rose the temple. It is easy to imagine what a stupendous sight the rising tiers of Girgenti must have looked from the sea." 

Goethe, Girgenti, April 25, 1787
wide like the disjointed bones of a gigantic skeleton, while the Temple of Hercules "on the other hand, still reveals traces of classic symmetry." 

Goethe and Kniep reached Taormina on May 7 and spent the day exploring and sketching the Greek theater (Figure 40) just outside of town. Goethe immediately commented on the degree of collaboration between art and nature, which he realized was the essence of Greek architecture:

After climbing the steep cliffs near the sea, one reaches two summits, connected by a half-circle. Whatever shape it may have had originally, Art has assisted Nature to build this semicircle which held the amphi-theater audience. Walls and other structures of brick, were added to provide the necessary passages and halls. The proscenium was built in a diagonal at the foot of the tiered half-circle, stretching from cliff to cliff to complete a stupendous work of Art and Nature.

His sketch shows the reconstructed theater integrated into both the immediate terrain and the surrounding landscape, forming a dramatic backstop to the stage.

Goethe acclimated himself quickly to the Greek architecture, focusing in on the creative idea behind it. He became sensitive to its proportional harmony (Figures 41, 42) and adaption of the type to its context which he perceives in a more elemental form in Greek architecture compared with the Roman. Already in Rome, with respect to Greek art, he had wondered at the process of their creativity:

What was the process by which these incomparable artists (the Greeks) evolved from the human body the circle of their god-like shapes, a perfect circle from which not one essential, incidental or transitional feature was lacking? My instinct tells me that they followed the same laws as Nature, and I believe I am on the track of these. But there is something else involved as well which I would not know how to express.

The Greeks' use of one type form to produce a variety of representations appealed directly to Goethe's morphological view of architecture as an analogy to nature:
"If one sits down where the topmost spectators sat, one has to admit that no audience in any other theater ever beheld such a view. Citadels stand perched on higher cliffs to the right; down below lies the town. Though these buildings are of a much later date, similar ones probably stood in the same places in older days. Straight ahead one sees the long ridge of Etna, to the left the coast line as far as Catania or even Syracuse, and the whole panorama is capped by the huge fuming, fiery mountain, the look of which, tempered by distance and atmosphere is, however, more friendly than forbidding."  

Goethe, Taormina, May 7, 1787
40. Taormina Theater (shown restored), Drawing: Goethe, c. 1787.
Observing the history of architecture among the Greeks, one can see that it was to their advantage that they unremittingly beat the same path and thereby trained and refined their sense. The doric temples of Sicily and the mainland of Greece are all based on one idea and yet are so very different from one another.  

Through his travels, and even after his decision not to become an artist, Goethe continued to sketch avidly often with the help and encouragement of his artist companions. Not only his architectural sketches, but also his landscapes reveal an underlying search for form. "Mt. Vesuvius from the Coast" (Figure 43) and "A Sicilian Mountain Landscape" (Figure 44), reflect a keen

*Bei Betrachtung der Geschichte der Baukunst unter den Griechen sieht man, dass es ihr Vortheil war, dass sie sich unablässig in einen engen Kreise herumdrehten und dadurch ihren Sinn uebten und verfeinerten; die dorischen Tempel von Sicilian und Grossgriechenland sind alle nach einer Idee aufgebaut und doch so sehr verschieden voneinander.
43. Vesuvius From the Coast, Drawing: Goethe, c. 1787.

44. Sicilian Mountain Landscape, Drawing: Goethe, 1787.
interest in how rock type affects the characteristic forms of the landscape. Throughout his journal Goethe makes reference to the interactive nature of his observations:

I cannot repeat often enough how much my hard-won knowledge of those natural things, which man takes as his raw material and transforms to suit his needs, helps me to get a clearer idea of the craftsman's technique. Just as my knowledge of mountains and the minerals extracted from them is of great advantage to me in my study of architecture.65

In "A view of the Bay of Taormina from Mt. Etna" (Figure 45), the form of cloud, smoke and distant mountain are each simply rendered in accordance with their inner character much in the spirit of Japanese prints. Goethe's love of chiaroscuro is revealed in "An Italian Coastal Landscape Under a Full Moon" (Figure 46). The polar entities of light and dark reduce the complexity of natural form to its most basic level, in which all the diverse objects merge into a unity of expression. He had earlier experienced this effect at Strasbourg Cathedral:

How often has the twilight, with its friendly stillness, refreshed my eye and with wide-eyed exploration, when it made the numberless parts melt into whole masses; and how, simple and great, these masses stood before my soul and my power rapturously unfolded in enjoyment and understanding.66

Drawing was important to Goethe as a means of expression and a learning tool. He considered it the language of nature: "We ought to talk less and draw more. I, personally, should like to renounce speech altogether and, like organic nature, communicate everything I have to say in sketches."67

For the remainder of his journey, Goethe continued to sketch and study art, architecture, botany, geology, sociology; all from his unique point of view. During this period, he was also busy on a number of his novels and plays, including Faust. On April 23, 1788, he departed Rome on the long journey back
45. A View of the Bay of Taormina From Mt. Etna, Drawing, Goethe, 1787.

46. An Italian Coastal Landscape Under A Full Moon, Drawing: Goethe, 1787.
to Weimar. Upon his return, Duke Carl August relieved him of the burden of all his governmental duties, but he retained all honors and titles. After a period of intense collecting, learning, and experience, Goethe was ready for a long period of ordering and synthesis.
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1. Evolution of Doric Order.
One can hardly do without the architectural primers of the Masters from the 15th and 16th centuries. Several parts of Serlio's work are quite useful. Palladio's is ingenious and charming; and probably the best in terms of the appropriate application of architectonic invention. Scamozzi's the most complete, sound, and excellent work that architecture has ever produced.1*

Goethe, in a letter to Schleusner, September 22, 1797

CHAPTER V
TOWARDS A NEW THEORY OF ARCHITECTURE

The years immediately following Goethe's return from Italy were a time of relative domesticity. A month after arriving in Weimar, resigned to the futility of his love for Frau von Stein, he set up house with Christian Vulpius, a young country girl. Their son was born on Christmas of the following year.2

No longer encumbered with his previous government duties, he became increasingly active in the Duchy's scientific and artistic institutions, to which he was later appointed Director. He was also involved with ordering and analyzing his experiences in Italy in preparation for a possible written work at which he hinted in a letter to Johann Auguste Heyne (1769-1831) in July 1788:

If I were inclined to put something down on paper, it would be the very simplest things first. For example, to what degree do the materials out of which a work is made determine whether the artist forms it in one way and not another. Thus, different types of stone provide insight into architecture. Every change

of materials and mechanism modifies and limits the work of art differently.3*

He did exactly that in his essay Material in the Formative Arts (Material der Bildenden Kunst). Here he discusses the importance of the materials for artists; how the nature of the material partially predetermines the resulting form as well as the will of the artist instilling form into the material. The degree to which the artist works on a knowledge of material's characteristics affects the success of the work. The more effort expended forcing the material into an unsuitable form, the less pleasing the result is:

No work of art is absolute, even if it is also produced by the greatest, most accomplished artist. Try as he may to become Lord of the material in which he works, nevertheless, he still cannot change its nature. Therefore, he can only in a certain sense and under certain conditions, realize what he has in mind. And the artist most admirable in his medium will always be the one whose power of innovation and imagination is simultaneously linked to the material in which he works.4**

This is then followed by an example showing how the natural state of a material might predetermine the type of form likely to be chosen by the artist.

In the essay Architecture, published at the same time in Der Teutsche Merkur, Goethe takes the interaction of the artist and his materials one step further and applies it to the art of building. In the transformation of an

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*Wenn ich geneigt waere etwas auf das Papier zu bringen, so waeren es vorest sehr einfache Sachen, z.B. inwiefern die Materie, woraus gebildet worden, den klugen Kuenstler bestimmt, das Werk so und nicht anders zu bilden. So geben die verschiedenen Steinarten gar artige Aufschluesse ueber Baukunst, jede Veraenderung des Materials und des Mechanismus gibt dem Kunstwerke eine andere Bestimmung und Beschraenkung.

**Kein Kunstwerk ist unbedingt, wenn as auch der groesste und geuebteste Kuenstler verfertigt: er mag sich noch so sehr zum Herrn der Materie machen, in welcher er arbeitet, so kann er doch ihre Natur nicht veraendern. Er kann also nur in einem gewissen Sinne und unter einer gewissen Bedingung das hervorbringen, was er im Sinne hat, und es wird derjenige Kuenstler in seiner Art immer der trefflichsste sein, dessen Erfindungs- und Einbildungskraft sich gleichsam unmittelbar mit der Materie verbindet, in welcher er zu arbeiten hat.
architectural type, Goethe was interested in what degree materials affect the nature of the metamorphosis. The catalyst for the essay is what Goethe called Vitruvius' 'Fairytale of the Hut', the prototypical wooden hut from which the Greek temple is supposed to have evolved (Figure 1), which was generally accepted among architectural theorists at the time.

Goethe believed that the explanation lay closer at hand. The rugged vernacular form of the original ceremonial structure over time came to be accepted as the norm, and beloved in and of itself. As stone began to be used as a building material in times of greater prosperity, the Doric order was born out of faithful imitation of the original wooden structure. As a result of the new material, the form was adjusted, reflecting the characteristics of stone construction and eventually, evolving into the more slender and graceful Ionic order.

Then, in characteristic fashion he derived a general formative principle from this observation:

That such a building (namely a wooden temple) became a model through the devotion of the people after which another was built out of an entirely different material is a fate man must experience in hundreds of other cases.

In the second part of the essay, he again applied this principle to the transformation of the type in Gothic architecture. He believed that, similarly to the Greek temple, the Gothic cathedral originally derived from wooden construction, in this case the decorated woodwork originally used in altars, chapels, etc. After the power and wealth of the church grew, this began to be imitated in masonry. At this point, Goethe, undoubtedly sensitive due to the

*Dass ein solches Gebaeude (naemlich ein Holztempel), durch die Andacht der Voelker geheiligt, zum Muster ward, wonach ein anderes, von einer ganz andern Materie aufgufuehrt wurde, ist ein Schicksal, welches unser Menschengeschlecht in hundert andern Faellen erfahren musste.*

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backlash from his earlier essay on Strasbourg Cathedral, was careful to note that he in no way wholeheartedly endorsed Gothic architecture. To make his point both on his view of Gothic, as well as the incorrect use of materials, he used the example of Milan Cathedral:

Few understand how to apply an overall proportion to these tiny forms. This is how some monsters, like Milan Cathedral, come about, where an entire mountain of marble was transplanted at prohibitive cost and forced into such miserable forms that even today the poor stones cry out for mercy.

The next in this series of essays, Simple Imitation of Nature, Manner, Style (Einfache Nachahmung der Natur, Manier, Stil), published February 1789 in Der Teutsche Merkur, took a further step in the development of a theory of art and was also a prototype for Goethe's essay on architectural theory. As will be seen later, both his essays on art and architecture parallel each other, following the same underlying principles, but express them in a characteristic vocabulary, appropriate to the medium in question. In the essay, Goethe develops three levels in the production of art:

I. SIMPLE IMITATION OF NATURE

In this level, the outer appearance of an object is faithfully reproduced without interpretation. Goethe considered it the simplest and least demanding, but not without merit.

II. MANNER

This involves the first step towards abstraction. Faithful reproduction of detail is superceded by an interpretation according to what the artist wishes to express:

*Wenige verstanden diesen kleinlichen Formen unter sich ein Verhältnis zu geben; und dadurch wurden solche Ungeheuer wie der Dom zu Mailand, wo man einen ganzen Marmorberg mit ungeheuren Kosten versetzte und in die elendesten Formen gezwungen hat, ja noch taeglich die armen Steine quaelt,...
He (the artist) sees a harmony between objects which he can only introduce into a single picture by sacrificing the particular: he finds it tedious to spell out what is in front of him according to the letter; he invents his own method, makes his own language to express what his spirit has grasped in its own way, to give an object, which he has repeated often its own characteristic form, without having nature before him everytime he repeats it, or without recollecting it very vividly.12

III. STYLE

This is the highest level, where Goethe applies his own theory of poetics to the creation of poetry in art:

If art succeeds in creating, through the imitation of nature, a general language, and if a profound and accurate study teaches it more and more precisely, the characteristics of things, and how they subsist, so that it surveys the whole range of forms and can juxtapose and imitate various characteristic ones, then the highest level it can reach is style, the level on which it is equal to the highest achievements of man.13

Goethe first met Friedrich von Schiller (1759-1805) in September of 1788 in Rudolsstadt. Their friendship and ensuing interchange of ideas greatly affected Goethe's methodology and, as a result, his theory of architecture. Following a meeting of the Society of Naturalists in Jena, Goethe and Schiller engaged in a discussion over the relative merits of vivisection as a method of observing nature. Both were opposed to the mechanistic view of nature gained by an examination of unconnected parts. Goethe proposed another way of viewing nature as a living whole, rather than as divided and separated, and proceeded to sketch a symbolic plant representing the essence contained in every individual plant.14 This image of the archetypal plant had been so strong in Goethe's mind while in Italy, that in a letter written to Herder from Palermo he exclaimed: "Surely there must be such a thing; how else could I recognize that this or that form is a plant, if all were not formed according to a model?"15
Goethe's perception of this image was so real as to constitute an experience. Schiller countered that it was not an experience, but an idea. This disagreement points out the nature of their opposing views. For Schiller, the world of ideas and experience were irrevocably separated, reflecting the Kantian legacy which Goethe instinctively rejected. Goethe at first considered Schiller a pompous Kantian and their difference in opinions almost cost them their friendship, but Goethe soon came to admire the logic and rigor of Schiller's thinking and often sought his advice.

For Goethe, the idea of a thing was an element present and active within an object, but only partially revealed at any one time. Therefore, in his approach to an object he sought its underlying essence through perceptual observation. This applied not only to nature, but to art and architecture as well.

At the same time, he was searching for the Urpflanze, or archetypal plant in Italian flora; he was also searching for the Urhaus, or archetypal hut in the history of Italian architecture. His preoccupation with this concept dates back to his studies of Laugier and Sulzer. It shows up in his essay inspired by Strasbourg Cathedral, in which he took issue with Laugier over the dogmatic definition of the derivation of classical architecture which excluded Gothic.

After this period of analysis and synthesis, Goethe was soon ready for another prolonged stay in Italy to gather more information. Together with the painter and art theorist, Johann Heinrich Meyer (1759-1832), he planned a second Italian Journey for 1795. There he intended to write with Meyer a history of Italian people, art, and architecture as an artistic counterpart to his theory of Metamorphosis. Precedence for this undertaking may have come from a variety of sources including Winckelmann with whose work he was well
acquainted, and Giambattista Vico (1668-1744), to whose writing he had been
introduced in Naples where he was given a copy of La Scienza Nuova.22

In preparation for his new expedition, Goethe studied the works of
Antonio Labacco, Serlio, Palladio and Scamozzi, among other.23 Names such as
Arnolfo di Cambio, Brunelleschi, Leon Battista Alberti, Bramante, Antonio da
Sangallo, and Giulio Romano, all of whose works he had so patently overlooked
before were no longer unknown to him.24

In formulating the outline of his own architectural theory, Goethe sought
Schiller's help.25 One of the problems was the question of what makes a building
a work of art. Schiller believed that Goethe's ideas on architecture corresponded
to his own aesthetic principles. In Schiller's explanation of Goethe's theory,
beautiful architecture was only an idea to which every individual work more or
less strives.26 A beautiful building, in Schiller's interpretation of Goethe's ideas,
could only exist when the functional element was not dominant in the outer
expression of the building.

Goethe, however, was approaching architecture from quite a different
standpoint. He was looking for a stable foundation from which to evaluate and
criticize architecture based on direct experience with the object. For him,
beauty in architecture was an objective experience manifested in the actual
works, to progressive degrees.

Goethe's concept of the Urhaus was composed of three primary
elements, the Base, the Wall, and the Roof, similar to Vitruvius' anthropomorphic
divisions. After a discussion with Goethe, Schiller explained this in a letter to
Wilhelm von Humboldt:

(Goethe) has said some interesting things about architecture
which I could have appropriated. You know his sound manner of
deriving the law from the object and of deducing its rules from the thing at hand. Now he is trying it here, too. From the three primary concepts, the Base, the Columns (walls, etc.) and Roof he extracts all the modifications that occur. The absurdities for him in architecture are nothing more than conflicts with the primary definitions of the elements.27*

Goethe sent Meyer on ahead to Italy to begin preparation for their work, hoping to follow soon. Unfortunately, due to political events and Meyer falling ill, Goethe decided not to go.28 The essay Architecture, 1795 is the only completed portion of this planned treatise,29 and constitutes his most important statement of his theory of architecture.

In Goethe's theory, architecture begins with the materials whose interaction with the idea produces the result. He had already developed this idea in reference to art in his earlier essay, Material in the Formative Arts. In every art the artist must be knowledgeable of the properties and characteristics of his materials. He must neither allow the material to dictate form nor manipulate the material too far beyond its inherent character. In other words, the artist must not be restricted by or dominate the materials.30

As in Simple Imitation of Nature, Manner, Style, Goethe divides the interaction of the material and the idea into three progressive levels: "Architecture presupposes a material which can be adapted to three sorts of use, in ascending order of importance."31

I. THE NEAREST PURPOSE (Der Naechste Zweck)

The requirement for this level is the simple fulfillment of a function;

*Über Baukunst... hat er (Goethe) manches Interessante gesagt, was ich mir habe zueignen koennen. Sie kennen seine solide Manier, immer von dem Objekt das Gesetz zu emfangen und aus der Sache heraus ihre Regeln abzuleiten. So versucht er es auch hier und aus den drei urspruenglichen Begriffen - der Base, der Saeule (Wand, Mauer und dergl.) und dem Dach, nimmt er alle Bestimmungen her, die hier vorkommen. Die Absurditaeten in der Baukunst sind ihm nichts als Widersprueche mit diesen urspruenglichen Bestimmungen der Teile.
a response to the Necessary (Das Notwendige). In his art theory it is analogous to the simple imitation of nature. A more diverse fulfillment of function results in the quality of Usefulness requiring some degree of craftsmanship (Das Nuetzliche). Only when the Necessary and Useful are phenomenally harmonious, is the level of art attained.\footnote{32}

At this level, the material still dominates the object. Goethe uses the example of the Etruscan masons (Figure 2) to point out his dividing line between building and architecture:

As long as the immediate purpose was the only object in view and the material was more in control than controlled, art was out of the question, and it is doubtful whether, in this sense, the Etruscans ever had an architecture. As long as large stones were laid, just as they were found, in every shape and direction, not even chance could point the builder's way to symmetry; he will have laid rectangular stones upon each other in horizontal rows for some time before it struck him that he should sort
them out, lay like against like, lay them symmetrically, or even make them all the same size.33

II. THE HIGHER PURPOSE (Der Hoheere Zweck)

But if the practice of building aspires to the name of art, it must, besides the necessary and the useful, produce objects harmonious to the senses. This sensible harmony is different in, and conditioned by, each art and it can only be judged within the framework of these conditions. They arise from the material, from the purpose and from the nature of the sense to which the whole must be harmonious.34

As with Manner in Goethe's art theory, this is accomplished by the introduction of harmony to orchestrate the various elements of the composition. By means of a proportional system, the parts can be given a relationship to the whole, transforming a mechanical object into an organism. Goethe had earlier expressed this idea in the essay on Strasbourg Cathedral: "Why art thou astonished?" he whispers toward me, "All these masses are there of necessity and dost thou not see them in all the churches of my town? Only I have raised their arbitrary proportions into harmony."35

The method by which this was applied is crucial in distinguishing Goethe's organic theory from its more classical predecessors:

It seems as though in the early period of architecture, the conception of Character which a building should have predominated over the concept of proportion (MASS), for Character cannot really be expressed by proportion (MASS), and we see from the measurements of actual buildings, how difficult it is to reduce their parts to numerical ratios. It was certainly no advantage to modern architecture when these ratios (according to which the different orders are to be set up), began to be taught, rather than indications of character.36

Thus, the quality of Character was a product of numerical proportions, but these proportions by themselves had no inherent Character. The dogmatic application of harmonic rules was foreign to Goethe's way of thinking. Contrary to Enlightenment theories, Goethe viewed proportional systems only as an aid in
the expression of the idea and not as prerequisite. Goethe understood proportion, not only in the visual, two-dimensional sense, but also in a spatial, three-dimensional sense, taking the theories of Winckelmann and Sulzer one step further.37 He viewed architecture as a creation in space whose harmonic proportions could also affect our sense of movement:

It might well be thought that as a fine art, architecture works for the eye alone, but it ought primarily and very little attention is paid to this - to work for the sense of movement in the human body. We experience a pleasurable sensation when we move in a dance according to certain laws; it ought to be possible to induce a similar sensation by leading a person blindfold through a well-built house.38

This ability simultaneously to affect all our senses forms the link to the third purpose of architecture.

III. THE HIGHEST PURPOSE (Der Hoechste Zweck)

Here Goethe makes his own unique contribution to architecture through the application of his poetic theory:

But here, too, appears the observation of the highest purpose of architecture, which undertakes if we may be allowed the expression, the super-satisfaction of the senses, and raises the cultivated mind to astonishment and rapture. This can only be effected by genius, which has mastered all the other demands, and this is the poetic part of architecture, the proper realm of invention.39

Analogous to Style in Goethe's theory of art, this level of achievement requires insight into the essence of the object whose subsequent expression can move along the range of ideas quoting forms from other appropriate systems to create a poetic statement.

The theory of Invention (Die Fiktion) presides here as did the theory of Proportion (Das Ebenmass) in the previous level of purpose. This quality of Invention was the result of the Appropriateness (Das Schickliche) of the Imitation (Die Nachahmung):
Architecture is not an art of imitation, but rather an autonomous art; yet at the highest level it cannot do without imitation. It carries over the qualities and appearance of one material into another: every order of columns for example, imitates building in wood; it carries over the characteristics of one building into another: for example, by the union of columns and pilasters with walls; and it does this for variety and richness. And just as it is always difficult for the artist to know whether he is doing the right thing here, so it is difficult for the connoisseur to know whether the right thing has been done.\textsuperscript{40}

Goethe uses a distinct set of words to describe his architectural theory, which corresponds to his art theory, but is specific to the art of architecture.\textsuperscript{41} Variety (Die Mannigfaltigkeit) with Character conveys the notion of richness and virtuosity within the confines of the original idea necessary for the attainment of this level. For Winckelmann, the concept of Variety was achieved through "depressions and elevations and through convex and concave lines."\textsuperscript{42}

Appropriateness is the key word in Goethe's theory. Sulzer defined: "... something as Appropriate, as that which isn't exactly necessary from the nature of a thing, but nevertheless naturally expected."\textsuperscript{43} * In his "Theory II, 1774" Sulzer explains:

The observance of the Appropriate and the avoidance of anything Inappropriate, is a talent that only the first rank artists in their respective medium have been given. Aside from the necessary artistic genius, this talent also belongs to the average human comprehension and power of judgement to a high degree. Horace the poet gives some excellent rules for how to avoid the Inappropriate and only for this reason his 'Ars Poetica' should be every poet's daily handbook.\textsuperscript{44}**

\textsuperscript{*}...dasjenige schiklich, was zwar nach der Natur der Sache nicht ganz nothwendig, aber doch...natuerlich erwartet wird...

\textsuperscript{**}Die Beobachtung des schiklichen, und Vermeidung alles Unschiklichen ist eine Gabe, die nur den ersten Kuenstlern in jeder Art, gegeben ist, die, ausser dem nothwendigen Kunstgenie, auch den allgemeinen Menschenverstand und allgemeine Beurteilungskraft in einem vorzuglichen Grad besitzen. Zur Vermeidung des Unschiklichen giebt Horaz dem Dichter viel fuertrefliche Regeln, und seine Ars poetica, sollte, auch blos in dieser Absicht, das taegliche Handbuch jedes Dichters seyn.
In his application of poetics to the highest purpose of architecture, Goethe also makes use of Horace's *Ars Poetica*. The concept of Appropriateness is related to Horace's concept of *Decet*, and the Greek theory of Mimesis, an issue prevalent in literary theory during Goethe's lifetime.45 Another contemporary influence may have been Francesco Milizia (1725-1798), a radical representative of the Theory of Imitation, about whom Goethe knew from a meeting of the Olympic Academy he attended in Vicenza concerning the age-old debate on whether Invention or Imitation was more advantageous in the Fine Arts.46 Goethe, in his own theory, took the middle road.47

Vitruvius is certainly Goethe's most obvious inspiration and Goethe's essay is in part a commentary on Vitruvius' theory.48 Vitruvius also stood in the tradition of Cicero, Horace, Quintilian, Plinius, and Aristotle.49 The levels of purpose correspond to Vitruvius' *Firmitas* (firmness), dealing with the choice of site, building materials, etc.; *Utilitas* (commodity), dealing with the type of building and its purpose; and *Venustas* (delight), dealing with the problem of architectonic beauty.50 In Goethe's system the Next Purpose already embodies *Firmitas* and *Utilitas*, while *Venustas* is contained in the Higher and Highest Purpose.51 Goethe, however, differed from Vitruvius in that he approached architecture from the intellectual process of creation.52

When Goethe utilizes the concept of Appropriateness as a means of criticising architecture, he is consistently concerned with a set of interrelated issues. The issues he addresses under the Appropriate refer to the interrelationship of form and function, transformation of the building type, adaptation of form to context, unity of composition, correlation of parts to the whole, etc.53 These can be traced back through his theory of art and poetry to the underlying scheme.
itself, Morphology, Goethe's philosophy of form, the key to his critical method.

He makes reference to this in a letter from Rome:

The principle by which I interpret works of art and unlock the secret which artists and art experts since the Renaissance have been laboriously trying to discover, seems to me sounder everytime I apply it. It is verily the egg of Columbus. Without going so far as to claim I know how to use such a master key properly, I find myself competent to discuss with artists the details of their work, to see what point they have reached and what their difficulties have been. My own door stands open and I stand on the threshold, but, alas, I have only time to peer into the temple before I must depart.54

Goethe's principles of morphology derive from a direct observation of nature herself. Describing the principles of creation in nature, Goethe reflects the emerging evolutionary thought as opposed to the prevailing mechanistic viewpoint: "Indeed, nature's productions are also subject to external restrictions, but with a corresponding counter-effect from within. In short, Matter acquires Form through animated exchange of exterior and interior forces."55*

His stay in Italy, surrounded by a whole new range of natural objects provided new validation for Goethe's ideas: "And it is no dream, no fantasy, it is the awareness of the essential form with which Nature is as it were, always toying and in the course of play, brings forth the infinite variety of life."56

The terms Goethe uses in his levels of form can be thought of as prototypes to his terminology in poetry, art, and architecture, and follow the same progressive sequence. At the lowest level is Matter (Der Stoff), followed by Content (Der Gehalt), culminating in Form (Die Form). Their interrelationship is concisely expressed in an aphorism: "Everyone sees Matter

*Die Produktionen der Natur erleiden zwar auch äussere Bedingungen, aber mit Gegenwirkung von innen. Kurz es ist hier ein lebendiges, Wirken von aussen und innen, wodurch der Stoff die Form erhaelt.
scattered about, yet only someone that is involved with it finds the Content, the Form is a secret of the master.\textsuperscript{57*}

The sequence of Matter, Content, and Form is not static and linear, but a dynamic and spiral one, further reflecting the departure from a mechanistic view of nature. This is essential in understanding the tripartite series in Goethe's applied theory. From his observation of nature, especially his research in preparation for the \textit{Metamorphosis of Plants}, Goethe derived two interactive principles constituting the driving formative force or \textit{Bildungstrieb} in \textit{Metamorphosis}, the principles of Polarity and Augmentation. In this regard, Matter and Content can be considered two polar forces, the result of their progressive interaction producing the Form. Matter represents the given context of physical reality, Content is the idea within nature or the mind: the type. Through their mutual opposition and fusion, a third reality, the Form, is created which is more than the sum of its parts.

Natural Law, for Goethe, provides the framework through which the idea reaches a phenomenal expression. Just as the underlying proportions within an organic object determine the character of its existence, so, too, the limitations in a work of art determine its greatness. These, then, no longer need be considered limitations but, rather, the means: "Only the complete knowledge of the laws and limitations of their art and the ability to maneuver within them and to utilize them made (these artists) so great."\textsuperscript{58**}

\*Den \textit{Stoff} sieht jedermann vor sich, den \textit{Gehalt} findet nur der, der etwas dazu zu tun hat, und die \textit{Form} ist ein Geheimnis der Meister.

\**Nur dass sie die Grenzen und Gesetze ihrer Kunst im hochsten Grade kannten und mit Leichtigkeit sich drin bewegten, sie ausuebten, macht sie so gross.
Goethe's morphological principle of Polarity underlies many of his more paradoxical aphorisms, the cryptic style of which often reflects a Taoist attitude:

Unconstrained minds will strive in vain,
for perfection's rarified heights.
Great achievement lies in discipline and order
Constraint first reveals the Master
Freedom comes only through law.59

Vergebens werden ungebundne Geister
Nach der Vollendung reiner Hohe streben.
Wer Grosses will muss sich zusammenraffen.
In der Beschraenkung zeigt sich erst der Meister,
Und das Gesetz nur kann uns Freiheit geben.

In describing the creative process of the poet, Goethe related his methodology in preparing his lyric work, West-easterly Divan to nature's morphological process:

The poet's discretion is mainly concerned with the Form; the world provides him the Matter all too generously, the Content springs spontaneously out of the depth of his innermost being. Both encounter each other unconsciously and ultimately it is unclear to which the richness belongs. Although already present, particularly in the Genius, the Form wants to be recognized and considered. Here discretion is necessary so that Form, Matter, and Content are sent to each other, joined together, and permeate each other.60*

This same morphological schema also constitutes the basis of Goethe's art theory:

Observing art in a higher sense, one can't help wishing that only the master would devote himself to it. Because the work of art should arise from genius, the artist should call forth Content and Form from the depth of his own being, maintaining control.

*Die Besonnenheit des Dichters bezieht sich eigentlich auf die Form, den Stoff gibt ihm die Welt nur allzu freigebig, der Gehalt entspringt freiwillig aus der Fuelle seines Innern; begegnen beide einander, und zuletzt weiss man nicht, wem eigentlich der Reichtum angehoeere. Aber die Form, ob sie schon vorzueglich im Genie liegt, will erkannt, will bedacht sein, und hier wird Besonnenheit erfordert, dass Form, Stoff, und Gehalt sich zueinander schicken, sich ineinander fuegen, sich ineinander durchdringen.
over the Matter and utilize the external influences only for his
development.61*

Thus, raw material is ordered and transformed into a work of art through the
artist's idea in a process analogous to the generation of an organic object in
nature:

As soon as the artist takes hold of any object of nature, it no
longer belongs to her realm. One could say that at that
moment, the artist creates by extracting from the object the
Meaningful, Characteristic, and Interesting or first instills in it
a higher worth. In this way, the human form, the more beautiful
proportions, the noble forms, and the higher characteristics are
first as it were impressed upon the object...62**

Goethe viewed all the arts with the same critical method. He judged
their merits by their individual characteristics while always keeping his schema
in mind. In his essay, Art and Handicraft (Kunst und Handwerk), he developed
the natural transformation of an object:

All the arts begin with the Necessary, yet it is not easy to have
something solely Necessary in our possession or in our use
without at the same time giving it a pleasant Shape, putting it
in an Appropriate place and placing it in a certain Relationship
with other things. The natural sense of the Fitness and the
Appropriateness which the first attempts at art brought forth
dare not be forgotten by the greatest Matter if he intends to
attain the highest level of art. This is closely related to the
sense of the Possible and Feasible which together, are actually
the basis of every art.63***

*Wenn man die Kunst in einem hoeheren Sinn betrachtet, so moechte man
wuenschen, dass nur Meister sich damit abgaeben...Denn das Kunstwerk soll aus
Genie entspringen, der Kuenstler soll Gehalt und Form aus der Tiefe seines
eigenen. Wesens hervorrufen, sich gegen den Stoff beherrschend verhalten und
sich der aeusseren Einfluesse nur zu seiner Ausbildung bedienen.

**Indem der Kuenstler irgendeinen Gegenstand der Natur ergreift, so gehoert
dieser schon nicht mehr der Natur an, ja man kann sagen, dass der Kuenstler ihn
in diesem Augenblick erschaffe, indem er ihm das Bedeutende,
Charakteristische, Interessante abgewinnt, oder vielmehr erst den hoeheren Wert
hineinlegt. Auf diese Art werden der menschlichen Gestalt die schoeneren.

***Alle Kuenste fangen von dem Nothwendigen an; allein es ist nicht leicht etwas
Nothwendiges in unserm Besitz oder zu unserm Gebrauch, dem wir nicht zugleich
eine angenehme Gestalt geben, es an einen schicklichen Platz u. mit anderen
The same held true for architecture. This also provides the clue for Goethe's lifelong fascination and involvement with architecture. In a letter to Heinrich Meyer in Rome, Goethe indicated the supremacy architecture enjoyed within his morphological conception of art: "nowhere is the primary need and the highest purpose so closely combined as in Architecture: man's house is half of his life; the place where he settles, the air he breathes, all determine his existence."64*

In the medium of architecture, the Matter becomes the Materials and Context, the Nearest Purpose. The Higher Purpose embodies the Content, the idea-type which reaches expression through the laws of proportion. Their subsequent interaction through the force of the architect's genius produces the Form, the Highest Purpose, the level of poetry in architecture. It is in reference to this that Goethe writes: "(Architecture) proceeds most swiftly and directly from the Material to the Form, from Matter to manifestation and thereby reflects the highest faculty in man."65** Herein lays the explanation for Goethe's relationship to architecture.

Observation was the vehicle through which Goethe acquired experience. He believed that in natural science, all knowledge begins and ends with the

***Dingen in ein gewisses Verhaeltniss setzen koennen. Diesses natuerliche Gefuehl des Gehoerigen und Schicklichen welches die ersten Versuche von Kunst hervorbringt, darf den letzten Meister nicht verlassen, welcher die hoechste Stufe der Kunst besteigen will; es ist so nahe mit dem Gefuehl des Moeglichen und Thulichen verknuepft und diese zusammen sind eigentlich die Base von jeder Kunst.

*niurgeonst ist das erste Beduerfniss und der hoechste Zweck so nah verbunden (wie bei der Baukunst): des Menschen Wohnung ist sein halbes Leben, der Ort, wo er sich niederlaesst, die Luft, die er einathmet, bestimmen seine Existenz.

**Sie (Die Baukunst) fuehrt am schnellsten und unmittelbarsten von der Materie zur Form von Stoff zur Erscheinung und entspricht dadurch der hoechsten Anlage im Menschen.

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observation of Nature. For him, observation itself was a science following a progressive transformation like any other:

The mere looking at a thing cannot bring anything to light. Every looking turns into a reflection, every reflection into a speculation, every speculation into a connection. So you could say that we already theorize with every attentive glimpse into the world.

This also explains his insistence on dealing directly with the objects of architecture.

As with natural phenomena, Goethe proceeded from observation to ordering and classifying the works of architecture, a procedure which had first occurred to him in Italy. He did a number of drawings during the preparation for his second Italian journey, which parallel his theory, illustrating the transformation of the type-form (Figure 3) and the definition and proportion of the basic elements of base, wall, and roof (Figures 4, 5). Many of his drawings reveal a renewed study of Palladio's villas (Figures 6, 7) and a further study of the classical orders as expressed in different building elements (Figures 8, 9).

The building types represented probably derive from Palladio's own designs (Figures 10, 11). It was Palladio's ability to operate so effortlessly on the poetic level of architecture that drew Goethe to his work. In a letter to Meyer on December 30, 1795, Goethe remarks: "The more one studies Palladio, the more incomprehensible this man's genius, mastery, richness, versatility, and gracefulness becomes."

*Das blosse Ansehen einer Sache kann uns nicht foerdern. Jedes Ansehen geht ueber in ein Betrachten, jedes Betrachten in ein Sinnen, jedes Sinnen in ein Verknuepfen, und so kann man sagen, dass wir schon bei jedem aufmerksamen Blick in die Welt theoretisieren.

**Je mehr man den Palladio studiert, je unbegreiflicher wird einem das Genie, die Meisterschaft, der Reichtum, die Versatilitaet und Grazie dieses Mannes.
3. Variations of a Type, Drawing: Goethe
4. Proportion of a Podium, Drawing: Goethe, c. 1795.

5. Doric Order Demonstrated in a House, Drawing: Goethe, c. 1795.

7. Facade and Plan, Drawing: Goethe, c. 1795.
8. Window Frames in Doric & Composition Order, Drawing: Goethe, c. 1795.

10. Side Facade of a Villa, Palladio.

11. Principal Facade of a Villa, Palladio.
In a sense, the goal of Goethe's project in Italy was to write a 'Critique of the Senses' for the Formative Arts following the model set up in Kant's *Critique of Pure Reason*. For Goethe, poetry helped explain Nature while the study of Nature led to an understanding of art. In his theories he sought the outline of the border between art and science, and between art and nature, which Kant's logical system denied. Goethe believed that our sensibilities could provide us with the understanding of this bridge. In many ways, his approach to science as a surrogate for art approached the aesthetic of Leonardo and Düerer.

Goethe first attempted an explanation of the intellectual jump from organic principles to aesthetic principles in an essay entitled: To what degree, the idea that beauty is perfect completion with freedom, could be applied to organic Nature (Inwiefern die Idee: Schoenheit sei Vollkommenheit mit Freiheit auf organische Naturen angewendet werden koenne). It comprised a playful attempt to apply Schiller's aesthetic ideas to his own expertise in the natural sciences, illustrating the 'seamless' boundary between a morphological and aesthetic way of thinking. The aesthetic appreciation of an object is then directly related to morphological principles. How well does form respond to function and with what degree of elegance does form transcend function through proportion and imitation to become a beautiful work of art?

Goethe's theory is unique in that it gathers experience from the world of phenomena and, while following an organic process common to them all, not only accepts but uses the individual characteristics and limitations of the medium in question. As it was developed in preparation for a treatise on art criticism, he was more interested in the process than in the solution. Far from an abstract
intellectual approach with a predetermined outcome, it was a living system requiring direct interaction with the objects themselves.
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47. Ibid., p. 18.


49. Ibid., p. 155.

51. Ibid., p. 103.


62. Ibid., p. 32.


70. Ibid., p. 26.

71. Ibid., p. 27.

72. Ibid., p. 19.

LIST OF ILLUSTRATIONS

1. Evolution of Doric Order.
3. Variations of a Type.
10. Side Facade of a Villa, Projects (No. 15), A. Palladio.
11. Principal Facade of a Villa, Project (No. 15), A. Palladio.
1. Main Entrance, House on the Frauenplan, Weimar.
For, in man there is a formative nature which reveals its activity when his existence is secure. As soon as he has nothing to worry about or fear, the demi-god, in his composure, reaches out for Matter, in order to breathe his living spirit into it.1*

Goethe, In a Letter to Frau von Mueller, November 4, 1823

CHAPTER VI
APPLICATION OF PRINCIPLES: THE 'WEIMAR SCHOOL'

It is no coincidence that soon after Goethe's return from Italy, the building activity in Weimar, previously stagnant, began to prosper.2 After his experience with the art and architecture of Italy, and his synthesis of morphology and a theory of art, the next step was to test these ideas in practice. His efforts to steer the direction of contemporary arts in Open Competitions sponsored by the Weimar 'Friends of the Arts' was to no avail, as the artists paid little attention to his suggestions and guidelines.3 His sponsorship and personal intervention in the Weimar building scene, however, had a much more positive and lasting effect. It is not surprising to learn that Goethe spent the greatest amount of his time, in the years after his return from Italy, involved in practical building activities.4

In the first Weimar years, Goethe had already taken on the responsibility of supervising what building activity there was, but due to his lack of knowledge

* Denn in dem Menschen ist eine bildende Natur, die gleich sich taetig beweist, wenn seine Existenz gesichert ist. Sobald er nichts zu sorgen und zu fuerchten hat, greift der Halbgott, wirksam in seiner Ruhe, umher nach Stoff, ihm seinen Geist einzuhauchen.

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in this area, a practical result was never realized.\(^5\) Realization of this may have been a contributive factor towards his investigation into the theoretical base of architecture. Yet in contrast to many of the theorists, Goethe never lost touch with the practical aspects of building.\(^6\)

The needs of this small provincial Duchy had remained mostly the same for centuries. The unique way in which Goethe handled them gives a clear indication of the novelty of approach and the degree to which he influenced the architects under his direction. Although Weimar could hardly boast the types of projects then being built in Berlin, the clarity of purpose in the projects built under Goethe's supervision are more noteworthy in their contribution towards the development of an architecture more responsive to the emerging modern age.

**House on The Frauenplan**

Goethe strongly believed in the effect the environment had on shaping the mind. Knowledge of a particular environment could provide insight into the way of thinking of those who lived within it. This principle is elegantly expressed in relationship to poetry:

Who Poetry would understand
Must go into a poetryland
Who a Poet would understand
Must go into the Poet's land\(^7\)

Wer das Dichten will verstehen,
Muss ins Land der Dichtung gehen;
Wer den Dichter will verstehen,
Muss in Dichters Lande gehen

Taking Goethe's own advice, the first place to search for a better understanding of his architectural theory would be where he spent the majority of time, his own house in Weimar.

The **Haus am Frauenplan** (Figure 2), a large baroque townhouse in the center of Weimar, was built in 1709 by the court architect, Johann Muetzel (1647-1717) for a presumably wealthy merchant.\(^8\) Goethe first moved in as a

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Why stand they there outside?
The doors are open wide.
If they'll come in and see
Right welcome they will be.  

Goethe, Under Etching of House on the Frauenplan
tenant in June 1782, so he was familiar with the house long before going to Italy. After his return, he moved back there and, in 1792, received the house as a gift from the Duke and lived there for the remainder of his life.\textsuperscript{10}

The baroque character of the interior space had never appealed to Goethe, and he immediately began plans for renovation, indicating that he had been considering it for quite some time. Using Palladio as a guide, he designed an ideal floor plan (Figure 4), which radically departed from the original (Figure 3). This was then adapted to the actual conditions (Figure 5).

Goethe had no difficulties enlisting the help of artists, architects, and craftsmen, then in Weimar working on larger projects. Among them were the architect, Christian Friedrich Schuricht (1753-1832), and Goethe's friend, the artist Heinrich Meyer, but all the major decisions were made by the poet making the result truly representative of Goethe's personal ideas on architecture.\textsuperscript{11}

Work on the house lasted from 1792-1798, indicating the degree to which the house was altered. Describing the process of renovating his new house, Goethe remarked to the Duke: "With the greatest Philistine comfort, I set myself in my nest, after sliding around several times in a circle, the way a greyhound does, in order to give my house a form analogous to my body."\textsuperscript{12*}

The first addition was a main stair to replace the narrow utilitarian stair in the original design. During his travels in Italy, Goethe had sketched a variety of stairs, often in perspective, perhaps in anticipation of their subsequent realization.\textsuperscript{13} Goethe's design for the stair, consisting of perspective views and a

\*Mit der groessten Philister-Behaglichkeit sitze ich in meinen Nest, nachdem ich mich vorher nach Art der Windhunde mehrmals herumgedreht habe, um ihm eine meinem Koerper analoge Form zu geben.
3. Ground Floor Plan before Renovation.

4. Ideal Plan, for Renovation, Design Sketch: Goethe, c. 1802.
5. First and Second Floor Plans after Renovation.
section (Figures 6, 7) reflects a strong Italian influence. The simplicity and clarity, quite unusual for the period, reflects Goethe's primary concern for the underlying form.

The gesture of the stairs (Figure 8) is welcoming, although formal. The stairwell is illuminated by three large openings suggesting the facade of a temple, which together with the bright pastel colors, creates an atmosphere of festivity and anticipation. Low risers slow down passage through the space altering perception of scale, creating a feeling of being larger than life. To accent the expression of hospitality, the word Salve, meaning Hail! or Welcome!, has been engraved into the wood floor just in front of the threshold leading to the suite of reception rooms. A fresco over the stairwell has the effect of a skylight, raising the apparent height of the space. It depicts the Goddess Iris in the heavens grasping the colors of the rainbow, referring to Goethe's color theory, a major theme throughout the house. The small amount of ornament consists of a triglyph frieze framing the perimeter of the ceiling and several niches, allowing the clarity of form to dominate.

In addition to these, Goethe also designed a second stair (Figure 9), leading from the second floor to the mansard level connecting to the main stair. These were based on the oval stairs Palladio designed in La Convento della Carita (Figure 10) (next to the sacristy) (Figure 17, Chapter IV), with which Goethe had been so enthralled in Venice: "I cannot forget the Carita; he (Palladio) installed a set of stairs there which he praises himself and which truly are very beautiful." Again, their simple execution (Figure 11) reflects Goethe's primary interest in the elegant response of form to function. Palladio's stairs (Figure 12) are extremely stark, achieving their elegance through the simplicity and purity of their form.

7. Section through Stairwell, Design Sketch: Goethe, 1792.

10. Stairs in the Convento della Carita (H), Palladio.

A unique addition to the house was the Bridge Room (Brueckenzimmer) connecting the front of the house to the rear, spanning the service courtyard. With its progressive sequence of antique artifacts hung along the wall, it was also a symbolic bridge spanning the history of art. The fresco on the vaulted ceiling and accompanying frieze (Figure 14) were painted by Conray Horny (1764–1807), and were most likely inspired by those found in the Roman mausoleums of Pompeii and Herculaneum (Figure 13).

Goethe was intrigued with the effect such ornamentation could have on the character of a room. In an essay published in the Teutsche Merkur in February 1789, Concerning Arabesques* (Von Arabesken) he describes how ornament can modulate space and, in conjunction with other devices, create a desired mood:

As we have already noted, such a vaulted passage delights the eye through its smoothness, shine, color, and purity of form. Light decoration and pleasing ornament contrast, as it were, with the large simple architectonic masses, transforming the vault into an arbour, a dark room into a lively world.**

The remaining rooms were left more or less in their original configuration, although each was treated so as to express the appropriate character of each space. This was accomplished by ornament, art, and sculpture. The Juno Room (Figure 15), for example, intended for receptions, readings, music recitals, etc., was profusely decorated in a festive manner.21

*We designate with this name an arbitrary and tasteful graphic grouping of the most diverse objects, in order to decorate the interior wall of a building.19 (Wir bezeichnen mit diesem Namen eine willkuerliche und geschmackvolle malerische Zusammenstellung der mannigfaltigsten Gegenstaende, um die innern Waende eines Gebaeudes zu verzieren.)

**Schon also, wie gesagt, ergoetzte ein solcher gewoelbter Gang durch Glaette, Glanz, Farbe, Reinlichkeit das Auge. Die leichte Zierde, der gefaellige Schmuck kontrastierte gleichsam mit den grossen, einfachen, architektonischen Massen, machte ein Gewoeuble zur Laube und einen dunklen Saal zur bunten Welt.
13. Ceiling Fresco, Roman Mausoleum.

14. Fresco and Frieze, Bridge Room.
Color played a major role in the determination of character, providing Goethe the opportunity to try out some of his ideas on the sensual effect of colors. The bulk of the work for his Theory of Colors (Farbenlehre) was accomplished during these years.

The Reception Room, rendered in a gray-blue was intended to create an atmosphere of formality and distance. Concerning the color blue in his theoretical treatise Goethe notes: "Rooms which are hung with pure blue, appear in some degree larger, but at the same time empty and cold." Thus, Goethe employed this color both to expand the perceptual space and also to set what he considered to be the appropriate mood for the activities there.

The Dining Room, on the other hand, was painted bright yellow. Goethe greatly enjoyed a festive dinner atmosphere, along with good food and wine. The color yellow for him was associated with a sense of comfort and cheerfulness: "In its (yellow) highest purity it always carries with it the nature of brightness, and has a serene, gay, softly exciting character."

In contrast to the more formal public rooms, Goethe's private spaces are rendered in a light green. The resulting feeling of contemplation, satisfaction, and repose was well-suited for his study and bedroom:

The eye experiences a distinctly grateful impression from this color (green). If the two elementary colors (yellow and blue) are mixed in perfect equality so that neither predominates the eye and the mind repose on the result of this junction as upon a simple color. The beholder has neither the wish nor the power to imagine a state beyond it. Hence, for rooms to live in constantly the green color is most generally selected.

The overall treatment of these two rooms, along with the choice of color is much simpler, straightforward and even stark compared to the more elaborate public rooms (Figures 15-19), reflecting the environment in which he felt most at home in, that of his small garden house in the park.
16. Ceiling Room.

17. Yellow Room (Dining Room).

18. Goethe's Study.

19. Goethe's Bedroom.
The order in which the colors themselves were perceived was also an important consideration in the creation of the desired character. In the sequence of rooms en suite, the colors produced a harmonic series as one moved from one room to the next, to provide for what Goethe referred to as the eye's 'need for Wholeness'.

According to Goethe's aesthetic theory, the fulfillment of this physiological response in the transition from one room to another induced a positive aesthetic response:

Simple, therefore, as these strictly harmonious contrasts are, as presented to us in the narrow circle (Figure 20) the hint is important that nature tends to emancipate the sense from confined impressions by suggesting and producing the whole, and that in this instance we have a natural phenomenon immediately applicable to aesthetic purposes.

Color harmonies were also introduced in the juxtaposition of art objects within the rooms and in the choice of colors for the wall decorations.

To reflect the changes in the interior, Goethe also planned to remodel the exterior, the baroque overtones of which he had never liked. Johann
Friedrich Rudolf Steiner (1742-1804), the municipal architect, helped prepare the drawings (Figure 21). The first floor was to be finished in squared stone with a horizontal cornice marking the beginning of the second story. The mansard roof was also to be raised to accommodate a full story. The resulting facade was also designed to articulate the basic elements of base, wall, and roof through the treatment of materials. Unfortunately, it was never executed. The rear facade (Figure 22) offers a pleasant contrast to the more formal street facade, and Goethe left it largely unaltered. This, together with the large rambling garden, has somewhat the image of an English country cottage.
The Weimar Residential Palace

On May 6, 1774, the Weimar Residential Palace burned down, leaving only the foundation and bases of the bearing walls intact.\(^33\) The resulting commission to redesign the Palace under Goethe's direction provided an opportunity to assemble architects, artists, and craftsmen in Weimar who could also be employed on the more routine projects. The size of this commission was a considerable strain on the small Duchy, especially after the excessive expenditures of Carl August's Father.\(^34\) Goethe's duty as Director of the Treasury was to attempt to reform the tax laws, enact cutbacks in military spending, and improve trade and production. The difficulties and obstacles he encountered were also contributing factors for Goethe's sudden flight to Italy.\(^35\)

Upon his return, Goethe was appointed Chairman of the Building Commission. He realized at once the necessity for a full-time architect to handle a project of this size, as well as the numerous smaller projects which had long been neglected. He received permission from the Duke to call in the Hamburg architect, Johann August Arens (1757-1806). Goethe had first met him in Rome in the circle of expatriate artists with whom he had associated. When Arens finally arrived in Weimar in June 1789, after some initial delay, Goethe was pleased to be once again in the company of an artist.\(^36\)

Arens was mainly responsible for the plan and general massing of the building volume. As the exterior walls and foundations were still usable, affording a considerable reduction in costs, most of the work involved adapting a new design to the remaining substructure.\(^37\) Arens' design reflects Goethe's influence in the clear cubic massing of the building elements in contrast to the haphazard grouping in the earlier structure, as well as in the clear demarkation of base, wall, and roof.\(^38\) The proposed facades (Figure 26) also owe a
23. Weimar Residential Palace, View from Park.

26. Design for the Main Entrance, J.A. Arens, 1792.
considerable debt to Palladio.

*Roman may it always be named, Those living there, this n'er have claimed For in the true German vein A world view is all the gain.*

Goethe

**The Roman House**

A much more interesting and representative project on which Goethe and Arens collaborated was a small garden house to be built for the Duke in the Weimar Park, which later came to be known as the Roman House (Roemisches Haus) (Figure 27). It was designed to replace the more provisional Bark Hut (Borkenhuette), currently serving as the Duke's garden lodgings.

Goethe knew of the Duke's plans before leaving for Italy, and during his travels, sketched a number of country houses, especially in the vicinity of Rome, as well as working on the design of a "house in the country (Figures 28, 29)." Due to the Duke's frequent long absences, Goethe was put in complete charge of this project. In a letter from the battle front on December 27, 1792, the Duke informs Goethe:

*I'm completely handing you over the building of the Garden House. Cover it (financially) with whatever means you want and go about it as if you were building for yourself, our needs were always similar to each other.*

The type-form adopted was a combination of the Italian detached country house and the Greek Prostyle. The vestible, which can be seen in

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*Den Bau des Gartenhauses übergebe ich dir ganz — decke es (finanziell) womit du willst und tue, als wenn du fuer dich baustest, unsere Bedürfnisse waren einander immer ahnlich.*

**Having a portico whose columns, usually four in number, extend in a line across the front only, as a Greek temple."
27. Roman House, Weimar Park.
28. Facades for a Small House Type, Drawing: Goethe, c. 1795.

30. Front Facade, Roman House.

31. Side Facade, Roman House.
plan (Figure 33), runs the width of the building, also suggesting a Megaron* in the Greek house. The site was intentionally located on a steep embankment just above the Ilm. Seen from the riverbank, the house perched on its rusticated base (Figure 34), juts above the trees. It was not only designed to be an object in the landscape, but also to harmonize with and support the natural characteristics of the site.

Approaching the Roman House from the river level, the irregular path and rustic treatment of the massive 1-story base, makes the building appear to have been built on the ruins of an ancient building.46 Continuing up the path, the arched passageway through the base is reached (Figure 35). The imagery of ruins is strengthened here by the use of two pairs of columns in the Doric order which, in addition, appear to be partially buried in the ground. The idea for this effect may have come from his observance of the columns in the arcade of the

*The principle room of an Aegean house.45
33. Plan, Sections, Roman House.
34. View From Across the Ilm, Roman House.
35. Lower Portico, Roman House.

36. Lower Portico, Roman House, Travel Sketches: F. Gilly, 1798.
Doges Palace where he notes: "When you see columns like this (Figure 32), aren't you led to believe that they are partially buried in the earth..."47*

The overscaled fountain base also seems to belong to another older building.48 Friedrich Gilly (1772-1800), one of the influential architects of the emerging Neoclassical movement, stopped over in Weimar on his way to Paris to visit this and other works executed under Goethe's aegis. His sketches indicate a particular interest in this portico (Figure 36).49

Continuing up the path along the south side of the building, stairs lead through stone retaining walls as if through the ruins of an older, larger structure; the walled-in windows in the sockle heighten this allusion.50 In contrast to the heavy character of the rear facade and sockle, the front elevation is executed in the slimmer, more refined Ionic order (Figure 28), whose light buff color against the dark rusticated stone provides a clear distinction between the 'old' and 'new'. An ornate entrance already hints at the bright, festive interior, carried out in part by one of Goethe's companions in Italy, Heinrich Meyer.51 This progressive metamorphosis from a simple, rustic character to a refined and even elegant character, as well as the pronounced horizontal articulation of base, wall, and roof show the strong influence of Goethe's ideas on the design.52

Goethe's pride in the building is indicated by the rather exaggerated comments he made in a lecture to the 'Friday Society' maintaining that:

The Duke's Garden House can be considered the first building that has been carried out in its entirety according to the more genuine feeling of the architect. It would be instructive to gather some opinions concerning the drawings as well as the execution.53**

*Wenn du solche Säulen sehnst glaubst du nicht ein Theil stecke in der Erde...
Yet increasing differences of opinion with the Duke over refinements in the design indicated that perhaps their needs were not so similar. Arens returned to Hamburg before the design was finalized, deciding that his hometown practice was more important, even after Goethe had offered him the position as Royal Building Counsellor. Christian Friedrich Schuricht (1753-1832) was brought in after Arens left. It is therefore a tribute to Goethe's persistence that the building maintained any unity of expression with the variety of conflicting interests involved.

In a letter to Meyer on July 7, 1794, Goethe revealed a more honest assessment of the building which all in all, did not suit his personal lifestyle:

The house will be very beautiful, that is for a free-standing building in which the persons themselves cannot always relate to in the same level of greatest cultivation and neatness, too beautiful to be able to live in and feel at home.

From 1792 to 1798, financial difficulties all but stopped construction on the Palace. In the meantime, the Building Commission was searching actively for an architect to replace Arens. The Duke suggested the Parisian architect Charles Louis Clerisseau (1721-1800). However, after reviewing Clerisseau's design submission, Goethe vetoed it on the grounds of its overall academic character. The Dukes then suggested Johann Wilhelm Daute (1746-1816), Leipzig's building director, but he was also rejected when Goethe found him unsuitable. All of this points out the pronounced influence Goethe had over the Commission and his recurrent disagreement with the Duke. Concerning the

*Das Haus wird sehr schoen, ich moechte sagen, fuer ein freystehendes Gebaeude, in welchen die Personen selbst nicht immer in der groessten Zucht und Reinlichkeit anlangen koennen, zu schoen, um mit Bequemlichkeit drinnen wie zu Hause seyn zu koennen.

38. Roman House in Mountain Landscape, Drawing, Goethe, 1824.
choice of the architect Goethe maintains: "Moreover, under the appropriate supervision and regulating influence, I would rather choose (architects) who have just freshly returned from Rome and Paris."60*

Indeed, Clerisseau fit this description, being the leader of the Beaux Arts in Paris, as well as having known Winckelmann well,61 but he was too old and well established. Goethe was searching for promising young architects at the beginning of their careers who, in addition, were sympathetic to his own art theory and philosophy in general.62

On a trip to Frankfurt, Stuttgart, and Switzerland in 1797, Goethe kept his eye out for possible prospects. In Stuttgart he happened across some of the first architectural works of the painter, Nicolaus Friedrich Thouret (1767-1845) newly returned from a stay in Rome. He was so taken with the execution, that he sought Thouret out in his studio and invited him to Weimar to finish the work on the Palace.

The Weimar Court Theater

As was the case with Arens, it was a secondary project which turned out to be the best representation of their joint efforts, the complete remodeling of the Weimar Court Theater, originally designed by Johann Friedrich Rudolf Steiner in 1779. Goethe spent a great deal of time working with Thouret on this project, which appealed to him much more than the Palace. In view of Goethe's wholistic point of view, it seems natural that he would concern himself not only

*Ich wuerde hiezu unter der gehoerigen Aufsicht und der regulierenden Einwirkung eher Personen waehlen, die erst ganz frisch Rom und Paris gesehen haben.
with the writing of plays, but also with the creation of the environment in which they would be experienced. He had already designed a set for Mozart's *Magic Flute* (Figure 39). Theater design was the next step in combinging his favorite disciplines of art and drama. In the journal from his *Travels in Switzerland*, 1797, Goethe writes: "In the higher sense, architecture should express a noble, solid presence. Without being weak, it can hardly allow itself to be graceful, yet, in a theater, everything should convey a graceful appearance."63*

Renovation work on the theater was accomplished in an amazingly short period of three months.64 The exterior facade was altered to express the

*Die Baukunst im hoeheren Sinne soll ein ernstes hohes festes Dasein ausdruecken, sie kann sich ohne schwach zu werden, kaum aufs Anmutige einlassen, auf dem Theater aber soll alles eine anmutige Erscheinung sein.
40. Weimar Court Theater, Travel Sketches: F. Gilly, 1798.

41. Superimposed Plans of Old and New Weimar Court Theater.
horizontal layering of base, wall, and roof, the entire effect of which made the massing appear simpler and more cubic.  

The most extensive alterations, however, occurred in the interior (Figure 42). The auditorium, previously parallel to the street, was now placed perpendicular to it, extending into a new wing which also contained the stage tower. The resulting loss in space was compensated by lowering the floor of the auditorium to street level and providing a two-story gallery.

Thouret's work on the palace consisted mainly of interior design (Figure 43). Disagreements and misunderstandings plagued progress on the work, eventually leading to a breakdown in communications. Following Thouret's return to Stuttgart after his second visit to Weimar, the long-distant exchange proved too difficult, causing Goethe to lament:

We are certainly having difficulties with our great palace construction, as well as the remaining instances where something beautiful was supposed to have been made, because we don't have our own man, but rather always have to borrow one at prohibitive cost. That is what happened with Arens, Clerisseau, Schuricht and now with Thouret too...Available materials only mean something when they first represent a certain form, when they come out of the hand of a craftsman or an artist.

Before meeting Thouret, Goethe had contacted his archaeologist friend, Professor Hirt, whom he knew from Italy, concerning suitable architects. Hirt had recommended the young Berlin architect, Heinrich Gentz (1776-1811), and showed Goethe Gentz's entry into the competition for a monument to Friedrich

*Wir sind freilich bei unserem grossen Schlossbau, sowie bei den uebrigen Faellen, wo etwas Schoenes gemacht werden soll, uebel dran, dass wir nicht einen eigenen Mann haben, sondern sie immer mit ansehnlichen Kosten borgen muessen. So wars mit Arens, Clerisseau, Schuricht und so ists nun auch mit Thouret...Alle Materialien bedeuten nur insofern etwas als sie zuletzt eine gewisse Form darstellen wenn sie aus der Hand des Handwerks oder Kuenstlers kommen...
"The facility is tasteful; serious without being oppressive, sumptuous without being overdone. A circle of columns in the doric order rests on an elliptically placed arcade which partitions off the orchestra stalls. Seats for the audience are provided both in front of and behind this circle, bordered by a bronzed balustrade. The columns themselves suggest an aged marble, the capitals are bronzed, while the entablature is a kind of grey-green Cipollin over which various masks have been placed, perpendicularly ranging from tragic dignity to comic grimaces to express a varigated character following classical examples. Another gallery is accommodated both behind and above this entablature."

Goethe, In The Allgemeinen Zeitung, October 12, 1798
42. Interior of Model, Weimar Court Theater, N.F. Thouret, 1798.
the Great (Figure 44). Despite Goethe's efforts, the Building Commission was slow to approve Gentz, as he was currently working on his first major commission. Thouret, however, had been immediately available. After Thouret left, Gentz was easily approved and he arrived in Weimar on November 28, 1800.

Gentz's background was perfectly suited to the task. He was an ardent admirer of the poet and was well acquainted with his literary, as well as theoretical, works. During his stay in Italy from 1790 to 1794, he associated with the same circle of artists in which Goethe's ideas were still active. His comments on Palladio's works, and the ancient Greek and Roman ruins, reveal a strong affinity with Goethe's ideas.

Reacting to the controversy over his first major building, the Berlin Mint (Figure 45), Gentz replies:

I have heard that there has been some disagreement as to which style this building has been executed in, whether in Roman, Greek, or Egyptian taste. In answer to that, I had in mind neither a Roman, Greek, nor Egyptian ideal, but rather, after my mind was actively infused with the building determinants I designed a facade that was not only suited for the whole but derived from it out of necessity and could not have come out any differently. So, if this building appears to some to have been executed in the Roman style, to others in the Greek, and to the well-educated even in the Egyptian style (about whose way of building we actually know so little, then this is just a secondary matter and in my opinion can never be the purpose and aim of the thinking architect. He should develop the character of his building from the inside and its functional

44. Competition for a Monument to Friederick the Great, Architect: Gentz, 1797.

needs and should not amuse himself and the public by using a copy of a Roman, Greek, or Egyptian house as the cause of his own inherent persuasive power.**

His approach to architecture thus indicates a thorough understanding of Goethe's underlying morphological viewpoint. It is not surprising, therefore, that they became close friends and Goethe introduced him to the circle of artists and writers in Weimar, including Schiller and Wieland.74

Gentz actually did very little work on the palace itself. He was mainly responsible for three rooms; the grand stair hall (Figure 46), the banquet hall (Figure 47), and the gallery as well as a number of smaller rooms.

Again, the most noteworthy projects were those carried out on the side. One such project, a shooting gallery, reveals definite formal similarities to Palladio's Villa Badoer, both in plan (Figure 48, 49), and in the massing of the building elements. Goethe had earlier been intrigued with Palladio's own adoption of a Roman villa as the type-form for his Convento della Carita (Figures 15, 16, CH. IV). The idea of employing an established type-form in a different, yet appropriate context represented, for him, a way of attaining the poetic level of architecture.

46. Stair Hall, Weimar Palace, Gentz, c. 1802.

47. Banquet Hall, Weimar Palace, Gentz, c. 1802-04.

Theater at Bad Lauchstaedt

The little summer theater (Figure 50), built for the Spa resort town, Bad Lauchstaedt, illustrates a further evolution in Goethe's theater design as interpreted by Gentz. In the design of a completely new building, the exterior expression of interior function could be more fully expressed than in the renovation of the Weimar Court Theater. Here, the simplicity and clarity of form derived from functional needs, a lesson Goethe had learned from classical architecture, was achieved with a minimum of actual classical forms or images. In its articulation of functional elements integrated into an overall unity of expression, the theater exemplifies Goethe's morphological principles as applied to architecture.

As in Thouret's design, the effect of the forms, ornament, and color in the interior of Gentz's design (Figures 52, 53) all contribute towards an illusory lightness of structure and conveys a sense of festiveness which Goethe considered so important in the determination of the appropriate receptive mood. Heinrich Meyer was again involved in the design of the decorations. The bright saturated yellow chosen for the exterior (Figure 54), already hints at the energy and festivity to be encountered within.

In the prologue What we are offering (Was wir bringen), written for the opening of the Theater in 1802, Mercury relates an allegory of Fantasy personified as a child:

Indeed, he even gained
Mastery over himself, as soon as I entrusted him

*Abgewiesen wurde vor allen Dingen die Huettenform, die das Ganze unter ein Dach begreift. Eine maessige Vorhalle fuer Kassen u. Treppen sollte angelegt werden, dahinter der hoehere Raum fuer die Zuschauer emporsteigen und ganz dahinter der hoechste fuers Theater.
"First of all the concept of a hut form which would encompass everything under one roof was rejected. A suitable entrance hall for the ticket office and stairs should be provided, behind which a higher space rises up for the audience and all the way at the back the highest space for the Theater."
50. Facades, Theater, Bad Lauchstaedt, Architect: Gentz, 1802-04.
The Staff which orchestrates souls.
At once he was composed and raw matter
Shaped itself together in preparation for new creation.
Summoned as if from Apollo's lyre the rough stone gathered
round to form walls
And as if to Orpheus' magic notes,
A forest circled round and
transformed into a Temple.78

Ja er baendigt
Sogar sich selbst, bald ich ihm den Stab
Vertrauend ueberliefre, der die Seelen fuehrt.
Sogleich ist er geregelt, und ein roher Stoff
Zu neuer Schoepfung bildet sich zusammen.
Wie von Apollos Leier aufgefordert,
Bewegt zu Mauern das Gestein sich her,
Und wie zu Orpheus' Zaubertoenen eilt
Ein Wald heran und bildet sich zum Tempel.

Thus using the Orpheus Legend as a vehicle, Goethe alludes to the creative
process by which this little theater came about.
52. View Towards Stage, Theater, Bad Lauchstaedt.

53. Auditorium, Theater, Bad Lauchstaedt.
54. Theater, Bad Lauchstaedt.
The Goetheplatz

Goethe was not only involved in building projects, but also the urban design of the city of Weimar. In 1797, a row of stalls bordering a trapezoidal square along the outside of the city walls, known as the Pig Market, burned to the ground. This provided Goethe the opportunity to upgrade the area which had long been an unattractive introduction to the city.79

In a site plan (Figure 55) he drew up himself, Goethe presented his own suggestions on how to handle the area. He proposed a new street running parallel to the city walls to connect the traffic from the Erfurt Gate to the Jakobsvorstadt in a straight line, which would be lined with a row of residential buildings. A green space, which later came to be known as the Goetheplatz, could then be created between these new buildings and the city wall.80

For the area in front of the houses, he proposed a wide esplanade lined with trees. Each house was to be conceived as a separate volume separated by a small space serving as an entrance court for each pair of buildings (Figure 56).81 Although the houses were to be separate, he sought to maintain a unity of expression by adopting uniform heights for the divisions between the three basic elements of base, wall, and roof. He even suggested a color for the houses to express the character of a busy festive city entrance:

Therefore, it would really be desirable if that abominable grey, which makes the houses look so much like funeral homes, were banned and a white, better still a yellow with grey-blue trim, was substituted for it, which doesn't look bad at all.82*

*So ware sehr zu wünschen, dass man das abscheuliche Grau, wodurch die Häuser den Todtenladen so ähnlichen werden, verbannte, und ein Weiß, noch lieber ein Gelb, mit blaugrauen Einfassungen, welches nicht übel aussieht, einführte.
55. Site Plan, Design Sketch: Goethe, 1798.


57. Goetheplatz, Engraving: A. Glaeser, c. 1820.
What all this actually amounted to was the drawing up of building guidelines to create a framework along which the urban space could develop.\textsuperscript{83}

In a presentation to the building committee on March 1, 1798, Goethe expressed exactly these sentiments:

\begin{quote}
Whoever knows our contractors and craftsmen would hardly expect anything architectonically satisfying from the new plan. The needs are so diverse, the unforeseen occurrences of such great number, the whims so great, that only through generally binding guidelines (whose inconvenience must be limited as much as possible) can the future builders be restrained from adding something totally inappropriate to the new plan.\textsuperscript{84}
\end{quote}

Goethe had no intention of instating a dogmatic building code, but he realized that in order to assure a semblance of unity and order, an organizing pattern was needed to integrate future growth within the city as a whole.\textsuperscript{85}

In the subsequent development of the Goetheplatz, his suggestions were largely adopted, especially as to the layout of the square, the planning of the street, and the building line setback.\textsuperscript{86} Unfortunately, the future additions Goethe envisioned for this area to enhance its festive character were never executed:

\begin{quote}
In the future, one could provide a pleasure pavilion for comfortable skating at the end of this dead-straight avenue, one could dig a canal to connect with the flooded Schwansee meadow and plant conifers on the slope along side, whereby these winter activities would acquire an even greater attraction.\textsuperscript{87}
\end{quote}

\*Wer unsere Baulustigen und Handwerker kennt, wird von der neuen Anlage wohl schwerlich etwas architektonisch Befriedigendes erwarten. Die Beduerfnisse sind so mancherlei, die Zufaelligkeiten eine so grosse Menge, der Grillen so viel, dass nur eine allgemeine feste Vorschrift, die aber so wenig als moeglich geniren muss, die kuenftigen Erbauer abhalten kann, in die neue Anlage nichts ganz Ungeschicktes einzumischen.

\**Wie man dereinst, am Ende eines schnurgeraden Weges, ein Lusthaus zur Bequemlichkeit der Eisfahrt anlegen, einen Canal zur Verbindung mit den ueberschwemmten Schwanseeewiesen graben und den rechts am Wege herlaufenden Abhang mit Nadelhoelzern besetzen koennte, wodurch diese Winterlustbarkeiten einen grosseren Reiz erhalten wuerde.

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Through his position as the Director of the Building Commission, Goethe was mainly responsible for the rebuilding of the Weimar Palace, but it was the secondary projects which allowed Goethe a freer hand over the design and execution. He sought young architects, with similar viewpoints to his own, who were still flexible enough to interpret Goethe's ideas by means of their own professional experience. A well-established, older architect would have been much less likely to respond and yield to the specific suggestions of this builder-poet.

The small Duchy of Weimar may have had a far lesser financial means compared with such major German cities as Berlin or Hamburg, but as a center of culture it was unsurpassed, earning it the reputation of the 'German Athens'. In the age of the bourgeoise, Goethe realized that such large commissions were increasingly a thing of the past:

But perhaps it is no longer the time to build Churches or Palaces, at least I would, in both cases, always advise that the communities be provided proper places of worship and families comfortable houses whether in the city or country.*

The renovation of his own house, the side projects with Arens, Thouret, and Gentz, as well as his own plan for the Goetheplatz all exhibit common characteristics, embodying what could be called the 'Weimar School' and represent the experimental physical counterpart to his architectural theory.

Goethe was most concerned with the adaption of form to function in the morphological sense, expressing the building elements in clear simple masses, harmoniously integrated within the context of the whole building. The idea of

*Doch ist vielleicht überhaupt keine Zeit mehr, Kirchen sowie Palaeste zu bauen, wenigstens würde ich in beiden Fällen immer raten, die Gemeinden in anständige Bethäuser u. die Familien in bequeme Stadt- u. Landhäuser zu teilen.

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the building in the ideal sense, acquires form through an interaction with the phenomenal world, adapting to its material, structure, and physical context. As a result of this process of organic development, the inner purpose of a building should be manifest in its exterior expression.

The articulation of the anthropomorphic elements: base, wall, and roof, appears in all cases as a fundamental criterion. In the exterior renovation proposed for the House on the Frauenplan and carried out on the Weimar Court Theater, the facades were completely altered to express this division.

The character of space, whether on the urban scale or within an enclosed room is a major determinant. Shape, ornament, and color all provided means of creating the appropriate atmosphere. Goethe conceived of architecture not only as a formed art, but also as a formative (bildend) art, which could modulate human feeling and behavior.

The application of his theory of colors to architecture was typical of Goethe's interdisciplinary approach. From his wholistic viewpoint, all phenomena are interrelated, a recurrent theme in Faust:

How each the Whole its substance gives,
Each in the other works and lives!
Like heavenly forces rising and descending,
Their golden urns reciprocally lending,
With wings that winnow blessing
From Heaven through Earth I see them pressing,
Filling the All with harmony unceasing!

In Goethe's theory, the resulting 'supersatisfaction of the senses' constituted the highest purpose, the realm of poetry in architecture. Here Imitation and Invention also play a major role. The suggestion of ruins in the base of the Roman House, the illusion of materials in the theaters, the conversion of type-form in the shooting gallery, all represent attempts to attain this level.
Within the emerging Neoclassical trend in Germany, the example of Weimar did not go unnoticed. Arens, Thouret, and Gentz all went on to practice elsewhere in Germany. The organic functionalism implicit within the 'tenets' of the 'Weimar School' led to an increasing independence from classical forms (as evidenced in the evolution of Gentz's work) and helped offset the tendency towards eclecticism in Neoclassicism.
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55. Site Plan, Western Outskirts, Weimar, Design Sketch: Goethe, 1798.


1. Goethe at 78. (Copy of a painting by Karl Stieler, 1829).
We repeatedly visited the deserted, damp rooms of the cathedral. Although robbed of its earlier religious life, the church stood unperturbed in its original majesty. Such buildings have something uniquely attracting; they bring back to mind good but melancholy situations. Because we are sometimes content to cloak ourselves in the twilight of the past, we find it welcoming when an ominous restriction grasping us with a perceptible shiver physically and mentally works on the feelings, imagination, and spirit, thereby inducing a moral, poetic and religious mood.1*

CHAPTER VII
MATURITY AND REFLECTION

Following the turn of the century, Goethe acquired an increasing number of honorary positions. In 1804 he was appointed Priory Councillor and bestowed the title: Your Excellency. Later in 1815 he was appointed Minister of State. Yet his authority was not only recognized in politics but also in science and art. He was appointed Head of the Institute of Natural Science at the University of Jena and later as Director of all immediate institutions of science and art in Weimar and Jena.2.

Goethe's elevated status in the Grand Duchy of Weimar as well as his fame as a poet gained the attention of Napoleon, currently in control of most of the German states. Napoleon consulted with him in Weimar in 1808 and even

*Die oeden feuchten Raeume des Doms besuchten wir zu wiederholten malen; er stand, obgleich seines frueheren religioesen Lebens beraubt, doch noch unserschueettet in unspruenglicher Wuerde. Dergleichen Gebaeude haben etwas eigen Anziehendes, sie vergegenwaertigen uns tuechtige aber duestere Zustaende, und weil wir uns manchmal gern ins Halbdunkle der Vergangenheit einhuellen, so finden wir es willkommen, wenn eine ahnungsvolle Beschraenkung uns mit gewissen Schauern ergreifen, koerperich, physisch, geistig, auf Gefuehl, Einbildungskraft und Gemuet wirkt und somit sittliche, poetische und religioese Stimmung anregt.
sought to lure him to Paris which seemed destined to become the capital of a united Europe.

The French occupation led by Napoleon also contributed to the building momentum of the Romantic Movement. In Germany, its inception is usually marked by the 1797 publication of William Heinrich Wackenroder's (1773-1798), The Heart Outpouring of an Art-loving Monk, (Herzensergiessungen eines kunstliebenden Klosterbruders). One of Wackenroder's major arguments in support of medieval architecture has a familiar ring:

True art not only germinates under the italian sky, majestic domes and corinthian columns, but also under pointed arches, intricately decorated buildings, and gothic towers.3*

The seeds of German nationalism can actually be seen as early as the Sturm & Drang movements and particularly in Goethe's 1772 essay Concerning German Architecture (Von Deutschen Baukunst) which contains a very similar argument to Wackenroder's. The full force of this movement was only unleashed by the freedom wars of 1813, which liberated the German states of the onerous french dominion.

Goethe's own reaction to his earlier essay reveals not only aspects of his own reorientation to art but also his relationship with the Romantic Movement in general. In his autobiography he explains:

What I had thought and imagined with respect to that style of architecture, I wrote in a connected form. The first point on which I insisted was, that it should be called German, and not Gothic; that it should be considered not foreign but native. The second point was that it could not be compared with the

*Nicht bloss unter italienischen Himmel, unter majestaetischen Kuppeln und korinthischen Saeulen, auch unter Spitzgewoelben, krausverzierten Gebaeuden und gotischen Tuermen, waechst wahre Kunst hervor.
architecture of the Greeks and Romans, because it sprang from quite another principle. If these, living under a more favourable sky, allowed their roof to rest upon columns, a wall broken through, arose of its own accord. (Figure 2) We, however, who must always protect ourselves against the weather and everywhere surround ourselves with walls, have to revere the genius who discovered the means of endowing massive walls with variety, of apparently breaking them through, and of thus occupying the eye in a worthy and pleasing manner on the broad surface. (Figure 3) The same principle applied to the steeples, which are not, like cupolas, to form a heaven within, but to strive toward heaven without, and to announce to the countries far around, the existence of the sanctuary which lies at their base. The interior of these venerable piles I only ventured to touch by poetical contemplation and a pious tone.\(^4\)

Implicit within these remarks is an acceptance of his own emotional tie to gothic architecture, yet distanced by an intellectual analysis reflecting the depth of his experience in the intervening years. He sympathizes in turn with the efforts of the romantics yet in view of his own maturity cannot embrace it. However the historical justification sought by the movement rekindled his own love of the gothic and the results found an important place in Goethe's more comprehensive view of history and art.

In the period following 1805, Goethe's orientation to the arts showed a consistent change manifesting itself in every aspect of his creative work. This change was due not only to changing political and cultural climate but also due to his own physical and mental progression and a corresponding tendency towards reflection and analysis.

The literary projects he worked on during this period were of a more historical nature than previously, yet a history with an implied pattern of morphological growth and development. He completed the historical part of the \textit{Theory of Colors}\(^5\) (\textit{Farbenlehre}) and most importantly began work on his own autobiography.\(^6\)

3. The Gothic Hut Built by Sir James Hall.
His sketches also reveal a marked deviation from those of his classical period. The architectural sketches indicate most clearly the nature of this change. In contrast to his earlier tendency to idealize and simplify objects, Goethe is now more concerned with recording and classifying objects in their actual state. In the Castle and City Gate of Bilin (Schloss und Stadttor von Bilin) (Figure 4) each element has its own importance and each is rendered in its own style.

In the arts, Goethe's interest now lies in the study of their historical evolution. The emerging Romantic Movement may have motivated his study of medieval art, but his interest is now much more academic. Goethe, although often considered a Romantic, in no way embraced the movement as a whole. He reacted as strongly against absolutism in art in the Romantic Movement as he had earlier reacted against the prevailing classicism of the Baroque in his Sturm and Drang period.

In his 1805 essay Winckelmann and his Century (Winckelmann und sein Jahrhundert), Goethe attempts to depict the historical development of art as analogous to the biological development of an organism:

...when considering all art as a living entity, it must be represented as having an unnoticeable origin, a slow period of growth, a brilliant moment of perfection and a gradual decline, just as every other organic being, only in several individuals.*

This also characterizes his new orientation to architecture. In a sense he has returned to his youthful enthusiasm for gothic (despite his distaste for the ideals...die ganze Kunst als ein Lebendiges anzusehn, das einen unmerklichen Ursprung, einen langsamen Wachstum, einem glänzenden Augenblick seiner Vollendung, eine stufenförmige Abnahme, wie jedes andere organische Wesen, nur in mehreren Individuen, notwendig darstellen muss.

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of the Romantics) but tempered with the insight and vision of his vast experience.\textsuperscript{14}

In \textit{Concerning German Architecture, 1823 (Von Deutscher Baukunst, 1823)}, its title referring to the original 1773 essay, Goethe asserts:

It is only natural that I should often recall my earlier attachment to Strasbourg Minister in the course of my renewed study of the German architecture of the twelfth century and that I should be pleased that I have nothing to be ashamed of in rereading that pamphlet which I wrote in 1773 in the first flush of my enthusiasm.\textsuperscript{15}

Far from being ashamed, he even intended to have this old essay reprinted.\textsuperscript{16}

Goethe renewed his study of medieval architects, yet now with a more systematic methodology:

I took up my earlier studies again, and, through reciprocal visits and the laborious examination of many buildings of the period, by means of engravings, drawings and paintings, so familiarized myself with them so that in the end I felt quite at home with these objects.\textsuperscript{17}

The subject of his architectural sketches now consist primarily of medieval German buildings and ruins. (Figures 5, 6, 7, 8)

Again it is the nature of morphological development that incites Goethe to further study and have a deeper understanding of the mechanism which produced medieval architecture:

In old German architecture, we see the flowering of a remarkable age. When one is confronted directly with such a flower, one can only marvel at it: but if one looks into the innermost secret life of the plant, to see how it uses its strength and gradually unfolds, then one sees things with quite different eyes, and with understanding of what one sees.\textsuperscript{18}

Thus the morphological development of the type apply equally to the gothic or the classical. Just as Goethe recognized the genius of the ancients and Palladio, he now rediscovers the power of architectural genius, he had first personified as Erwin von Steinbach:
5. Stage Design for the Opera Die Salnixe.
7. Castle Ruins, Graupen.

8. The old tower of the Loebder gate in Jena.
Genius is the creative force through which decisive and influential actions came to pass... The man who first invented the shapes and proportions of historic German architecture - so that in the course of the centuries it led to the building of Strassburg and Cologne Cathedral - was a genius. In fact, his ideas have kept their creative force and are still at work today.19

Although in his interest in medieval architecture, Goethe shows some sympathy towards the current romantic trend in architecture, he by no means advocated the replication of gothic buildings as the proper course to follow to create a new architecture. In his correspondance with leading architects of the day, he makes this point repeatedly. In a letter to Ludwig Catel he stresses:

But the more we thereby become historically and critically acquainted with such buildings, then the more the desire will disappear, in planning new buildings, to ever imitate such forms which belong to a vanished age. The current tendency in this direction derives from the false urge to recreate that which one values and admires in totally adverse conditions. If one considers that a gloomy, melancholy Phantasy, that prefers to be formless, would just as happily have its pointed arches and crenelations hovering in the mist. If one considers with an unbiased interpretation, that this astonishing art was first reintroduced as garden diversions, thus the inappropriateness of the intention of using such otherwise respectable forms for a higher purpose becomes immediately apparent.20*

Cologne Cathedral

A major event contributing to Goethe's renewed interest in gothic architecture was the proposed completion of Cologne Cathedral. Following

*Aber jemehr wir hiedurch das Charakterische jener Gebaeude historisch und kritisch kennenlernen, desto mehr wird alle Lust verschwinden, bei Anlage neuer Gebaeude, Neigung jenen Formen zu folgen, die einer entschwundenen Zeit angehoeren. Die neuere dazu ist aus dem falschen Triebe entstanden, der dasjenige, was er schaetzt, auch unter völlig widersprechenden Bedingungen wieder hervorbringen will. Bedenkt man, dass eine truebe, duestere Phantasie, die sich im Formlosen gelaegt, um Spitzbogen und Zinnen Nebeln gleich gern schweben mag; bedenkt man mit freiem Sinn, dass man jene erstaunenswuerdige Kunst vorerst als Gartenspaesse eingefuehrt hat, so wird das Ungehoerige sogleich in die Augen fallen, wenn man zu hoheren Zwecken jene auch noch so respektable Formen wieder gebrauchen wolle.
German independence, Prussia along with the other german states sought a symbol to express the resurgence of german nationalism. Due to the efforts of Sulpiz (1785-1854) and Melchior (1786-1851) Boisseree and other leaders of the romantics, Prussia was persuaded to undertake the completion of Cologne Cathedral rather than building a new church proposed for the Leipzigerplatz in Berlin. Not only would this be a powerful political, religious symbol, but also a living link to Germany's medieval past to which the romantics felt so close.

The Boisserees had done extensive research on the planning of the cathedral and the practices of the masonic lodge in the thirteenth century when it was just begun. The art historian, Friedrich Schlegel (1772-1829) accompanied the brothers to Cologne in 1808. Schlegel's ensuing book, Principles of Gothic Architecture (Grundzüge des gotischen Baukunst) also helped gain support for the burgeoning gothic revival movement. During their stay in Cologne, they measured the existing structure and produced working drawings for its completion. A major aid to their efforts came when, with the help of the architect, Georg Moller (1784-1852) they found the original medieval plans that had been lost during the revolutionary period.

In 1810, Sulpiz solicited Goethe's patronage in the publishing of the history of Cologne Cathedral; the Domwerk and persuaded Goethe to write a report supporting the cathedral's preservation and completion. As an incentive, Boisseree reminded Goethe of his youthful enthusiasm for gothic architecture and his use of gothic imagery in his writing. Boisseree also enlisted the aid of Karl Friedrich Schinkel in examining the structural integrity of the existing structure to ensure the feasibility of renewed construction.

Goethe was intrigued with Cologne Cathedral primarily for its historical significance and had followed the efforts of the brothers Boisseree with
increasing sympathy. Following Sulpiz's plea for support, Goethe invited him to Weimar for Michaelmas, but the meeting didn't actually take place until the following year.\textsuperscript{26}

In helping prepare Boisseree's exhibition for the Weimar Court, Goethe insisted on including church plans from the time of Carl the Great to the present. Goethe's main interest was in the evolution of architectural form, from its vernacular origins to its culmination in the great cathedrals. The completion of Cologne Cathedral afforded the possibility to gain first-hand experience in the methods of design and construction of a bygone era.

When Goethe visited the cathedral in the company of Boisseree, he was initially put back by the immensity of the undertaking. (Figure 9) Yet once inside, surrounded by the towering skeletal walls, the intended harmony of the whole became apparent:

To be honest, even inside, the Cathedral makes a pronounced but also a discordant effect; only when we step into the choir, (Figures 10,11) where the completeness surprises us with an unexpected harmony, are we happily astonished and pleasantly awed, and feel our yearning more than satisfied.\textsuperscript{28}

He was especially intrigued with the newly recovered medieval plans which evoked a similar intuitive response in him as the facade of Strasbourg Cathedral had earlier. In a conversation with Boisseree he exclaims that the plan for the cathedral:

... had been a revelation to me (aperçu). It gave me new vision. I thought that I now had mastered the whole mystery of architecture.\textsuperscript{29}

In comparing Goethe's reaction to these two monuments of gothic art, his experience in Strasbourg can be considered mainly intuitive and emotional while that in Cologne more analytical and reflective. The intensity of feeling is
"I cannot deny that the sight of the exterior of Cologne Cathedral aroused in me a certain indefinable apprehension. If an important ruin has something impressive about it, we sense, we see in it the conflict between an admirable work of man and time, still, mighty and wholly inconsiderate: here we are confronted with something at once incomplete and gigantic whose very incompleteness reminds us of the inadequacy of man, the moment he undertakes something that is too big for him."27

Goethe in On German Architecture, 1823
9. Cologne Cathedral at the end of the medieval period. Drawing: A. Quaglio c. 1820 for Boisseree's History and Description of Cologne Cathedral, 2nd ed.
10. Plan of Choir with geometric overlay, Cologne Cathedral.

11. Interior View, Choir, Cologne Cathedral.
still present in the latter case, but tempered by his matured knowledge of architecture and morphological viewpoint. The external characteristics of a classical or gothic style are no longer of interest, but rather the process by which the type evolves - a process equally discernable in both styles.

In a description of Strasbourg Cathedral, now evaluated in his autobiography, he could just as easily be discussing Greek art:

Here the building we are considering (Strasbourg Cathedral) satisfies us in the highest degree, for we see each and every ornament appropriate to the part it decorates, subordinate to it and as if growing out of it. Such variety gives us great enjoyment in that it derives from what is appropriate, and hence at the same time arouses a feeling of unity. Only in such cases is the treatment prized as the highest peak of art.30

After his prolonged study of classical art, Goethe can now concur with Blondel, whom he had lambasted before and even cites him in his 1873 essay although with reservation:

Thus we look with pleasure on the proportions of those Gothic buildings whose beauty seems to derive from and is seen in symmetry and the relationship of the whole, and of the parts among themselves, without taking account of, indeed, in spite of, the ugly ornaments with which they are covered. But what must surely convince us most is the fact that, if we investigate these measurements precisely, we find for the most part the same proportions as in those buildings which, since they were built according to the rules of good taste, give us so much pleasure to look at.31

What Goethe now appreciates in both classical and gothic art are the means by which the type achieves an organic unity of expression. In this respect Goethe parts company with the Gothic Revivalists to whom external style is most important. This dividing line is made quite clear in his harsh criticism of Milan Cathedral:

Few indeed understand how to interrelate these superficial forms whereby such monstrosities as Milan Cathedral came
about. Here an entire mountain of marble has been displaced at an outrageous cost and forced into such miserable forms that the poor stones are still tortured to this day...32*

Goethe recognizes the picturesque character of the neo-gothic, but only considers it appropriate for buildings in which a theatrical effect is paramount. To the notion of neogothic as a new direction in architecture he is firmly opposed.

**The Temple-Manor**

The Weimar Park along the banks of the Ilm, had traditionally provided Goethe a place to experiment with ideas currently occupying him. Here, in an ideal setting, contextual restraints and practical considerations did not determine form, but rather the image and character necessary to achieve the desired effect. Due to the nature of a romantic landscape garden, Goethe considered gothic forms, representative of a vanished era, as appropriate in absence of any higher considerations. The Gothic Revivalists on the other hand did not recognize this latter limitation.

The Worlitz Park, which had served as the most immediate model for the Weimar Park had boasted its own Gothic House (Figure 12) built as early as 1773.33

It was mainly due to Goethe's efforts to the contrary, that the archduke had not littered the park with Chinese pagodas and other eclectic trifles, a practice Goethe had mocked in his comic piece, The Triumph of Sentimentality. Yet this time, when Carl August sought his advice in planning a new Gothic House for Weimar, Goethe complied.

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* Wenige verstanden diesen kleinlichen Formen unter sich ein Verhaeltnis zu geben; und dadurch wurden solche Ungeheuer wie der Dom zu Mailand, wo man einen ganzen Marmorberg mit ungeheuren Kosten versetzt und in die elendesten Formen gezwungen hat, ja noch taeglich die armen Steine quaelt,...
In 1786, an old greenhouse structure in the Welsh Gardens, known as the Orange House was converted into a gathering place for court entertainment in lieu of facilities lost in the recent palace fire. The Salon, as it came to be known, exhibited some superficial Gothic Revival elements, consisting of crenelated walls, windows with pointed arches (on one side only painted on) and a stepped gable roof complete with cross-topped spires. A side chapel was added in 1792 to house the orchestra for court balls, but after the residential palace was rebuilt, the Salon was seldom used. Eventually it was demolished in 1811.

In designing and adding to this small building, the archduke consulted Goethe, whom he considered an expert in such matters. Goethe responded by sketching out a design in which a gothic tower was to be added to the structure. \(^36\) (Figures 13, 14) The archduke was so pleased with the result that it was converted into a summer house for his family. \(^37\) Thereafter it became known as the Temple-Manor.

The image Goethe sought to create of the secluded gothic chapel in the middle of the forest, is a theme that surfaces in his writings at this time as well. It is also a recurrent theme of the Romantic Movement. An influence on this design may have been the scenes depicted by the painter, Caspar David Friedrich (1774-1840), whom Goethe knew from the Weimar Art Competitions. After the allied bombing in 1945, the Temple-Manor was transformed into a true ruin recalling all the more Friedrich's romantic imagery. (Figures 15, 16)

**Karl Friedrich von Schinkel**

The building activity in Weimar had been on the decline ever since the death of Gentz in 1811, and had all but ceased during the French occupation. Following the Freedom Wars, the german economy and along with it the building activity soon picked up again. It wasn't long before Goethe was again on the lookout for a state architect. As he now had contact with many of Germany's leading architects, he had a wide range to choose from; many of these architects in turn sought closer ties to Weimar.

Among the better-known architects Goethe corresponded with were Friedrich Weinbrenner (1766-1826) responsible for planning the city of Karlsruhe in 1815, as well as Leo von Klenze (1784-1864) but Goethe maintained an
ambivalence to their work.\textsuperscript{38} He was much more sympathetic with one of Weinbrenner's pupils, Georg Moller (1784–1852). Goethe had first met him in Darmstadt\textsuperscript{39} and had further contact with him through Sulpiz Boisseree. As with architects chosen earlier to work in Weimar, Moller appealed to Goethe because he didn't fall into the trap of dogmatic formalism.\textsuperscript{40} However, closer ties never developed.

Of all these leading architects, Goethe was most intrigued with Schinkel's works. Even during the early phases, Goethe was sufficiently impressed to recommend Schinkel to the Boisseree brothers for the inspection of the existing structure of Cologne Cathedral.\textsuperscript{41} It was precisely Schinkel's budding rather than established career that attracted Goethe, as well as his background which parallels that of the architects Goethe had worked with earlier.

Schinkel's teacher had been the classicist Friedrich Gilly and his early work indicates a similar preference for heavy classical forms. Gilly himself was well acquainted with the architectural developments in Weimar and it is probably through him that Goethe first became aware of Goethe's theories. Schinkel's mentor, Wilhelm Freiherr von Humboldt (1776–1835) maintained a close personal correspondence with the German poet, provided Schinkel further access. Yet it was most likely Schinkel's friendship and later rivalry\textsuperscript{43} with Heinrich Gentz that gave him the closest insight into Goethe's philosophy.

Both Schinkel and Gentz had traveled extensively in Italy; their itinerary and travel notes show a marked influence of Goethe's own 'Italian Journey'.\textsuperscript{44} Goethe could in many ways be considered their guide through the land of classical antiquity.\textsuperscript{45} Their professional relation began following the
competition for the Memorial to Friedrich II to which they had both submitted entries. It ended only with Gentz's death in 1811.

Schinkel's career received its first boost after the war of independence, when Berlin began building again. German nationalism surfaced in many forms during this time following the long repression. The ideal of a medieval German state became the model for new development. In architecture, Gothic was heralded as the appropriate style to represent the new image of the state. Precedence for this was already present in Goethe's early nationalistic essay where he declares Gothic to be the only true German style.

In 1812, Schinkel, profoundly influenced by these ideals, executed a rendering of the west facade of Strasbourg Cathedral with the second tower added, (Figure 17) which embodies the sublime character described in Goethe's essay. Later, in a project for a memorial church in Berlin (Figure 18) this influence is evident in his own work. By using the medieval forms, that recall in spirit, those of Strasbourg Cathedral, Schinkel expresses the prevailing nationalist sentiment in Prussia. This design represents an effort to transform Goethe's ideal into a modern architectural statement, which is further born out in the exuberance of Schinkel's accompanying writings.

Perhaps Schinkel's most evocative image of Gothic architecture as a symbol of national power, is in his painting entitled, "Cathedral above a City" (Dom ueber einer Stadt). (Figure 19)

After Schinkel's first sojourn in Italy, he returned to Berlin via Weimar in 1805, as Gilly before him had done. But it wasn't until 1816, that Schinkel first visited Goethe in Weimar. The premise for the visit was to seek Goethe's advice in his task of buying the Boisseree art collection, appointed to him by
17. West Facade, Strasbourg Cathedral (with second tower added): Rendering: Schinkel, c. 1812.
18. View from the west. Project for a Memorial Church in Berlin, K. F. Schinkel, 1814.

Friedrich Wilhelm III, King of Prussia (1797-1840) under whom he served as state architect.  

After this visit they remained in close contact. It is interesting to note that following this first visit, Schinkel returned to classical form in his "New Guard Station" (Neue Wache).  

Schinkel next visited Goethe in Jena, four years later in the company of State Advisor Schultz and the Berlin sculptors Christian Daniel Rauch (1777-1859) and Christian Friedrich Tieck (1776-1851). This time Goethe sought Schinkel’s aid in suggestions for decorating the new library room in Jena, a project Goethe had instigated. The wall mural Schinkel proposed reveals the common area of interest of architect and poet. The sketch (Figure 20) depicts the mythical
derivation of the corinthian order, representing the organic evolution of the classical orders, based on the greek legend of Callimachus as recorded by Vitruvius. (Figure 21) Even in this small decoration, their mutual fascination with the historical development of architecture is apparent.

Of Schinkel's current projects, Goethe was most intrigued with the design for a new playhouse in Berlin. (Figure 22, 23) As well as sending drawings on ahead for Goethe to study, Schinkel brought others along with him on which he elaborated in detail with his host.54

Although, due to illness, Goethe missed the presentation at the opening of his own Iphigeny on Tauris (Iphigenie auf Tauris) he wrote a prologue in praise of Schinkel's architectural genius.55 Schinkel later sent Goethe a watercolor of the stage backdrop for the opening, depicting the architect's vision of Berlin's urban development, already largely completed.57

Goethe greatly approved of the new theater, especially the idea incorporated in the design of the auditorium whereby the public was made more aware of itself and hence became a more integral part of the spectacle. In his own work, Schinkel was profoundly influenced not only by Goethe's architectural criticism, but also by his underlying morphological theory of architecture. Both had an equal appreciation for the two apparent opposites; classical and gothic form, as the starting point for both lay in the principles by which form itself is generated. Schinkel in architecture and Goethe in poetry both show an equal mastery in the manipulation of form.

In his urban design schemes, Schinkel demonstrates an innate sensitivity for organic integration and continuum, which he valued above the imposition of his own individual expression.59 Throughout his work is a concern for

coordinating nature and architecture and a concern for the completion of environmental totalities. This concept of a living, morphological art is implicit in Schinkel’s writings - revealing the strong influence of Goethe’s own morphology:

As in any branch of art, life has to be visible in architecture. One has to recognize the process by which the idea is formulated, and the way in which the entire imagery of nature is ready and eager to satisfy this idea. A work of architecture must not stand as a finished and self-sufficient object. True and pure imagination, having once entered the stream of the idea that it expresses, has to expand forever beyond this work, and it must venture out, leading ultimately to the infinite. It must be regarded as the point where one can make an orderly entry into the unbreakable chain of the universe. Striving, budding, crystallizing, unfolding, driving, a splitting, tilting, drifting, floating, pulling, pressing, bending, bearing, placing,
Then, for your sakes, the Architect
would with great genius such a noble room erect,
with proportions so discreetly articulated
that you yourselves should feel orchestrated.56

Denn euretwegen hat der Architekt
mit hohem Geist so edlen Raum bezweckt,
das Ebenmass bedächtig abgezollt,
dass ihr euch selbst geregelt fühlten sollt.

Goethe, Prologue for Theater Opening
vibrating, connecting, holding, a lying and resting - where the latter which contrasts with the kinetic properties, must be an intentional, and obvious repose, and therefore also a living action - these are the ways in which architecture must manifest life.\(^6\)

In Schinkel’s design of the Building Academy, motifs from Goethe’s writings are used as decorative elements around the main entrances. (Figure 24)

In the spandrel panels, Amphion and Orpheus are represented orchestrating rough stone into structured walls through the power of music. The plant motifs, including those on the lower frame panels are derived from Goethe’s concept of the metamorphosis of plants.\(^6\)

Despite their similar ideas, Goethe gradually became disenchanted with Schinkel’s work, due in part to its very magnitude and success. Goethe seemed to have a better relationship with less established and ambitious architects. In a sense, Schinkel had outgrown Goethe’s influence.

Schinkel last visited Goethe in 1824, again bringing new designs, but Goethe had already begun hesitating in expressing his unmitigated approval of Schinkel’s work.\(^6\)

Goethe believed, that in Schinkel’s desire to synthesize classical and medieval styles, he was unable to transcend the historical imagery and hence derive new form representative of the new age. He considered Schinkel a great artist, but in the end did not consider his works as constituting great art.\(^6\) He hoped, nevertheless, that an architect of Schinkel’s stature could stem what he saw as the progressive decline of all the arts.\(^6\) It is ironic that after Goethe’s death, Schinkel was commissioned to design the interior of Goethe’s memorial gallery in the Weimar Palace, bringing to life scenes from Goethe’s works. (Figure 25)
The improved economy and nationalistic spirit which contributed to Schinkel's rapid rise in Berlin was also being increasingly felt in Weimar. As usual in times of prosperity, work on the Weimar Residential Palace resumed; this time with a plan calling for the extension of the small wing. With this project and the backlog of other work, Goethe now had the opportunity to finally appoint a court architect under his supervision. Following the recommendation by the Frankfurt mineralogist, Carl Casar von Leonhard (1779-1862), Goethe invited Clemens Wenzeslaus Coudray (1775-1845) to Weimar. After a successful interview he was appointed the 'Chief Building Director' of the Grand Duchy of Weimar. With this appointment, an end was brought to the sporadic borrowing of
Coudray's background made him a perfect candidate for the job, despite being hardly as well known as the other architects under consideration. His prior experience follows a now familiar pattern. He had apprenticed with Schuricht, who had himself assisted Arens in the design of the Roman House and later with the court architect of Dresden, Johann August Heyne (1769-1831).

In 1800, he began 4 years of formal study at the Ecole Polytechnique in Paris under the direction of Jean-Nicolas Durand (1760-1834) and Julien David Leroy (1724-1803). He soon became Durand's master student, winning numerous honors and awards. After graduating with highest honors, he set out on a study trip to Italy, where he met many of the same expatriot German artists whom Goethe knew from his own travels there.

His apprenticeship and schooling provided Coudray an orientation to architecture very sympathetic to Goethe's own. Through Schuricht and Heyne he was subjected to a strong Palladian influence but it was mainly through Durand that deeper similarities evolved.

Durand, himself a student of Boullee, stands at the onset of the modern trend which largely rejected historical precedent. Architecture was considered a scientific art in which building form derived from strict functional requirements. Factors under consideration included materials, structure and economics as well as pertinent customs, climate and culture. Simplicity of overall architectonic form was esteemed while decoration was considered secondary.

In many aspects, this view of architecture paralleled Goethe's own morphological derivation. Coudray, aware of this connection, sought a greater
understanding and realization of it; which he hoped to facilitate by personal contact with the poet. As a result, Coudray was perhaps more dependent on Goethe's influence than all of his predecessors.76

Goethe was immensely pleased with Coudray's appointment, happy to have an artist sympathetic to his viewpoint only wishing he'd come along fifty years earlier.77 Goethe quickly introduced him to the Weimar society and they soon became close personal friends. Their lively interchange of ideas often reached late into the night.78

A frequent topic of conversation was the theory of theater design and its application for a new Weimar playhouse. Goethe already had extensive experience in this area through working with Arens, Thouret and Gentz, not to mention his own insight as a playwright. Both he and Schiller were concerned with the effects of the theater's architecture on the public's perception.

In addition to this theoretical background, both had an indepth knowledge of the technical aspects of theater design. Goethe had carefully studied such works as Carl Ferdinand Langhan's (1782-1869) treatise on the demands of optics and acoustics on theater form79 and Weinbrenner's essay on theaters published in 1809.80

In preparation for their own design, they reviewed current examples of successful theater design:

We had plans and sections of some of the most pre-eminent German theaters sent to us and by utilizing the best aspects and avoiding what we deemed to be mistakes, we have come up with a plan that is really something to see.81*

*Wir hatten uns von einigen der vorzueglichsten deutschen Theater Grund- und Durchschnittsrisse kommen lassen und indem wir daraus das beste benutzten und das uns fehlerhaft scheinende vermeiden, haben wir einen Riss zustande gebracht, der sich wird kennen sehen lassen."
Of the plans they reviewed, those of Durand for an ideal theater (Figure 26) and Moller's design for the Mainz theater (Figure 27) were probably the most influential. Both reveal a deliberate expression of individual function elements within a balanced composition. This tendency deviated from the more traditional strain of Neoclassicism in which the image of the resulting building superceded any expression of functional realities.

As well as expressing function, Goethe's morphological approach necessitated a re-evaluation of the theater type itself. Despite a more complex program, he sought to reestablish a link to the greco-roman archetype. He had carefully studied the evolution of this type from its original greek form through its study and interpretation by Vitruvius and Palladio. (Figures 28, 29, 30, 31) He was also familiar with the efforts of Ludwig Catel to reinstate the renaissance practice of basing new theater design on classical precedent. (Figure 32) One of Goethe's preliminary sketches bears some similarity to Palladio's Olympic Theater (Figure 33) suggesting the type under consideration, but has little external resemblance to the final design.

Coudray's first design (Figure 34) exhibits a formal likeness to Schinkel's playhouse (Figure 37) despite the difference in scale. The major point of departure, however, is in the expression of the rounded auditorium on the exterior facade. Schinkel on the other hand superimposed the facade of a greek temple onto the curved form of his auditorium. In an assessment of his own design, Coudray remarks:

Building character is simple but solid. The external form results from the functionally determined interior elements.
Thus the building statement recalls the memory of the ancient theater.83*

An unexpected opportunity arose to realize this project when in 1825, the old court theater burnt to the ground.84 Goethe expressed his own surprised reaction after learning of the disaster from Eckermann:

This fire appears to me very remarkable. I will now confess to you that during the long winter evenings, I have occupied myself with Coudray in drawing the plan of a new handsome theater suitable to Weimar...

... As soon as the Grand Duke gives permission, the building may be commenced and it is no trifle that this accident found us so wonderfully prepared.85

But his optimism proved premature. The novel appearance of Coudray's design did not appeal at all to Carl August, who was more interested in the pretentious image of a traditional theater. Following some heated debates

*Bauart einfach aber fest. Die aeussere Form das Resultat der inneren zweckgemaessenen Einrichtung und so die Bestimmung des Gebaeudes aussprechend. Erinnerrung an die Theater der Alten.


32. Plan, Theater, Design: Ludwig Catel, 1802.


between the duke and Goethe, Coudray produced two further designs (Figures 35, 36) in an attempt to compromise.

The plans were finally approved by the duke later in the year. All was proceeding on schedule with the foundation, when Coudray was suddenly relieved from his position as building supervisor. It soon became apparent that a design prepared by another architect was now being grafted to the foundation walls of the original. The duke it seems, anticipating his dislike for any revisions possible, had commissioned Steiner to design an alternate plan. This was then stealthily implemented to avoid confrontation and delay. From this point on, Goethe and Coudray no longer played any active part in the project. Goethe comforted himself with the hope that it too would sooner or later go up in flames.

Despite this setback, they both worked on a number of building projects together. The extent to which Goethe was involved is revealed in Coudray's own description:

While reviewing the plans which I was accustomed to show him of all our larger projects, he always first sought out the purpose under consideration. Then he had me explain to him how we meant to accommodate such with the means at hand.

One of the major problems they faced in realizing projects was the builder's general lack of skill. In an attempt to improve the situation for future projects, Coudray with Goethe's support and input opened a building school in 1829. The program's first aim stressed the

*Bei Durchsicht der Risse, die ich ihm von allen unseren grossern Bauten zu zeigen pflegte, forschte er jedesmal zunaehest nach dem vorliegenden Zweck und dann liess er sich erklaren, wie wir solchen mit den vorhandenen Mitteln zu erreichen gesucht.

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development and perfection of technique. At the same time it also provided guidelines for future development in architecture. In intent, the school was to architecture what the Weimar Prize Competitions had attempted to be for art.

Goethe had already anticipated the effect new materials such as iron, would have on future architectural form. Both he and Coudray were familiar with Heinrich Huebsch's (1795-1863) design for a theater auditorium spanned by an iron truss. (Figures 38, 39)

Goethe was also intrigued with the development of new iron bridges. The evolution of form caused by the inherent properties of the new material was well exemplified by the increasingly long and slender spans to be seen in the bridges.

The success of the school was so great that branches were established throughout the Grand Duchy. Thus Goethe's efforts to redirect the course of architecture extended beyond his own lifetime and may well have set the precedent for establishing the Bauhaus in Weimar only 70 years later.

Poetry and Architecture

Of the architects Goethe worked with in Weimar, those most familiar with his writings and sympathetic to his overall philosophical outlook were best able to realize his architectural ideals. For these ideals came from the same source as his poetry. Morphology, the science of form, provided the basis of comparison. Goethe's aesthetic theory originally derived from his study of poetry. This aesthetic theory could then be applied to 'form' in general and architecture in particular. The special prominence of architecture from Goethe's morphological viewpoint came from its need to fulfill function yet

39. Plan, Section, theater with a steel truss roof, H. Huebsch, 1825.
simultaneously transcend function to become an art form. In this sense it most clearly of all the arts paralleled the process of natural growth upon which morphology is ultimately based.

Throughout his literary work, both poetry and prose, the ideal of architecture was perhaps much more successfully expressed than in any of his building efforts. In writing, Goethe was limited only by his own expressive ability and in this art form Goethe was an acknowledged master. Thus the written word served him as the most successful vehicle to convey his notion of architecture.

Poetry as the root of the quest for knowledge has a strong classical precedent through Horace and Vitruvius and serves as the basis for Goethe's continuing inquiry. He, too, considered poetry to be the root of science:

No-one has been willing to admit that Science and Poetry could be united in any capacity. It has been forgotten, that Science originally developed out of Poetry. No one considers that in a new age both could happily meet again on a higher plane to their mutual advantage.  

In this capacity poetry also occupied a counterpoint position to that of science, providing a more direct means of understanding a scientific principal. Thus Goethe's own scientific inquiries were often accompanied by pedagogical verse. The best known of these being his poem The Metamorphosis of Plants, but also are found with his treatises on animals, colors, geology, clouds, optics, etc.

*Nirgends wollte man zugeben, dass Wissenschaft und Poesie vereinbar seien. Man vergess, dass Wissenschaft sich aus Poesie entwickelt habe; man bedachte nicht, dass nach einem Umschwung von Zeiten beide sich wieder freundlich, zu beiderseitigem Vorteil, auf hoheren Stelle gar wohl wieder begegnen konnten.
Poetry, then as an art form provides an alternate means of probing the inner workings of nature; a method usually overlooked in the empirical scientific tradition:

Poetry hints at the secrets of nature and attempts to solve them metaphorically.95*

Morphology presupposes a common basis for art in nature and by virtue of this underlying commonality, makes analogies between art forms instructive. Goethe's best known analogy of this kind was his comparison of architecture to music:

"I have found a paper of mine among some others," said Goethe today, "in which I call architecture petrified music. Really there is something in this; the tone of mind produced by architecture approaches the effect of music."96

which in turn refers back to a much earlier passage dating from his travels in Italy:

If you consider that centuries have architectonically held sway in the highest sense; that the artistic thoughts of pre-eminent minds have risen up on the remains of mighty foundations and presented themselves to the eye. Then you can understand how the mind and eye must be enchanted when in such light you perceive these manifold horizontal and thousand vertical lines interrupted and embellished like a silent music. And you can understand how everything in us that is small and narrow-minded is aroused - not without pain - and is driven out.97**

*Die Poesie deutet auf die Geheimnisse der Natur und sucht sie durchs Bild zu loesen.
**Wenn man bedenkt, dass Jahrhunderte hier im hoechsten Sinne architektonisch gewaltet, dass auf uebriggebliebenen, maehtigen Substruktionen die kuenstlerischen Gedanken vorzueglicher Geister sich hervorgehoben und den Augen dargestellt, so wird man begreifen, wie sich Geist und Aug' entzuecken muessen, wenn man unter jeder Beleuchtung diese vielfachen horizontalen und tausend vertikalen Linien unterbrochen und geschmueckt wie eine stumme Musik mit den Augen auffasst, und wie alles, was klein und beschraenkt in uns ist, nicht ohne Schmerz erregt und ausgetrieben wird.
The complex interrelationship of nature and art was a recurrent theme in Goethe's poetry, often delivered in a self-contradictory, cryptic style epitomized by *Nature and Art* (c. 1800) which in turn illustrates the morphological principals of polar opposites:

Nature, It seems, must always clash with Art,
And yet, before we know it, both are one;
I too have learned: their enmity is none,
Since each compels me, and in equal part.
Hard, honest work counts most! And once we start
To measure out the hours and never shun
Art's daily labor till our task is done,
Freely again may Nature move the heart,
So too all growth and ripening of the mind:
To the pure heights of ultimate consummation
In vain the unbound spirit seeks to flee.
Who seeks great gain leaves easy gain behind.
None proves a master but by limitation
And only law can give us liberty.98

The duality of nature and art is one of the many lessons in the pedagogical epic series featuring Wilhelm Meister, which were often expressed in verse to heighten the sense of universality:

As all Nature's thousand changes
But one changeless God proclaim;
So in the Arts wide kingdoms ranges
One sole meaning still the same:
This is Truth, eternal Reason,
Which from Beauty takes its dress,
And, serene through time and season,
Stands for age in loveliness.99

In the prose poem written for the reopening of the Weimar Theater in 1807, in celebration of the new interior renovation by the Stuttgart architect Thouret, Goethe makes an analogy to nature forming her own creations to that of man's will forming art, this time the art form being architecture:

Had nature, under her dark rule
Here laid out a mountain range
There chiseled crags and just alongside
Above hills, valleys and caves
Tended an ancient forest divinely resting
So that the wanderer avoids
The inhospitable labyrinthes with dread.
Behold! there the master stroke
Makes its way, they are allowed to undertake it
Allowed to destroy thousand year old creations.
Now the axe resounds deep in the forest.
Iron clangs against the rugged crags
And now destruction in horrible disarray
Lays in the splinters of trunks and wreckage of boulders,
Awaiting an incredible new creation.
Soon the stones are ordered
According to the square and string growing higher
New forms evolve from them, the ornament
Takes shape wonderously with the order
And the old trunk hewn square gracefully joins
The gables, slowly rising one after another into the heights.
A new man-made forest rises up into the air.
Behold, the masters triumphal wreath waves on high.
Jubilation resounds in him and it sounds almost
As if the earthly architect equals the heavenly.
This can be accomplished on occasion, 100

*Hat Natur, nach ihrem dunklen Walten,
Hier sich Bergreihn hingezogen, droben
Felsen aufgezackt und gleich daneben
Ueber Talgestein und Hoehn und Hoehlen
Heilig ruhend alten Wald gepfleget,
Dass den unwirtbaren Labyrinthen
Sich der Wandrer grausend gern entzoeg
Sieh! da dringt heran des edlen Menschen
Meisterhand; sie darf es unternehmen,
Darf zerstoeren tausendjaehr'ge Schoepfung.
Schallet nun das Beil im tiefsten Walde,
Klingt das Eisen an dem schroffen Felsen,
Und in Staemmen, Splittern, Massen, Truemmern
Liegt zu unbegreiflich neuem Schaffen
Ein Zerstoertes graesslich durcheinander.
Aber bald dem Winkelmass, der Schnur nach
Reihen sich die Steine, wachsen hooher;
Neue Form entspringt an ihnen, herrlich
Bildet mit der Ordnung sich die Zierde,
Und der alte Stamm, gekantet, fuegt sich,
Ruhend bald und bald emporgerichtet,
Einer in den andern Hohen Giebels
Neuer Kunstwald hebt sich in die Luefte.
Sieh! des Meisters Kraenze wehen droben,
Jubel schallt ihm, und den Weltbaumeister
Hoert man wohl dem irdischen vergleichen.
So vermag's ein jeder.
Thus from Goethe's viewpoint, architecture and poetry were analogous art forms; each had their own characteristic raw materials and means by which they could be ordered. Nature, as always stands as the model for the creative process. A more unusual aspect of this viewpoint was that once a form was so created it could be appreciated in the same manner as a natural object, and in addition could bring a closer understanding as to the natural process. Goethe, himself had experienced this enlightenment on the occasion of his first encounter with the gothic architecture of Strasbourg Cathedral.

On the immediate level, Goethe realized the effect architecture had on all the senses:

It might well be thought that, as a fine art, architecture works for the eye alone, but it ought primarily - and very little attention is paid to this - to work for the sense of movement in the human body. When, in dancing we move according to certain rules, we feel a pleasant sensation, and we ought to be able to rouse similar sensations in a person whom we lead blindfold through a well-built house. The difficult and complicated doctrine of proportion, which enables the building and its various parts to have character, comes into play here.\textsuperscript{101}

In the art form in which he most excelled, that of poetry and prose, Goethe could express the effect of architecture on yet another level. Here poetry afforded him a means to express what was otherwise ineffable. In words he could more effectively express what he struggles to have realized through his strong influence on the court architects.

Throughout his literary works, architecture is portrayed as a powerful art form capable of interacting with human consciousness and elevated it. In Goethe's pedagogical series featuring Wilhelm Meister, the protagonist learns of the inner power and lesson within external forms:
It was a world, it was a heaven, that in this abode surrounded the spectator; and beside the thoughts which those polished forms suggested, beside the feelings they awoke, there still seemed something further to be present, something by which the whole man felt himself and laid hold of, "What is this," exclaimed he, "which independently of all signification, without any sympathy that human incidents and fortunes man inspires us with, acts on me so strongly and so gracefully? It speaks to me from the whole, it speaks from every part; though I have not fully understood the former, though I do not specially apply the latter to myself! What enchantment breathes from these surfaces, these lines, these heights, and breadths, these masses and colours! What is it that makes these figures so delightful, even when slightly viewed, and merely in the light of decorations. Yes, I feel it: one might tarry here, might rest, might view the whole and be happy; and yet feel and think something altogether different from aught that stood before his eyes."102

Later on, he makes a more startling assertion as to the interaction of architecture and human behavior:

No doubt you are wondering at the strange accordance of this building with its inhabitants, whom you last night got acquainted with. Yet it is, perhaps, still more singular than you suppose: the building has, in truth, formed the inhabitants. For, when the inanimate has life, it can also produce what has life.103

In the novel Elective Affinities (Die Wahlverwandtschaften), the architect plays a minor role but through his work on a small country chapel, enables one of the main characters to see outside of the turmoil of her own immediate surroundings:

...she halted in surprise at the unexpected appearance of the familiar room. A grave many-coloured light was coming through the single high window, which had been set with stained glass, giving the whole interior a strange glow and evoking a peculiar atmosphere. The beauty of the vault and the walls was enhanced by the decoration of the floor, which now consisted of tiles specially shaped and laid after a handsome pattern and joined together plasterwork. The architect had had these tiles, together with the stained-glass panes, prepared in secret and been able to have them installed very quickly. There were also seats in the chapel now: a number of finely carved choir stalls had been
discovered among the antiquities of the church and these were now disposed very becomingly around the chapel walls. Ottilie was delighted to see things familiar to her thus brought together into an unfamiliar whole. She stood, walked back and forth, looked and examined. At length she sat in one of the stalls, and as she gazed up and around it seemed to her that she was and was not, she felt her existence and did not feel it, she felt that all this before her might vanish away and that she too might vanish away, and only when the sun ceased to illuminate the window did Ottilie come to herself...

Thus architecture on its highest level was able to transcend the necessary functional requirements and thereby achieve artistic beauty.

In the following prose poem many of these ideas are presented simultaneously and linked to the lessons of classical mythology:

Imagine Orpheus, who when confronted with a large barren building site, wisely set himself down in the most appropriate place and by means of the animating notes of his lyre formed a spacious marketplace around about him. Swiftly seized by the powerfully compelling yet sweetly attracting notes, the rough stones split away from the massive wholeness. As they enthusiastically gather together, they must artistically yet practically arrange themselves in rhythmic layers. And thus were streets joined on to streets, nor were defensive battlements lacking.

The notes fade away in time, but the harmony remains. The citizen of such a city waltzes to eternal melodies, their spirits can never sink and their activity can never subside. The eye acquires the function, burden and responsibility of the ear. Even on the worst of days, the citizen remains in an ideal condition without questioning the reason why and experiences the highest moral and religious gratification. One gets accustomed to strolling back and forth in St. Peters and it is with this that an analogy can be drawn to what we have just asserted.

On the contrary, in a poorly built city, where chance has swept the houses together with a nasty broom, unknowingly, the citizen dwells in a totally barren environment. However for the outsider it is all too apparent, just as if he heard bagpipes,
40. Orpheus, F. F. Salviati.
whistling, and drums and awaited the appearance of dancing bears and leaping apes.105*

In many ways, Goethe was better able to realize the creative potential of architecture in his poetry, than he was able to express it in practice. Of all his architects, however, Coudray served most successfully as Goethe's interpreter in the art of building. It seems fitting that Coudray designed the simple Palladian mausoleum where Goethe was buried alongside Schiller in 1832. Coudray continued on as court architect in Weimar long after Goethe's death.

*Man denke sich den Orpheus der, als ihm ein grosser wüster Bauplatz angewiesen war, sich weis' an den schicklichsten Ort niedersetzte und durch die belebenden Toene seiner Leier den geraeumigen Marktplatz um sich her bildete. Die von kraeftig gebietenden, freundlich lockenden Toenen schnell ergriffenen, aus ihrer massenhaften Ganzheit gerissenen Felssteine mussten, indem sie sich enthusiastisch herbeibewegten, sich kunst- und handwerksgemaess gestalten um sich sodann in rhythmischen Schichten gebuehrend hinzuordnen. Und so mag sich Strasse zu Strasse anfuegen. An wohlgeschuetzenden Mauern wirds auch nicht fehlen.

Die Toene verhallen, aber die Harmonie bleibt, Die Buerger einer solchen Stadt wandeln und weben zwischen ewigen Melodien; der Geist kann nicht sinken, die Taetigkeit nicht einschlafen, das Auge uebernimmt Funktion, Gebuehr und Pflicht des Ohres und die Buerger am gemeinsten Tage fuehlen sich in einem ideellen Zustand; ohne Reflexion, ohne nach dem Ursprung zu fragen, werden sie des hoechsten sittlichen und religioesen Genusses teilhaftig. Man gewoehne sich in St. Peter auf und ab zu gehen und man wird ein Analogon desjenigen empfinden, was wir auszusprechen gewagt.

Dagegen in einer schlecht gebauten Stadt, wo der Zufall mit leidigem Besen die Haeuser zusammenkehrte, lebt der Buerger unbewusst in der Wueste eines duetern Zustandes; dem fremden Eintretenden jedoch ist es zu Mute, als wenn er Dudelsack, Pfeifen und Schellentrommeln hoerte und sich bereiten muesste, Baerentaenzen und Affenspruengen beizuwohnen.
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95. ???


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CONCLUSION

In the attempt to more clearly delineate the nature of form in architecture, both its synthesis and effect, Goethe again utilizes the myth of Orpheus. This myth characterizes the transforming from idea to art; the process of all morphology. Orpheus represents the creative spirit in man instilling order into lifeless material; in the discipline of architecture symbolized by rough boulders. With the animating tones of his lyre, this order is achieved; that is with an understanding of the principles of morphology a living architecture can be created. This quality of animation is both a reflection of its creator, as well as being the character of elegantly fulfilled function. As an object imbued with life, it can then in turn impinge on the life of other beings; the inhabitants of the town. Through this powerful symbol, poetry, biology and art all converge and illuminate the principles of morphology in the art of building.¹

Ever since his initial experience with Strasbourg Cathedral, Goethe concerned himself with both the theoretical and practical aspects of architecture. During his lifetime he made several efforts to steer the course of architecture, but to little avail. However, the positions he stood for did have some direct influence.

He is best known for his role in the Gothic Revival, but on closer inspection, the nature of his role is not as straightforward as it appears. As the Romantic Movement swept Europe in the wake of Napoleon's defeat, the Gothic style became the symbol for the rebirth of nationalism in Germany after years of French occupation. It was during this time that Goethe's essay on Strasbourg Cathedral was rediscovered.
The essay was originally published without Goethe's name; the publisher and location were made purposely misleading so as to give no clues to its author. At the time it was published it had little influence. The Dresden architect, Krubsazius, was pleased with the essay, but criticized the author's lack of architectural background. Nicolai, the rationalist publisher gave it a scathing review in his Berlin newspaper.

As the Romantic Movement gained momentum after the turn of the century, Goethe's essay soon became the symbol of the beginning of the German Gothic Revival movement. When Goethe renewed his interest in the Gothic in connection with the completion of Cologne Cathedral, he published the essay himself in 1824, and again in 1830. By this time, Gothic architecture was no longer considered a barbarous style, and in contrast to his earlier embarrassment over the essay, he was now anxious to be known as its author.

Of the influential architects of the period, Schinkel was very sympathetic with the growing nationalistic spirit. He had read Goethe's essay and was intrigued with the poet's morphologic theory of architecture. In 1824 he visited Strasbourg Cathedral and was impressed by the plasticity of the stonework, which he described as looking "as if poured in bronze." Following the liberation of Germany from French occupation, Schinkel employed the Gothic style as a symbol of German patriotism, departing briefly from his more usual Neo-Classical style.

Goethe, however, never fully embraced the Gothic Revival, despite his fascination with original Gothic structures. He was concerned with the tendency in this movement towards the picturesque and excessive sentimentality. He sought a direction in architecture founded on natural principles, free from too
strong a traditional influence. Through his hand-picked court architects, Goethe sought to nurture a morphological basis of design in the projects under his jurisdiction. Although, from today's vantage point, the results of his efforts were hardly significant, upon closer inspection, it soon becomes evident that the approach to these projects was revolutionary. The stress on function and adaptation versus tradition and style was diametrically opposed to the prevailing attitudes in Germany at the time. The combination of design philosophy and founding of practical building schools heralds the emergence of the Bauhaus in Weimar only some 70 years later.

Despite his efforts, Goethe was never able to directly influence the direction of art or architecture to the extent he had hoped. It was rather through his natural philosophy of form that Goethe influenced organic theory that later contributed to the modern movement.

Although organic philosophy was quite prevalent in the German-speaking countries, it was relatively unknown in England. Samuel Taylor Coleridge was one of the first to express the relationship of art to nature in a complete artistic theory in the English-speaking world. The basis premises of Coleridge's ideas came from Germany where he had studied in his youth. Other writers such as Thomas Carlyle also helped disseminate these ideas into the general artistic consciousness.

The English version of the Gothic Revival had as its main proponents, Augustus Welby Pugin and John Ruskin. In Pugin's polemic, there is a familiar emphasis on functional versus formal expression:

Firstly there should be no features about a building which are not necessary for convenience, construction or propriety... (What I mean by propriety is this, that the external and internal appearance of an edifice should be illustrative of and in accordance with the purpose for which it is destined.)
Similar concepts of responsiveness and fitness to purpose are readily apparent in Ruskin’s writings. In describing the adaptation of the Gothic style to functional considerations, he states:

And whenever it finds occasion for change in its form or purpose, it submits to it without the slightest sense of loss either to its unity of majesty . . . subtle and flexible like a fiery serpent, but ever attentive to the voice of its charmer. And it is one of the virtues of the Gothic builders that they never suffered ideas of outside symmetries and consistencies to interfere with the real use and value of what they did.\textsuperscript{10}

Adherents to the principles espoused by Pugin and Ruskin were less drawn to using the literal forms of Gothic architecture and became more interested in the expression of function in the spirit of the Gothic. It was from this background that the modern organic architects first achieved a mature expression without being bound too closely to traditional historical forms.

In America, the principles of organic thought came both from England and from Germany as interpreted by the Transcendentalist philosophers. For Ralph Waldo Emerson Strasbourg cathedral was also a powerful symbol of natural creative genius:

Strasbourg Cathedral is a material counterpart of the soul of Erwin of Steinbach.\textsuperscript{11}

This same body of ideas can be found in the writings of Henry David Thoreau, Walt Whitman, Herbert Spencer, and Swedenborg, among others. Louis Sullivan was much indebted to these writers, as was his follower Frank Lloyd Wright. In his book, \textit{Modern Building}, Walter Behrendt indicates the degree to which Wright’s views were based on Goethe’s morphology:

Wright’s reflection of nature is conforming to the classic example of Goethe, of that creative kind, where intuition itself becomes thinking, and thinking an intuition. It is directed upon the morphological, upon the problem of structure and upon the laws of organic growth. From the study of nature and its

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formative laws, he gets a firm and definite conception for his architectural creation. He realizes how form derives its structure from nature and from the character of the material and its conditions, exactly as a flower forms itself according to the law which lies in its seed.\(^\text{12}\)

Comparing both Wright's and Goethe's direct inspiration from nature, their statements are remarkably similar:

A universal knowledge of organic nature is necessary in order to understand and develop the artist through the labyrinth of this structure.\(^\text{13}\)

Goethe

A sense of the organic in nature is indispensable to an architect, and the knowledge of the relation of form to function is at the root of his practice.\(^\text{14}\)

Wright

Their position on Gothic Architecture is also very similar:

A revival of the Gothic Spirit is needed in the Art and Architecture of modern life. Reviving the Gothic Spirit does not mean using the forms of Gothic Architecture. It means something quite different. I have called this spirit for organic character of form and treatment the Gothic Spirit, for it was more completely realized in the forms of that Architecture perhaps than any other.\(^\text{15}\)

Wright

Wright was educated as a youth according to principles established by Froebel, who himself developed his educational ideas from the German organic school.

Sullivan first introduced Wright to these interrelated concepts, and it was Sullivan perhaps even more than Wright who was inspired by the morphological roots of form:

Form is everything and anything, everywhere and at every instant. According to their nature, their function, some forms are definite, some indefinite; some are nebulous, others concrete and sharp; some symmetrical, others partly rhythmical. Some are abstract, others material. Some appeal to the eye, some to the ear, some to the touch, some to the sense of smell, some to any one or all or any combination of these. But all without fail, stand for relationships between the immaterial and the material, between the subjective and objective, between the Infinite Spirit and the finite mind.\(^\text{16}\)
Sullivan had also studied Goethe's *Metamorphosis of plants* and often used the symbol of the seed to signify the potential of an architectural idea.

Alvar Aalto's organic theory was certainly based on a wide variety of sources but was never developed verbally to the extent that either Sullivan's or Wright's was. Yet, from the little he did write, organic form can again be seen to be of primary importance:

> Only where form arises at the same time as content or in faithful combination with it, as it were, can we speak of a step forward, but then form as a separate element no longer interests us. But in its organic context, it seems natural to us.17

Of the German-speaking architects in this group, it was Rudolf Steiner who developed his entire architectural theory directly from a study of Goethe's writings on morphology. The history and results of this unique relationship provided the first clues as to the overall importance of morphology to the understanding of organic theory in general.

Hugo Haering and Hans Scharoun had a similar relationship to Sullivan and Wright's. Haering was the primary theorist, while Scharoun built many more projects based on his interpretation of principles laid out by Haering. Haering spent the latter years of his life preparing an epic work on organic theory which unfortunately was never finished. Fragments of the work were published posthumously under the title, *The Cultivation of the Intellect in Preparation for Work on Form*. (Die Ausbildung des Geistes zur Arbeit an der Gestalt)

From this cursory look at the theoretical background of these architects, the common principles are already evident. Each has a style characteristic of their culture, region and personality, yet were able to derive form from function unfettered by historic precedence to a degree the previous generation had been unable to attain. In this sense, they indeed represent the pioneers of
modern architecture, although the style that was to become modern soon evolved in directions which had little to do with its organic roots.

In analyzing the body of their work using the comparative method advocated in Goethe's morphology, the important elements of design, come immediately to focus (Figures 1-5). Whether these comparisons are of plans, facades or models is immaterial, as all indicate similar aspects of the underlying idea. In each case, the ideal type is revealed in the process of comparative analysis, as is the progressive metamorphosis of the type. Goethe's role in the development of an organic philosophy is still little known or understood in the English-speaking world, although it is taken for granted in Germany. Professor Kuno Francke alluded to this when he suggested to Wright that he come to Germany where his work would be appreciated in a way that did not happen in America for decades. And it was indeed the German Wasmuth edition on his works that first gave Wright exposure in his home country.

Having studied the science of form as developed by Goethe and seen how it was applied to architecture, an example has been established of the link between philosophy and built form. This process is not specific to this particular focus of discussion but is universally applicable. Goethe himself is part of a chain of morphological thinkers, including such diverse representatives as Pythagoras, Plato, Ovid, Shakespeare, Giambattista Vico, Linnaeus, Swedenborg, Erasmus, Darwin, Novalis, Coleridge, Wordsworth, Emerson, Spencer, Spengler and many others.
1. Variation of Tall Building Type, Architect: L. Sullivan.
2. Variation of Usonian House Type, Architect: F. L. Wright.
3. Variation of Library Type, Architect: A. Aalto.
4. Variation of House Type, Architect: H. Haering.
5. Variation of House Type, Architect: H. Scharoun.
The works of the organic architects mentioned may be particular to an era, but the principles and vitality expressed by them are likewise timeless.

It was a response to this subliminal vitality that provided the impetus for this work which as often repeated could have taken many different directions. The directions not taken could serve as the basis of further studies:

1. An in-depth study of the history and principles of morphology itself.
2. A study of the morphological basis and structure of the philosophy espoused by the modern organic architects.
3. A comparative analysis of the works of these architects based on morphological principles.

The ultimate aim of these studies is not to undergo an elaborate academic exercise, but a search for answers to a perennial dilemma recognized by Aalto:

Our greatest problem will be to discover the form appropriate to our age, not only in the realm of architecture, but in all spheres of life.20

This is as great a challenge today, as it was in his time, as we find ourselves again in a transitional period, the resolution of which is still unclear. Seen in the light of morphological thought, there will be no one definitive solution, but numerous related, intriguing responses.
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Thou art confused, my beloved, at seeing the thousandfold medley,
   Shown in this flowery mass, over the garden dispersed;
Many a name, love, thou hearest assigned; one after another
   Falls on thy listening ear with a barbarian sound.
None of these forms are alike but they all bear a certain resemblance.
   And a mysterious law is by their chorus revealed.
Yea, 'tis a sacred enigma, my loveliest friend; could I only
   Happily teach thee the word which will the mystery solve!
Closely observe how the plant is developing little by little,
   How it will grow by degrees changing to blossom and fruit!
First from the seed it unravels itself, as soon as the silent,
   Motherly womb of the earth kindly allows its escape,
And to the charms of the light, which is holy and ever in motion,
   Trusteth its delicate leaves, feebly beginning to shoot.
Simple the force is that slumbers in seeds; 'tis a germ of the future,
   Peacefully locked in itself, 'neath the integument hid,
Leaflet, and rootlet, and bud, still void of all color, and shapeless,
   Such as the kernel, while dry, holdeth in motionless life.
Upward then striveth the plant and it swelleth with delicate moisture,
   Forth from the night where it dwelt, straightway ascending to light.
Simple remaineth its shape, when the green first makes it appearance;
   And 'tis a token like this, points out the child 'mid the plants.
Soon though an off-shoot, succeeding it, rises on high, and repeateth,
   Piling up node upon node, ever the primitive form;
Yet now always alike; for the following leaf, as thou seest,
   Ever produceth itself, fashioned in manifold ways,
Longer and more indented, in points and in parts more divided, —
   Forms which were latent till now, sleeping in organs below.
So it attaineth at length its predestined and noble perfection,
   Which in these numerous forms, fills thee with wondering awe.
Ribbed it appears here and toothed, on its surface exuberant swelling,
   Free and unending the shoot seemeth in fulness to be;
Nature, however, restraineth with a powerful hand the formation,
   And she perfecteth the plant, gently completing its growth,
Yielding the juices with lesser abundance, contracting the vessels,
   So that the figure ere long nobler effects will disclose.
See how the growth of the foliage here on the edge is retarded,
   While there the rib of the leaf fuller becometh in form.
Leafless, however, and quick the tenderer stem then upspringeth,
   And a miraculous sight will the observer enchant.
Ranged in a circle in numbers that now are but small, and now countless,
   Gather these delicate leaves close by the side of their like,
Here at the axis embraces them all the well sheltering calyx
   Which the corolla presents, brilliant in hue and in form.
Nature thus decks them with bloom in a noble and radiant glory,
   Showing in order arranged, branches with leaves and with buds.
Wonderment fresh dost thou feel, as soon as the stem rears the flower
   Over the scaffolding frail fringed with its alternate leaves.
Flowers, however, are only the prophets of further creation,
   Truly the leaf with its hues feeleth the touch of a god.
It on a sudden contracteth itself; the tenderest figures
   Stand as yet twofold, divided, but soon will they haste to unite.
Lovingly then the fair couples are joined in a bridal alliance,
   Gathered in countless array, there where the altar is raised.
Hymen is hovering o'er them, and scents of an odor delicious
   Sweetly their fragrance exhale for the delight of the world.
Presently numberless germs on the several branches are swelling,
   Sweetly concealed in the womb, where is made perfect the fruit.
Here, we see, Nature is closing the ring of her forces eternal;
   And it attacheth a new link to the one gone before,
So that the chain be prolonged forever through all generations,
   The whole may have life, e'en as enjoyed by each part.
Now, my beloved one, turn thou thy gaze on the many-hued thousands
   Which can confuse thee no more; for they will gladden thy mind.
Every plant unto thee proclaimeth the law everlasting,
   Every floweret speaks louder and louder to thee;
But if thou here canst decipher the sacred design of the goddess,
   Everywhere will it be seen, e'en though the features are changed.
Caterpillars are sluggish, and busily butterflies flutter,—
   Man however may change even the figure decreed.
Oh, then, bethink thee, as well, how out of the germ of acquaintance,
   Man gradually habits arose. Seeking each other we met,
Verily friendship and love began to flame in our bosoms,
   Finally Amor procured wondrously blossom and fruit!
Think of the manifold touches which Nature hath lent to our feelings,
   Silently giving them birth, all of them different in form!
Yea and rejoice thou to-day in the present! For love that is holy
   Sekesthe the noblest of fruits, — which is a concord of thought,
When our opinions agree, — thus we both will in rapt contemplation,
   Lovingly blending in one, find a more excellent world.

Johann Wolfgang von Goethe

After Bowring's translation.

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APPENDIX C

Nature: Aphoristic (1782)

Nature! We are encircled and enclasped by her — powerless to depart from her, and powerless to find our way more deeply into her being. Without invitation and without warning she involves us in the orbit of her dance, and drives us onward until we are exhausted and fall from her arm.

Eternally she creates new forms. What now is, never was in time past; what has been, cometh not again — all is new, and yet always it is the old.

We live in the midst of her, and yet to her we are alien. She parleys incessantly with us, and to us she does not disclose her secret. We influence her perpetually, and yet we have no power over her.

It is as if she founded all things upon individuality, and she recks nothing of individuals. She builds for ever, and destroys for ever, and her atelier is inaccessible.

She lives in her children alone, and the mother, where is she? — She is the sole artist; from the simplest material she passes to the extremest diversity; with no hint of strain she arrives at the fullest consummation — at the exactest precision, always veiled in a certain obscurity. Each thing she makes has its own being, each of her manifestations is an isolated idea, and yet they all are one.

She acts a play; whether she witnesses it herself we know not, and still she acts it for us — for us whose view is but sidelong.

In her there is eternal life, eternal coming-to-be, and eternal movement, and yet she travels no further. She transmutes herself for ever, and for no moment does she come to rest. To abide unchanged is not in her scheme of things, and she has set her curse upon stagnation. She is constancy itself. Her pace is measured, she seldom endures exceptions, and her laws are immutable.

Pondering and meditation are perpetual in her; but it is not as humanity, but as Nature, that she muses. She reserves for herself an all-embracing mode of thought which none can penetrate.

All mankind is in her, and she is in them all. In friendliness she plays with each one, and rejoices the more he prevails against her. With many she deals so secretly that she plays the play out to the end before they are aware of it.

Even the extreme of the unnatural is Nature. None can see her rightly anywhere who does not see her everywhere.

She loves her very self, and unto herself she cleaves eternally with countless eyes and hearts. She has set herself asunder, that she may be to herself the sources of gladness. Continually she produces new sentient beings who can enjoy her; inexhaustibly she communicates herself.

She takes delight in illusion. He who shatters it in himself and in other men, him she chastises as the harshest tyrant. He who follows her trustingly him she gathers to her heart like a babe.

Her children are innumerable. To none is she at all times miserly, but she has her favoured darlings for whom she is prodigal and to whom she dedicates much. To greatness she accords her protection.

She volleys forth her creations from nothingness, and tells them not whence they come nor whither they go. They have only to run the course she sets; knowledge of the way is hers alone.
Her springs of action are few, but they are never outworn; powerful are they always, and always rich in diversity.

Her drama is for ever fresh, since she continually creates new spectators. Life is her loveliest invention, and Death is her device for ensuring plenitude of Life.

She shrouds man in misty dark, and goads him incessantly towards the light; she makes him earthbound, inert, and ponderous, and ever and again she startles him out of sleep.

She arouses cravings, since she loves to incite. Marvellous it is that she achieves this incitement with so little. Each longing which she instils is a benison; quickly appeased, quickly it springs up anew. If ever she gives more, it is a fresh fount of desire; but the balance is soon redressed.

Every moment she sets forth on the longest pilgrimage, and every moment she is at the end where she would be.

She is vanity itself, but not for us, for whom she becomes the soul of seriousness.

She allows every child to work its will upon her, every fool to sit in judgment upon her, and she permits thousands to pass over her in blind apathy; but she rejoices in them all, and from all she reaps her harvest.

We obey her laws even in resisting them; we work with her, even when our desire is to work against her.

Everything she gives becomes a blessing, since she begins by making it a necessity. She tarries, that we may long for her; she hastens, that we may not tire of her.

She has no speech nor language, but she creates tongues and hearts, through which she feels and utters.

Her ultimate perfection is Love; it is only through Love that she can be approached. She sets chasms between all beings, and in them all is the urge to interfuse. She has created severance, in order to draw all things together. She holds that a few draughts from the chalice of Love are a requital for a life full of care.

She is the Whole. To herself she metes out reward and punishment, delight and torment. She is austere and tender; charming and horrible; impotent and omnipotent. All things are evermore in her. Past and future are nought to her. The present is her eternity. Gracious is she. I laud her with all her works.

She is wisdom and tranquillity. No answer to life's riddle can be wrestled from her, no gift can be extorted from her which she does not offer of her own free will. She is full of finesse, but her goal is good, and it is best to avert the mind from her craft.

She is perfectly whole, and yet always incomplete. Thus, as she now works, she can work for ever.

To each man she appears as befits him alone. She cloaks herself under a thousand names and terms, and is always the same.

She has brought me hither, and will also lead me hence. I yield myself to her in trust. She may do with me as she pleases. She will feel no hatred towards her work. It is not I myself who have spoken concerning her. No — it is she who has said everything, both what is true and what is false. She is guilty of All, and hers is the honour of the Whole.

Johann Wolfgang von Goethe

APPENDIX D

— Chronology: Johann Wolfgang von Goethe —

1749 Born the 28th of August in Frankfurt am Main, son of Dr. Johann Caspar Goethe, Solicitor and Councillor to the Crown without portfolio, and Catharina Elisabeth, nee Textor, daughter of a city official.

1752 First acquaintance with "Faust" material in the puppet theater at play school.

1765 - 1768 Study at the University of Leipzig, lectures in Law and the Fine Arts, crisis of identity, increasing interest in Art and Theater.


1771 Return to Frankfurt am Main, admittance to practice at the Bar of the Court in Frankfurt and establishment of legal chambers at his parents' home.

1772 Legal work at the High Court in Wetzlar.

1774 Completion and Publication of "The Sorrows of Young Werther" which made Goethe famous in Europe. Start of work on "Faust" and others.

1775 First trip to Switzerland. Trip to Weimar at the invitation of Carl August, Duke of Sachsen-Weimar-Eisenach. Completion of "Urfaust."

1776 Decision to stay in Weimar, set up of residence in the Garden House on the Ilm (until 1782). Entrance into Weimar State Service, appointment as Counsellor of Legation. Start of geological and mineralogical studies in conjunction with the assignment of reopening the mine in Ilmenau. Participation in presentations at the Weimar Theater.

1777 Start of work on "Wilhelm Meister's Theatrical Mission."

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1779  Assumption of leadership of the War Commission and Directorship of road works.
      Appointment to Privy Councillor.

1780  Intensification of Minerological Studies.
      Set up of residence in the House on the Fraunplan.
      Elevation to the aristocracy by Emperor Joseph II.
      Appointment as Director of Treasury.

1784  Discovery of the Human Inter-maxillary Bone.

1785  Start of Botanical Studies.
      Completion of "Wilhelm Meister's Theatrical Mission."

1786  Secret departure from Karlsbad for Italy; stay in Venice and Rome.

1787  Trip to Sicily, Naples.

1787 -  Work on "Faust" and others.
1788  Work on numerous drawings and sketches.

1788  Return to Weimar, relief from all governmental duties while retaining all honors and titles.
      Commencement of a staged adoption of directorship of the scientific and artistic institutions of the Duchy.
      Set up of house with Christiane Vulpius.
      First meeting with Friedrich Schiller.

1789  Birth of son, August.

1790  Second Italian Trip.
      Discovery of the theory of the vertebrae of the cranium.
      Commencement of experiments on theory of colors.

1791  Appointment as Director to newly erected Court Theater of Weimar.

1792  Participation in French Campaign with the Duke's troops.

1793  Observation of the Siege of Mainz.

1794  Intensification of scientific studies, particularly those on the Metamorphosis of Plants and the Theory of Colors.

1797  Supervision of library and coin collection.
      Resumption of work on "Faust."

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1803 Appointment as Head of the Institute of Natural Science at the University of Jena.

1804 Actual appointment as Privy Councillor, entitlement of 'Your Excellency.'

1806 Marriage to Christiane Vulpius.

1808 First meeting with Napoleon I in Erfurt, further talks with Napoleon in Weimar.

1809 Publication of works on the Theory of Colors and "Elective Affinities."

1810 Completion of works on the Theory of Colors.

1812 Meeting with Ludwig von Beethoven.

1814 Travels in the Rhine and Main areas.

1815 Appointment as Minister of State. Merger of all the cultural institutions of the (now) Grand Duchy. Appointment as 'Director of all immediate Institutions for Science and Art' in Weimar and Jena.

1816 Death of Christiane.

1817 Relief of Directorship of Court Theater. Assignment to library merger in Jena.

1819 Completion of "West-easterly Divan." Publication of works in 20 volumes.

1825 Resumption of work on "Faust, Part II." Celebration of 50 years in office.

1828 Death of friend and patron, Grand Duke Carl August.

1829 First performance of "Faust" in Braunschweig. Completion of "Wilhelm Meister's Years of Travel."

1830 Death of August in Rome. Publication of "Goethe's Works, Complete" in 40 volumes.

1831 Completion of "Faust, Part II."

1832 Goethe's death on March 22nd.

Based on the Biographical Notes from: Korn, Fritjof; Johann Wolfgang von Goethe; Milestones in his Life and Works, Goethe Institute, Munich.
APPENDIX E
Selected Bibliography

ARCHITECTURE: Organic


GOETHE: Aesthetics


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APPENDIX E

Selected Bibliography

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GOETHE: Color Theory


GOETHE: Drawings


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GOETHE: Essays, Art


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**GOETHE: Natural Philosophy**

- Carus, Paul: *Goethe with Special Consideration of his Philosophy*. The Open Court, Chicago, London, 1915.

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GOETHE: Travels, Italy


