THE STRUCTURE OF ARCHITECTURAL THEORY

A Study of Some Writings by Gottfried Semper, John Ruskin, and Christopher Alexander

CORNELIS J. BALKON
THE STRUCTURE OF
ARCHITECTURAL THEORY:

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John Ruskin, and Christopher Alexander

Proefschrift

Ter verkrijging van de graad van doctor
aan de Technische Universiteit Delft
op gezag van de Rector Magnificus,
Prof. drs. P.A. Schenck,
in het openbaar te verdedigen
ten overstaan van een commissie
aangewezen door het College van Dekanen
op dinsdag 1 juni 1993 te 16.00 uur

door

Cornelis Jacobus Baljon

geboren te Oegstgeest,
stede bouwkundig ingenieur.
Dit proefschrift is goedgekeurd door de promotoren:

prof. S.J. Doorman M.Sc.
prof. A. Tzonis
Published and produced by:

Cornelis J. Baljon
p/a Plantsoen 73
2311 KK Leiden
The Netherlands

CIP-DATA KONINKLIJKE BIBLIOTHEEK, DEN HAAG

Baljon, Cornelis Jacobus

The structure of architectural theory: a study of some writings by Gottfried Semper, John Ruskin, and Christopher Alexander
Cornelis Jacobus Baljon - [S.l: s.n.]
Thesis Technische Universiteit Delft. - With index, ref. -
With summary in Dutch
ISBN 90-9006051-0
Subject headings: architectural theory
                Semper, Gottfried
                Ruskin, John

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Acknowledgements

This dissertation was completed in the organizational context of the group Architecture Knowledge Systems (A.K.S.) and its subgroup Artificial Intelligence for the Intelligent Architect (A.I.I.A) at Delft Technical University. Thanks are due to the following persons and institutions. First and foremost to my two promotors at Delft Technical University, Prof. S.J. Doorman for the philosophical aspects and Prof. A. Tzonis for architectural history and theory. Contacts with Prof. Doorman in particular have a long history, reaching back as far as 1973, when I approached him to be a supervisor for my masters thesis. On this dissertation he advised me ever since its tentative beginnings in the early 1980s--and it is safe to say that without this consistent support there would have been no dissertation. Next to Prof. David Van Zanten. Among the good things of living in Chicago was to find out that he not only lived there too, but even was interested (or just kind?) enough to volunteer as a co-reader and local advisor. To the other members of the 'promotiecommissie,' prof. dr. ir. F.M.Th. Bax, prof. dr. P. Drewe, dr. A.D. Graafland, and prof. dr. M. van Nierop, for their willingness to spend considerable time on this bulky manuscript. To Dr. Harry F. Mallgrave for reading and commenting on the Semper part. To Prof. Pieter Singelenberg for doing the same at an earlier stage, and to Prof. Elizabeth Helsinger for likewise reading and criticizing the Ruskin chapters. To Prof. J.J.A. Mooij, Prof. John Habraken, Prof. Etty Mulder, Prof. Manfred Bock, and Prof. Geert Bekaert for help and advice at earlier stages of the project. To several people in Chicago (where eventually in the years 1990-93 most of the writing was done), particularly to Robert Bruegman, Roger Dodds, Katherine Fischer-Taylor, Wim de Wit, and John Zukowski for incidental advice. To former colleagues at Amer Adviseurs in Amersfoort for pointing out which of the 'stellingen' I had in mind had lost their topicality during my years of absence from Dutch urban planning and design. To the University of Chicago for the use of their magnificent Regenstein Library. To the 'Kunsthistorisch Instituut' of the University of Amsterdam (GU) for the use of theirs. To my father for the example he set us children in patient study of ancient texts. To my mother for her care and wisdom in all other aspects of life. To my nextdoor neighbor Lee Blue for the use of his fax machine and other technical support. To other friends and relatives for various ways in which they have been helpful. To my wife Arlette for her patience with this project--which may not have been as rewarding to those who depend on me as it was to myself. And, last but not least, to our daughter Kelda Lee, who over the last two years has supervised the work more closely than anybody else--and always let me know in time when to interrupt it in favor of the more basic facts of life.
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1. Introduction

The problem which this study wants to address is that little of substance has been written on the more systematic and possibly logical structure of architectural theory as an intellectual tradition, and that, as a result, few among those who are professionally involved in architectural design, decision-making, education, or criticism, including those who specialize on its history and theory, have a clear conception of what this structure is like. Many--and those not necessarily outsiders to the field--even appear to doubt it is a feasible intellectual enterprise at all. Thus Bruce Allsopp feels he has something to apologize for when in *A Modern Theory of Architecture* (1977) he states:

Many friends, whose opinions I respect, have told me that it is impossible to write a modern theory of architecture, and yet there has never been a greater need for architects to bridge the widening gap of understanding between them and the public. ... The subject is complex. This book will not be an argument in the old, conventional form of two-value logic towards a conclusion. It rejects, from the outset, the specious simplicity of critical-path analysis. It recognises that understanding must be built up like a mosaic. The form of the book is a mosaic in which a multitude of parts are interrelated.

And that indeed is what it is: a little bit of everything. Some classification of buildings by categories on which different demands are made, contemplations on proportion, on the responsibilities of a designer, on origins of architecture and its relationship to ethics, aesthetics, music, and so on. No leading question that might serve as a connection between all of these loose ends is formulated at the outset of Allsopp's book, or step by step worked out. Nor is much else done to arrive at a tighter structure of argument. Thus the whole project is inconsistent from the start. For if the skeptics are right, if indeed a non-trivial contemporary theory of architecture is impossible, what right or reason do we have to claim that it is desirable to have one? Or, if they are wrong, if a good theory is possible, just waiting for Mr. Allsopp or one of his colleagues to write it down, why not at least indicate how it should be worked out, or what further research is needed before it can be completed?

This type of dilemma certainly is not unique to Allsopp's modest attempt to arrive at a 'modern theory of architecture.' Christian Norberg-Schulz in *Intentions in Architecture* (1965), an earlier, more ambitious, and apparently more optimistic effort to do so, states that "The theory of architecture [the one he is about to expound] should render an account of the characteristic dimensions of the building tasks, as well as the formal structures, and of the relations between these two aspects of the architectural totality." It is added that the theory "has to be based upon empirical knowledge (architectural history),
but aims at helping the creative architect to plan and predict, to compare and criticize." However, then the author in cold blood informs us that "In itself the theory is empty"—a contention which, as far as I can see, must be taken literally.

At this point let us make sure we are not trapped in a verbal fallacy. Should the word 'theory' with its inevitably scientific connotations, when architecture is what it is about be taken in a strict sense? Until about a hundred years ago it only rarely occurred in titles of architectural treatises. Early cases like Frézier's *Dissertation théorique et pratique sur les ordres d'architecture* of 1738, mark the exception rather than the rule. So why should it be used in this connection now? To this there is a simple answer: because, whenever people feel an urge to speculate on general conditions of architectural quality, and write down the conclusions they arrive at, such is called (architectural) theory, these days, even if it was not customary to do so a long time ago. As long as the word theory is taken in this vague sense, there is no problem, really. Problems start as soon as one tries to be more specific—and so the question is why we should want to do precisely that.

This question I would like to approach from the angle of the present study first, and then more in general. During the years that passed before we could decide on a research program as expounded in the next few chapters, various other scenarios have been reviewed. At one point the idea was to investigate pre-modern principles of design, and to do so not only from an art historical point of view, but also with an eye on how they might be used in current design, especially when it comes to piecemeal renewal of urban areas from before World War I. Not knowing at the outset for how much such principles could be found in pre-modern architectural theory, that is, in nineteenth century or slightly older writings, I planned to combine a study of such texts with a case study of half a dozen or more pre-modern buildings whose qualities were systematically to be evaluated. So far so good, but when the building is, for instance, Cuypers's Central Railway Station in Amsterdam (to which we shall recur in § 9.8), where to find, or how to arrive at a neat survey of principles of design from existing or contemporaneous literature that, even if it cannot be established beyond doubt that Cuypers knew them from the same source we do, might somehow illuminate his work? Cuypers himself in this context used to refer to and quote from the writings of Viollet-le-Duc, and so that is the direction most of his critics and biographers likewise tend to look in first. However, when both Cuypers's built masterpiece and Cuypers's words are considered in more detail, it soon becomes evident that the few rationalist 'bon mots' and commonplaces which, for the sake of justification of certain design decisions, he liked to borrow from his French colleague and friend, do little to account for the sophistication and originality of either the overall composition or the detailing of Amsterdam's Central Railway Station. This being the case, it may be suggested those 'bon mots' are only the tip of an iceberg of substantial theory, as laid down in the works of Viollet-
le-Duc, and that it is in this iceberg that we will find more detailed principles of design which Cuypers either found there, or independently happened to share. Unfortunately, at this point it turns out that no systematic survey of some depth and completeness is available for Viollet-le-Duc's ideas on architectural composition and detailing, whereas the mere bulk of his written output discourages efforts to compile one just for the needs of the moment. Besides, having spent many hours with his *Discourses on Architecture* (which under the circumstances still seemed the best place to start), I increasingly became convinced that, even if a survey as mentioned would have been available, it would not have illuminated much, as this particular iceberg does not nearly contain as much substantial theory regarding architectural composition and detailing as it is widely assumed to do.

What this suggests is that, at least in Cuypers's case, the relationship between architectural theory and design is more indirect than those of his biographers who in this connection have rather exclusively focused on Viollet-le-Duc were inclined to believe. On the other hand, it in no way implies that this fairly indirect relationship can be no further investigated. What is called for, if we should insist on doing so, are systematic surveys of other nineteenth-century bodies of architectural theory, against which subsequently some of Cuypers's actual design decisions can be set off. Among the bodies which then come first to mind are the architectural writings of John Ruskin and Gottfried Semper, as will be dealt with in the present study. However, in respect to these the situation is hardly any different from what it is regarding Viollet-le-Duc. No matter how much has been written on Ruskin in particular, a systematic and more or less complete survey of what he had to say on architectural composition and detailing is hard to find. We shall recur to this in Chapter 13, in the context of a review of 'other readings' of the texts discussed in Chapters 8-12.

This being the case, I could have shifted emphasis (as indeed I did) from the study of buildings to compiling this systematic survey of theory which either Cuypers actually drew on, or which must be seen as a parallel phenomenon to his built works--specifying in words what at the same time Cuypers intuitively expressed in brick, stone, and cast-iron. Unfortunately, even before I actually got started on this new track we ran into another problem, that is, the lack of clarity as to the structure of the theory at stake. Such may at least partly account for the absence of surveys as mentioned, but in any event, starting from a modest proposal to study Cuypers's Central Railway Station and a few other buildings in Amsterdam for pre-modern principles of design, I was thrown back time and again, to end up with the structure of architectural theory as the only issue fundamental enough to serve as a basis, once explored, for whatever else I might choose to do next in this field.

Now let it be observed that problems like the ones outlined above are to some degree likely to be encountered by any student who takes it upon him- or
herself to make a modest contribution to architectural theory. Methods of research that actually fit the nature of the field are barely available. Whoever wants to stay on the safe side will be content to do historical research in accordance with standards that prevail among historians, accepting from the outset that the results of his or her work will at most have a very indirect impact on architectural decision-making and design. Whoever is not prepared to accept that much is at risk of losing him- or herself in the kind of empty verbosity that fills much of current architectural magazines, and of yearbooks as edited by every self-respecting school of architecture.

Consequently, not nearly as much progress is made in the study of, let us say, what conditions quality of an enduring kind in architecture, as would be possible if better methods were available for fundamental research. Or, if such progress is made at all, it is likely to come from outside: from architects who find new ways to solve design problems, or (though less likely) from an important new discovery in psychology. In either case it is not from the way knowledge accumulates and untenable points of view are discarded by new ones within architectural theory. If such accumulation were systematically pursued, this ought to result in systematic surveys of what others a long time ago already figured out regarding the same (or related) problems we are facing today. That once more might speed up the process of making new discoveries.

It is, however, not only in research proper that the aforementioned need is felt. Two adjacent domains where the lack of clarity, and of mere thought regarding the structure of architectural theory is painfully obvious are those of architectural education and architectural criticism. In education it is slightly embarrassing to find out how, even though in Hanno W. Kruft's *Geschichte der Architekturtheorie* (1984) we nowadays dispose of a fairly good *historical* introduction to the field, there is hardly anything which comes close to a *systematic introduction*. Nor is there much that could pass for an introductory course in methodology of architectural theory. In the absence of the latter, a freshman in the study of architecture is left without a logical framework on which to fasten all the loose ends of theoretical knowledge he or she will be showered with during the years that lie ahead. This puts him or her at a disadvantage to fellow students in sociology, psychology, science, mathematics, or even the humanities, all of whom at an early stage are given an introduction to the philosophy of science and corresponding methodologies that go with the field of their choice. From an educational point of view this is highly inefficient. More knowledge could be mastered in a shorter period of time if early on the inherent restrictions and chances of architectural theory were explained.

In architectural criticism the problem manifests itself even more directly and painfully: in the artificiality, above all, of the language and style of reasoning employed in much of today's architectural discourse. Where confidence in substantial theory as a basis for criticism has faded, metaphor and paradox in ever greater abundance and ever wilder combinations fill the
void left behind, struggling to hold up an appearance of profundity where basically fashion reigns supreme. We shall recur to this in § 2.3 and, more in particular, in Appendix 2.

Meanwhile it may be objected that, even if there is no complete consensus about the structure of their field among all those who one way or another are involved in architectural theory, at least it is possible to point out certain ways to proceed, certain schools of thought within the larger field, each with methodological premises and traditions of their own. Some of these, such as those which follow a behavioral science or a linguistic model, have a certain pretense of covering architectural theory as a whole, others merely intrude on it from adjacent fields like art history, or (like meta-criticism) operate from the very outlines of architectural theory itself. All this will be reviewed in the next chapter. Far from rendering innocuous, however, the objections raised so far, such will enable us to assess more fully the extent of the current confusion. Thus, to begin with, it is far from easy in any of these approaches to clearly demarcate a theory of architecture—as opposed to architectural theory as an intellectual tradition. Now that in itself is not so problematic, as long as one is content to evaluate what contributions to this larger whole are made in single books or articles, taking for granted, for the time being, the notion of a theory. It is the approach we intend to stick to throughout the present study. More profoundly disturbing is the fact that contributions made in, for instance, a behavioral science approach cannot be well assessed in terms of a linguistic, or any other of the current alternative models, and vice versa. Nor is any of these well-prepared to serve as a tool for mapping contributions as made in older texts, like those by Semper, Ruskin, and so on.

Which leads us back to our initial problem and beyond: a lack of continuity with the past, not only when it comes to understanding pre-modern principles of design, but even in conceptions of the structure of what theory ought to take care of formulating such principles. Roughly, the situation at this point is that those who hold on to the idea of a systematic body of knowledge on which to lean in architectural decision-making and design favor a basically ahistoric approach—and so far remain within the modernist tradition. In doing so, on the other hand, they increasingly have come to see themselves isolated amidst the rising tides of postmodernist and (post-)structuralist criticism, centering on historical reflection, without much effort to create a systematic body of architectural knowledge, even if the word theory is still used to refer to such reflection.

It is fascinating to consider how this situation could come about. Architectural history as a special branch of history of art, which in turn is part of cultural history, is a fairly recent phenomenon, reaching back no further than the mid-eighteenth century. Architectural theory as a design-oriented discipline is much older. History in the works of Alberti and those who followed in the classicist tradition always remained subservient to finding
canons of artistic excellence. Even when, through the efforts of Winckelmann and a few of his contemporaries, art history had started out on a more independent course, studies in architectural history for a long time either had a stylistic axe to grind or served obvious ends related to preservation or restoration\(^3\). But whatever the historic background of the current situation, where one apparently has to choose between an ahistorical systematic or an unsystematic historic approach, there is no a priori reason to think of it as inevitable. And so the model to be presented in the following chapters will try to combine the best of both.

For it is by way of a model that the problems outlined so far will in the present study be addressed: a model which describes the basic structure, the invariables so to say, of architectural theory as an intellectual tradition. After a brief review of current varieties of architectural theory in Chapter 2, the model and its function will be expounded in Chapters 4 and 3 respectively. A method of research, based on this model, follows in Chapter 5, and it is through this method that the model subsequently (Chapters 7-13) will be tested in an application to texts. Claims in regard to model and method of research are summarized in Chapter 6, consequent demands on the case studies in §7.1. To what extent those demands are met, and how the results can be further tested and expanded will be the subject of Chapter 14.
2. Current Varieties of Architectural Theory

2.1 Behavioral Science

A conviction that an empirical study of man, his needs, and how they best be met, is the only sound theoretical basis on which to base design was one of those ideas which from the very start have defined Modernism in architecture and industrial design. Even if the idea was not always lived by, few among Modernism's protagonists doubted its validity. Nevertheless, the actual results of behavioral research aimed at architectural decision-making have always stayed behind the expectations of the 1920s, or, for that matter, of the 1950s--apparently for reasons more fundamental than a lack of serious effort.

For one thing, preferences regarding built environments involve many variables, relating both to an environment itself and to the people who occupy and use it. And, for another, situations that differ in just one or two respects, and yet are authentic enough to reflect real life, are hard to isolate as a testing ground. Still that is precisely what is needed to arrive at non-trivial conclusions along strictly empirical lines.

Accepting these limitations, behavioral science may still point out interesting phenomena as to how people react on certain aspects of a built environment, and provide equally interesting explanations. These, however, are bound to remain either broad generalizations from which at most rough differences in actual preference can be inferred, or explanations with a specific but very limited scope. And so the result would be an aggregation of loosely related pieces of explanation, separated by an abundance of more subtle issues not covered by the same. Even this aggregation may have a structure that deserves to be investigated, described, and formalized--but what structure could it be if not, for the reasons just mentioned, that of hypothetico-deductive explanation? Behavioral science itself does not seem to provide an answer that is completely satisfactory.

A fairly accurate overview of the state of the art in this domain is presented in a recent study by Jon Lang, *Creating Architectural Theory: The Role of the Behavioral Sciences in Environmental Design* (1987). As indicated in its title, architectural theory is taken as synonymous with application of behavioral science to environmental decision-making and design. 'Theory' is defined as 'description and explanation of the nature' of, in this case, built environments and the design process--but in what sense architectural theory actually 'explains' these phenomena remains largely in the dark. Or, more precisely, a hypothetico-deductive model is taken for granted:
Successful theories consist of simple but powerful generalizations about the world and how it operates that enable us to predict accurately future operations. It is essential for applied fields such as the environmental design professions to have theories.

Apparently this is supposed to hold for little fragments, or single contributions to the field, as much as for the field as a whole. The only major distinction made within the whole is between theories of the predictive kind, labeled 'positive theory,' and something else called 'normative theory.' Positive theory aims at being 'value-free,' and in Lang's view should do so. Values, however, must come in somewhere somehow in theory that is to be of use in actual decision-making. Normative theory is what takes care of precisely that:

In contrast to positive theory, normative theory is concerned with the different positions that have been taken or might be taken on what the built environment and/or the design process should be. It is concerned with the views of different designers or schools of design on what the role of the designer is, and how the design process should be carried out.

Observe, however, the ambiguity in this statement, one that in fact pervades all of Lang's book: can proclamations of value systems be taken seriously as theory, or only reconstructions of these by outsiders, who do not necessarily themselves confess to them? If the latter, what is at stake is still a perfectly descriptive type of theory, different only in subject matter from (other) 'positive' theory, but hardly making it more operational to decision-making or design. If the former, it remains unclear how such unscientific elements can harmoniously be integrated with descriptive theory into ... what?

There is a way-out of this dilemma, one that, unfortunately, is very common in all environmental planning which takes behavioral science as its model. This is to focus on identification of such facts as most directly and inevitably suggest what should be done about them. More in particular, it focuses on human needs and on shortcomings in current situations. Obviously, such 'facts' are loaded with value, but—as will be dealt with more extensively in Appendix 1—that is not what is most problematic about them. Such holds for a wide range of facts. It is rather that these facts are so loaded in a fairly rude, uncomplicated way; that the approach results in a one-sided selection of facts, leaving out the ones that carry a more subtle load of value.
2.2 Architecture as a Language

The notion that architecture has something important in common with language has been around in architectural theory for a long time. Thus it has been quite fashionable from, let us say, the mid-eighteenth until the late-nineteenth century, and so it was of late, but on the other hand it has not always been that way. Thus as late as 1965 Peter Collins could note that:

The analogy between architecture and language has been less popular in recent years than it was from the middle of the eighteenth century to the middle of the nineteenth century, probably because it lacks the scientific glamour possessed by analogies with living organisms and machines.

Indeed John Summerson's *The Classical Language of Architecture* (1963) back then was among the few recent books in this vein—and even this was primarily a neat and elegant survey of the same body of classicist theory which in the eighteenth century had adopted the linguistic analogy.


Now let it be noted that linguistic analogies can be, and have been used to highlight a wide variety of qualities in built environments and the design process. Within the classicist tradition it could appropriately be pointed out how, like language, architecture works with standardized elements, with rules that condition what is, and what is not a correct application of these, and rules that govern 'meaning' to be associated both with these elements as such, and with the way they are combined. Classical rhetorics as laid down in works by Cicero and Horace moreover served throughout the classical tradition as a basis for theories of architectural expression. Thus in the mid-eighteenth century Blondel and Boffrand took recourse to them for pointing out that merely ornamental ornament in architecture does as little to enhance a building's expressive power as merely ornamental words in poetry, or in other types of discourse—and it was basically the same set of ideas on which a little later Boullée and Ledoux based theirs.
With the collapse of classicist theory of art in the mid-nineteenth century the linguistic analogy was nonetheless occasionally invoked, as by Ruskin in the 'Lamp of Obedience' (see § 10.5 below), to insist that there should be rules, that a society which does not somehow put constraints on choice of style, leaves it all to the freedom of individual architects and their clients, has little hope for a harmonious built environment in the near or distant future. Or to draw attention to the evolutionary aspects of architectural style, which, like language, presumably cannot be invented by a single genius, but takes centuries to grow and mature. Or, as with Semper (see § 8.7.2), to point out that for an architecture which refuses to fail its basic objective of being understood, a certain amount of conventionality in choice and treatment of decorative themes is indispensable. Later in the nineteenth century a linguistic analogy was once more implied in a wide-spread search for an architectural 'vernacular,' that is, a natural, indigenous, spontaneous, and unaffected way of building, rooted in the everyday life of a people like its language, or even like its dialects. A search for national or regional identity and a romantic love of variety were involved as well.

It is worth considering whether these or related interests again spur the present reliance on linguistic models. The answer need not be the same for all who took recourse to such models. Both Bruno Zevi and Christopher Alexander are in search of a powerful grammar that (a) sets rules which will prevent gross mistake, and (b) creates some sort of unity among the design output of different architects—and so their emphasis is on syntax. Not so with Jencks, or the Italian and French semiologists and structuralists, or their followers elsewhere in the world, who all tend to emphasize the semantic aspects. As opposed to their eighteenth-century forebears, who used the linguistic model to insist on restraint in decorative treatment of buildings, and who dreamt of one universal, classical language of architecture, the semiologists and structuralists of today endorse richer and more explicit meaning than modern architecture used to display, and they favor the kind of stylistic relativism which holds that all architectural value is relative to the codes and value systems of the cultural setting in which a building was conceived and realized.

Even so, this linguistic or semiotic approach so far has contributed little to the creation of a systematic body of architectural knowledge. Instead, the trend is to discard theory altogether in favor of history. Other distinctions which tend to be obliterated are between architectural meaning that does have something important in common with language and such as does not. Likewise, semiotic approaches love to treat meaning and quality as interchangeable. Such speaks, for instance, from the following fragment of Jencks's Modern Movements in Architecture (1973, p. 14):

Certain buildings have a richness and density of meaning which make them more enjoyable to inhabit, view and visit than others. These are the buildings which are reinterpreted anew by every generation. We
return to them again and again, not necessarily because of any particular meaning which they may convey, but more because of the exciting and deep way in which the meanings are interrelated or fused together into a powerful pattern. For this quality I have adopted the general term multivalence because it points to the presence of multi-valued levels of meaning. To be more precise, multivalence consists of four distinct qualities: imaginative creation, or the putting together of parts in a new way, the amount of parts so transformed, the linkage between the parts which is the cause of this creation and which allows the parts to modify each other.

Let it be noted how multivalence as qualified in this last sentence is a quality of form, whereas in the preceding one it was defined as one of meaning. This is appropriately reflected in the word itself, which hovers between multi-meaning and multi-value.

All things considered, Roger Scruton seems right in stating that whatever good there is in linguistic analogies applied to architecture is better explained in terms of 'style'. A major difference, as he convincingly argues, is that semantics based on a concept of truth are unique to language, and find no counterpart in architecture. Linguistic models of the latter fall back on a referential concept of meaning--of the kind English/American philosophy of language has been moving away from for several decades now.

2.3 Structuralism and Poststructuralism

Although both structuralist and poststructuralist theory and criticism are intimately connected to a linguistic model of architectural theory, they cannot be done away with as just two more variations on that theme. For even though an intensive preoccupation with meaning is a striking feature in both, neither provides a clear consensus regarding a linguistic model as the most appropriate way to describe and analyze such meaning. Besides, there are exceptions, such as the works of Françoise Choay of which we will come to speak below (§ 2.4), which are emphatically structuralist but not particularly linguistic in their approach of architecture. And so it might seem both structuralism and poststructuralism ought to be dealt with separately in this chapter as two more current varieties of architectural theory. However, here we run into problems. The point is that where faith in the linguistic model has faded, the latter's place has been taken not so much by another conception of theory as by history. Poststructuralism in this sense is professedly anti-theoretical, and so are those varieties of structuralism which in the present chapter have not been and will not be reviewed under a different heading. As on the other hand the two are too strongly present in recent architectural theory and criticism to be ignored, the issue has been relegated to Appendix 2.
2.4 Theory as Concepts or as Principles

In 1957, in a speech entitled 'The Case for a Theory of Modern Architecture', John Summerson raised doubts as regards the feasibility of a project as meant in that title. Going over his speech today, a first thing that must strike a reader is how profoundly the situation since has changed, for modern architecture as much as for architectural theory. Precisely that, however, makes it fascinating reading. The author does not question the existence of modern architecture (we are surrounded by buildings that everyone would recognize as 'modern'), or even allow for the possibility that it could be challenged, that modern architecture's victory might be incomplete. However, that, in his view, need not imply there must be at its core a sophisticated theory, ready to be reconstructed either from the products of modern design, or from the writings of their designers, or—even better—through a careful comparative study of both. Architectural theory, he argues, has always led a life of its own, only loosely and indirectly connected to architectural practice of the day. By the end of his lecture the existence of 'a specifically modern theory of architecture' is nonetheless acknowledged, but it turns out to be a remarkably simple one. Roughly (although the author stops one step short of using that phrase) it can be summarized as form following function—within the formal constraints of unadorned geometrical volumes, dimensioned in accordance with some proportional system. That, he insists, is all there is to it, and all we need, for now and for the foreseeable future. This means a crude break with the past, of which the author is aware when he notes:

And if I say that in my opinion the erection of proportional disciplines—purely intellectual contrivances—does bring the principia of modern theory into satisfactory relationship to each other and to actuality, it may well be objected that this theory excludes almost everything that has been most valued in the art of architecture as a means of expression in the past three thousand years.

But what he has to say in reply to this does nothing to soften the break, which at the same time stands for a separation of architectural history and theory, not unlike what we witness today, although it is differently motivated. For whereas current structuralist and poststructuralist criticism holds that no generalizing theory can do justice to the uniqueness and complexity of actual design decisions, that there is no such thing as timeless quality, let alone simple rules as to how it should be brought about, that the best we can do is immerse ourselves in history, hoping to get a hint what history demands of us, Summerson (like a true English gentleman who takes his sport, architectural history, deadly seriously, while convinced it is politically irrelevant, but not in the least concerned about the latter) simply rejects the relevance of history for current design—with the possible exception of work in restoration and
preservation.

However that may be, what in the present context matters most is the identification of theory with statements of principle. As in the aforementioned speech Summerson puts it, referring to eighteenth- and nineteenth-century treatises of an encyclopedic kind:

But I suspect that what is in our minds when we talk about architectural theory now is something both less extensive and more profound than these—a statement of related ideas resting on a philosophical conception of the nature of architecture—in short, principia.

That theory might be concerned with questions in the first place, that whatever principles it introduces are, for as long as theory does not collapse into mere doctrine, hypothetical answers to these questions, is not even considered as a possibility. Part of the reason may be that, when Summerson talks of architectural theory, he thinks of classicist theory in the first place, where questions indeed tend to have faded into the background—more so than in, for instance, the works of Semper and Ruskin we will come to speak of. Even in classicist theory, however, the questions are still there, so this cannot be the whole answer. Another clue may be in the Aristotelian idea of a teleological description of 'the nature of architecture'—from which apparently it will follow how architecture should be. Eventually, however, we can only guess why this rather than another concept of theory has been adopted, so let us leave it at that.

It may seem a long way from Summerson's lecture of 1957 to Françoise Choay's study of 1981, La règle et le modèle, but the concept of theory that features in the latter is not too different, after all, from that of the former. To be sure, it is not in Summerson's or anybody else's recent writings that Choay found such a concept ready for use. To her it was the outcome of a long search, a long fascination with the question how something as unscientific as what goes by the name of architectural theory could have such impact on the course of events in architecture and urban design. Looking back on an earlier work, L'Urbanisme, utopies et réalités (1965), where she had been busy playing down the scientific status of such theories, she notes:

One will take it for granted here that, in spite of its pretensions, the urbanistic discourse remains normative and can only indirectly belong to any scientific practice: its justified recourse to the science of nature and of 'man' is subordinate to ethical and political choices, to ends that do not exclusively belong to the domain of knowledge. Today I set myself other objectives. The issue is no longer to find out what the urbanistic writings are not, determining their deviations from a well-known type of writing, scientific texts. What matters is to find out what they are, the secret intentions that are likewise masked by their explicit
pretensions and their tacit ideologies, and to define their actual status. This new work does not, like the former, stem from indignation, but from a reconsidered surprise\(^4\).

It is decided these texts cannot be trivial, after all, and deserve close investigation. It is quite a leap, though, from the initial observations as to what architectural theory is not--based, by the way, on a rather narrowly positivistic concept of science, see Appendix 1--to the subsequent conclusion as to what it is or should be. Such would be fine if indeed the latter were accounted for as the outcome of a systematic search, but such is hardly the case. Instead, it is stated at the outset:

So we shall be concerned with texts, with theory, so to say, which in the context of a disciplinary field of their own take it upon themselves to determine the modalities, in accordance to which future buildings and cities are to be conceived\(^5\).

And a bit later:

.. those writings whose explicit aim it is to establish an autonomous conceptual equipment, which enables to conceive and realize completely new spaces\(^6\).

This particular conception of architectural theory apparently is a priori. Writings that serve as vehicles to such theory are introduced as 'founding texts of space' [textes instaurateurs d'espace], and it is only after having thus confined the field of research that Choay decides she is to investigate the form rather than the content of these texts. Eventually, one text turns out to serve as the one and only model for all architectural theory, namely Alberti's *De Re Aedificatoria*. Why this should be so remains a mystery. That in many ways Alberti was the first can hardly be a sufficient reason. But whatever the reason, the resulting book, although one of the very few I have come across that states as its explicit aim to uncover the structure of architectural theory, under these circumstances was of little use as a model for ours.

In the meantime, that is in 1965, a more sophisticated study had appeared which likewise deals with architectural theory as primarily a conceptual framework for the perception of architecture: Norberg-Schulz's influential *Intentions in Architecture*. The task of architectural theory at one point [p. 87] is defined as follows:

The theory of architecture should render an account of the characteristic dimensions of the building tasks, as well as the formal structures, and of the relations between these two aspects of the architectural totality.
Referring to questions raised in an earlier section it is added:

... the theory will be complete if we manage to answer our questions. The theory has to be based upon empirical knowledge (architectural history), but aims at helping the creative architect to plan and predict, to compare and criticize.

This leaves it in the middle whether architectural history as the empirical dimension of the proposed theory is actually part of the latter or remains outside, complementary but distinct. Apparently there is, in Norberg-Schulz's view, considerable overlap between the two fields, as speaks from statements like [p. 23]:

We thus have to ask: Why has a building from a particular period a particular form? This is the central problem in architectural history as well as in architectural theory.

More strictly speaking, though, the two remain separate. Thus, as already mentioned in Chapter 1 above, it is noted [p. 102] that "In itself the theory is 'empty'." Or, as it is put in an introductory chapter [p. 24]:

The logical skeleton of our architectural theory will always remain valid because it is purely analytical. ... Hence we do not want to present a 'textbook', but to establish a convenient method of architectural analysis.

What method? As it is stated on p. 85:

The theory should not be a substitute for the direct experience of architecture. ... But the theory surely can help us to attain a more 'correct' and profound experience of architecture. The theoretical insight will perhaps tell us that the work of architecture is a function of factors which are not immediately accessible, at the same time as a theoretical examination of its formal organization facilitates our perceiving it correctly. The theory thus indicates the poles which define the 'adequate' orientation to the object. Only when intending what the form represents as a manifestation of higher objects may we talk about a real architectural experience.

The method is intentionalist in the sense that the reader is encouraged to perceive a building in terms of the intentions of its makers--but apparently that is not what the 'Intentions' of the book's title, or the 'intending' of the last sentence just quoted stand for. They refer to the attitude of an observer toward the observed--which is slightly confusing, but good to know. The originality of Intentions in Architecture lies in the effort to apply
psychology of perception to the study of architecture, while at the same time holding on to the conviction that the study of history remains at the core of architectural theory. The leading idea is that people perceive a built environment in terms of objects, rather than as mere sense impressions, and that moreover every object is immediately interpreted as representing something else. A conception of architecture as primarily the 'art of space' accordingly is rejected, and, with an appeal to Gestalt-psychology, the role of harmonic proportions is played down. These have to yield to a widening attention to various levels of meaning involved in the production and perception of architecture— with, as indicated, a certain bias in favor of tracing a designer's intentions as the only 'correct' way to perceive architectural quality. Behavioral science in this approach mainly provides conceptual tools (or, to put it less friendly, professional jargon), which, having been successfully applied in other domains, hold a promise for the study of architecture as well. Detailed recommendations as to what makes a good built environment are not expected from that angle. Rather it is through application of the aforementioned conceptual tools in the study of history that we should gain such insight. What remains totally unclear, however, is how directly or indirectly the results of such historic research will be applicable to current architectural decision-making and design, or how they can possibly accumulate into a systematic body of knowledge aimed at the latter. And so, when everything is said and done, the chasm between history and theory remains as wide as ever— with theory eventually being sacrificed to history.

2.5 Meta-Criticism

A fourth category of studies in architectural theory are those which focus on structure of argument in architectural criticism, judgment, justification of plans, or... theory. These (which, for the sake of convenience, are brought together here under the heading of 'meta-criticism') should stand a good deal closer to the project at hand, but, unfortunately, once again there was none which could directly serve as a model. One reason is that there are not too many substantial studies in this category anyway, additional reasons are more varied.

Of the works by Françoise Choay I have already come to speak, and there is not much to add. More interesting is a study by a group under the direction of Alexander Tzonis, Les Systèmes Conceptuels de l'Architecture (1975)\textsuperscript{18}. It deals with thirty texts which one way or another are concerned with justification of design proposals and decisions. A formal structure which all these texts are held to display is expounded and, by application to the same texts, amply illustrated. The result is convincing in the sense that indeed it appears to give an accurate account of the actual structure of argument. As such the study is, moreover, fairly unique. Structure of argument, however, need not coincide with structure of theory, or even with actual thought as
led to a proposal or decision. The authors are aware of this when they state:

A design discourse may not always tell the truth. It may be constructed in order to mislead; it may be a tool of coercion or propaganda. In this case, discourse analysis alone cannot reveal the thinking that lies beyond the discourse. We must see how the discourse was used in a given social context. In other words, we must look at the game that was played with it.

Moreover, they acknowledge that design argumentation as analyzed is not "a logical or a problem solving process." At what point it stops being logical—something which might have been pointed out in terms of the same formalization—is not explained. On the other hand, it is emphasized these written texts are the most substantial evidence available regarding the mentality, the way of thought behind architectural decision-making processes of the past. And that indeed is what the study primarily aims at: elucidation of past decision-making.

Differences with the present study are thus fairly clear. Ours aims at creating a body of knowledge which is more directly applicable to current decision-making and design. Moreover, it is based on a concept of theory in which argumentations, even of a strictly logical kind, have moved from the center to a more peripheral position. This may reflect a difference in priorities as well as an evolution in philosophy of science as has taken effect over the past ten years, but in any event, the aforementioned study could not serve as a model for ours.

Equally interesting is a book by Juan P. Bonta, *Architecture and Its Interpretation* (1979). It deals primarily with cultural mechanisms governing the way meaning is assigned to buildings. These are described in a perceptive and illuminating way, the whole thing culminating in an absolutely delightful account of the critical acclaim awarded to Mies Van der Rohe's Barcelona pavilion, ever since its erection in 1929, and of all the stages it went through on its way to eventual canonization.

The thesis which like a red ribbon runs through all of the work—that the 'locus of the expressive system' in architecture lies in the interpretations that people give to buildings once they are there, and nowhere else—is of great consequence. A greater contrast with an intentionalist concept of meaning as endorsed by Norberg-Schulz and many with him is hard to think of. What it implies is that architectural critics have a leading role in establishing the conventions regarding what meaning shall cling to what forms. On the other hand, it points to a certain unpredictability as to what course future meaning will take. For as much as those who have decisive power in assigning such meaning are guided by theory at all, architectural theory indeed may have a role in the process, but otherwise the mechanisms Bonta describes hinge
more on rhetorics. And so Bonta's study could not immediately serve as a model either. Still it was relevant for yet another reason than the ones just mentioned, namely its elucidation of the phenomenon of 'canonical' buildings—which nearly coincides with what in our model (see § 4.3.3) will be called 'paradigmatic examples.'

Another relevant study in approximately the same category is Peter Collins's *Architectural Judgement* (Montreal, 1971). The question stated at the outset is whether or not there is an interesting parallel between judgment in architecture and in law. It is concluded there is, and that architectural decision-making would be a more rational affair if it stayed closer to the litigationary model. The case is argued convincingly for design competitions, which indeed provide the clearest parallels. When subsequently it is submitted that the same holds true on lower and less formalized levels of decision-making, down to the actual design process itself, problems however do arise. The argument centers on the concept of 'precedent.' It is to be feared, though, that there is a major difference between precedent in law and in environmental planning. For whereas in the former it rests on the assumption that everybody is equal for the law, and so like cases should be likewise decided, there is no counterpart to that in architectural decision-making. The latter is, and always will be, for the most part carried on between an architect and his client—and there is no reason why an architect should pretend all clients are equal to him, or vice versa. And so, much as I sympathize with Collins's endorsement of respect for architectural tradition, judicial analogies, I fear, may not provide its strongest case.

### 2.6 Study of Texts from an Art Historical Angle

Study of texts for whatever theory they contain, like meta-criticism as dealt with in the previous paragraph and like history of architectural theory as will be discussed in the next, is a form of meta-theory rather than (architectural) theory proper. As a major function of meta-theory, however, is to pave the way for theory proper, and as precisely in this sense the present study is meta-theoretical too, it sure deserves a place in this survey. So let us now turn to cases where texts are studied for what light they shed on buildings as the primary subject matter of history of art and architecture. Within art history (which, as indicated, is already much younger than architectural theory) this is a fairly recent way to proceed, one that, with pioneering works by Frankl and von Simson on Gothic, by Wittkower on Renaissance architecture, and by Ackerman on both, gained momentum only after World War II. Its becoming a truly common thing is something of the past two or three decades at the most. Provided that research objectives coincide or sufficiently overlap, a
period that long, on the other hand, should be long enough to have produced a decent number of studies which might serve as models to the present study.

Unfortunately, at this point problems arise. Art historical research, as indicated, has gone through a process of purification, focusing more strictly on understanding cultural achievements of the past. An orientation toward current problem solving and decision-making, which at least by implication was traditionally always there, became less self-evident all the time. Even then research objectives might considerably overlap with a more problem-oriented approach like the one we are after, except that, in an effort to explain built forms from texts many an art historian appears to be looking for, and eventually to rely on a connection between the two that is too direct. Such is exemplified, for one thing, in a study of texts for biographical detail in the first place, apparently from a hope that such will bring to light the whole chain of ideas leading up to important choices and inventions in design. And, for another, in an inclination to judge an architect’s output of built or unrealized designs by written statements pertaining to these, as made by either the architect himself or someone from the circles he dwelt in, one whose views he may be trusted to have shared.

Unfortunately, tracing biographical detail, no matter how laborious, can never even remotely be complete. Ideas can reach an author or architect in innumerable ways, some very indirect. Patterns of design may thoughtlessly or consciously be taken from whatever a designer has once seen. Besides, even if it can thus be established beyond reasonable doubt where a designer or theorist got his ideas from, this may be of little use in assessing the precise content of those ideas. Instead, the ideas may get stigmatized (or the reverse) in a way that obscures their actual content. And as for the second digression as mentioned: even if written statements of a theoretical kind may illuminate design decisions, the reverse is more problematic. Just like whatever Sartre as a playwright lets an actor say in one of his dramas remains invalid as a statement from which to reconstruct Sartre’s philosophy, what a designer does as a designer must be dealt with as slightly independent of what he writes down as a theorist.

More specifically, as in this study I intend to demonstrate, these two digressions tend to result in seven 'mortal sins' of inaccurate interpretation as will be enumerated in Chapter 3, and of which numerous examples will be encountered in Chapter 13—the one on 'other readings' of the works reviewed in Chapters 8-12. Such, on the other hand, does not imply that every art historian is bound to commit them. Without a full-fledged model of the structure of architectural theory as a theoretical justification, some have intuitively settled down on approximately the same procedure for interpreting texts as will be expounded in Chapter 5. What all the more sophisticated of texts in relation to buildings have in common, though, is an acknowledgement of architectural theory and practice as two parallel developments, interacting no doubt upon each other, but each with its own dynamics of evolution and decay. Thus
they will try to interpret actual choices in design against the background of all design theory that at the time was 'in the air,' not just of texts to which the architect in question actually refers—a point which in § 9.8 will be illustrated on late-nineteenth century buildings by Cuypers and Berlage in Amsterdam. Which brings us to our next subheading in this survey of current varieties of theory and meta-theory: history of architectural theory. For it is from that angle that one may hope to arrive at what apparently is called for at this point: systematic surveys of the state of the art in architectural theory at particular times and places.

2.7 History of Architectural Theory

It may in retrospect be no coincidence that the same Summerson who, as mentioned, in 1957 insisted on the sometimes very indirect interaction of theory and practice in design, was in the 1940s and 50s among the very few to write about the history of architectural theory independent of particular buildings. Most well-known in this category are the chapters devoted to the writings of Alberti, Poliphilus, and Viollet-le-Duc in Heavenly Mansions (1949). By present standards the chapters may seem small and simple relative to the complexity of their subject matter, but, as may be expected from Summerson, they are well-written, and their impact has been considerable. Chapter 6, 'Viollet-le-Duc and the rational point of view,' in particular met all current demands apparently so well that few took the pains to actually look beyond it in the works of the famous Frenchman himself, so as to check Summerson's findings. But anyway, Summerson had for the English speaking world opened up a fairly new line of study.

Business became more serious when in 1962 Wolfgang Herrmann published a monograph on the life and writings of Laugier, followed by a similar work on Claude Perrault in 1973, and one on Gottfried Semper in 1984—with an earlier edition of the latter in German. In doing so Herrmann continued a tradition which in Germany goes further back, as speaks from the long row of studies on Semper's theoretical writings, some of which will be reviewed in Chapter 13.

In the meantime the English born Canadian scholar Peter Collins had published Changing Ideals in Modern Architecture (1965), which was new and remarkable for yet another reason, namely the way its material was arranged thematically rather than by author—an approach which, unfortunately, has not been imitated much. In 1972 follows Pevsner's Some Architectural Writers of the Nineteenth Century, which, with all its imperfections, was in its way a pioneering work as well. As indicated in its title it is arranged by author and confines itself to those who wrote during the nineteenth century. There is no pretense at completeness, not even within that category. More ambitious is Hanno W. Kruft's Geschichte der Architekturtheorie (1984), which covers
basically all authors of some consequence from Vitruvius onwards.

And so, even though within the whole literature on history and theory of architecture it remains but a small section, there is by now a decent number of books dealing more specifically with the history of theory\(^\text{28}\). Reasons why none of them could directly serve as a model for the present study vary, but an insufficiently clear concept of 'theory' as applied to the study of architecture is a recurring one. Thus Kruft, like Choay, holds that an historian should confine himself to what has been written down, be it for practical reasons in the first place:

> Architectural theory in principle does not need the written account, but as an historian one depends on it. For history as a profession this means: architectural theory is identical with the written texts through which it is transmitted\(^\text{29}\).

Unlike his French colleague, Kruft, on the other hand, sees no reason to pick out one kind of text in particular as its only true medium:

> Reflections on issues in the field of architectural theory are often integrated in the general theory of art, to which the former as a special branch belongs, and with which it shares overlapping problems, like theory of proportions. As a result, many theories of architecture are presented in the context of general theories of art, for instance when the issue is how to design encompassing categories for all of the arts. Theory of art is part of aesthetics, which philosophically depends on theory of knowledge and perception. As a result, sources of architectural theory are multi-layered. No fundamental demarcation or restriction is justified\(^\text{30}\).

Nevertheless he sees a stable core:

> Systems that intend to be taken as theory of architecture generally try to integrate aesthetic, social, and practical categories ...

and he concludes:

> After what has been said it seems possible to arrive at a workable definition of the concept of architectural theory: architectural theory is any encompassing or partial system of architecture, documented in writing, that is based on aesthetic categories. This definition still holds when aesthetics is reduced to function\(^\text{31}\).

As opposed to this, it might be argued the difficulty of disentangling academic disciplines does not preclude the possibility of demarcating the field in terms
of its more pragmatic dimensions. Contestable too is the emphasis on aesthetic as opposed to ethical values. For sure it does not hold for the past 150 years or so, let us say for whatever came after Pugin's *Contrasts* of 1836, but all things considered it turns out that architectural theory has had this moralistic character at least since medieval times—that is, if we forget about Vitruvius and his contemporaries for a while, ever since there has been architectural theory at all. Observe, in this connection, the mixed ethico-aesthetic character of leading criteria of quality. The insistence on 'rationality' of the past two or three hundred years—as a property not of a design process, but of its products—is a case in point, but further back in time one may also think of Alberti's emphasis on 'decorum,' or the basically medieval theology spun around theories of proportion, which persists in Alberti's *De Re Aedificatoria* of 1452.

The real problem, however, is that Kruft does not move beyond these few broad generalizations to describe in more detail the structure of the theory his book is about. Considering the encyclopedic character of Kruft's book, where a few pages at most can be devoted to a single theorist, and where reliance on secondary sources inevitably is strong, it is questionable whether it would have made a big difference if there had been a clearer concept of theory. The same, however, does not hold for more detailed and otherwise accurate studies like Herrmann's monographs. For the one on Semper this will be dealt with in Chapter 13.

### 2.8 Pattern-Oriented Approach

Studies on architectural and urban form considered from a contemporary rather than from a historic point of view, even if no longer the mainstream within architectural theory, still keep on being published every now and then. Usually these focus on the interface of architectural and urban form. That is where the present study likewise has its roots—and so it is not altogether surprising that it owes most to studies in this category—which will be referred to as the pattern-oriented approach—and more in particular to the later works (after 1965) of Christopher Alexander (1936-).

Patterns of architectural and urban form, for sure, can also be studied from a historic point of view. Examples abound in art historical studies of building types, whereas Tzonis and Lefairre's *Classical Architecture: The Poetics of Order* (1986) is a nice and inspiring example of what in this direction can on a more theoretical level be done. These, however, will no further be dealt with here, the former because they stay too much within architectural history proper, the latter because such efforts have of late remained too incidental.

Talking of 'patterns' as the basic subject matter of architectural theory, the aforementioned works by Alexander most likely are what to most architects first comes to mind. Yet it is good to remember that, even though Alexander was among the few to hold on to it when the several post-isms of the 1980s
lured away most others, in the 1970s several architect-professors in the United States practiced architectural theory in this vein. Thus there is *The Place of Houses: Three Architects Suggest Ways to Build and Inhabit Houses*, a memorable book of 1974 by Charles Moore, Gerald Allen, and Donlyn Lyndon. In a spirit that is not too different from Alexander's the authors state as their conviction [p. VII]:

Our traditions are far less confining than the "tastemakers" would have us believe. Traditions have great power precisely because they present us with possibilities and guides that can support invention (Thou Shalt ...), while good taste seeks to intimidate us with rules and limitations that stifle personal choice (Thou Shalt Not ...) ..

and as their intention [p. VIII]:

We started out to write a pattern book for houses, inspired by the nineteenth-century pattern books that described a set of houses for people to emulate. We began with the premise that houses built today are mostly careless and terrible, that they had been built well in the past, and that pattern books had helped make them so. Therefore, a new pattern book was called for, and we set about devising one. As we considered what a new pattern book might include and how it might be helpful, we realized that it was not so much the patterns themselves that mattered but the way they were useful in focusing energy.

Provided 'patterns' are not understood as complete floor plans or roof and window types that a reader can just pick and choose from in putting together his own plans, but are taken in a more abstract sense, the book can nonetheless be read as very much a pattern book. Houses are analyzed in terms of three interacting orders: those of rooms, machines, and dreams. Recommendations in regard to the first two in particular could easily be reworded in terms of patterns--in Alexander's sense. Thus when it is noted that daylight in a room should not come in from just one side [pp. 96-97], this completely coincides with pattern 159 as codified by Alexander in *A Pattern Language*[^12]--but let this not be misunderstood as an allegation of one stealing it from the other. Most likely they both got it from yet another source, but who cares? Slightly more complicated is the situation as regards the third order, the one of dreams. It is noted [p. 125]:

[^12]: [Andrew Jackson] Downing's arguments over whether a house should be like a classical temple or a rural villa have, of course, long since faded from currency. Nonetheless, he and the older craftsmen, though they disagreed on the particulars, all assumed something which we are inclined to forget--that without question a house should be like something.
The question what kinds of likeness would make sense these days, either for a whole house or for its parts, is skirted, though. Significantly, the chapter that deals with this third order, unlike most other chapters, contains no illustrations from the authors' own work. Nor would it be easy to reconstruct an answer from their built works up to 1974 (the year of the book's publication)—but as this is not the place to discuss their architecture, we will have to take that much for granted. In any event this fear of likenesses, even if it has lost its self-evidence, at least at one point keeps the authors safely within the modernist tradition—once again in a way similar to what can be observed about Alexander.

Which brings us to the latter's later works, the ones that followed his brief manifesto of 1965: 'A City is not a Tree.' A first major publication in this new spirit was *A Pattern Language Which Generates Multi-Service Centers* (Berkeley, 1968), but as there is little in this early work which has not found its way into the more extensive ones of the 1970s, we better skip it and move on to *A Pattern Language* (1977) and its more philosophical companion volume, *The Timeless Way of Building* (1979). Both works are beautifully written, carefully edited, and, considering their size and the complexity of their subject matter, remarkably accessible. That in a way is their problem, for like a handsome lady, fully aware of her good looks, they present themselves with an air of "take us whole, or take us not at all." Few architects or critics these days are very much inclined to do the former, so most of them must feel encouraged to take the latter course. Which is a pity, for even the somewhat idiosyncratic concept of the *Quality Without a Name*, as expounded in 'The Timeless Way' and apparently based on, or flirting with, a Buddhist philosophy of life (less fashionable, I am afraid, in the western hemisphere these days than it used to be in the 1970s) cannot altogether obscure how a powerful and sophisticated method is at work there, aimed at creating a body of architectural knowledge of great theoretical interest and practical usefulness.

What is it that makes these works by Alexander and his team stand out among other pattern-oriented studies? First of all, their scope. There is a consistent effort to think of built environments in terms of patterns on all levels of scale and function. The 253 patterns presented in *A Pattern Language* are designed to meet an immensely wide variety of forces in a built environment, related to education of children, domestic and office life, growing old in a dignified way, the proper size and demarcation of neighborhoods, demands to be made on public streets and squares, on transportation, on construction of roofs, and so on, and so forth. That in itself would be nothing special, if not for the resulting unity. The patterns are remarkably compatible, and all pervaded by a spirit which, paradoxically, is as utopian as it is down-to-earth. How that has been achieved is not so easy to point out. The *Quality Without a Name* as a unifying criterion explains as little as its name suggests. It must have taken years of hard work and determined effort to bring about this unity--
but that being said, I fear we are not much wiser either.

Another outstanding quality is that at many points the patterns and their motivation run counter to conventional wisdom. The reason need not always be that they are extremely original. Often it is more a matter of reanimating pre-modern insights that gradually came to be forgotten and overlooked. Among these is an insistence on both the possibility and the desirability of timeless quality in a built environment—an issue which will be dealt with more extensively in Appendix 3. For now, suffice it to note that those who have held this against him, arguing that Alexander's approach is ahistorical (which in a way it is), tend to overlook that, considered over a longer period than, let us say, the last hundred or hundred and fifty years, this in architectural theory has been the more traditional way to proceed. So at least an admirable effort is made to restore a tradition.

Most patterns, moreover, are carefully motivated. The choice of patterns as the type of conjecture on which to focus behavioral research seems fortunate. Had this been focused on a more abstract level, like Lang's 'broad generalizations' (see § 2.1), the results most likely would have been either trivial or ill-founded, whereas on a more concrete level there would have been little to theorize. To this we shall likewise recur in Appendix 3. And, last but not least, from a data base point of view as will be endorsed in the present study, the uniform format these patterns are presented in is a great asset.

So much for what most clearly and most strongly speaks in favor of Alexander's pattern language. On the negative side let it be noted how the apparent harmony among the 253 patterns has been obtained at a price. Thus it is neatly indicated how these patterns reinforce each other, how some can be taken as specifications of others—but not how they compete. Conflicts among them either are ignored, or minimized through simplification of the language. Observe how no alternative patterns are presented as alternative answers to the same set of forces to be met. Alternatives could be defended on the ground that not in every situation the forces involved are equally strong, whereas, moreover, there will always be special circumstances (unknown forces) with side-effects that cannot be taken into account in the abstraction which a pattern inevitably must be.

Another source of problems is the whole conception of patterns as a language. Qualities in traditional architecture, for sure, are convincingly analyzed in terms of a finite (in fact a fairly small) number of interrelated patterns, shared by mostly everybody in a society that builds this way, and therefore referred to as a 'pattern language'. On the other hand, Alexander, as indicated (§ 2.2) does not insist on a semantic dimension for such languages, and so, if not for their being shared and rooted in society, they might as well be designated as pattern systems. However, when it comes to how a language as proposed can as a whole come to be shared by a society—other than maybe by founding a new religion which cherishes this architecture as one of its manifestations—we are left completely in the dark. Finally it is emphasized
how good pattern languages allow for an infinite variety of forms—but once again it remains unclear whether that is typical of languages as opposed to other systems.

The issue is a fundamental one because of the supposed *generativity* of the language expounded in these works. This, I insist, is a highly risky concept, for it assumes that if the patterns are right, if the situations they are supposed to meet are clearly defined, and if for their combination some easy rules can be laid down, we can be confident that, if only we use the language in accordance to those rules, the results will be all right. That is, we would not have to check for each individual case whether the resulting plans meet more general demands—or more down-to-earth ones, like a budget. Methods of evaluation for plans, operating by standards independent of the patterns and their syntax as served as their input, are no part of Alexander's system. Its empirical dimension lies in the motivation of individual patterns (which may involve a certain amount of behavioral research) and in occasional evaluation of the language as a whole—rather than of each of its applications.

Problematic too is the reduction of all conceivable qualities in a built environment to one: the *Quality Without a Name*, also referred to as *The Timeless Way*—as well as most of the organic analogies employed in specifying what this unspeakable quality is about. The choice of this one criterion, no matter how vague, most likely has to do with a profound distrust of verbal criteria in general, of which we will come to speak in Chapter 12 in connection with Alexander's earlier works—but it does not in any way detract from the problems involved that we know this.

Finally, the works display a one-sided attention to the integrity of space, at the expense of the integrity of architectural objects, which in no way is typical for Alexander as compared to other contemporary critics and theorists, but should be mentioned all the same.

For the sake of completeness whatever in architectural theory goes by the name of 'typology' must likewise be mentioned in this context, for at least in intention it is another variety of the pattern-oriented approach. The only problem is that, whereas as a widely acknowledged cluster of research intentions typology has been around for many years now, it never actually has outgrown this initial stage. And so, unfortunately, there is little more to say about it at this point than that we better wait for a few more years.

### 2.9 Methodology of Design

Whether or not methodology of design should be included in this survey in part depends on how architectural theory is defined. That is, sometimes the two are dealt with as two adjacent but separate fields of study, sometimes the former is held to be included in the latter. It does not make much of a
difference, though, for even if they are approached as one, a distinction between procedural and non-procedural (or, as they will here be called, 'material') issues, as we shall see, is among the most fundamental and least problematic to be made within that larger field. And even though procedural issues includes a bit more than methodology of design (education of taste, for instance, is also part of it), it does include it all.

In the present study methodology of design will receive only modest attention. One reason is that material issues predominate in the works of both Semper and Ruskin, and hence in the two major case studies. To this it may be objected that, had we wished to focus on methodology of design, we should have chosen other (and probably more recent) texts for our case studies. As traditionally material, not procedural issues are at the core of architectural theory, such would, however, been at odds with one of the major objectives of this study: to investigate and describe that traditional structure. Besides, that part of the investigation will result in the design of an architectural data base whose primary function, as far as I can see (but others eventually may use it differently), will be that of a tool for evaluation of alternative design decisions--rather than for their generation. We shall recur to this in Chapter 6.

2.10 Why A Data Base Approach?

If after this review of current varieties of architectural theory we now return to the question stated at the outset of this study, that is what kind of theory architectural theory actually is, at least so much is clear that it is not the kind that will ever explain the whole world of architecture from a few basic principles. At most it will explain small segments of it, and at best it will do so incompletely. Accepting these limitations, and acknowledging that none of the models reviewed so far can serve as an overall model to the field that goes by this name (for none covers more than a certain range of the aforementioned piecemeal explanations), we still have the rather neutral and low-profile concept of a mere body of knowledge to fall back on. The concept may even be fairly promising. As we shall see, there is considerable continuity among the themes and questions architectural theory deals with, much more so than it is generally assumed. If properly formalized, this may serve to turn a mere body of knowledge into an efficient architectural data base.

And so, what will be done in the following chapters is that the structure of architectural theory will be described in terms of, quite literally, an information system. In doing so we shall not hesitate to use some of the methodology and tools that to this end have been developed in the worlds of financial and logistic data processing. Demands on an architectural data base can be specified as follows:
1. The information must be truly accessible, to teachers and students of design as well as to practicing architects, architectural critics, and so on. This involves a whole range of technical-organizational issues we need not be concerned with at this point, but has certain consequences for the way information should be structured as well, and that sure is at stake, right now.

2. The system must be comprehensive in the sense that it covers all types of questions which in the study of architecture and in architectural design tend to arise. This second demand follows from the first, since in consulting information few things are more frustrating than to find out the information is distributed over different systems which are not available at the same time and place, have different access methods, when put together leave whole areas uncovered or cover them twice, and so on.

3. The system must be continuous with architectural theory and methodology of design as it is. The reasons are twofold. For one thing, it would be a pity if valuable insights as have been formulated in the past could find no place in the system, and would thus get lost. And, for another, if it is not continuous with the past, what reason do we have to presume it will be continuous with the future—rather than represent the limited scope of current interests?

4. The system must be so designed, and procedures must be set up to ensure, that information will not just accumulate in quantity, but increase in quality as well. Whatever is untenable or inadequately founded sooner or later should come out as such and yield to what is more reliable and sound.

It is against the background of these demands that the proposals to be outlined in the following chapters must be read.
3. Functions of the Model

As a further introduction to the model of architectural theory to be expounded in Chapter 4, we shall now consider what functions it is supposed to perform in the study of either texts or buildings. Four kinds of operations (a-d, see Fig. 1) to this end have been distinguished, which can be specified as follows:

a. When applied to secondary texts, that is, to comments on, or summaries and interpretations of primary ones, the model provides criteria to discriminate between readings that make sense, readings that do not, and such as hold an intermediate position between the two extremes.

Basically these criteria are the same as those employed in 'my reading' (b) of primary texts. That means, what counts is their accuracy, completeness and consistency. By lack of accuracy I mean that someone reads something into a text which simply is not there, that he reads carelessly or does not understand the language. Completeness in this case means that the author of a secondary text takes into account all issues dealt with in the primary one under consideration. Consistency will be defined both negatively, as absence of contradiction and incompatibilities, and, positively, as presence (explicit or by implication) of a leading concept to which all points of view expounded in a text relate as illustrations or specifications. Implied in the latter is, in fact, a fourth criterion: the reading must be imaginative--or else it will, no matter how consistent and complete, still be of little use.
All the while it should be acknowledged that, if another reading of the same text(s) seriously conflicts with 'mine,' the problem may as well be in 'my' model (or the way it has been applied) as in that other reading. So let me list a number of ways in which such conflicts might occur:

(aa) From certain fragments of text inferences are made which, if the same fragments are read more carefully, we must conclude cannot be made from these.

(ab) The other reading is based on a too small or one-sided selection of fragments from the same text; 'mine' presents other fragments to point out what is missing.

(ac) All writings by an author are dealt with as one synchronic whole, rather than as reflecting a growth of ideas over time, or different contexts of speech.

(ad) Rhetorical means in the text(s) under investigation are not acknowledged as such.

(ae) Conclusions are inferred from contextual evidence long before the possibilities of further textual analysis have been exhausted.

(af) A reading is based on incorrect translations.

(ag) A different conception of functions of architectural theory is implied, that is, a different model.

Ample illustrations of these seven mortal sins, so to say, will be presented in Chapter 13, where other readings of the texts investigated in the chapters 8-12 will be reviewed.

b. The model guides my reading of a text.

How it does so will, after a presentation of the model as such in §§ 4.3 and 4.4, be expounded in § 5.1. For now let it be noted that 'my reading' will never be presented as the best possible one. At most it will claim to be the most sensible reading so far. More precisely, its claim in general will be that in certain respects it makes more sense than other readings as have been (or will be) reviewed. Whatever seems correct in other readings will be taken over in 'mine,' but as there is no guarantee that I completely understand these other readings, 'mine' may still be inferior to them in certain ways.

c. The model will facilitate future readings of a text.

This it may do in combination with 'my' reading, just like 'mine' was facilitated by others, but with this difference that 'mine' is already based on the model that is supposed to guide future readings, while those others were not. Thus the connection is more intimate. What matters is that 'my' reading must remain transparent in the sense that others can check on what fragments of text in
particular its conclusions are based. And also that its reliance on evidence from outside the text is kept at a minimum. Reference may incidentally be made to other texts from the same period or before, dealing with related issues, but biographical detail, for instance, should be avoided. If not, the chances are that, instead of actually elucidating a primary text, its reading helps maintain a bias of the kind that future readers better take for granted or ignore.

d. The model will be used in efforts to create or improve theory from other sources than existing texts, that is, from the study of buildings: how they are located and put together, how they were conceived, and how they can be (or tend to be) experienced and used.

This will result in analytical descriptions (evaluations and interpretations), which take their place beside other primary texts in what eventually may grow into a large architectural data base. It will, moreover, be contended that such data base is not just a futuristic dream, but in many ways already reflects architectural theory the way it is. One major function of the model, accordingly, is to lay bare the structure of an already existing body of knowledge. In this regard the model is descriptive. Otherwise it is a tool which, when applied in study, be it of buildings or of texts, constrains the operation in certain ways. And so the question, if it might be raised, whether the model is descriptive or prescriptive, has only one answer: both—and that not even in the sense that it is descriptive in one context, prescriptive in another, but that it is both in virtually every situation where it might be used.
4. The Model Specified

As a result of the lack of thought which worldwide has been given to the structure of architectural theory as an intellectual tradition, the model featuring in this study could not with minor adaptations be derived from one already available within the field it is about. Reference, nonetheless, is due to the aforementioned works by Christopher Alexander as a major source of inspiration. A second source, likewise already mentioned frequently (see § 2.10), has been information technology. A third is philosophy of science, and in particular pragmatic realism, of which we will come to speak in the next paragraph (§ 4.1). From mainly these three sources I have tried to derive a model which meets the following demands. First, that it accommodates all varieties of architectural theory commonly acknowledged as such. Second, that it likewise excludes whatever, either because of its logical structure, or of its subject matter, is generally agreed not to belong to this field. Third, that in a case of doubt, where some would say a text makes sense as a contribution to architectural theory, while others hold it does not, the model will be helpful in making the issue decidable. And, finally, that every major system of architectural theory not only can be described in terms of it, but that, moreover, the resulting description will (or, let us say, makes a fair chance to) be elegant and illuminating.

How to arrive at such a model? Basically it is a process of trial and error, of figuring out what is constant in the most diverse systems, translate this into a preliminary model, apply the model to a first set of texts, adapt the model if it fails to fit those texts, then apply it to another set, and so on until it begins to stabilize, that is, until no more adaptations are called for. The result will be expounded in §§ 4.2-4.4. First (§ 4.2) the concept of an architectural data base will be further explored. This is followed (§ 4.3) by a specification of elements that apparently are constant in all architectural theory of all times, and in terms of which the structure of the most various systems in the field can be described. The chapter concludes (§ 4.4) with a proposal for structuring and coding themes and questions.

4.1 Pragmatic Realism

For a review of pragmatic realism as a recent development in philosophy of science we shall turn to two recent studies in that field: Ian Hacking’s *Representing and Intervening: Introductory Topics in the Philosophy of Natural Science* (1983), and Rom Harré’s *Varieties of Realism: A Rationale for the Natural Sciences* (1986). The two scientist/philosophers defend slightly different versions of 'pragmatic realism.' Such may seem remote to the issues featuring in this study, but as their arguments contain elements which are equally relevant
to the way architecture is or can be studied, let us nonetheless give them more detailed attention.

Philosophical realism exists in two varieties. Realism about theories claims that the latter must be taken literally as either true or false, and that at least some scientific theories come close to being true. Realism about theoretical entities states objects like electrons, photons, or magnetic fields make a good chance really to exist, even if no one so far has actually seen them. Both Hacking and Harré subscribe to the latter while rejecting the former, that is, realism about theories--why? For one thing because of the former's dependence on what Harré calls 'logical essentialism:'

The giving of primacy to logical structures as the inner essence of discourse has had a disastrous effect in philosophy of science, vividly illustrated by the implausibility of Hempel's ... account of scientific explanation. ... Logic does have a place in the creation of scientific discourse, but not at its core. That is formed by semantic structures, and relations of likeness and difference. A clear-eyed look at the cognitive and material practices of the scientific community will reveal that logic is a socially motivated addition, a rhetorical contribution to persuasive power\textsuperscript{34}.

Or, as he notes about his own book:

In so far as this little work itself is logically coherent it is the result of a fear of accusations of illogic, rather than the effect of any conviction that logic can reveal that which informed intuition cannot\textsuperscript{35}.

Hacking, as indicated in the title of his book, describes the nature and function of scientific theories in terms of 'representing' and 'intervening.'

Science is said to have two aims: theory and experiment. Theories try to say how the world is. Experiment and subsequent technology change the world. We represent and we intervene. We represent in order to intervene, and we intervene in the light of representations\textsuperscript{36}.

Representations are first of all likenesses\textsuperscript{37}. As with legends or fairy-tales, these may be couched in sentences, but we cannot have it both ways: simple declarative sentences like "The cat is on the mat" may be either true or false, but that is because (in contrast to what Wittgenstein, the early one of the 'Tractatus,' held) they do not represent. Conversely, theories can only represent thanks to not being literally true. Hacking goes on to suggest representations come first, the concept of reality next: that the latter originates in a comparison of different representations of aspects of the world. However, that is precisely where at least in physics the problem starts, as every now and then alternative,
and mutually incompatible representations of the same class of phenomena are being proposed, without much of a clue as to which of them is best. Which is why Hacking, like Harré (and like Hilary Putnam, another outstanding pragmatic realist, of whose ideas we will come to speak in Appendix 1) sees no future in realism of theories.

So what precisely does he have in mind when nonetheless he claims 'reality' for photons and electrons? Certainly not that they can be observed. The criterion rather appears to lie in man's ability to manipulate their causal powers. Or, as he puts it in response to an experiment where positrons had to be 'sprayed' on a niobium ball: "So far as I'm concerned, if you can spray them then they are real." So what is 'a theory,' considered from this angle? A representation, no doubt, but one that does not coincide with a finite series of statements through which it is transmitted. Harré identifies them as "static, synchronic descriptions of moments in the development of cognitive entities of higher order," and as "devices by which phenomena are mapped on to aspects of some common ontology." These higher order entities are referred to as 'theory-families.' A slightly simplified version of Harré's representation of these has been rendered in Figure 2.

Theories--to start at the bottom of this scheme--may be speculations not meant to serve any practical end at all, but most of the time, even if the connection is an indirect one, they originate in real-life problems like an illness or the strength of a construction. This (though Harré does not use the expression) may be called its field of intended applications. In order to come to grips with such events, efforts will be made to discover and describe patterns of regularity therein. This involves a choice of patterns to investigate, as well as conjectures regarding what patterns will be found. These, however, will be selected or invented top-down rather than bottom-up, so let us skip to the top of our scheme. As processes which cause an illness, or powers that prevent a building from collaps-
sing, cannot be actually observed, theories will grow through choice of an analogy with better-known things and events. These, if they turn out to be fruitful, will become part of the 'semantic core,' which in Harré's view is the most stable and enduring part of theory-families. Concepts like photons, electrons, viruses, fields of gravitation, and so on, all have their place here. More variable is the way properties of such 'theoretical entities' are further specified, so as to enable one to deduce rules for their behavior. Such imaginary behavior results in patterns that can be compared to the actual ones described at the most basic level of research. Studying this 'behavioral analogy' in fact is the experimental part of it. Refinement of the 'material analogy' roughly corresponds to the theoretical dimension of normal science.

So far so good, but what (if any) bearing does this have on the structure of architectural theory? Is there any reason why, in order to be substantial theory at all, architectural theory should be like science? Not necessarily, although it would be reassuring to find out that some non-trivial analogy exists between our fragile field and one whose status is more firmly established. Therefore, it is nice to know that the model of architectural theory to be expounded below bears some resemblance to Harré's model of natural science. Nonetheless, there are major differences as well, so nothing conclusive follows from this. What matters is, first of all, the way both scholars play down the role of hypothetico-deductive explanation, or even of explanation in general, as not what science, after all, is really about. Consequent on this is a more pragmatic conception of scientific theories. Harré identifies them as even so many temporary states in a process of creating order, of searching for patterns of regularity among things and events in order to make these more conceivable, manageable, or at least debatable. Hacking sees them as representations of certain aspects of reality, meant to enable us more successfully to intervene in the latter. Both characterizations, if theoretical entities are replaced by theoretical constructs of a more strictly conceptual kind, carry a strong, and possibly fertile analogy for architectural theory.

4.2 A Body of Knowledge Structured as a Data Base

As indicated (§ 2.10) the model will be of an architectural data base which is to meet certain demands concerning accessibility of information, comprehensiveness, continuity with architectural theory of the past, and actual accumulation of knowledge. What data structure best meets these demands is what we must consider next. To this end we first have to decide what logical entities, that is, what types of information unit are to be registered, and how these are related. A proposal is contained in Figure 3, where each box stands for an entity and each arrow for a 1:n relationship.
What this means is the following. For every architect the system may contain one or more buildings, for every author one or more publications. Conversely every building must be linked to an architect (possibly a dummy one, if no architect is known) and every publication to an author. There will be room for registering a co-author or co-architect, as well as publications within publications. In cases where no architect is known, a building may instead be linked to the city or region where it is located. Otherwise such geographical data can serve as a secondary search criterion.

'Buildings' must be taken in a wide sense, to include three-dimensional space defining constructions which fail to have all of a building's regular attributes, like a roof, a door, and so on. Nevertheless I would suggest there are strong reasons to choose 'buildings' as a basic information unit. The most pragmatic one is that buildings are still the most current units of design commissions as they pass from clients to architects, and subsequently of plans as they are submitted to local authorities for approval, or to investors for a loan. For every 'building' there can be one or more summaries (e.g. comments on how it was designed, how constructed, or how it affects a beholder), for publications this can be either a summary or a quotation, while both can be reduced to a mere reference to information that is stored elsewhere. Graphics and pictures can be included as well. Such puts additional demands on working stations where information is to be consulted, but as this is not the place to discuss hardware problems, that much may be taken for granted. Between themes/questions and quotations/summaries there exists what is called an n:m relationship. That is, for every theme there can be one or more quotations, while likewise a quotation may relate to one or more themes. This has been resolved into two 1:n relationships by introduction of the entity 'relation.' Except for quotations/summaries, which must be of variable length, all entities may have a fixed format. This holds for data regarding building costs too, which is why they have been mentioned separately.

Once registered, summaries can be consulted by author->publication, by architect->building, by city/region, by theme/question, or by building costs.
Most likely registration will go by publication or by building, most of the
time, consultation by theme or question, by city/region, or by building costs.
This points to a crucial difference between a data base approach and more
traditional ways of communication. An author of a book or article, like a
lecturer or one who produces a movie or a videotape, tends to rely on it that
the average reader, listener, or viewer of his product will receive the information
presented in roughly the same order as it was registered in, or at least finally
put together. That with books readers every now and then will start at the
index and plug in from there, does make a difference, but it remains a secondary
entrance, while in a data base approach this exception has become the rule
and been perfected as such. An information system need not even be
computerized in order to provide these options, though it is not until some
electronic device is chosen that they can be exploited to the full.

If consulted on city or region the system will tell what interesting buildings
there are in, for instance, Buffalo, and who is their architect—which is nice
for whom intends to go there anyway and has a few hours left for sightseeing.
Consultation by theme/question or by building costs nevertheless will tend
to yield more remarkable results. Thus if a sufficiently large number of
buildings has been registered by uniform parameters, including cost of construc-
tion, this will provide a basis for predicting such costs at an early stage in
a design process. Still that is an option which in this study will not be explored
any further. What it will focus on is the kind of information the system may
provide to those who consult it on theme/question. In general this will be
a well-documented history of the problem at stake, occasionally a more specific
answer.

If subsequently we briefly consider some of the practical implications of building
up a data base like this, a first conclusion must be that successful implementation
hinges on a broad consensus regarding structuring and coding of themes.
Moreover, this consensus better be reached at an early stage, before information
is entered on a large scale. It is crucial that one list of themes and questions
comes to be shared by a large number of people, affiliated to different institu-
tions, and that this list will stay in use for years to come. If not, the system
cannot grow into the broad and encompassing thing we want it to be. How
to arrive at a structuring of themes which most naturally fits the nature of
the problems architects have to deal with will be discussed in § 4.4.
4.3 Dimensions of Architectural Theory

4.3.1 Theory Proper

In our model, which in Figure 4 has been rendered in its most basic form, a first distinction has been made between 'theory' and 'theory proper.' Theory is, in Hacking's terms, conceived as a set of representations that we make of certain aspects of reality in order to enhance our ability to manipulate these very aspects, theory proper (Fig. 5) as an ongoing process of asking questions, formulating hypothetical answers, and collecting evidence to either refute or support the latter.

What more specifically marks the difference between the two will be shown when we come to discuss how theory proper relates to the four elements which in Figure 4 surround theory. These are the following. Below is future decision-making regarding interventions in a built environment—which will easily be recognized as corresponding to a theory's field of intended applications (Fig. 2). Above are the three basic types of information on which architectural theory can draw: examples, built or unbuilt, that epitomize the kind of quality one hopes to attain (or to avoid) through design, value systems—ethical, aesthetic, or (most likely) a combination of the two, and past decision-making. All these will be discussed in the next three paragraphs. For now let us focus on the very nature of theory proper. Why, to begin with, this insistence on questions as being at the very heart of the matter? For one thing, because it marks the difference between theory and rhetorics—a distinction which in texts dealing with architecture tends to be obscured. Thus it is frequently argued that a major function of architectural theory lies in justification of plans, or of whole styles. Indeed that is what those texts are frequently about. Yet it appears that what are thus highlighted are their rhetorical aspects. For what is rhetorics? Unfortunately the word is often used in a pejorative sense to discard whatever one chooses not to take seriously. So let us try to give it a more precise meaning. Following Chaim Perelman I intend to use it as referring to argumentative techniques which aim, not at making the best possible inferences from certain premisses, but at enhancing an audience's support for one or more theses that are submitted to its approval. Such approval generally has to be
transferred from facts, rules, or principles the audience already accepts to those it keeps under consideration. The resulting argument may have something in common with a more strictly theoretical one, but there will always be a difference in character, consequent on a difference in intention. Ignoring these differences has resulted in such oddities as proclaiming Viollet-le-Duc the greatest theorist of architecture since Alberti⁴⁴, although it should be clear his works, for as much as they try to reach beyond architectural history, are highly rhetorical—in Perelman's not so vague sense of that word.

However that may be, I see no reason not to subscribe to the idea, endorsed by Popper and many with him, that theory originates in questions. More problematic is the notion that answers to these questions as provided by a theory should always be of a hypothetico-deductive kind. Even if this holds true for scientific theories (but there too it has come to be challenged as at best an oversimplification), it does not bring us very far in an analysis of the nature of architectural theory. Sensible questions may be asked, conjectural answers formulated which subsequently serve as search-lights for collecting relevant examples as to how problems in architectural design could, should, or should not be handled, the result may be useful as a body of knowledge to lean on in actual decision-making, but that is about it. Measured by standards of more strictly scientific theory what is missing is a deductive structure among hypotheses which, in combination with simple, straightforward facts, allows to make reliable predictions. Or at least it will not be found in theory of architecture in a strict sense (see below). In methodology of planning and design it is quite feasible to work out mathematical models of considerable complexity to make accurate predictions, predict the costs or strength of a construction, the thinnest slice of concrete that will do the job, capacity of elevators, and so on. When questions deal with the imponderables of architecture, however, it does not usually work that way. Architectural theory stands for taxonomies or typologies which contain small but unconnected fragments of explanation, rather than the other way around—and it is hard to see how this order could be reversed. As a result it makes more sense to talk of theories of a hypothetico-explorative than of a hypothetico-deductive kind.

5. Theory proper

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Theory proper: questions hypotheses evidence
If next we turn to what the questions asked in theory proper are about, it should from the outset be clear that, if architectural theory is taken in its widest, most literal sense, that is, as theory on architecture, no generalizing question on architecture can be excluded in advance. So what is 'architecture'? Is it just the art of designing buildings, and all material products of that art, or is it supposed to include all human abilities and activities somehow related to preparing (plans for) interventions in a built environment? There is a certain vagueness about the word, as used in ordinary English, which, if we don't want to lapse into the arbitrariness of stipulative or persuasive definitions, must be respected. So let us for the moment take it in its widest sense. Within this whole body of questions a first distinction to be made is between procedural and material issues. Architectural theory in a wide sense includes them both, in a more restricted sense it covers only the material, that is, the ones which deal with quality, measurable or imponderable, of the completed product. Procedural issues in that case are left to methodology of planning and design. Among the latter, procedure of design (how to arrive at a design) is distinct from procedure of evaluation (how to judge one). This results in a scheme as rendered in Figure 5. What further subdivisions among questions could or should be made will be discussed in § 4.4 below, after a brief review of the model as a whole.

6. Constant elements in decision-making

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4.3.2 Decision-Making

Decision-making regarding interventions in a built environment holds a special place in our model, if only because it occurs twice: in its past variety as a source of information, and for as much as it still lies ahead as a the theory's field of intended applications. The latter marks the difference with architectural history, where, if such relevance to practical decision-making is demanded at all, it will be more indirect.

As role patterns within architectural decision-making are remarkably constant, our overall model of architectural theory can, if we wish, be extended with a more detailed representation of this section. A proposal is contained in Figure 6. Roughly decision-making is where architects and other designers or technicians do their work of consulting clients as to how, given a site, zoning regulations, a budget, and a certain amount of time, the client's demands best be met, how to get plans approved, and how to make sure that, once a builder has been contracted, plans will be executed in accordance with the contract. Although usually it is not directly involved in the decision-making process, a place has been reserved to the public-at-large for a more indirect, controlling role. Thus it may be assumed that both an architect and his client have a reputation to lose with a public, which even can get organized and exert pressure on the administration to withhold approval, to change a zoning regulation or to stick to it and interpret it very strictly.

Some variations on this pattern do occur. Different roles may coincide in one and the same person or authority. Thus there have long since been architect-contractors, architect-principals, and public authorities who commission as well as approve of a design. Such, however, does not upset the scheme in any fundamental way. The scheme might be detailed even further, but I would rather leave it at this. The only reason why it has been brought up at all is to show how constant these role patterns are--and because everything that is constant

7. The model refined
can be used as a matrix for mapping individual contributions to the field as a whole.

Unfortunately most of the information that becomes available in practical decision-making is too diffuse to be used in theory proper straight away. It needs some structuring. Therefore an intermediate level of concept formation has been reserved (Fig. 7) for testing, that is, for implementation of theory in a decision-making process, actual or simulated, and, in the opposite direction, for evaluating the same processes.

4.3.3 Examples

The information found in past decision-making comprises most of what is available on procedural issues, and some current examples of built solutions as well. So one might wonder why 'examples' has been singled out as an additional source of information. For one thing, because it is hard to make a balanced judgment of built environments that were recently completed or are still under construction, and, for another, because there is little point in architectural theory which fails to put present decision-making in a wider historical or environmental context. A wider range of inspiring or otherwise illuminating examples can be found in history of architecture, in other branches of human art and technology, or in nature (Fig. 8). Nature may be taken abstractly ('la Belle Nature', the cosmic order, the ideal types, the universals underlying the particulars as they present themselves to the human eye, and so on) or concretely—a distinction which roughly coincides with that between classicism and romanticism. Within the romantic approach a further distinction can be made between imitating nature in its actual appearance, versus trying to emulate it in its workings so as to create an architecture which looks as though it were a product of nature—but that becomes too detailed to be rendered in our scheme (Fig. 8). A special place should be reserved to music. Strictly speaking it is, of course, a man-made thing, but as much of its appeal in theory of art stems from a feeling that it gives expression to some cosmic order, let it at least be placed right next to nature.

<table>
<thead>
<tr>
<th>History of architecture</th>
<th>Nature idealized</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art and Technology</td>
<td>Music</td>
</tr>
<tr>
<td>Man-made</td>
<td>Natural</td>
</tr>
</tbody>
</table>

EXAMPLES

8. Examples as a source of information
Depending on their role within a theory, a distinction can be made between *paradigmatic* and *auxiliary* examples. Paradigmatic are the ones whose value is beyond dispute. The author's position in such cases reflects a consensus within the cultural community he belongs to. This value must be accounted for, but it is given from the outset rather than found as evidence for criteria of quality, or patterns of design that were formulated *in abstracto first*. Paradigmatic examples stand for questions rather than for answers. They put constraints on a theory in a way those of an auxiliary kind do not. Their choice or identification, therefore, has been marked as a separate level of concept formation (Fig. 9). A fascinating study of the cultural dynamics through which certain buildings become paradigmatic (or 'canonical') and how later on they may again lose this status, is contained in J. Bonta's aforementioned (§ 2.5) *Architecture and its Interpretation*. Let it be noted though, that not only buildings (Greek temples, Gothic cathedrals, and maybe kasbah's too) can serve as such, but natural phenomena, music, and human art or artifice as well.

9. The model extended

### 4.3.4 Value Systems

As with 'examples,' one might wonder why 'value systems' are needed as a separate source of information. Criteria of quality in principle might be defined in terms of the greatest satisfaction for the greatest number of people who somehow are served or victimized in a decision-making process. All evidence needed in that case would come from decision-making. Such, however, is not the way desirability of alternative solutions is usually measured, let alone how major decisions are taken in regard to interventions in a built environment—and for at least some good reason. Future satisfaction is often hard to measure, and so are size and importance of interest groups. Besides, even when it can be done, such provides little information regarding future plans, for it does not explain *what it is* that makes a group prefer one solution to another. At this point reference must be made to value systems that have their center of
gravity outside the domain of architectural decision-making.

Now let us be clear as to what is meant by 'value systems.' Note that we are dealing with a source of information, not with broad generalizations and conjectures on value--like a declaration of socialism being superior to capitalism, or Protestantism to Catholicism. The latter have their place among hypotheses, that is, within theory proper—if anywhere. Nor does it consist of objects or concretizations of value, like particular buildings, built environments, or samples of natural scenery. Those come under 'examples' as reviewed above. So what is in it? In general I would propose to think of a value system as a subsystem within a civilization, one that has come to embody certain values and made it its business to preserve them: a state, its legal system, the basic principles on which its laws are based, unwritten rules of conduct that guide its leaders as well as their subjects in situations where no written law applies; a nation and its history, its heroes and their legendary feats; a church, its holy books and sites, its saints and sages and all the splendor it is surrounded with; an educational system as embodied in schools, universities, and libraries; the world of art, the world of sports; organizations for the preservation of nature; the world of business and its ideals of free enterprise or corporate undertakings; a society, its language and its literature; the human family.

All the while the place of such value systems within systems of architectural theory is more difficult to specify than that of 'examples' or 'decision-making.' Specific forms cannot in general directly be derived from general values, and even if this third source of information is mainly used in evaluation of alternative solutions, problems abound. Modernism's claim at rationality gets no support from anything intrinsically rational in flat roofs, straight, unadorned walls, exposed concrete, or large amounts of glass. Gothic has been endorsed as the Christian style par excellence, rejected as typically Roman Catholic, embraced again as authentically German by the Germans, French by the French, and English by the English. Classicist architecture as a humanist tradition has been contaminated by its use for totalitarian ends.

Obviously convention and historical coincidence are major factors in the relationship of architectural form to non-architectural value systems. The question is whether that is all there is about it. Such a conclusion to architectural theorists would be somewhat unsatisfactory, as the ultimate consequence would be that anything goes, provided people can relate to it as 'theirs.' Architectural theory generally is in search of criteria which transcend this kind of parochialism—and would do a poor job if it were not. An immediate advantage, on the other hand, of analyzing quality in terms of value systems is that it takes away the mystery of the aforementioned (§ 2.7) mixed ethico-aesthetic character of criteria of quality in architecture. If such can only be achieved at the expense of complete artistic relativism, one may however wonder if it is worth it, and if one is on the right track, after all.
Meanwhile there are indications that architects are as pragmatic about the value systems of their theorists as clients about those of their architects. That A. W. Pugin was a Roman Catholic, and even as an architect and writer appears to have thought of himself primarily as that, did not prevent his ideas on Gothic as a rational style of architecture, most suitable for ecclesiastical buildings though not for these alone, from being eagerly accepted among English architects who for the most part were no Catholics. Conversely, we see in Viollet-le-Duc the paradoxical phenomenon of an outspoken republican who was on the best of terms with the emperor Napoleon III, an agnostic who got along great with the clergy (who likewise loved to hire him for his Gothic expertise), and of a French nationalist who, as a debunker of the Ecole des Beaux-Arts and self-proclaimed prophet of rationality, enjoyed his greatest prestige abroad. It is not immediately obvious, though, what conclusions to derive from this. To infer that all these architects and clients were only interested in the aesthetics of their theorists would be premature. Other options are that an appeal to rationality (which nobody is profoundly opposed to) transcends religion as well as nationality, or even that Viollet-le-Duc's French nationalism appealed to a French cultural orientation among his readers abroad—or, mutatis mutandis, to their own nationalism. Only so much is certain, that one should be extremely careful about placing these non-architectural value systems to which an author confesses at the core of his theories. Nor should such confession too easily be marked as an ideology, for it is likewise possible that in a highly unprejudiced way an author wonders what is so great about the value systems he admires. We shall recur to this when dealing with the works of Ruskin in particular.

So how can value systems play a significant role in non-trivial, non-relativistic bodies of architectural theory? There are several options. One is to to think of a value system as embodied in the institution a building is to accommodate, and to let the building somehow dramatize that institution. That is the approach endorsed in the writings and teachings of Louis Kahn, who thus renews a line of thought with older roots in the Beaux-Arts tradition. Another is to explore historic and symbolic connections between forms and value systems—and to claim that these are as valid today as they were in the past. A third (partly coinciding with the former) is to establish a connection through those of the humanities or social sciences which deal with the same value systems as subject matter of research, and possibly as something which through research they intend to reinforce. Linguistics, psychology, or sociology may nowadays be what in this regard first comes to mind, but further back in time theology was a major issue as well. The link may be a superficial one, for instance when it is mainly through their professional jargon that the humanities and social sciences make their influence in the study of architecture felt, but it is likewise possible that architectural theory takes recourse to a sophisticated philosophy of art—with ethical as well as more purely aesthetic dimensions.
The latter, as we shall see, is the case in most of the texts dealt with in our case studies. It speaks as clearly from Semper’s preoccupation with Kantian and Schillerian aesthetics in *Der Stil* as from Ruskin’s elaborations on British associationist philosophy in *The Seven Lamps*, whereas Alexander’s fascination with qualities in ‘unselfconscious’ design which apparently are hard to emulate in its ‘selfconscious’ counterparts, already in his early works moves in a similar direction.

10. The model completed

The resulting structure of theory has been rendered in Figure 10. Professional or merely idiosyncratic jargon has been subsumed under ‘semantic core,’ on which more in the next paragraph. As with these last additions our model has been more or less completed, the same figure will in the following case studies be used as a recurring logo, by way of which it will be indicated whenever the text moves from one of the aforementioned dimensions of (systems of) architectural theory to another.

### 4.3.5 Semantic Core

What goes by this name is the set of words which, compared to other texts dealing with related issues, are used more often, used in a slightly unusual sense, or both. Of these there may be five, or ten, or fifty, but few theoretical systems apparently can altogether do without them. Three kinds of reason why this should be so deserve our attention at this point.

One is the non-availability of appropriate vocabulary in common English (or whatever language is employed) to describe the phenomena or hypothetical constructs involved. Words in that case words must be metaphorically transferred from other contexts. As indicated by Harré (see § 4.1), this is the normal way new terminology gets introduced in natural science, for instance when
the transmission of electricity through a wire is described in terms of water flowing through a tube. Or one may think of the terminology of 'dressing' as encountered in Der Stil (see § 8.5.4). Such new terminology may subsequently get so firmly established that people stop thinking of it as metaphorical or as referring to something hypothetical.

Another reason is that words which designate the basic categories in a system of classification (as either is part of a theory or prepares the ground for it) are used more frequently in the context of such theory than in most other contexts. There is nothing special about this: it is just a matter of economy of thought. As such words may at the same time be metaphorically transferred from other contexts, this second reason partly overlaps with the first.

A third type of reason is rhetorical. This situation occurs most clearly when a word is introduced to create a polarity with another, and if moreover (a) both words cover a wide range of phenomena, so strictly speaking classification might as well have started with three or more categories instead of with two; (b) of the two categories one invariably covers cases that are considered all right, the other mostly doubtful or unfavorable ones, whereas (c) otherwise criteria to decide to which of the two a phenomenon belongs are not always that clear. This is the kind of situation one encounters in pairs like 'postmodern' versus 'modern' or 'modernist;' 'non-camp' versus 'camp;' or 'multivalent' versus 'univalent'--as employed in the writings of Charles Jencks.

4.4 Structuring Themes and Questions

'Themes and questions' as an element of the data structure rendered in Figure 3 (§ 4.2) stands for more than the range of questions dealt with in 'theory proper.' It also refers to certain ranges of examples, that is, to styles and periods, and to special-words-with-special-meanings. Considering how these various types of themes and questions should be arranged and uniquely identified, a first system that comes to mind is that of a regular encyclopedia, with as many potential headings as there are words in a language--or more. Another option is that of a hierarchical arrangement, with a few encompassing topics at the top and at the basis a wide variety of sub- and sub-sub-themes and questions.

The obvious advantage of an encyclopedic approach is its immediate accessibility to all who share its language. Major drawbacks are the indefinite length of the list and the impossibility of clustering themes, other than by incidental cross-reference between entries. As a result, entries will overlap as much as there is choice to enter information under different headings. Minimizing such overlap and establishing a rich and clear network of relationships among entries are the basic objectives of a hierarchical arrangement--but if the arrangement is poorly done, there may be little to make up for its
cumbersome artificiality. A broad consensus regarding its application, moreover, is not easily attained.

A way to avoid the pitfalls of both extremes is exemplified in the *Art & Architecture Thesaurus* (AAT) of the J. Paul Getty Trust. In a coordinated effort by architectural and art librarians, frustrated at the lack of unity and transparency among their several cataloguing systems, current headings in these catalogues were evaluated, sifted, and hierarchically arranged. Subsequently the hierarchies were completed by filling out missing parts wherever they showed up. The resulting work makes a chance indeed to be widely accepted and thus to serve as a structuring principle to a huge data base, but being conceived bottom-up (from interesting facts and answers and the way these have been catalogued) rather than top-down (from the most general to more specific questions history and theory of art and architecture have to deal with), the hierarchies poorly reflect the structure of these questions, the more so if architectural theory is singled out from its adjacent fields: architectural history and both history and theory of all the other arts.

Consequently, what will be proposed here is not so much this in-between approach as a combination of the two extremes: an open-ended list of catchwords for ranges of examples (styles and periods) as well as for special-words-with-special-meanings, a top-down structuring of questions for theory proper. For whereas in regard to periods, styles, and other key-words one has to follow their existing use or the use as found in texts, there is no such obligation when it comes to structuring questions so as to make answers to them more comparable. What matters is (a) to identify the whole *range* of questions traditionally dealt with in architectural theory, and (b) to split it up in such a way that each next level will again be *complete* (in the sense that all is covered), while *minimizing overlap* between lower-level questions. Because it cannot realistically be expected that this list will ever gain such wide support among librarians as the AAT or a comparable project, it may eventually be wise to create a link between the codings of the latter and of questions as coded in our model (Figs. 13-14), but one cannot simply let the AAT do the job. For that purpose it is not sufficiently problem-oriented.

So far only two major distinctions have been made (§ 4.3.1) within the range defined for theory proper: one between material issues and procedural ones, another between procedures of design and of evaluation. Why these, and not, for instance, one by building types? The basic criterion to decide such issues is how the chosen categories can be further subdivided. If they all neatly fall apart in sub- and sub-subgroups with none or very little overlap between them, one is on the right track. If, on the other hand, one and the same question turns up in many places, there must be something wrong. Now that is precisely what would happen, if building types were chosen as a first entry. Different types of building are composed of similar elements, by rules and by procedures which at least are comparable.
Thus the only way to find out whether our first two choices were approximately right is to go ahead—but how? Let us focus on material issues first. After all these traditionally are more central to architectural theory than procedural ones. Should we, parallel to a distinction as made between procedure of design and of evaluation, separate patterns of design from criteria of quality. Unfortunately that does not work. Conceptions which at one point serve as input for design, at another are used as criteria for judging plans. Christopher Alexander in his later works emphasizes how buildings or built environments can be evaluated in terms of how lower-level patterns fit patterns on a higher level of scale or abstraction. On the other hand, there is no reason to think of this as the only possible way. Intuitions as to what makes one solution more desirable than another cannot always be specified as full-fledged patterns. For instance, what if the criterion is as vague (though by no means meaningless) as, for instance, 'unity in variety?' A way-out might be to call even that a pattern, but such would obscure the problem rather than solve it. The truth is that a more or less continuous scale ranges from mostly graphic patterns to merely verbal criteria. In Figure 13 this has been indicated by two stars (***) to the right of the most verbal ones, none to the side of the most pattern-like, most graphic ones, and one (*) at those which hold an intermediate position.

So how to proceed instead? Once again this in our case was at first a process of trial and error, analogous to the one expounded in § 4.1 for defining the model as a whole, but then, by the time a more stable structuring of questions began to emerge, it turned out this reflected the semantics of common English rather than anything else. Which, I suppose, is basically good, because natural languages have a sophisticated structure of their own, which is not easily improved by ad hoc conventions as to how certain words should be used, and also because the already existing consensus regarding use and meaning of words may provide a sound basis for one regarding a uniform structuring of themes and questions. Let us consider this semantic structure in more detail (Figs. 11-12).

At the core is the concept of 'form' or 'shape.' Both words are used either in the syntactical construct "A has the form (shape) of B" or in that of "A has a ... form (shape)." The first is about likeness or resemblance, and it may further be noted how, unless B is at least as familiar or as concrete as A, the proposition sounds odd. In the second construct the place of the dots (...) can be taken by all kinds of adjectives, but excluded are those of color, size, and material. Thus 'form' or 'shape' may be conceived as the outward appearance of an object, abstracted from its color, size, and material. If subsequently it is asked what other characteristics remain to define an object's form or shape, an inevitable conclusion will be that this hinges on relationships between its parts. Whatever the nature of these relationships (I would suggest they are of difference and likeness, relative distance, and direction, but for now that much may be taken for granted), they are altogether different from the ones involved in likeness—or, for that matter, in 'meaning.' The latter hold
between an object and the world outside. Likeness and meaning thus stand in clear opposition to form or shape. This results in the following disjunct categories (Fig. 11):

| Form | Material | Color | Size | Likeness | Meaning |

11. Semantical basis for structuring material issues

Depending on the nature of the rules that govern 'Meaning,' this category can be split into symbolic or conventional, indexical, and associative meaning. From this point on our further subdivisions once again follow the structure of architectural decision-making rather than the semantics of English. Thus 'Form' has been split according to its scale. Architectural detailing at one extreme, and urban patterns at another, are distinct from form on the level of a building as a whole. Within the latter, functional layout of rooms, hallways, exits, entrances, and so on, is distinct from (although of course related to) a building's outward appearance. If finally the category of 'Material' is extended by 'Construction' and 'Technical facilities' (heating, electricity, water supply, and so on), and if two more categories are added, those of 'Style' and of 'Quantitative demands,' we arrive at the scheme rendered in Figure 12. A line between two categories in this scheme indicates that the two are strongly related and possibly overlap.

12. Conceptual scheme that underlies the list of themes and questions rendered in Figs. 13 and 14.
About 'quantitative demands' we can be brief. Basically they serve as an interface between procedural issues and material ones. As a result their content varies with the building task, and has traditionally not been awarded an important place within architectural theory.

'Style' is related to form. To be precise: in our model it covers the conventional aspects of form. Obviously 'style' has, throughout the ages, been defined in many other ways besides, but at this point that may be ignored. What is needed here is a category that covers these conventional aspects, so as to let 'form' take care of whatever in the history of architectural theory has been contended in regard to its non-conventional or 'natural' laws.

Roughly, Figure 12 reflects the conceptual scheme for the list of themes and questions rendered in Figure 13. If this is not immediately clear, it is (among perhaps some other things) because in Figure 13, in order to better fit a data base approach as expounded in § 4.2 above, themes have been identified by mnemonic codes and placed in alphabetical order of the latter. Though efforts have been made to minimize it, not all overlapping among themes could be avoided. Where it most stubbornly remains, an indication between brackets to the right of a theme refers to the ones it partly coincides with. If the list is used for consultation, one thus is warned further information on the same issue may be found under these other headings. If new data are being stored, one is asked to consider whether these really belong under the chosen heading, or under a related one.

There is no such semantic structure to the list of procedural issues rendered in Figure 14. Instead they are arranged by closeness to the design or decision-making process. Among activities that are wholly part of this process (PD.1) the following subcategories have been distinguished: making an inventory of demands (PD.1.I), choosing and adapting a site (PD.1.S), making a layout based on these demands plus the constraints of the site (PD.1.L), optimizing a plan (PD.1.O) and presenting one (PD.1.P). The question how to make sure that in this process there will be sufficient feedback, so that indeed it will function as a learning process (PD.1.F) is a bit more abstract, but for the sake of convenience has still been placed in this first category. On the other extreme (PD.3) are questions like how design is influenced by all kinds of socio-political, cultural, environmental, technological, and psychological circumstances—which most likely neither a designer nor his client can influence very much. Design education (PD.2.E), organization of a design process (PD.2.O), and architectural research (PD.2.R) hold an intermediate position. Under procedure of evaluation (PE) measurement and comparison of imponderables (PE.1) severally of quantifiable aspects (PE.2) are the ones closest to the decision-making process. More removed are questions regarding education of public taste (PE.E) and how to arrive at a consensus regarding criteria of quality (PE.DC) or procedures of evaluation (PE.DP).
<table>
<thead>
<tr>
<th>CO</th>
<th>Color *</th>
<th>F</th>
<th>Form—abstracted from likeness</th>
<th>SA</th>
<th>Signification Associative *</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO.C</td>
<td>Choice and Combination *</td>
<td>F.20</td>
<td>2-dimensional form *(D.C)</td>
<td>S.A.C</td>
<td>of Cosmic order *</td>
</tr>
<tr>
<td>CO.F</td>
<td>in relation to Form *</td>
<td>F.25</td>
<td>3-dimensional articulation of planes *(D)</td>
<td>S.A.H</td>
<td>of History *</td>
</tr>
<tr>
<td>CO.M</td>
<td>in relation to Materials *(SLC)</td>
<td>F.30</td>
<td>full 3-dimensional form *(L)</td>
<td>S.A.P</td>
<td>of Past experience *</td>
</tr>
<tr>
<td>CO.N</td>
<td>Naturalism versus abstraction *(F.M)</td>
<td>F.E</td>
<td>Exterior versus interior *(L, U.E, R.HD)</td>
<td>S.A.U</td>
<td>of Use and Users *</td>
</tr>
<tr>
<td>CO.S</td>
<td>as applied to architectural Sculpture *</td>
<td>F.MP</td>
<td>Proportion</td>
<td>S.I.H</td>
<td>of History *</td>
</tr>
<tr>
<td>CS</td>
<td>Construction</td>
<td>F.MR</td>
<td>Rhythm</td>
<td>S.I.M</td>
<td>of Makers and the process of Making *</td>
</tr>
<tr>
<td>CS.B</td>
<td>Basements and foundations</td>
<td>F.MT</td>
<td>Themes and variations</td>
<td>S.L.O</td>
<td>of Owners *</td>
</tr>
<tr>
<td>CS.C</td>
<td>Ceilings, vaults &amp; floors</td>
<td>F.O</td>
<td>Organic analogies *(F.O)</td>
<td>S.L.U</td>
<td>of Use *</td>
</tr>
<tr>
<td>CS.F</td>
<td>Frames with light fillings</td>
<td>F.O.S</td>
<td>of Structure *</td>
<td>SS</td>
<td>Signification Symbolic *</td>
</tr>
<tr>
<td>CS.FC</td>
<td>Cast (on the site)</td>
<td>F.OU</td>
<td>Unity in variety *(F.OU)</td>
<td>ST</td>
<td>Style *</td>
</tr>
<tr>
<td>CS.FI</td>
<td>of Iron</td>
<td>L.F</td>
<td>by Functional elements *(L.H, L.T)</td>
<td>ST.C</td>
<td>Contribution to style as made in a single building or design *</td>
</tr>
<tr>
<td>CS.FM</td>
<td>of Masonry</td>
<td>L.T</td>
<td>by Type of building *(L.F)</td>
<td>ST.H</td>
<td>How to arrive at (a) style **</td>
</tr>
<tr>
<td>CS.FW</td>
<td>of Wood (or bamboo)</td>
<td>Q.A</td>
<td>Activities to be accommodated *(Q.A)</td>
<td>ST.W</td>
<td>What style to choose?</td>
</tr>
<tr>
<td>CS.M</td>
<td>Materials</td>
<td>Q.C</td>
<td>costs of Construction *(Q.C)</td>
<td>T</td>
<td>Technical facilities</td>
</tr>
<tr>
<td>CS.MA</td>
<td>Application</td>
<td>Q.M</td>
<td>costs of Maintenance *(Q.M)</td>
<td>U</td>
<td>Urban patterns</td>
</tr>
<tr>
<td>CS.MAB</td>
<td>Baked materials</td>
<td>Q.V</td>
<td>monetary Value *(Q.V)</td>
<td>U.D</td>
<td>Distribution</td>
</tr>
<tr>
<td>CS.MAC</td>
<td>Cast or plastered</td>
<td>R.A</td>
<td>How? **</td>
<td>U.DA</td>
<td>of Activities</td>
</tr>
<tr>
<td>CS.MAG</td>
<td>Glass-like</td>
<td>R.H</td>
<td>Abstraction of it *(R.H)</td>
<td>U.DC</td>
<td>of Cultural and social life</td>
</tr>
<tr>
<td>CS.MAM</td>
<td>Metals</td>
<td>R.HC</td>
<td>Combination of different likenesses *(R.HC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS.MAS</td>
<td>Stone and Slates</td>
<td>R.HD</td>
<td>Distribution of figurative detail over a building's surface *(F.25, F.E)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS.MAW</td>
<td>Wood and bamboo</td>
<td>R.W</td>
<td>with What?</td>
<td>U.DL</td>
<td>of Landmarks and sacred sites</td>
</tr>
<tr>
<td>CS.MC</td>
<td>Choice *</td>
<td>R.WB</td>
<td>with other Buildings *(R.WB)</td>
<td>U.DN</td>
<td>of Nature</td>
</tr>
<tr>
<td>CS.R</td>
<td>Roofs</td>
<td>R.WB.H</td>
<td>Fashionable *(R.WB.H)</td>
<td>U.DO</td>
<td>of Ownership</td>
</tr>
<tr>
<td>CS.W</td>
<td>load bearing Walls</td>
<td>R.WB.R</td>
<td>Historic *(R.WB.R)</td>
<td>U.DP</td>
<td>of People</td>
</tr>
<tr>
<td>CS.WC</td>
<td>of Cast material</td>
<td>R.WC</td>
<td>Regional *(R.WC)</td>
<td>U.E</td>
<td>Building and Environment *</td>
</tr>
<tr>
<td>CS.WM</td>
<td>of Masonry</td>
<td>R.WM</td>
<td>with Ceremonial objects *(R.WM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS.WMB</td>
<td>of Brick</td>
<td>R.WM</td>
<td>with other Materials—than those of the actual construction *(SLC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CS.WMC</td>
<td>of Cast blocks</td>
<td>R.WN</td>
<td>with Nature *(R.WN)</td>
<td>U.EE</td>
<td>a building's Edge *(L.FE)</td>
</tr>
<tr>
<td>CS.WMS</td>
<td>of Stone</td>
<td>R.WN.A</td>
<td>Animals *(R.WN.A)</td>
<td>U.EG</td>
<td>building and Garden *</td>
</tr>
<tr>
<td>CS.WW</td>
<td>of Wood (or bamboo)</td>
<td>R.WN.H</td>
<td>Human beings *(R.WN.H)</td>
<td>U.EL</td>
<td>building and Landscape *</td>
</tr>
<tr>
<td>D</td>
<td>Detailing *</td>
<td>R.WN.P</td>
<td>Plants *(R.WN.P)</td>
<td>U.EP</td>
<td>Presence; contribution to Place—now and in the long run *(CO.P)</td>
</tr>
<tr>
<td>D.C</td>
<td>Cladding *(SLC)</td>
<td>R.WN.S</td>
<td>Stones, rocks, and Shells *(R.WN.S)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.CC</td>
<td>of Ceilings</td>
<td>R.WT</td>
<td>with Technology and artifice *(R.WT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.CF</td>
<td>of Floors</td>
<td>R.WB</td>
<td>with other Buildings *(R.WB)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.CS</td>
<td>of Shafts</td>
<td>R.WB.H</td>
<td>Historic *(R.WB.H)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.CW</td>
<td>of Walls</td>
<td>R.WB.R</td>
<td>Regional *(R.WB.R)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.F</td>
<td>Filling</td>
<td>R.WC</td>
<td>with Ceremonial objects *(R.WC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.FB</td>
<td>of Blind wall</td>
<td>R.WM</td>
<td>with other Materials—than those of the actual construction *(SLC)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.FC</td>
<td>of Colonnades</td>
<td>R.WN</td>
<td>with Nature *(R.WN)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.FD</td>
<td>of Doors</td>
<td>R.WN.A</td>
<td>Animals *(R.WN.A)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.FW</td>
<td>of Windows</td>
<td>R.WN.H</td>
<td>Human beings *(R.WN.H)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.M</td>
<td>Miscellaneous</td>
<td>R.WN.P</td>
<td>Plants *(R.WN.P)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.T</td>
<td>Termination *</td>
<td>R.WN.S</td>
<td>Stones, rocks, and Shells *(R.WN.S)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.TC</td>
<td>of Corners</td>
<td>R.WT</td>
<td>with Technology and artifice *(R.WT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.TO</td>
<td>of Openings</td>
<td>R.WB</td>
<td>with other Buildings *(R.WB)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.TP</td>
<td>of Piers, Pilasters</td>
<td>R.WB.H</td>
<td>Historic *(R.WB.H)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.TR</td>
<td>of Roofs</td>
<td>R.WB.R</td>
<td>Regional *(R.WB.R)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.TW</td>
<td>of Walls</td>
<td>R.WC</td>
<td>with Ceremonial objects *(R.WC)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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To illustrate the intentions behind these lists and how to work with them, let it be noted how in neither of them themes have been included under the headings 'ornament' or 'decoration.' The issues these words stand for instead have been split up. 'Likeness' and 'detailing' together cover most of them, 'color' touches on them as well. It is assumed that after a review of what in a particular text or range of texts is meant by 'ornament,' or 'decoration' (an issue to be elucidated in a discussion of their 'semantic core'), most of what an author has to say in regard to this can find a place under other headings as mentioned.

What is thus gained is that the continuity of themes and questions in architectural theory--of which it was stated at the outset of this chapter (§ 4.1) that it is stronger than is generally assumed--will stand out clearer. For even if it is no longer the habit these days to terminate columns, doors, niches, or whatever by adding figurative elements like leafage, lion heads, or miniature architecture, nor to detail a roof in such a way that it will look like a hat, or to make a dormer resemble a tiny building on its own, and if thus much of the traditional concept of ornament is abandoned, one still has to deal with the two kinds of question, now separate: (a) how to terminate a door, a column, or a niche, and (b) what a building as a whole or its parts ought to look like.

13. Themes and questions in architectural theory--material issues. See Figures 5 and 10 for their place in a larger scheme. Mnemonic codes between brackets to the right of one theme refer to themes it partly coincides with. Themes of a predominantly verbal kind have been marked by two stars (**), the most pattern-like among them by none, and those that keep an intermediate position by one (*).
5. The Model Applied

5.1 Mapping Contributions to Architectural Theory

An inevitable conclusion from the preceding chapters is that, even if architectural theory as an intellectual tradition can fairly accurately be described, 'a' theory of architecture remains an elusive thing. Mapping what contributions in a text, or range of texts, are made to architectural theory at large is nonetheless quite possible. A mapping process in accordance with the model outlined above can be described as one of deconstruction and reconstruction in five, six, or seven recurring steps.

As a first step can be identified the selection of texts for more detailed investigation. Reasons to include one text rather than another may lie in its greater originality (in content or in form), or in its having been more influential. In either case we choose a source that marks a stage of some importance in the history of the problems it deals with. Preferably a text should be studied in its original language and in an unabridged edition. Anthologies should be avoided. As standard selections of fragments, thoughtlessly handed down from one commentator to another, they tend to reinforce preconceived notions regarding the texts they are taken from. Commentaries in general should be consulted for suggestions as to how a text might be read, but never trusted blindly. Even comments that later in life an author himself makes in regard to his earlier works can hardly be relied on as evidence of what these earlier ones really are about. Otherwise there is nothing wrong in letting choice of texts depend on what period, or what set of problems one has chosen to specialize in, or any such personal interests.

The second step is one of collecting quotes and summaries from these texts, and arranging them by themes and questions from a standardized list like the one rendered in Figures 13 and 14, or by catchwords that refer to examples (particular buildings, a whole range of them, all the buildings by one architect or of a style), to special words with special meanings, or to value systems. Quotes and summaries may be accompanied by one's own comments, or be replaced by a mere reference. Note that texts at this stage are studied neither to find an answer to one particular question, nor for a general impression only, but for all the questions on the list, for each of which one tries to find out what, if anything, an author has to say on it, as well as for a certain array of catchwords—which is more flexible and open-ended than the list of questions. Obviously this manner of reading is rather time consuming, but, as I hope the following case studies will show, it is rewarding. At least it should be done for as long as is needed to get a rough idea of what themes are being broached in the chosen range of texts, and which are not.
This brings us to the third step, where, based on quotes and summaries as collected in the second step, several inventories are made. Central to this is a check on completeness—in the sense of a survey of what range of questions from the standardized list is actually dealt with, and which questions receive none or very little attention. This may already give an indication of how the text responds to issues of recent architectural decision-making, but more specific information should be collected in regard to that as well. Likewise one should try to identify what range of examples is discussed, and which among these enjoy the status of paradigmatic ones. And, finally, there is a cluster of related topics which consists of value systems an author pleads loyal to or otherwise singles out for special attention, those of the humanities or branches of social science which have a marked role in the author's exploration of those systems, and, possibly related to that, special words with special meanings and how these are used in the texts at stake.

A fourth step is to analyze a text's structure of argument and underlying epistemology. This prepares for an evaluation of its consistency as will follow in the fifth and sixth—but most likely the fourth and fifth steps will largely run parallel, as will the fifth and sixth. Consistency will in Step 5 first be considered negatively, that is, as absence of contradiction and incompatibilities. Next, in Step 6, positively, that is, as presence of a leading concept to which all, or most, of what an author has to say relates as illustrations or specifications.

Because a basic rule in reconstructions of this kind must be always to give the author of a text the benefit of the doubt, and, unless there is strong evidence to the contrary, always to presume there must be a rational ground to the positions endorsed, a number of things must be checked before an incompatibility is ascertained. Can what looks like it be explained from the context quotes are taken from? Do quotes refer to different ranges of buildings, or are they followed by qualifications that take away the apparent contradiction? If not, does it not merely reflect a development in the author's ideas over time? Or is rhetorical use of key-terms at the heart of the problem?

So much for consistency approached negatively. Tracing a leading concept within a wide variety of observations and opinions as presented in a range of texts should lay bare what is positively there as a system's conceptual core—one that need not (and usually does not) coincide with what we have called its 'semantic core:' a set of special words with special meanings. Unfortunately, there is no easy trick to this. A leading concept may be in a work's very title, but most of the time it is not. In Ruskin's case it is neither 'Truth' nor Venice, with Semper it is not 'Style.' Nor can it be derived from an author's most provocative statements, such as Ruskin's equalization of ornament and beauty. Nor, as a rule, from value systems like Pugin's Catholicism, Ruskin's Protestantism, or Viollet-le-Duc's agnosticism. More promising is to look for it in those of the humanities (or, for that matter, social sciences) which apparently serve as a link between value systems and theory proper. Philosophy of art and
beauty thus appeared a good one in the case of both Semper and Ruskin. From the state of the art in such fields one may attempt to reconstruct what options were available to the author at the time, work these out in a number of models, and see which of the latter most nearly fit those texts. In Semper's case this brings out a surprisingly clear and consistent philosophical conception. With Ruskin the conclusion must be that, even though at times there is an interesting core at this level of concept formation, it is never altogether stable. And so, if one is in search of a truly unifying concept for all, or most, of Ruskin's architectural writings, one should look for it elsewhere. In the process all this may show how the seeds of an author's (Ruskin's or anybody else's) later convictions lie dormant in the incompatibilities of his or her earlier views—and so one need not rely on biographical evidence to account for major changes in these views.

Even so, it is always possible that after the fifth step, an inventory of apparent contradictions and incompatibilities, there is nothing left to reconstruct: that the contradictions as found are real, and that no interesting implied concept can be pointed out to bridge them. In that case we can immediately go over to the optional seventh step, which is to see what practical implementation has been given to these ideas, either by the author himself or by others.

Tracing such implementation should not be confused with checking what actual influence the same writings have exerted on architectural design. The two may overlap, but it is likewise possible that an idea put down in words by one, has independently thereof been expressed in built forms by someone else, at another time, in another place. Lines of influence strictly speaking are a minor issue in the type of research expounded here, no matter whether it concerns influence from others on the author of the texts under investigation, or from those texts on practicing architects. Regarding the first it stops at assessing what in a text is actually new. If it turns out somebody else formulated the same ideas before, it is of biographical interest only to know whether our author must, or could have been familiar with this earlier formulation. If it was independently from each other that two authors picked up the same idea and wrote it down, what difference does it make to an architectural knowledge base? As for influence emanating from an author's writings, it is important to see what new interpretation or practical implementation others have given to his ideas—but mainly to assess that such was possible: that these ideas were sound and strong enough to allow for that. Thus it does matter to see how, in many of their works, Henry Hobson Richardson (1838-86) and Louis Sullivan (1856-1924) closely follow precepts as laid down in The Seven Lamps, but if, or when, they actually read this book, does not. Or, if for some reason not mentioned here it does matter, it still better be left to people who study art and architecture from a more strictly historical perspective.
In actual research the order of these steps need not be as strict as presented here. Each cycle allows for sub-cycles, and the procedure as a whole looks even less linear if thought of as an ongoing process in which ever more literature is included. The method, on the other hand, knows certain restrictions as well. Study of letters and diaries, in order to find biographical evidence that may explain an author's position on key items, will not, for instance, be part of it. This is not because such information is considered totally irrelevant, but, for one thing, it is a different kind of study, which once again better be left to students with a more specifically historic orientation, and, for another, whatever can be explained by careful study of texts alone, without reliance on biographical data, better fits a reconstruction of substantial theory. On the other hand, there is no reason why, in studying contributions made by, for instance, one author, we should confine ourselves to texts by this author alone. The greater the variety of texts that is uniformly studied in accordance with our model, the better it can be established what is truly original and what is not. Unexpected contrasts and similarities may thus turn up, as in the case of Ruskin and Alberti. That is, Alberti, for what I know, is never mentioned in Ruskin's writings, but simple comparison of texts suggests an intimate connection.

5.2 Study of Buildings

Although this study focuses on how the model can be used in the study of texts, creation of an architectural knowledge base in the long run may depend even more on its successful application in direct study of buildings, that is, without intermediate texts in which these have already been described and evaluated. One reason is that the number of really important and truly interesting texts in architectural theory has always been small, even in such relatively fertile periods as the second half of the eighteenth century, the mid- and late-nineteenth century, or the period from, let us say, 1960 up to the present day. And besides, even if their number were much larger, these texts never could deal exhaustively with all important aspects of all interesting buildings in the world. So sooner or later a direct study of these would have to take over, if only to arrive at results that are more tuned to a particular time and place.

Parallel to how it is with texts, a first step in the study of buildings is their selection. On what grounds to do so? Basically, I would suggest, there is only one criterion, which is that they must have some interesting quality. Who was the architect, or whether they have since been an issue in some stylistic debate, is more interesting from a historian's point of view than in the context of a design- and decision-making-oriented knowledge base. Anonymous examples may do just as well, or even better. Besides, if the latter are skipped, the chances are that a small range of buildings--which need not contain all the more interesting ones--will forever draw most attention, and that, moreover,
these will unduly be evaluated in terms of a historic stylistic debate—rather than in terms of how, for instance, they take their place in a public domain.

A second step would be to register some standard data, such as its dates of design and completion, its architect(s) (if known), location, functional type, constructive type, and possibly quantitative data in regard to size and cost of construction.

As a third step one is invited to write down observations regarding all themes and questions on the list of material issues (Fig. 13) the building provides interesting information on. The order in which these themes are listed (alphabetical on mnemonic code) need not be the order of the evaluation process, but I am not sure that any order in particular would be best for no matter what evaluation, so let the list stand as it is. In any event, it seems advisable to go through the whole list at least twice, because different observations not only complement, but also tend to influence and refine each other. A brief section has been included (in § 9.8) to show how this works out for Semper’s written works as applied to buildings by Berlage and Cuypers.

An optional fourth step, finally, would be to investigate the decision-making process from which the building has resulted, and see what information this provides regarding procedural issues (Fig. 14). More in particular, this may illuminate the ones listed under 'Methodology of design proper' (PD.1).

5.3 Study of Patterns

If only to see how far, by now, we have moved away from a pattern-oriented approach like Alexander’s, and how much ours still shares with the latter, let us complete this chapter by considering how study of patterns (in Alexander’s sense) fits in. Rather than becoming a whole new category in the knowledge base, next to texts and buildings, patterns would be registered under the type(s) of problem they are supposed to meet. Once this is done, for instance for the 253 patterns of A Pattern Language, one may subsequently check on completeness, that is, see what range of questions from the list (Figs. 13-14) they actually cover. That much was done for all the systems dealt with in the three case studies, so it is mere routine. If subsequently one should want to make the system more complete, the following comes to mind: (a) work out patterns, verbal criteria, or procedures for those aspects the system does not yet cover; (b) allow for multiple patterns as alternative solutions to (approximately) the same sets of problems; (c) allow for, but also check on, conflicts between patterns thus assembled, and (d) investigate patterns not just synchronically, but historically as well.
6. Claims in Regard to Model and Method

After this presentation of a model representing the structure of architectural theory as an intellectual tradition, and of a method of research based on this model, it is time now to reconsider what we may hope all this will prove. For one thing, I would claim that, if conceived in terms of this model, substantial theory on architecture, directed at actual decision-making and design, is quite possible indeed. And, for another, that such substantial theory can already be reconstructed from texts like those dealt with in the three case studies. These are the basic claims. Sideways it will be contended that the method opens up a wealth of new and unexpected points of view regarding texts studied that way, and does so in a comparatively short time—but as I am aware this is hard to check for one who has never personally applied the method, I shall not insist on that.

Recurring to the problems signalled in Chapter 1, a number of wider as well as more specific claims can be made. First and foremost that model and method present a framework for the study of architectural theory, cut to size to its specific nature—as distinct from art history, behavioral science, literary criticism, or any other adjacent field. If consistently applied on a certain scale, this will result in sample studies that will further enhance current research. Model and method thus will contribute to real progress in architectural theory, the more so if their application does not stop at textual analysis, but is extended to a more direct study of buildings. Some of it, by the way, may be of use in more strictly art historical studies as well.

It must in this context be emphasized that, in spite of the book's subtitle, what has been expounded so far is not merely a model and a method for the interpretation of texts. If other methods, based on the same model, but directed at the study of buildings, have received only incidental attention, this is because in the context of a single dissertation we could not do it all. Efforts have nonetheless been made to point out how to move from the study of texts to direct study of buildings and vice versa—in such a way that the two types of research optimally reinforce each other.

Once a sufficient number of studies based on (or retrospectively tuned to) our model has been completed, it is but a small step from there to a systematic introduction to architectural theory at large, one that could find wide application in design education and might also be of interest to architectural historians. Likewise a basic course book on the structure of architectural theory could be based on it—one that would provide a freshman in the study of architecture with a conceptual framework which might considerably facilitate the mastering of whatever professional knowledge he or she is to obtain during the years that lie ahead.
So much for the methodology as applied in research and education. A data base of architectural knowledge as resulting from these research efforts would be of use not only in those contexts, but also in architectural decision-making and design itself, most of all as a source-book in evaluation. This not only applies to the study of buildings and designs in their completed form, but likewise to the same at earlier stages of a design or decision-making process. How is that supposed to work? Buildings (or, for that matter, built environments) have, on the one hand, certain functions to perform, and, on the other, are composed of certain patterns and materials. The data base will provide information as to how these patterns and materials may be expected to perform in regard to those functions. Or, put another way, the system will help translate a plan from the one context it is presented in to all other contexts it will (if realized) have to function in some day. This includes translations:

a. From the building as a set of drawings or scale models to the real thing full size, filled with all kinds of life, and seen from a normal height—that is, not from a bird’s-eye view.

b. From the building as seen from across the street to the same watched from a longer, or shorter distance.

c. From a building seen once to the same seen everyday, or every now and then over a certain period of time. Observe how here we face a basic dilemma of likeness: that each and every building inevitably must look like something, whereas likenesses that are interesting at first glance as well as in the long run are hard to spot.

d. From the building now to what it may be in ten, twenty or fifty years, when either fashion, or the building itself, or its environment, or the activities going on inside, may have considerably changed.

e. From the building as seen by one cultural minority, for instance architects, investors, or local authorities, to the same as observed by other, possibly larger groups in a society.

Architectural theory, thus conceived, not only would enhance insight in the nature of architectural dilemmas, but be used for prediction as well: of the impact of planned interventions in a built environment on that environment and on those who use it. Most of the time it will be no prediction, though, by way of hard rules like the ones that, up to a level, natural science is made of. Prediction in this case is facilitated mainly by consulting the history of the problems at stake.
Finally this type of systematic evaluation, once it becomes more widely accepted, may be instrumental in getting rid of affectation in architectural discourse. Otherwise there is, as regards this particular problem, little one can do—other than present as an alternative the terms of a more reasonable type of discourse, showing that complex and controversial messages can be composed without taking recourse to metaphor and paradox on a scale as is fashionable today.

To prevent misunderstandings and forestall expectations a model and a method as outlined cannot live up to, a few 'negative' claims, so to say, are called for as well. For one thing, it is, as indicated (§ 2.6), still possible that in a more intuitive way, that is, without explication of anything close to our model, someone arrives at approximately the same six or seven steps. Conversely, there will be no way to prove that interesting findings as result from research structured by our method, could not have been attained in any other way. The method may increase the chances that such indeed will happen, but there is no limit to what, in principle, well-informed intuition can bring about without the guidelines of conscious method.
PART II:

Three Case Studies
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7. Introduction to the Case Studies

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7.2 Structure
7.3 Selection of Texts

'Der Stil in den technischen und tektonischen Künsten oder praktische Aesthetik: ein Handbuch fur Techniker, Künstler und Kunstfreunde' (1860/63) by Gottfried Semper

8. 'Der Stil:' Theory Laid Apart

9. 'Der Stil:' Theory Reconstructed

'The Seven Lamps of Architecture' (1849) and 'The Stones of Venice' (1851/53) by John Ruskin

10. 'Lamps' and 'Stones:' Theory Laid Apart

11. 'Lamps' and 'Stones:' Theory Reconstructed

'Community & Privacy' (1963) by Serge Chermayeff and Christopher Alexander and 'Notes on the Synthesis of Form' (1964) by Christopher Alexander

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13.4 Emerging Patterns

14. Conclusions and Suggestions for Further Research

14.1 Dependence of New Findings on Methodology
14.2 Further Testing of the Results
7. Introduction to the Case Studies

7.1 Objectives

A primary objective of the following three case studies is to demonstrate how a method for mapping contributions to architectural theory as outlined in § 5.1, and based on a model of architectural theory as expounded in the preceding chapters, works out when applied to actual texts, particularly texts that are complex and sophisticated enough not to yield all of their secrets at first reading. Thus for all the selected texts I have tried to arrive at analytical summaries which will meet the following demands:

a. All levels of concept formation, plus all the sources of information and of questions, as described in the model will be appropriately identified and described;

b. The whole range of questions relating to architecture and actually dealt with in these texts will be reviewed;

c. After an inventory of apparent contradictions serious efforts will be made to bridge the same by way of a hypothetical implied concept to which all or most of what is in these texts refers as specifications or illustrations.

If in the course of these efforts we should incidentally arrive at interestingly new points of view regarding those texts, that certainly is important and speaks in favor of the methodology employed, but to prove our point in regard to the method strictly new findings are not imperative. If the method will serve to make existing data more accessible, and hence more liable to accumulate into useful bodies of knowledge, that in principle should suffice.

Sideways, another objective is to show how far in interpretation one can get with minimal reliance on contextual evidence. Such evidence (for instance of a biographical kind) will not categorically be rejected as unsound or irrelevant, but its use is consciously suspended in order not to jump to, or unthinkingly take over, conclusions that find no support in the texts at stake. Implicitly, the three case studies can also be seen as an effort to play down the role of elements which in our model have not been acknowledged as constant dimensions of architectural theory, but are widely assumed to be at the core of any major system in this field. This holds for 'belief systems,' ideologies, and other such favorite targets of demystification in structuralist and poststructuralist theory and criticism.
7.2 Structure

In order to enhance comparability, a uniform structure has been chosen for all three of the case studies. The sequence of paragraphs roughly follows the sequence of steps outlined in § 5.1 above. The first five steps, which are mostly analytical, will be handled in one chapter, the optional and more synthetic sixth and seventh in another. For a more detailed indication of what dimension of theory is being dealt with in what paragraph, a graphic representation of the completed model (Fig. 10), abstracted to a logo with current dimensions highlighted, will appear at the outset of paragraphs whenever a new dimension is broached.

Because Step 1, selection of texts, has already been dealt with above, the case studies will largely skip that issue. Instead, they open with a sketch of the life, times, and works of the author at stake. Because part of our program is to minimize reliance on contextual evidence, this section will be brief. If only for the convenience of a reader (who otherwise might have to check his or her encyclopedia, or visit a library) a tiny amount of history will be presented all the same. The introductory part (§ #.1) then continues (and concludes) with a few general remarks about the case study as a whole.

The second step (collecting quotes and summaries) and the third (making several inventories based on these) in this report of the results have been taken as one, but subdivided by what the inventory is about. First comes recent decision-making (§ #.2), then questions (§ #.3), examples (§ #.4), value systems (§ #.5), humanities and social science (§ #.6), and finally special words with special meanings or semantic core (§ #.7). The next paragraph (§ #.8) again corresponds to the next step (4): analyzing a text's structure of argument and trying to identify an epistemology behind it. Apparent contradictions or incompatibilities (Step 5) will be dealt with in § #.9. This presents a first opportunity to review interpretations by others of the same texts. If these contradict each other, what matters is to find out what could be ambiguous about the source text. A more complete and systematic survey of other readings of the texts reviewed in the three case studies is postponed to Chapter 13.

As indicated (§ 5.1), it is possible that after this there is little left to be done; that 'apparent' contradictions turn out to be quite real indeed, and that no interesting concept as a way to bridge them can be pointed out. In that case there may, as we shall see in regard to the early works of Christopher Alexander, not be enough left to say for another chapter. But if there is, a second chapter will be devoted to a reconstruction of substantial theory from the texts under investigation. Starting from a leading concept hypothetically placed at their core, this chapter will work its way down to the most practical recommendations found there (Step 6), and hence to implementation and testing of the theory in actual decision-making and design--either by the author himself or by others (Step 7).
A first evaluation of the degree to which objectives as stated above (§ 7.1) have been met will conclude each of the case studies. At that point it may still be hard to decide in how far the results attained really depend on the methodology employed, because alternative approaches to the same texts have not yet systematically been reviewed. That will be done in Chapter 13, and so it will be no sooner than in §§ 13.4 and 14.1 that this correlation between method of research and conclusions arrived at can be more systematically explored. As indicated (Chapter 6) it will forever be impossible to prove that our results could not have been attained by any other method than ours, but what can be done is point out how it is no coincidence when important data or interesting points of view, which did surface in ours, in other approaches have been overlooked.

To enhance transparency, lists of quotes from the texts under investigation, arranged by theme, and with an indication of the paragraph (if any) where they have been quoted or referred to, for the first two case studies have been added as Appendices 4 and 5. A uniform format was employed to indicate the place of quotes in the source texts. What abbreviations to this end have been used will be expounded at the outset of each case study (§§ 8.1.2, 10.1.2, and 12.1).

If occasionally it may seem that quotations are numerous and long compared to the connecting text, this is inherent to one of the main objectives of the present study: to draw attention as much as possible to original texts. It has been stated (and indeed remains one of the basic assumptions throughout) that comments and summaries, no matter how illuminating or practical, can never be trusted—and there was no way I could make an exception for my own. For the sake of conciseness I nonetheless have tried not to quote more than was strictly relevant.

7.3 Selection of Texts

The number of case studies through which to illustrate the applicability of model and method as outlined above to texts in the tradition of architectural theory, has been kept at three. This was done on the assumption that three is the bare minimum to establish claims of wider validity, while on the other hand it is better to deal with a few texts thoroughly than with a large number superficially.

The selected texts are, for the first case study, _Der Stil in den technischen und tektonischen Künsten oder praktische Aesthetik: ein Handbuch für Techniker, Künstler und Kunstfreunde_ (Style in the Technical and Tectonic Arts, or Practical Aesthetics: A Handbook for Technicians, Artists, and Patrons of the Arts, 1860-63) by Gottfried Semper (1803-79); for the second, _The
Seven Lamps of Architecture (1849) and The Stones of Venice (1851-53) by John Ruskin (1819-1900); and, for the third, Community and Privacy (1963) by Christopher Alexander (1936-) and Serge Chermayeff (1900-) plus Notes on the Synthesis of Form (1964) by Alexander alone.

Why these? If the number of texts that can appropriately be dealt with were larger, or if we could merely add to an already large number of comparable case studies, one might choose them at random from a wide variety of sources, or follow one's own interests and predilections. As unfortunately none of this was the case, other considerations came in. Of these there were five, to begin with. First, the range of issues dealt with should not be too small. To make up for the inevitably small number of texts that can be subjected to a detailed analysis, the ones that are selected should cover a decent share of all the questions traditionally dealt with in architectural theory. Second, one must decide whether these texts have enough in common, and also enough in which they differ, to make an interesting comparison. On the other hand (and that is a third consideration) not all the texts should be from the same period, or from the same school of thought. If they are, there will, once we are done, be too much left to prove in regard to the model's universality. As a fourth, it is better at this point to focus on texts that at least hold a promise in regard to substantial theory which can be reconstructed from them. The thing to prove is that, where at least there is some substance to begin with, consistent application of the model will result in an illuminating reconstruction of it. That the same model may also be helpful in pointing out the absence of substantial theory is a far less interesting claim. And, as a fifth and final point, let it be noted how, as we intend to trace the history of problems, it is better to focus on texts which presented original points of view, or have been influential, or, even better, both.

The aforementioned works by Semper and Ruskin meet all of these demands but one, which is that they are from the same period (1849-63). The latter is largely compensated by the difference in intellectual traditions from which they stem: German idealism versus British empiricism—although I am aware such easy labels do no justice to the more subtle differences between their several points of view. This makes them highly interesting to compare. As true Victorians, Semper and Ruskin share an overwhelming interest in ornament and style. What is more, in dealing with these they both rebel against the kind of rationalism which since times immemorial has defined the mainstream in architectural theory. Considering the impact of their works on aesthetic thought in the German (Semper) severally English (Ruskin) speaking worlds during the final decades of the nineteenth century, it might seem as though they gave a new bend to this mainstream, but, as we shall see, this is not quite the case. Nevertheless, together with those of Viollet-le-Duc in France and abroad their works kind of epitomize the state of the art in architectural theory in the mid- and late-nineteenth century. Of all mid-nineteenth-century authors
in this field they were the only ones still to be widely quoted (and maybe even studied) by the end of the century and beyond—which puts them at the crossroads of two eras, so to say.

Nonetheless, it was obvious that the third case study had to cover works from a different period. A study on Viollet-le-Duc's *Discourses on Architecture* (1863/72), on which considerable time already had been spent, for this and other reasons\(^46\) was not included. In order to link the mid- and late-nineteenth century to the situation we are in right now, to take some recent texts seemed more appropriate. The writings of Alexander were an attractive choice because, like few others in the field of late, they cover a wide range of issues, picking up various themes which, after the advent and worldwide victory of modern architecture, were virtually dead and forgotten. This, for sure, holds more clearly for Alexander's later works (the ones he wrote from 1965 onwards, after 'The City is not a Tree') than for the early ones selected for this study, but practical considerations prevented me from focusing on the former. If carefully done, it would have resulted in another large case study, whereas the current project had already started to outgrow the average size of a dissertation, in number of pages as well as in time invested in the whole thing. Further delays in its completion, and further additions to its physical weight, seemed unwarranted, whereas a study of Alexander's much shorter early works should suffice to show how the method works out when applied to texts which in style, spirit, and time are far removed from the mid-nineteenth century. Besides, those later works by Alexander have already received considerable attention in §§ 2.8, and 5.3, and will surface again in Appendix 3 (the one on 'Timeless Value').

Subsequently one might wonder why among all the architectural writings by Semper and Ruskin we chose to focus on the ones just mentioned. Among Semper's, *Der Stil* was the obvious choice, being the magnum opus in which all lines of thought he ever pursued (and did not altogether give up later on) converge. Incidental reference to earlier or later texts by the same author will suffice.

With Ruskin things are more complicated. In some of his later works, notably *The Two Paths*, a series of lectures he delivered in 1857-59, points of view are endorsed which undercut the balance and consistency of his earlier thought. Choice, therefore, must occasionally be made between the Ruskin of *The Seven Lamps* and *Stones of Venice* versus the one of *The Two Paths*—and for one who is out to reconstruct substantial theory from these writings the former is usually the more promising.

Finally it may be asked: why this overwhelming attention to the nineteenth century at the expense of other periods? Personal predilection definitely has been a major factor here, but goes hand in hand with a feeling that the period stretching from, let us say, the polychromy debate of the late-1820s to Sitte's
Städtebau nach seinen künstlerischen Grundsätzen of 1889, has been an extremely fruitful one. Architectural theorists over the past decades have unduly neglected it. To mention just a few examples: among 350 illustrations in Venturi's Complexity and Contradiction in Architecture (1966) only eight are of nineteenth-century buildings. Amidst 102 illustrations in Norberg-Schulz's Intentions in Architecture (1965) we count one of the Crystal Palace (100), a floor plan of Semper's first Dresden Opera (27), and two anonymous buildings (2 and 77) that may belong to the nineteenth century, but in any event are there for their defects, not for their qualities. As for writers of the same period, the names of Ruskin, Pugin, Durand, Rondelet, or even Viollet-le-Duc do not occur in the index to Norberg-Schulz's book. Semper is mentioned just once: in a footnote that betrays huge ignorance. Elsewhere the whole period is dismissed by slightly biased observations like "Romantic art and later expressionism and impressionism above all expressed the personality of the artist."

What happened is that, when in the early 1960s Banham, Summerson, and a few more pointed out how modern architecture had deeper roots in classicism than in Gothic revival and related events, this resulted in a renewed interest in classicism, mannerism, Renaissance, Baroque, Piranesi, and so on—at the expense of everything else, including a less biased approach to the Victorian epoch. Or, let us say, that much was left to scholars of a more strictly historical orientation, who remained outsiders to the debate on meaning and style in contemporary architecture. Much of what is highly valuable both in nineteenth-century buildings and in the theoretical works that accompanied them has thus escaped attention, of late. As, moreover, the period stretching from, let us say, World War I until the early sixties has been a low tide in architectural theory anyway, their neglect actually reaches back much further.
Der Stil

in den technischen und tektonischen Künsten oder praktische Aesthetik: ein Handbuch für Techniker, Künstler und Kunstfreunde

(1860/63)

by

Gottfried Semper

Surrounded by a world full of wonder, and forces whose law he surmises, would like to understand, but never deciphers, which reaches him only in a few fragmentary harmonies and suspends his soul in a continuous state of unresolved tension, man conjures up the missing perfection in play, creates a miniature world of his own where the cosmic law becomes manifest within strict limits, yet perfect and complete in this seclusion. In such play man satisfies his cosmogonic instinct.

*Der Stil*, Prolegomena, p. XXI
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8. 'Der Stil:' Theory Laid Apart

8.1 Introduction

8.1.1 Gottfried Semper: Life, Times, and Works

Gottfried Semper was born in Hamburg\textsuperscript{52} in 1803, son of a well-to-do wool merchant and manufacturer. He grew up in an atmosphere of modern liberalism and old-fashioned Protestantism. In 1823 he enlisted as a student of mathematics at the university of Göttingen. According to his son, Hans Semper, this was the outcome of a compromise between Gottfried, who from the start would have preferred to specialize in classical studies, and Gottfried's father, who wanted him to study law\textsuperscript{53}. According to the same source he did, while in Göttingen, not only study mathematics, but also attended the lectures of two of the greatest classical scholars of his day, A.H.L. Heeren and K.O. Müller. As pointed out to me by Harry Mallgrave, who did some recent research on the issue\textsuperscript{54}, that source is highly unreliable, though, when it comes to Semper's early years. Thus there is no evidence that he ever attended a lecture by Müller, and the one course by Heeren that by his own account he attended was on statistics, not ancient civilization. In fact, he showed little interest in classical or pre-classical scholarship, and all the more in gambling, drinking, fighting, and womanizing.

The traditional account, popularized by his son Hans, wants it that subsequently (in 1825) he moved to Munich to study architecture under Gärtner. Herrmann (1984) suggests it was civil engineering rather than architecture, but Mallgrave's recent findings are that even that most likely was not true: that even though he did enter the Munich Academy, he behaved even less as a serious student there than he had done in Göttingen. In any event, he had in the meantime spent another year travelling through Germany and abroad, considering at some point (April 1825) to enter the military academy at Delft to study hydraulic engineering—only to find out that he was too old to be admitted\textsuperscript{55}. In consequence of a duel (or, as Mallgrave suggests, at the instigation of Heeren sr.) he moved to Paris in 1826, where he became affiliated with the German born architect F.C. Gau (1790-1853), who directed a small, private school of architecture. Altogether he spent two years there, 1826-27 and 1829-30, in the meantime working and travelling in Germany again. The choice of Gau appears to have been rather accidental (Semper had not heard of him before going to Paris), but would be of great consequence. Whereas it seems that initially he studied architecture as a preparation for civil engineering, eventually he took it very seriously. Moreover, Gau (who was the author of \textit{Antiquités de la Nubie}, 1822-27\textsuperscript{56}, and in the process of editing the third and fourth volumes to François Mazois's \textit{Ruines de Pompeii}, 1829/1838) roused his interest in archaeology in general, and the polychromy
debate in particular, making him aware of his great ignorance in this field. It has generally been supposed that through Gau Semper entered the circle around the architect J.J. Hittorff (1792-1867), another protagonist in the polychromy debate, but that too appears to be uncertain.  

Nevertheless, these newly aroused interests put Semper on his way to Italy and Greece. It seems that initially he did not plan to travel any further than Rome, but eventually he made it all the way to southern Italy, Sicily, and Greece, where for almost three years (1830-33) he and the German, French, and English friends he met on the way spent most of their time in archaeological excavations. On his return the conclusions arrived at were laid down in the essay Preliminary Remarks on Painted Architecture and Sculpture in Antiquity ('Vorläufige Bemerkungen über bemalte Architektur und Plastik bei den Alten', 1834), which simultaneously served as a personal manifesto regarding the state of the art in architecture.

Soon afterwards, on Gau's recommendation, he was appointed professor and director of the department of architecture at the Dresden Academy. At that point he was 31 and had just completed his first small building. From the two years he actually studied under Gau he brought home a small but decent, though hardly spectacular portfolio of architectural designs, and from his trips abroad hundreds of nice travel sketches, but that was about it. Nor had his ideas on contemporary architecture really crystallized. Opinions he expressed in the Preliminary Remarks reflect the spirit of the French rationalist circles he had dwelt in rather than the positions he himself would soon come to defend. But once established as a professor of architectural design, his full mastery of what he was to teach came fast and convincingly, paving the way for an extremely successful career as a practicing architect: a synagogue (1837), Villa Rosa (1839), first Court Theater (1835-41), Palais Oppenheim (1845-48), Royal Painting Gallery and a whole range of plans for a Zwinger Forum (1835-55), all in Dresden, plus a prize-winning, though unexecuted design for the Church of St. Nicholas in Hamburg (1844).

All this came to a sudden end when in 1849 Semper joined the unfortunate rebellion which then swept over most of continental Europe, including Dresden—and was forced to flee. After two years of hardship in Paris he moved to London in 1851, where he made friends with people in what is mostly referred to as the circle around Henry Cole. Cole, who had been the driving force behind the Great Exhibition of 1851, hired him for a small job at this huge event, and afterwards as a professor of applied art at the newly founded Kensington School of Art. As an architect, however, he remained without commissions, and so, when thanks to meddling by his friend and comrade Richard Wagner—who had fled Dresden at the same time and for the same reason as Semper—he was offered a position as professor at the ETH in Zürich, he gladly accepted. The last eight years (1871-79) of his life he spent in Vienna, where some of his largest and most prestigious buildings were realized: the Court Musea (1869-76) and the Burgtheater (1869-88).
Most of Semper's literary output stems from the years of his exile in Paris and London (1849-55) and those immediately afterwards in Zürich. The first two volumes of *Der Stil*, which conclude this period, appeared in 1860 and 1863. A third volume, which from the outset had been part of the scheme, never materialized. When urged by his publisher to come up with at least a first installment (instead of constantly asking for an advance) Semper used to brag about his busy life as a practicing architect—which at the time, that is, from 1863 until his death in 1879, indeed made some sense. As indicated by Herrmann (1984), an equally important reason, though, must have been that in the first two volumes he already told his readers most of what he had to say on architecture in relation to the applied arts. Of the third volume no more has been completed than a manuscript of some thirty or forty pages, based on a lecture of 1869, entitled *Über Baustile* (On Architectural Styles).

The lecture was printed separately, to become Semper's last publication in architectural theory.

Among Semper's publications prior to *Der Stil* the most significant, apart from the aforementioned *Preliminary Remarks*, are *The Four Elements of Architecture* (*Die Vier Elemente der Baukunst,*' 1851), *Science, Industry, and Art* (*Wissenschaft, Industrie und Kunst,*' 1852), and *On the Formal Order of Adornment* (*Über die formelle Gesetzmäßigkeit des Schmuckes,*' 1856). All these hold the middle between an extended lecture or article and a short book. *The Four Elements* starts as a defense against the art historian Kugler (1808-58) of the author's ideas regarding polychrome architecture as expounded long ago in the *Preliminary Remarks*. It ends with a first presentation of a highly original idea, later to be elaborated in *Der Stil*, that all decorative forms in architecture can be traced to four basic techniques, most of them older than architecture itself. The techniques—which correspond to 'the four elements' of the hearth, the roof, the wall, and the mound respectively—are those of ceramics, carpentry ('tectonics'), textile art, and masonry ('stereotomy'). How this works out for the Greek temple is explained in a most fascinating and imaginative way. *Science, Industry, and Art* is a critical response to the Great Exhibition of 1851. To this we shall recur later on. *On the Formal Order of Adornment* stems from an attempt to work out rules of formal aesthetics for textile and related arts. A larger work on this, entitled *Theory of Formal Beauty* ('Theorie des Formell-Schönen,' 1855-59) remained unfinished. The manuscript itself got lost, but much of it must have found its way to *Der Stil*. This for instance is the case for its conceptual framework, which became the second half of the Prolegomena (pp. XXII-XLII). An earlier unfinished project is *Comparative Theory of Building* ('Vergleichende Baulehre'), on which Semper worked while in Paris (1849-50). It was meant to become a kind of course book of architectural design, arranged by building types. Apart from a brochure in which this was announced, only a small fragment of the whole thing was completed.
Some of the aforementioned shorter publications, together with other lectures and travel notes, were published shortly after Semper's death as *Kleine Schriften* ('Short Writings'), edited by his sons Hans and Manfred. A complete bibliography, which also lists unpublished works like courses he gave as a professor in Dresden and Zürich, has been compiled by Herrmann in 1981\(^6\).

### 8.1.2 About this Case Study

Basic objectives of this, like of the other case studies have been stated in § 7.1 above. In how far these goals have been attained will be evaluated first in § 9.9, and then, after a review of other readings of *Der Stil* in § 13.1, in § 14.1. Basically this case study conforms to the structure outlined for all three of them in § 7.2. A list of quotes from Semper's works, or simply places in these works where interesting observations or opinions can be found, all of them arranged by themes from the lists contained in Figures 13 and 14 (§ 4.4), with an indication of paragraphs in the current text where reference to these fragments from Semper's writings has been made, has been included as Appendix 4. Both there and in the main text the following abbreviations have been used to refer to places in Semper's published works:

**PR:** Preliminary Remarks, 1834  
**FE:** The Four Elements of Architecture, 1851  
**SI:** Science, Industry, and Art, 1852  
**DS:** Der Stil, 1860-63  
**AS:** On Architectural Styles, 1869

References to *Der Stil* will be followed by a paragraph number and, between brackets, [..], page--both as found in the second edition (Munich, 1878/79: Bruckmann). Volume and chapter have been omitted, because the numeration of paragraphs is continuous. Volume 1 ranges from §§ 1 through 85, Volume 2 from §§ 86 through 186. Places in the 'Prolegomena' (the beginning of Volume 1) will be indicated by Roman numbers corresponding to pages. Unfortunately, about half of all books and articles on *Der Stil* refer to the first edition (Frankfurt, 1860/63) instead of the second. The only differences are that in the first edition two paragraph numbers erroneously have been repeated, which was corrected in the second. As a result, paragraph numbers in the second are one up from §§ 6 through 29, and two up from § 30 onwards. Moreover, the second edition uses about seven percent less pages for Volume 1 and about four percent less for Volume 2. Multiplying page numbers as indicated here with 107/100 for the first and 104/100 for the second gives the approximate page number in the edition of 1860/63. Of the four shorter publications as mentioned, The Four Elements of Architecture and Science, Industry, and Art have a paragraph numbering, the others have none. Page numbers in the
case of Science, Industry, and Art refer to a 1966 reprint. For the Preliminary Remarks and On Architectural Styles they refer to Kleine Schriften, for The Four Elements to the original German edition of 1851. Translations, unless otherwise indicated, are mine.

8.2 Recent Decision-Making

If after this brief introduction we now go over to the actual business of mapping contributions to architectural theory as contained in Der Stil, and of doing so in terms of the model (Fig. 10) outlined in Chapter 4, starting in the upper right corner at a box-like element which says 'Previous Decision-Making,' we are immediately faced with a problem, which is that very little in Der Stil is said either about questions that arise in actual decision-making and to which this book intends to provide an answer, or about what information actual decision-making provides for answering these or other questions. In other words, the work's relationship to actual decision-making is veiled, obscured—why?

An indication of what range of current problems in architectural decision-making the book wants to address, and hence of why the approach of these problems must be so circumspect, is in the key word of its very title: 'style.' For even though, as will be argued below (§ 8.7.1), it is fruitless to look for a clear concept of style as the work's conceptual core, Semper, like most of his nineteenth-century colleagues, must have been haunted by questions of historicism versus eclecticism versus the feasibility of inventing a powerful new style. At the same time he realized there was no easy answer to such questions, and so what in Der Stil and other publications of those years he did was step back far into his favorite range of paradigmatic examples and value systems, to see what seed of an answer these might contain.
8.3 Questions

This brings us almost directly to what is at the core of 'theory proper:' questions actually dealt with in Der Stil and typical for architectural theory. Figure 15 presents a summary, compiled from a more detailed inventory included as Appendix 4, of which among those questions are granted most attention, which some but not too much, and which ones none or very little. The inventory is open-ended. It consists of observations and opinions encountered in Der Stil regarding themes and questions as listed in Figures 13 and 14 (§ 4.4). Inevitably there is a subjective element in their selection. Included are those of Semper's observations and opinions which I considered interesting enough to register. Equally important points of view may have escaped me, others may not have been listed under all the appropriate headings. Nevertheless, I claim it is an approximation of a pattern which does not exist in my imagination only, but is absolutely there—but how is this pattern intertwined with the text as it actually confronts a reader?

At this point it is important to distinguish between questions that directly refer to quality in architecture and how to achieve it versus questions regarding evolution of style. The latter should be classified as historical issues in the first place. Unlike the former they do not belong to architectural theory in a strict sense. Questions regarding quality, to proceed with the former, can be raised from two opposite angles. To ask what is so great about the Parthenon is to raise a general question in regard to a specific building. If, on the other hand, one wonders how the corners of a peristyle temple best be treated, a more specific one is asked in general. Nonetheless, in either case one ends up investigating the same cluster of problems. Historical evolution of style is a different thing. A major problem with Der Stil is that it is often hard to tell where history ends and theory begins—but if appropriately acknowledged it is a problem one can live with.

If subsequently this survey (Fig. 15) is compared to the one for Ruskin's works (Fig. 28, see § 10.3), a striking feature is how much the two have in common. Even though Semper never went as far as to suggest that ornament or detailing is what architecture is all about, he too must have considered it the most interest-
ting part—at least for theorizing. Thus, in spite of the fact that as a practicing architect he had quite specific, and often original ideas about layout of buildings, or on how to make a building fit its urban setting and vice versa, little of this has found its way into *Der Stil* or any other of his published works. What this suggests is that opinions as to what is proper subject matter for architectural theory, and what is not, are most of all a matter of convention and of what types of written discourse exist at the time\(^63\). Eventually it was left to Camillo Sitte to pick up the ideas on urban design incidentally hinted at (no more than that) in Semper's writings, or implied in some of his designs—thus introducing a whole new genre within architectural theory\(^64\).

<table>
<thead>
<tr>
<th>Little attention:</th>
<th>Some attention:</th>
<th>Much attention:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CS Construction, other than:</td>
<td>CO Color</td>
<td>CS.M Materials, choice and application</td>
</tr>
<tr>
<td>L Functional layout of buildings</td>
<td></td>
<td>CS.W Construction of walls</td>
</tr>
<tr>
<td>Q Quantitative demands</td>
<td>R Resemblance/likeness</td>
<td>D Detailing, especially:</td>
</tr>
<tr>
<td>SA Signification associative, except:</td>
<td></td>
<td>DC Cladding</td>
</tr>
<tr>
<td>SI.H Sign. indexical of history</td>
<td>SI.M Signification indexical of makers and making</td>
<td>F Form</td>
</tr>
<tr>
<td>SI.O Sign. indexical of owners</td>
<td></td>
<td>SA.C Association with cosmic order</td>
</tr>
<tr>
<td>T Technical facilities</td>
<td></td>
<td>SLC Signification indexical of construction</td>
</tr>
<tr>
<td>U Urban patterns, with the exception of:</td>
<td>U.E A building in its direct environment</td>
<td>SS Signification symbolic</td>
</tr>
<tr>
<td>PE Procedures of evaluation, with the exception of:</td>
<td>PD1-3 Procedure of design</td>
<td>ST Style</td>
</tr>
<tr>
<td>PE.E Educating taste</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. Distribution of attention over questions in *Der Stil*
This being as it is, the questions to consider next are (a) what more specific issues related to ornament and detailing Der Stil focuses on, and (b) where in the same work art history ends and architectural theory begins, or how practical, after all, the work was meant to be.

At this point it might be wise to take a look at the actual contents first. Volume 1 deals with textile art and with the principle of dressing [Bekleidung] in architecture. The industrial arts corresponding to the hearth (ceramics), the roof ('tectonics,' that is, carpentry), and the mould ('stereotomy,' that is masonry) are dealt with in Volume 2, which concludes with a chapter on metal works. In the unwritten third volume it was to be expounded how all this merges in architecture, and how growth of style can be evaluated from this angle. This surface structure is historically descriptive rather than theoretically prescriptive, and so are the work's two leading concepts: those of material transformation [Stoffwechsel] and dressing or cladding [Bekleidung]. The former refers to the persistence of decorative themes in spite of new materials and new building technology. The latter, as a special case of the former, points to the persistence of patterns derived from, or distantly related to the textile arts, but it is often used in a wider sense to refer to all thin surfaces which, like a human dress or bodily adornment, are laid upon or carved into more strictly constructive masses. We shall recur to this in § 8.8 below. Both concepts are introduced primarily to be instrumental in tracing the genesis of style. Such is done with so much loving interest that one is inclined to take it as a justification of such practices—for times to come as much as for the past. But just as Semper's earlier studies on classical polychromy can hardly be taken as a recommendation to paint contemporary buildings all over in red, blue, gold, or purple, there need not be such close correspondence either in Der Stil between what the author describes and what he advocates. Absence of decent opportunities for dressing, as we shall see (§ 8.4.1), is held against Gothic as one of its shortcomings, so at that point the theory indeed becomes normative. But, for one thing, dressing is an encompassing concept, which, if used to describe the evolution of style, gives us no clue as to what makes the difference between great and poor applications of the same principle. And, for another, it does not explain what is so great about continuity of decorative themes—other than that Der Stil offers hundreds of fascinating examples from all times and places of how this principle has been applied.

So if in these reflections on 'Bekleidung' and 'Stoffwechsel' some more strictly evaluative concepts are implied, we either have to read for them between the lines of those long chapters in which their historical evolution is described, or trace them in some other section of Der Stil. Which brings us to the question what in Der Stil, and more particularly in the Prolegomena, is stated as the work's primary objective, and as its basic subject matter. Unfortunately, instead of one, half a dozen answers are suggested there, some of them overlapping, others hard to reconcile. Having, with characteristic cynicism, noted that in the present state of universal confusion it is better to presume art is already
on its way back to recovery, because the opposite hypothesis is fruitless and
demoralizing, the author continues:

**DS.VIII** As long as whoever believes in it shuns the presumption of
wanting to be the founder and savior of an art of the future, he may
in all modesty observe the work at hand in its process of becoming,
or more in general the becoming of art, and set himself the task to explore
in single cases the order that becomes apparent in the process of becoming
of artistic phenomena, and to infer from what is found general principles,
the basics of an empirical theory of art.

Such theory should be no handbook for the practice of art, for
it shows not the *making* of artistic form, but its *becoming*; it takes the
work of art as a result of *everything* that is involved in its becoming.
Accordingly its technical aspect will be considered as a major issue,
yet only insofar as it is part of the laws that condition the becoming
of art. Nor is it pure art history; in passing through the field of history
it apprehends nor explains the works of art of different times and countries
as facts, but develops them, as it were, identifies in them the inevitably
different values of a function composed of many variable coefficients,
and this primarily with the intention to reveal the inner law that rules
throughout the world of artistic form, as it does in nature. For just as
nature in her infinite abundance is very sparse in her motives, displays
a constant repetition in her basic forms, but these, depending on the
stage of a creature's development, and on the conditions of its existence,
appear in endless modifications, shortened here, lengthened there, fully
developed in one part, only hinted at in another, just as nature has its
evolutionary history in the course of which old motives shine through
at every new formation—in the same way art too is based on a few
standard forms and types that stem from the most ancient traditions and
that always reappear yet offer an infinite variety, and, like nature's types,
have their history. Nothing in this is arbitrary, everything is conditioned
by situation and circumstance.

Four options are dismissed in these few lines. *Der Stil* is not a book in which
an architecture of the future will be prophesied. Instead, as we shall see, the
importance of historic continuity is emphasized on almost every page. Neither
does it, in spite of its subtitles, pretend to be a handbook of practical aesthetics,
a guide to invention, or anything close. Even less it insists on a materialist
approach to design. The material employed and the technology of processing
the latter are only two among half a dozen factors that condition style. Nor
is the book's subject matter mere art history. So what is it?

Two options are suggested, but so gently that it is kind of cruel to insist
on them as the theoretical backbone of what is to follow. One is that works
of art will be considered as functions with many variables, which together
make up their quality. That would be great if such functions could in a non-trivial way be formalized. If not, what else could result from this than just another kind of speculative art history? Unfortunately there is no serious attempt at their formalization in Der Stil. Another option is hinted at in the analogy between the laws of nature and those that govern art. If this analogy is a strong one, it should be possible to study art the same way, and as successfully as nature has long since been studied. However, that would imply a determinist conception of history and of the arts which is not Semper's at all.

So what options remain to rescue Der Stil from the suspicion that all it has to offer is art history of an interestingly speculative, but impractical kind? As we shall see (§ 8.4.1), it would be mistaken to think of it as an attempt at justification of a particular historic style. Equally clear is that its author aimed at more than just another pattern book of eclectic detailing. If such had been his intention, examples might have been arranged by style, or by their place and function on a building, but not, as in Der Stil, by what basic technique explains their form. At one point [§ 80, p. 428] it is stated that "this whole chapter about dressing in its application to architecture has no other objective than to trace this correlation between form and color," but considering (see § 9.7.4 below) on the one hand the absence of clear answers or even questions on this issue, and on the other the wide range of other issues that are dealt with, such only adds to the confusion.

On one issue the author nonetheless is quite specific: in spite of all those long excursions on textile art, ceramics, and so on, it intends to be a book on architecture, after all. This does not mean its relevance to architecture is always obvious (in the case of, for instance, the endless classifications of Greek pottery in Volume 2 it is not), but there is no reason to doubt its sincerity as a principle. Otherwise it is hard, and hardly justified, to sort out all the questions dealt with in two categories: the ones that are essential to the argument versus those that are not.

The only reasonable way out, if none of those reviewed so far will do, is to presume the book must be about all of the things just mentioned simultaneously. In doing so it operates on three levels. First, on that of genesis of style in general, and of ornament as its most distinctive feature in particular. Closely related to that, as a second layer, is the function of ornament, and on top of that, as a third, rules as to what is good ornament and what is not, demands that all decoration should meet, no matter in what style. The function, or functions, of ornamental detail, conventional or figurative, thus is a leading theme. As this is described in terms of certain kinds of illusion a building should create and maintain, and as the latter does not rest on ornamental detail alone, but on composition as well, the work's actual scope within architectural theory proper is a bit wider, though. *Conditions of successful architectural illusionism* is the most fitting label I can think of. What this entails will be expounded in what follows.
8.4 Examples

If, as indicated, recent decision-making is not in Der Stil used very often as a direct source for answering these questions, two other sources according to our model remain: examples, built or unbuilt, and value systems. These will now be reviewed in that order.

8.4.1 Art and Artifice

Semper's choice of paradigmatic examples from the history of art and architecture is conventional in only one respect, which is that the unique achievement of the Greeks is never seriously questioned. Their temples stand safely at the zenith of all great architecture of all times. Otherwise there is always something unusual either about the paradigms he selects, or the way he deals with them. Thus, to begin with, their range is much wider than was common either in the near or distant past. Such speaks, first, from an unusually strong interest in pre-Greek art and architecture: Egyptian, Asian, Assyrian, and so on. That the latter had hardly been dealt with in earlier architectural treatises was simply a result of the fact that only in the late 1840s, thanks to the discoveries of Botta and Layard, a good deal more of this civilization became visible than what is in the Bible or was known through Herodotos. To Semper these findings were of particular interest because all of a sudden they provided him with evidence to substantiate earlier claims, as expressed in the Preliminary Remarks, concerning evolution of style in general and of Greek temple architecture in particular—but of that we will come to speak later on.

In the aftermath of the Great Exhibition of 1851 a major issue was why products of the applied Arts in industrialized countries like England, Germany, and France, tended to be artistically inferior to those from otherwise less civilized, less organized societies as found in British India, in Africa, or among American aboriginals. This paved the way for yet another type of paradigmatic examples: art and artifice as produced by contemporary non-western civilizations. In his appreciation of these Semper stood not alone. Thus Owen Jones, as speaks from The Grammar of Ornament (1855), had likewise come under its spell. Semper, as we shall see, nonetheless reached beyond virtually all of his contemporaries (with the possible exception of Ruskin) in thinking his way through to the heart of the matter.

Parallel to this runs an interest in more or less primitive art that does belong to the European cultural heritage, but not to the Greco-Roman mainstream
of it: Celtic and Scandinavian embroidery, woodwork, needlework, and so on. Nevertheless it holds a modest place within the whole of Semper's thought—never becomes ideologically loaded in a way one might fear from a close friend of Richard Wagner.

Art and artifice so far have repeatedly been mentioned in one breath, as though that were the most natural thing in the world. It is, however, one more point where Semper's choice of examples (paradigmatic or not so) on which to base his theories is highly original. The sources of this interest in the applied arts are manifold. For one thing, it results from the conviction, first expressed in *The Four Elements of Architecture* (1851), that most of them, notably the textile ones (weaving, tapestry, embroidery, and so on) and ceramics, are older than architecture, and that most decorative patterns in the latter can be traced to these earlier arts. And, for another, as later on he pointed out in *Science, Industry, and Art* (1852), Semper had by that time arrived at the conclusion that, desirable as it is that architecture, painting, sculpture, and the applied arts cooperate in order to arrive at truly monumental art of an enduring quality, current economic and technological conditions unfortunately did not permit architecture once more to take the lead and make the other arts its servants. Industrialized countries instead should not expect to witness a significant improvement in the quality of their architectural production, until in education of designers and of public taste priority were given to the industrial arts. Architecture then was bound to follow.

Somewhat remarkable, finally, is Semper's angry rejection of Gothic, not only as a style of the future, but apparently even as one of the past. What precisely he disliked in it is expounded at the end of volume I, in a section [§ 85] that deals with the decline of the principle of dressing (of which we will come to speak in § 8.7.4) in medieval times. The villain in this play is the Gothic style. It is reviewed as a constructive system where everything becomes subordinate to the vaulting. As a result, the integrity both of the wall as space enclosure [Raumabschluss] and of the roof as cover [Decke] is spoiled. 'Dressing' is banished to peripheral elements, where it no longer shows up well. With the wall most of the better places for painting get lost. Ceilings and vaults, it is noted elsewhere [§ 18], tend to become too high to display what is painted on them to its full advantage. Painted glass windows cannot really make up for painted walls, because of inherent technical restrictions and of their strict subordination to the architecture. Sculpture fares hardly better. It seldom rises above an iconographic level of existence. In this regard it is like its Egyptian counterparts. Ornament gives up its 'symbolically-structural' sense (see §§ 8.7.2 and 9.4 below) and is only loosely related to the construction. Constructive honesty in general is a dubious quality in Gothic cathedrals. Flying buttresses remain invisible from the inside, leaving the observer with an impression of painfully inadequate support, whereas from
the outside it is unclear what the same buttresses are there for.

Elsewhere, in an oft quoted paragraph [§ 68, p. 299], the exterior of a Gothic cathedral is likened to "the armor-clad crab that makes a show of its skeleton." Viollet-le-Duc's conclusion that Gothic, as opposed to classical architecture, works with an absolute module of scale, based on the size of an average human body, is taken over [§ 68], but as a mixed blessing. In the Prolegomena, Gothic construction is described as "the lapidarian transformation of the scholastic philosophy of the twelfth and thirteenth centuries" [p. XX] and efforts to revive it as a dead-end street [p. XVIII]. In Volume 2 [§ 151] it is pointed out how poorly large Gothic cathedrals fit in the tender urban fabric of predominantly Romanesque towns. Its virtues in civil architecture are likewise played down [§ 153]. At innumerable occasions [e.g. §§ 157-58] Gothic, moreover, is linked to a repressive system of religious intimidation and control. To this can be added equally critical remarks as collected by Herrmann from unpublished material:

A Gothic building, seen from the distance, is too much of an openwork; the masses disappear, and the details too. It looks as though it were in the process of being built, surrounded by scaffolding ...,

As the Byzantine sculpture is finer and simpler, so is the architecture. Pointed architecture on the one hand has too much system, on the other too much mannerism. ... The style in question cannot be developed; it has spent itself.

In lectures and writings from his earlier years in Dresden, on the other hand, as Herrmann notes, Semper showed himself to be quite open to the beauties of Gothic. What he admired in it was a "wonderful magic" and "structural forms that at the same time are the most beautiful adornment of the building." Moreover, he acknowledged in these forms a 'moral effect' which he felt hard to explain. Gothic architecture in Germany at the time (the 1830s) had not yet been studied extensively, but Semper took a vivid interest in it. This speaks not only from his lecture notes, but even more from the very able Gothic versions of his entry to the competition for the Nicholas Church in Hamburg. No matter whether he praised, rejected, or somewhat unwillingly practiced it, Semper knew what he was talking about when he dealt with Gothic.

Even so, it was, in Herrmann's view, precisely this competition which marks the break in Semper's appreciation of Gothic. Honest fascination gave way to anger and frustration, when, after his entry had been awarded first prize, a lobby of Gothic fundamentalists sneaked the eventual commission away from him and put it in the hands of Gilbert Scott. A few things should be noted, though, which somewhat undermine this all too easy biographical explanation. First, that in most of Europe in the 1850s the Gothic revival in a strict sense was beyond its peak. England would still witness the rise
of 'Ruskinism' as part of a more eclectic, more mundane variety of Gothic, but that had little direct following in continental Europe. Second, that in his gradually increasing dislike of Gothic Semper was not alone among the leading architects and theorists of continental Europe. Thus in France Fortoul, Vaudoyer, and Reynaud already in the 1830s had presented various reasons why they held Romanesque and Byzantine to be in general superior to Gothic—and during the 1850s only hardened in these positions. And, finally, it was about the same time (late-1840s, early-1850s) that Semper's dressing theory of ornament began to crystallize, which, as we shall see, accounts for a wide range of qualities in a wide variety of styles, but, precisely not so much those of Gothic.

And so what happened was that, instead of reinterpretting the Gothic paradigm to make it fit his allegedly universal concepts of architectural quality—the way Ruskin had done a bit earlier—Semper tried to rob the rationalists of their Gothic paradigm, playing down its presumed perfection. Raised in a Germany where Schinkel was the leading architect and architectural theorist, Semper as a young man had enjoyed Gothic architecture from a basically romantic point of view. Now he increasingly came to look at it through the eyes of his rationalist opponents—and hence to reject it almost integrally. Whether in this he had a choice is an interesting question, to which we shall recur in § 9.6.

Finally let it be noted how only a few pages in Der Stil are devoted to the Italian Renaissance. This in itself was not unusual at the time, but for a man who as an architect has always been considered a champion of Renaissance-related styles, there is nothing self-evident about it either. Even so, it says nothing about the author's appreciation of this period. In the few pages that actually deal with it, the Italian Renaissance is showered with praise. It does, however, strongly suggest Der Stil should not be read as in the first place an attempt at justification of the author's architectural works. Note that, apart from an exuberant punchbowl at the end of Volume 2, the work does not contain any of his own designs either. A choice not to focus on Renaissance architecture, on the other hand, fits a distribution of attention inversely proportionate to a period's distance to the Periclean age. That is, about as many pages as an average are devoted to medieval art and architecture as to Roman, but both are a fraction of the ones dealing with Greece. The Renaissance must do with much less, and only incidental reference is made to whatever comes later.

8.4.2 Nature and Music

So much for examples as found in the history of architecture and the industrial arts. For the sake of completeness we should also pause to see what role, if any, has been assigned to nature and music as paradigms of quality architec-
ture should try to emulate. Nature for sure was an important one. Basically Semper subscribed to a conception endorsed by Schinkel and most of the leading intellectuals in the tradition of German idealism, which held that architecture should imitate nature not in its outward forms, but in its workings, so to say; that it should try to emulate nature in the sense that its products should appear like a necessity of nature. As it is stated in the Prolegomena, in a reflection on the nature of the factors [Momente] that, whether internal or external to an object, make us think of the latter as beautiful:

**DS. XXIII** These factors, where they do not emanate from the beautiful object itself, still must be reflected in it, condition its particular configuration. Moreover, these factors must arise from and be consistent with the law of nature. For although art only has to deal with form and appearance [Schein], not with the essence of things, it still cannot create its form in any other way than following what it learns from external nature, be it only by complying with the general law which prevails in all domains of nature, appearing undeveloped here and elsewhere more mature.

Concepts like symmetry, eurhythmity, proportion, direction, and the several authorities corresponding to these, as expounded in the Prolegomena (see § 8.7.3 below), are conceived as principles of nature, aimed at (or anyway resulting in) unity in variety. Such principles are found in organic nature (plants, animals, man), as well as in its anorganic aspects, the latter either microcosmic (crystals, snowflakes, and so on) or macrocosmic (e.g. an object’s position relative to the center of the earth). Similar mechanisms are held responsible for the kind of animation that the author perceives in certain Greek temples. Working out in this vein such in origin idealist conceptions, Semper arrives at conclusions which, as will be reviewed in § 9.4, considerably differ from those endorsed by Schinkel and his school. In doing so he nonetheless remains within a tradition that is romantic rather than strictly classicist—or, let us say, German rather than French.

The latter becomes even more evident if we consider the place of music in this scheme. In regard to symmetry and proportion, musical analogies are systematically avoided, or even rejected. Instead the former are conceived in terms of an analogy with nature. Musical analogies, however, do turn up in connection with rhythm or to elucidate the dynamics of themes and variations. Thus we are told in *Science, Industry, and Art* (1851):

**Sl.II** [35-36] It is no doubt gratifying when the primordial motive in a work of art, no matter how distant from its original source, pervades the composition as key note. A clear and fresh conception of this is highly conducive, for sure, to the artistic effect, because one thereby gains a foothold against the arbitrary and the insignificant, and it even

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occasions new invention. The new becomes engrafted onto the old without being a copy and is freed from a dependence on the inane influence of fashion.

Observe how in these lines it is neither stated nor implied that, when applied in contemporary architecture, the original meaning clinging to such ornament is the only valid one. Emphasis is on continuity in the choice of decorative themes and conventionality in their treatment—at the expense of a free play of the artist's imagination. Semper is a traditionalist, not a fundamentalist. Meaning has become subordinate to form. Hence there is ample reason to take these musical analogies, and the classification of architecture with music and dance as a non-imitative, 'cosmic' art, quite seriously.

8.5 Value Systems

In choice of value systems he considered worthwhile to study and to cultivate, Semper wholly conforms to the nineteenth-century idea of a Renaissance man. Turning his back on the theocratic Dark Ages, he consistently follows the lead of classical antiquity, and, as a true 'uomo universale,' is not afraid to try and excel in several fields. A major difference between fifteenth–or sixteenth-century Italy and nineteenth-century Germany was that in the latter classical Greece had largely replaced Rome as the true standard of excellence, but even in this regard what Semper effectively did was help restore the balance in favor of the Romans.

In combination with a strong commitment to liberalism and democracy, this Renaissance ideal accounts for most of the more specific value systems Semper endorsed. Negatively, it speaks from a deep-seated distrust and dislike of Roman Catholicism, fueled by the undemocratic nature of its institutions in the first place. Unlike Ruskin, whose anti-Catholic positions were more religiously inspired, and faded as he grew older, Semper only turned more embittered on Catholicism as years went by. Otherwise he is as liberal and humanist in matters of religion as in politics, though not profoundly interested in the former. Christian faith and rituals are discussed with the same detachment as those of other religions. Notwithstanding his friendship with Richard Wagner, there is not a trace of racism or antisemitism in Semper's writings—or at least
not in his published ones. A broad humanist, even 'idealistic' education is emphatically endorsed.

Now it so happens that in nineteenth-century Germany the ideals of Renaissance culture and political liberalism went hand in hand. Semper's cultural orientation, moreover, was thoroughly international and cosmopolitan. A predilection for Renaissance or Beaux-Arts architecture, as speaks from most of his built works as well as some unrealized designs, wholly fits that pattern, but cultural liberalism is even more evident in a consistent effort to judge every style (with the possible exception of Gothic) on its own merits. All things considered, there is considerable stylistic pluralism in Semper's architectural legacy (see § 9.8 below), and if among his realized buildings those in a Renaissance-related style outnumber the rest, such may reflect the taste of his clientele as much as his own. Another consequence of this political stand which, as indicated in Science, Industry, and Art (1852), Semper was willing to accept is that good taste cannot be enforced from above--or, if it could, that it would be highly undesirable if such a thing should happen.

8.6 Humanities

The importance he assigns to the study of some of the humanities closely parallels Semper's ranking of value systems as outlined above. From his first publication until the very last, a never-ending study of classical antiquity is insisted upon as crucial to a civilized life style and to intellectual or artistic flourishing in general. And indeed Der Stil as well as some of his publications of the early- and mid-1850s like The Four Elements of Architecture bear witness of an impressive erudition, not only as regards the history, literature, and artefacts of Rome, Greece, and the ancient mid-east, but likewise in more recent history of art and architecture, literature (apparently with a strong predilection for theatre, and hence for playwrights like Shakespeare, Lessing, Goethe, Schiller, and so on), and philosophy.

Unfortunately (when it comes to identifying the links between value systems and theory proper) in all of this Semper behaves like a true intellectual omnivore, with admirable discretion taking advantage of whatever useful information or opinions he encountered anywhere, but not, in his own writings, very explicit (nor, possibly, always aware) as to what school of thought he was following at what point.
8.7 Special Words with Special Meanings

This situation is clearly reflected in what can be marked as the work's special-words-with-special-meanings, that is, words that are introduced with a suggestion that they stand for leading concepts to which everything else (or most of it) in the text relates as illustrations or specifications. These are not taken from one branch of the humanities or of science in particular, but from various sources. For those words which most clearly enjoy this status we shall in the following paragraphs try to decide what is there actual scope within the body of theory expounded in Der Stil, and, sideways, what their origin in other schools of thought.

8.7.1 Style

In Science, Industry, and Art (1852) 'style' is defined as follows:

SLII [34] Style means giving emphasis and artistic significance to the basic idea and to all intrinsic and extrinsic coefficients that modify the embodiment of the theme in a work of art.

It is the kind of persuasive definition that remains rather vague, and yet is too specific to cover everything for which the word 'style' can be used, and nothing more. Even so, it enumerates coefficients of style in terms of which the concept can be further explored. And indeed Science, Industry, and Art is the first major publication where Semper makes it clear that, even though at that time he is still involved with Comparative Theory of Building, a first installment of which is announced for the next year, he wants to start working on an encompassing theory of style. Such is presented as an alternative to the 'theory of taste (aesthetics),' for which the author feels nothing but contempt:

SLII [34] Its tottering precepts and basic principles find approval only with so-called experts of art, who measure the value of a work thereby because they have no inner standard for it of their own. They believe to have grasped beauty's secret with a dozen precepts, whereas it is precisely through the denial of any scheme that the infinite variation in the world of form assumes characteristic meaning and individual beauty.
The assumption is that substantial theory which avoids these pitfalls is possible, after all, and that a theory of style could meet these demands. Such theory should consist of three parts. First, the historical, which confines itself to the mere tracing of stylistic motives over time. Second, the material, which:

**SL.II [36]** should teach us how the forms evolving from the motives should take different shapes depending on our means, and how the material is to be treated stylistically within our advancing technology.

It is immediately added, though, that this part is more elusive, and that such holds even more for the third, the one:

**SL.II [37]** that deals with the local, temporal, and personal influences on form extrinsic to the work of art and their accord with other factors, such as character and expression.

As we shall see, this roughly corresponds to the eventual structure of *Der Stil*, except that the order of the first two parts (which have been combined for each basic technique, like textile art, ceramics, and so on) has been reversed, while the third part must have been very elusive indeed, as it was never completed, hardly even got started. It is further suggested [p. 35] that this theory should serve as 'a practical guide to invention that maps out the cliffs and sandbars to be avoided and points out the right course to be taken'—a notion which in 'Der Stil' will be considerably tuned down, but yet survives in its subtitles. For some reason the whole concept of style, its major coefficients, and how the latter can be investigated one by one, is not expounded in a comparable way anywhere in *Der Stil*, but so much the more in the lecture that by and large may be considered its postscriptum, *On Architectural Styles* (1869). It states:

**AS [402-03]** Style is the accord of an artistic phenomenon with the history of its becoming and with all preconditions and circumstances of its genesis [Werden]. When we consider the object from a stylistic point of view, we see it not as something absolute, but as a result. Style is the stylus, the instrument with which the ancients used to write and draw; therefore the word is quite meaningful for that relation of form to the history of its becoming. To the tool belongs, first of all, the hand that leads it and a will that guides the hand. These, then, intimize the technical and personal factors in the genesis of a work of art.

Another factor is the material, considered in a wide sense as also comprising the *task* or *theme* for artistic exploitation. Subsequently an attempt at classification of such tasks or themes is made, and so indeed the argument appears to move ahead in ever wider circles around a concept of style.
Following this suggestion, Rykwert has 'the conception of style' featuring in the title of an article (1974), and Mallgrave 'the idea of style' in that of a dissertation (1983) on Semper. Rykwert, in summarizing some of Semper's leading ideas, no further specifies this particular conception. Mallgrave submits that an 'elocutionary' concept of style, even if Semper had not yet fully arrived at it in *Der Stil*, was the one he was heading for and finally attained in *On Architectural Styles*. We shall recur to this in Chapter 13. For now let it be stated that, although I do believe the work is a response to current *stylistic dilemmas*, to which its title explicitly refers, it is fruitless to look for a truly powerful and interesting concept of style (elocutionary or of some other variety) there. The reason eventually lies in the very nature of the word, which covers two entirely different concepts, of which one is too specific, the other too vague to serve as a real conceptual core. Too specific is style in the sense of a set of design conventions, characterizing the architecture of a period and region, a school, a movement, or even of a single architect. Too vague is style as grace, dignity, authenticity—in short, as the totality of all imponderable qualities that bestow character upon a product of design. As used in the very title of *Der Stil* it refers to the latter, that is, style in a normative, prospective sense, 'le style' rather than 'les styles,' to use a phrase that is often attributed to Viollet-le-Duc, but has been around a good deal longer. Inserting this in the full title of *Der Stil*, the latter could somewhat irreverently be read as 'Quality in Architecture and the Applied Arts'—which indeed is what the book approximately is about. *On Architectural Styles* as a title, on the other hand, points to the former, that is, to style(s) in a descriptive, retrospective sense. To further complicate matters, in the lecture by that name 'style' is once again defined as universal style—see quote above.

The heart of the matter is that both *Der Stil* and *On Architectural Styles* stand for an effort to reason from one kind of style to the other, to infer from an evaluation of specific styles in their historic evolution principles which transcend the inevitable conventionality of these styles. So far these texts run parallel to Viollet-le-Duc's *Discourses on Architecture*, the first volume of which appeared in the same year (1863) as the second of *Der Stil*. A major complication in Semper's case, much more so than in Viollet-le-Duc's, is that among timeless criteria of architectural excellence a certain degree of conventionality, or at least of continuity in choice and treatment of decorative themes holds an important place. Accordingly, there can, from Semper's point of view, never be an altogether timeless style of great distinction.

### 8.7.2 Symbol

Another concept that no doubt holds an important place in *Der Stil* is that of built forms symbolizing something more, something else than just themselves. Unfortunately, 'symbol' and 'symbolism' in this work are not particularly well
defined relative to other kinds of signification, but used in a variety of ways, some positive, some negative, and others neutral in their qualification of what is thus described. For this and other reasons it is likewise a concept which in a reconstruction of substantial theory as contained in Der Stil does not serve well as a conceptual core. In an evaluation of built forms it tends to remain subordinate to other concepts, like those of spiritualization and dematerialization of dead matter. Or, if it does not, the word is used in a peculiar way, as in a footnote to § 62 (for a longer quote see § 9.3 below) where it is noted:

**DS.62n** Destruction of reality, of the material, is needed wherever form is to appear as a meaningful symbol, as an autonomous creation of man.

It is not immediately obvious why the autonomy of a human creation should be enhanced by its being a symbol (meaningful, of course) of something else. Most of the time, and in accordance with how it was taken by most of his contemporaries⁸⁸, Semper uses 'symbol' to refer to a kind of signification that rests partly on convention, and partly on likeness—no matter of what kind—between the sign and what is signified. Probably the above conception of a work of art (in general) as a meaningful symbol must also be taken in that sense, but if so, such hardly illuminates the very nature of works of art.

Elsewhere he is more specific. If likeness of decorative forms is with an earlier technique through which the decorated could have been created, and if these forms thus symbolize basic functions (to support, to cover, to enclose, et cetera) of what they decorate, they are said to be applied in a 'symbolically structural' [struktiv-symbolisch] sense. Such is considered excellent, especially if decoration and what it decorates appear to be inseparable, if the former grows out of the latter, so to say. This, as we shall see (§ 9.4), is what the author admires in the Greek paradigm. A good deal lower on his scale is ornament which, as in Egyptian architecture, symbolizes a ceremonial rather than constructive or protective function, and refuses to integrate with the elements it is applied to⁸⁹. Lowest is what he calls 'Tendenzsymbolik.' A fitting English equivalent for that expression is hard to come by, but it refers to symbolism of an educative, moralizing kind—which is considered basically unarchitectural. It ought, in Semper's view, to be confined to the apparently least structural parts of a construction, or, even better, altogether avoided. Thus in the Prolegomena, in an attack on 'Purists, Schematists, and Futurists,' it is noted:

**DS.XX-XXI** Another retroactive effect of speculative philosophy on the arts is evident in the iconographic art of moralists and futurists [Tendenz- und Zukunftskunst], in the hunt for new ideas, the boastful display of thoughts, profundity, richness of meaning, and so on, and so forth.

This appeal to nonartistic interest, this moralizing [Tendenzeln]
(deservingly echoed in the ecstatic explanations of art and the often comical mania for interpretation on the part of connoisseurs and archeologists) are typical either of times of barbarity or of decline. Art on its highest level hates exegesis. It therefore consciously tries to prevent such intentions from becoming visible. It veils them behind the most general, purely human motives and deliberately chooses the simple, already known themes. It considers these, like the material out of which it creates, be it clay or stone, solely as a means to an end that is sufficient to itself.

So not all symbolism in or on built forms is taken as a blessing, and even in its most successful applications, like in the detailing of Greek temples, it is as indicated, dealt with as a means to the higher ends of spiritualization and dematerialization rather than as an end in itself. This one should keep in mind while reading the linguistic analogy presented in the introductory chapter immediately following the Prolegomena. Having submitted that most decorative motives in architecture can be traced to pre-architectural applied art, Semper continues:

DS.1 [6] Without taking into account this oldest influence of the technical arts on the genesis of traditional forms and types in architecture, no proper understanding of the latter is possible. Just like the root forms of a language always retain their currency, and at all later modifications and extensions of the concepts that are tied to them recur in the same basic form, like it is impossible for every new concept immediately to invent a new word, and still not fail at the first objective, that is, to be understood, thus one should not reject or ignore these oldest types and roots of art's symbolism in favor of others. The public that is watching, as well as most practicing architects follow these traditions more or less unconsciously. The same advantage, however, that a present day rhetorician can take of the comparative study of language and of research into primeval affinities between languages is enjoyed in his art by the architect who discerns the oldest symbols of his language in their most original sense, and takes account of what transformations in form and meaning these, with the art, have gone through.

Observe that this endorsement of a traditional vocabulary of forms for the sake of historic continuity and basic comprehensibility, and certain rules in regard to their combination and application on a building, is about all there is to Semper's conception of architecture as a language. Otherwise, as I will argue in what follows, the positions he endorses in architectural aesthetics are formalist rather than symbolist.
8.7.3 Concepts of Form

Two kinds of terminology are introduced early in Der Stil to describe form. First, in the Prolegomena, those of pure form, abstracted from all likeness, and second, at the outset [§§ 6-22] of the section on textile art, those of 'dressing.' The former include those of eurhythm, symmetry, proportion, direction, four authorities corresponding to each of these, plus a fifth to decide which one in a particular situation predominates.

Eurhythm is defined as a 'closed concatenation of identical units of space' [DS.XXVII]. As such it may follow either a strictly regular or an alternating pattern. Its basic function is in framing, that is, in focusing attention on what it frames.

Symmetry, as applied to architecture, in Semper's system like in Ruskin's, corresponds to a building's width, proportion to its height. With 'direction' a third dimension is introduced, that of depth. It refers to, for instance, the axes along which Beaux-Arts plans used to be developed, or the direction we feel a building's facade to be looking in. As the third and final volume of Der Stil, in which this was to be worked out, never materialized, most of it remains somewhat in the dark. In the two completed volumes the author occasionally recurs to the formal aesthetics expounded in the Prolegomena, but as a rule this hardly moves beyond the rather vague, though by no means pointless analogy with nature already reviewed in § 8.4.2. Nor can much more be expected from an author who—once more like Ruskin—refuses to believe in easy formulae for good proportion.

Opinions widely vary regarding the relevance of these formal aesthetics within Der Stil as a whole—so much so that it points to a certain caprice among commentators and interpreters as to the questions they intend to answer, the mysteries they want to solve, versus the ones they take for granted. Thus Mallgrave states:

The second half [of the Prolegomena] opens with an impassioned plea for art in a world that is cruel and absurd, but soon shifts to an abstract, quasi-mathematical set of aesthetic postulates that bear only the slightest relation to the investigations that follow.90

This echoes an opinion expressed five years before by Herrmann, who notes that the author had taken over this section from the unfinished Theory of Formal Beauty, because "In this way he hoped to ensure early publication of his theories of art, apparently not minding that these purely theoretical observations would appear to have little relevance to the empiricism of Der Stil." In perfect contrast, Quitzsch in the early 1960s takes it as a core piece of Semper's aesthetics92. We shall recur to this in Chapter 13.
8.7.4 Concepts of Dressing

More specific is the terminology introduced to describe form that does involve several kinds of likeness, and operates on the level of architectural detailing in the first place: that of 'dressing' [Bekleidung]. Five concepts beside that of dressing itself are of special importance here, those of string or lace [Reihung], belt, band, border, tape, fillet, braid, or ribbon [Band], cover [Decke], seam [Naht], and fringe [Saum]. With a number of rules for their proper combination and application these constitute what might be called a grammar of ornament. For even though not all conventional ornament and detailing can be interpreted in terms of the textile arts, most (in Semper's view) can. The five elements as mentioned are introduced [§§ 6-22] by way of a functional and occasionally also morphological definition, formal constraints regarding their architectural application, and a listing of some basic varieties plus illustrations.

Thus a cover is described [§§ 9-18] as a textile element (a category that includes hides) of a certain extension, meant to cover, to protect, or to enclose something else. Its two major formal characteristics are its flatness and its bounding lines. By way of seams [§§ 19-21] small covers can be combined into larger ones. Seams differ from belts or bands in that they are stretched sideways, and give support not to their length but to their width.

Belts [§§ 7-8], as already suggested by the long list of other translations (see above) that apply to the German word 'Band,' exist in many varieties, and have various functions to perform. Some serve to bind, others to border, to emphasize the direction of a body (e.g. as loose ends of a waist belt), to express freedom and independence (e.g. as flags or ribbons), or as a double seam connecting minor covers. Their common characteristics are morphological: flexibility in combination with tenacity, and a capacity to absorb tension in the direction of their length. Here lies the basic difference with seams, which, as indicated, operate sideways. Nonetheless it is possible that one and the same elongated textile element functions in both directions. In that case it is called a fringe [Saum, § 22].

16. Fringe, seam, and cover in a Roman floor pattern (Der Stil)
A string or lace [Reihung, § 6], finally, differs functionally from most kinds of belt [Band] in that it surrounds without binding, and morphologically from those bands that do the same by being composed of identical or alternating elements in a chain. Typical examples are a garland of leaves, a crown of feathers, or a string of beads. Mostly they serve such merely decorative purposes as terminating, crowning, or raising the autonomy of what they surround, e.g. a lady's body, neck, or head.

In architecture 'covers' stand for walls, floors, vaults, and ceilings, or, more in particular, for tapestry-, weaving-, or embroidery-like detailing as applied to these. 'Seams' can be identified in the single or double sawtooth lines that in Figure 16 connect the fringes and covers which together make up a floor pattern. Cases of 'belts' or 'bands' are the rings on Egyptian columns (Fig. 17) that appear to hold them together as a bundle of reeds, or as a single beam dressed with a carpet; yet another are Greek acroteria (Fig. 18) which, as pointed out by Semper, are like plumes on Greek helmets, mirrored to make a symmetrical pattern. 'Strings' or 'laces' occur as egg and dart mouldings, or as undulating lines (Fig. 19), 'fringes' as edges of floors, walls, ceilings, or major segments of these (Fig. 16). All of these elements, finally, can even more directly be identified in figurative decoration like the Assyrian bas-reliefs (Fig. 20), the discovery of which, as indicated (§ 8.4.1), was a major event in the genesis of Semper's dressing theory of ornament.
Consequent on the function of these elements in textile art are formal constraints which likewise hold for their application in architecture. For as much as these are specified for separate parts of a building, like floors, walls, and ceilings, these will be reviewed in § 9.7. For now let us focus on those that are stated for dressing in general. From the demand of historic transparency of decorative forms it follows that after innumerable transformations a cover should still look like a (textile) cover, a band like a (textile) band, and so on. More in particular this entails the following.

Whatever is covered, protected, or enclosed is seen as unified, as a collectivity. The basic element is the plane. Its formal properties—extension in length and width, absence of a third dimension, and being bounded by lines (straight, curved or something in between)—are the crucial factors [Momente] that condition the style of any cover.

What in a seam should be expressed is, first of all, the act of sideways connecting two parts of a cover. Second, the seam should reflect the nature of the larger cover it is part of, and finally the character of the person or object thus covered. Its basic shape is that of a single or double zigzag. If the seam's function is only symbolically represented, symbols may be taken from nature. Climbers, creepers, branches of the vine, jaws of animals, et cetera, will do quite well. In no case should they allow for 'Tendenzsymbolik.' Likewise the architectural derivatives of seams should be conventional and hybrid rather than naturalistic or emphatically symbolic [tendentiös]. Seams, as opposed to belts, laces, rings, or bracelets, mostly run parallel to the direction of a body's proportional development—and so they should. As a result they have little influence on proportion, but so much the more on symmetry.

A belt, rather than being part of a dress, tends to serve as a connection between the dress as a whole and whom or what it dresses. Sometimes it is even completely independent of the dress and has no other function than to articulate a proportional division. Every belt presents itself as a textile product, that is, as flexible and tenacious. The thinner it is, and the more it has to bind, the more this tenacity should be expressed (Fig. 21). Most simply it is a line or thread. It may also be composed of a number of threads, wound together. More complicated is strapwork.
On the light extreme is a string of pearls [Astragal] or a winding of leaves [Stephanos]. This, by the way, suggests the distinction between strings and bands is a gradual one. The direction of a belt, as opposed to that of a seam, is always perpendicular to what it binds. Decorative patterns on ribbons must roll off with the latter's movement. Flags for that reason should have their color bars run parallel with themselves rather than perpendicular. Otherwise bands should just fit the character of the person or event: light and fluttering, bright and colorful for young ladies, dance and pleasure, heavier and more solemn for priests, rulers, and other dignitaries.

*Strings* which serve as terminations must have an upward or downward pointing pattern. Otherwise it is not unusual or incorrect for a pattern alternatingly to point in both directions.

*Fringes*, finally, which combine the functions of belts and seams, must display the formal characteristics of both. That is, there should be a development in width as well as in length.

19. Semper, varieties of 'string' (*Der Stil*)

20. Semper, Assyrian bas-relief (*Der Stil*)

21. Semper, varieties of 'bands' (*Der Stil*)
8.8 Structure of Argument

Having reviewed all the major sources of questions (decision-making) and information (ibidem plus examples and value systems), the range of questions dealt with, and some of the intermediary levels of concept formation (choice of paradigmatic examples, humanities, and semantic core) we now return to theory proper in order to decide what structure of argument connects those questions to their answers. This, to complete this chapter, will be followed (§ 8.9) by an inventory of apparent contradictions and incompatibilities—the ones that in Chapter 9 we shall attempt to bridge by way of a hypothetical implied concept.

At this point it should first of all be noted that Der Stil is not an easy book, but that on the other hand it is not altogether fair to blame it on its style—the way Gombrich does when he calls the work 'soporific' and 'almost unreadable'93. Semper, to be sure, mostly expresses himself in a concise way, and there is always an undertone of subdued aggression, a disrespect for conventional wisdom, which lends a fresh and stimulating flavor to his works, and to Der Stil in particular. Some sections, such as those on formal aesthetics in the Prolegomena, may look incomprehensible at first, but once they are understood one wonders what was so mysterious about them at first reading. Others, like the endless classifications of Greek pottery in the chapters on ceramics, in spite of the author's repeated assertion that they are strictly relevant to the study of architecture, look a bit pointless (we shall recur to this in § 9.7.5 below), but they are not particularly hard to follow.

So what is so difficult about the book as a whole? First, that so many questions are dealt with simultaneously, without a clear order as to which comes first. Second, that much fresh ground is broken, and third, that familiarity is assumed with things most of us are no longer familiar with.

Therefore, although there is a structure to the book, and to the way it deals with a wide range of issues, it is easily overlooked. As indicated (§ 8.3), in the introductory chapters Semper elaborates more on what his theory is not than on what it is. As a result, a complete answer will be found there, but it can be reconstructed. The questions dealt with simultaneously are mainly of three kinds: questions regarding evolution of style, regarding functions of ornamental detail, and regarding demands all ornament should meet, no matter in what style. These are raised, first, for those decorative forms that are supposed to have their origin in textile art, and subsequently for those that
originate in ceramics, tectonics (that is, carpentry), and stereotomy (masonry), while metalworks are dealt with as a fifth, somewhat derivative group.

The order of these five is not a random one. For even though Mallgrave, following Herrmann, points out that "Semper's decision to begin with textiles is not significant in itself, since he had initially hoped to start with ceramics," and that it was only because of a dispute with a former publisher who refused to return a manuscript on ceramics that eventually textile art came first, choice was apparently between these two, and it would definitely have weakened the structure of argument had he begun with ceramics instead. The point is that, no matter which of the two is oldest (but who knows, and who cares?), textile art is more basic in the sense that its forms are sometimes taken over in ceramics, while the reverse does not hold true. Carpentry, masonry, and metalworks (in that order) are even more derivative, and so it is only natural that they are dealt with later, so frequent reference can be made to the primeval techniques as reviewed in earlier chapters, on which they lean for much of their formal vocabulary.

What does not altogether fit this scheme is the long section (§§ 59-87) on the principle of dressing and masking in architecture. Whereas the preceding part of the section on textile art focuses, first, on tapestry and how its formal vocabulary survives in detailing of interior floors, walls, vaults and ceilings, and subsequently on textile art as such, the second part (from § 59 onwards) takes 'dressing' [Bekleidung] in a much wider sense, as comprising thin layers of no matter what material (paint, metals, terra-cotta, tiles, inlaid stone, mosaics) a building's interior or exterior surface is covered with to enhance its appearance, as well as patterns which to the same end have been carved in. The archetype in this case is no longer the tapestry wall of prehistoric dwellings, but dressing and adornment of the human body. In a way this is confusing, because the methodology of reviewing ornamental detail in accordance to the primeval technique that explains its forms is temporarily suspended here, but, on the other hand, it lends to the work as a whole thematic unity which could hardly have otherwise been achieved.

For each of the techniques the order in which the three types of question as mentioned are answered is the reverse of the one they were presented in here. That is, demands on decorative forms come first, historic evolution last, function is somewhere in between. This is the background of the distinction that for every technique is made between 'Allgemein-Formelles'--or 'Aesthetic-Formales' (ceramics) severally 'Zwecklich-Formales' (stereotomy)--and 'Technisch-Historisches.' For metalworks, because of its derivative character and its place at the end of Volume 2, the general-formal part was kept so small that the author felt no need to mark it by a heading of its own. With textile art it grew so long that the second chapter (3) again starts with technical and general-formal reflections. In neither case does this actually affects the structure of argument.

This distinction--even though Mallgrave may have a point when he notes
it is neither clear nor consistent in its format, must be considered basic. It reflects something close to what nowadays is called a hypothetico-deductive approach—although, as indicated (§ 4.3.1), 'hypothetico-explorative' would be a more appropriate label. Semper, as he puts it in Science, Industry, and Art (1852), is aware that "Facts alone do not prove anything," but commits himself to a concept of scientific theory, as expounded in the same paper (1852), which by all standards (see § 4.1 above) is a remarkably advanced and realistic one:

SII [30-31] Necessity was the mother of science. Developing empirically and with youthful spontaneity, science soon drew confident deductions on the unknown from the narrow field of acquired knowledge, doubting nothing and creating its world from hypotheses. Later it felt confined by its dependence on application and became an end in itself. It entered the field of doubt and analysis. A craze for classification and nomenclature superseded the imaginative and fantastic systems. In the end genius reconquered the vast amount of material collected by research, and purely objective investigation was forced to submit to constructive combination, and to become the latter's servant in the procurement of further factual evidence derived from analogies.

Assuming that among those who produce art there has always been, and always will be, a drive towards greater perfection (just like there are always forces working the other way), formal demands on decorative forms serve as partial explanations of why the history of ornamental forms took one course rather than another. The numerous examples reviewed in a description of this evolution moreover serve as illustrations of these formal demands.

It is interesting to see how, before settling down on this approach, Semper had long been struggling to find the proper form in which to lay down the wealth of his ideas, collected from a dozen fields. Such speaks from the unfinished projects which preceded the likewise unfinished Der Stil. The point was not to get stuck in phase two—that of classification only—but to find a way into the third, where, as in the beginning, hypothetical inference holds sway. Work on Comparative Theory of Building by the time he wrote the above (1852) had come to a halt. He must have realized it never would outgrow phase two. Theory of Formal Beauty, his next major project, came as close to a truly Newtonian theory as he could hope to get, but once again this was a dead-end street. In Der Stil a middle of the road approach is pursued. Careful not to overreach again in either direction of the ill-fated previous works, the author moves ahead on the three levels of questions and answers as mentioned simultaneously. The resulting book reads like a voyage of discovery through the history of architecture and applied art, with unexpected findings all the time, but with no clear prospect as to where the trip will end—if it will end at all.
8.9 Apparent Contradictions and Incompatibilities

On a voyage like this, where at every stage a considerable amount of improvisation is required, an author might be expected to run into all kinds of contradictions and anomalies. Is that what happens in Der Stil? Not quite. Considered as a stage in an intellectual development that received its first public expression in the Preliminary Remarks of 1834, and some sort of a postscriptum in On Architectural Styles (1869), it testifies of an impressive, constant growth to ever greater consistency and comprehensiveness. Most of the leading ideas in Der Stil are based on early intuitions as laid down in the 'Preliminary Remarks,' but matured and better documented than in this early manifesto. On the other hand, such is not the case for all of these ideas. Some of the apparent continuity is pretended rather than real, and accounts for much of the confusion that the book has caused among its readers.

As already hinted at (§ 8.4.1), and as I will try to demonstrate below, this holds especially for the author's early enthusiasm for classical polychromy and some of the aesthetic (as opposed to historic) positions which in consequence of this he felt obliged to defend for the rest of his life. Ambiguities, if not straightforward contradictions, as regards the role of the material in the architectural whole, or, to approach it from the other end, the 'ideality' of perfect architecture, largely follow from that. Most of this can, for now, only briefly be indicated. A more lengthy discussion will follow in the paragraphs 9.3 through 9.7.4, where it will be accompanied by explanations which should remove at least some apparent incompatibilities.

Unrelated to the polychromy issue is the author's somewhat wavering position on a new style for the nineteenth century and beyond. A final paragraph (8.9.4) has been devoted to this.

8.9.1 Special Status of Greek Art and Architecture

If Semper assigns a special status to one cultural era in particular, even if it is classical Greece, such is paradoxical for two reasons. First because, unlike Schinkel, he never designed or built a single neo-Greek building, and, second, because historic and stylistic relativism, a determined effort to judge each period or style on its own merits, is the rule in his writings. Ettlinger (1937)\textsuperscript{97} takes issue with the former, Herrmann (1984)\textsuperscript{98} with the latter. To Herrmann the problem remains internal to the man's writings. For although he never endorsed Greek revival architecture, Semper's faith in the "crowning and un-repeatable achievement of Greek architecture" in Herrmann's view "... was not easily compatible with his aim of objectively comprehending the historical process that embraced many cultures and many periods." There is much that speaks in favor of this view. Thus when in the Preliminary Remarks (1834) the reader is admonished that under the present circumstances, unfavorable
as they are to architecture,

PR [220] .. it is always prudent to consult our old teachers, the Greeks, to find out what they had done under similar circumstances. Not to copy their dead alphabet, but to imbibe their spirit and draw nourishment from the tender, southern plant of art once more directly from its native land, until it degenerates again on our barren soil—that would be helpful

this indeed does not oblige to anything in particular. It is a recommendation to study classical antiquity, not to copy the forms it left behind. Besides, such adulation, which is expressed repeatedly in Semper's shorter publications and unpublished lectures, does not often occur in Der Stil, where most of the time the author is quite specific as to what is so great about Greek art—and in what ways it has remained inferior to earlier, or was surpassed by later products of human civilization.

What this suggests is that confessions of faith like the one just quoted serve a polemical end. To subscribe to the alleged perfection of Greek art can be seen as, among other things, a way to give more momentum to a re-interpretation of its nature as endorsed by the author. Whoever shares this adoration of Greek art, even if it is for altogether different reasons, thus cannot simply ignore Semper's views. And so even Herrmann's fears that it must affect Semper's ability to objectively assess the cultural achievements of other periods may not have come true, after all—with one notable exception, already hinted at, which has to do with painting the exterior of stone buildings.

8.9.2 External Coloration

Such practice, for sure, is not recommended in so many words anywhere in Der Stil, but the way Greek temples are praised for it (see § 9.4 below) makes it hard to see why underlying principles should not more universally be observed. The problem surfaces (and is suppressed) already in the Preliminary Remarks, and lingers on in The Four Elements, from where it found its way undamaged to Der Stil. A little excursion into these earlier writings may help clarify this. The Preliminary Remarks open with a reassuring statement that the author does not intend:

PR [215] .. to persuade his contemporaries to paint all their buildings at a stroke in the manner of the ancient temples of Athens and Sicily.

They end with an endorsement of its application in restoration of medieval churches, and with an admonition not, if the results of recent experiments in polychrome architecture were disappointing. "to throw the baby out with
the bathwater." They fail to give the least bit of an indication, though, what contemporary applications would make sense. It should in this context be noted that, unlike France or England, Germany had a long-standing tradition of exterior painting as applied to plastered brick buildings, often in (by foreign standards) exuberant colors—and that in none of his writings on polychrome architecture Semper ever refers to this. The tradition peaked in seventeenth-century Baroque, certainly not Semper's favorite style, if only for the Counter-Reformative zeal it stood for—as opposed to the life, freedom, and democracy he saw embodied in Greek polychromy.

Earlier in the Preliminary Remarks the Italian Renaissance is criticized for abandoning external coloration. The Romans at this point are not yet held responsible. The Colosseum, we are told, was painted all over in red, and so was, in different colors, Trajan's column. Semper's first building, a private museum for Mr. Donner in Altona, which he designed and supervised that same year (1834), in perfect accordance with all this was an experiment in external, painted polychromy, based on classical precedent. It would—if we discount a floating laundromat in Zürich of the 1860s—remain his only effort in that vein. Nor did he ever complete the larger publication on Greek, Roman, and medieval polychromy to which the Preliminary Remarks owe their name. In The Four Elements he explains:

FE.I [5] Even more than the criticism of scholars and experts I feared the stupidity of enthusiasts. Indeed, in Germany the first experiments in polychromy were not encouraging to a further pursuit of the undertaking, and I began to doubt its timeliness. Such a horror stirred in me that I have since given up every effort to apply antique polychromy, and in my decoration, apart from using colored materials where the circumstances permit, I have followed the traditions of the early Italian school as that which best corresponds to the viewpoint of modern painting.

To which in a footnote it is added:

The different systems of antique polychromy each had their followers in practice. Here we saw a rather pale marzipan style professing to be Greek, there a style of a color as red as blood likewise pretending to be Greek.

And which is followed by further mystifications, like:

FE.I [7-8] On the barbarian monuments everything was comprehensible; there the harmony was achieved by fusing the dependent parts into the idea of the whole. Even now they are intelligible in their polychrome appearance. With the Greeks, however, this harmony could come about only through a free and circumscribed working together of elements
of equal value, through a democracy of the arts. Does anybody have the key to it?

Apparently not. The key is lost, and so, instead of formulating rules that should guide the application of color in architecture, Semper leaves the Greek paradigm on the ideal side for what it is, and on a practical level sides with the Renaissance. As it is put toward the end of the same essay:

[99] Antique polychromy lost its historical basis once that, already with the Romans, the wall's material and construction received their higher artistic validation. No longer were material and construction subordinate features hidden behind a partition wall [Scheerwand], merely serving; they began to create form, or at least influence it, a right the roof had already long enjoyed from the inception of the arts.

This suggests that, no matter how regrettably, the course of events cannot be reversed, so we will have to put up with what, through the Romans, the Renaissance has left behind. Observe in passing how the end of classical polychromy is now located in Roman times, that is, some 1500 years earlier than it was in the Preliminary Remarks. The contention that the Colosseum was painted all over in red nonetheless will be repeated in Der Stil [DS.82, p. 457]. Apparently Semper was not the kind of man easily to abandon a point of view he once had made his own.

All the same, the other side of the matter is that in Der Stil, for as much as an aesthetic justification of Greek polychromy is presented at all, it remains thin and looks like an ad hoc construction, whereas Renaissance or Roman ways of treating exterior walls or porticos fit in perfectly well with architectural aesthetics as expounded in the main body of the text.

But, to return to The Four Elements, the general conclusion just quoted is followed by five more practical recommendations, of which the most specific is the fifth, which states that ironwork, "which looks more perfect the thinner it is," better be painted in black, bronze, or gilding than in bright colors. In the other four a reader is informed that a country's climate and customs must be taken into account, that painting should fit a building's character, that a wall (with a few exceptions, where total illusionism is acceptable) should retain its character of spatial enclosure, while on the other hand painting must be adopted on its own terms, that is, with all the technical perfection it has achieved these days. More significant than all that is a final suggestion which states:

[102] A large field of exterior polychrome effects remains open to us in the use of differently colored materials, whose artistic development does not encroach upon our traditions, and which, as indicated, perfectly corresponds to the present state of technology--
provided that the selection of decorative forms and colors is not, as with the Assyrians, determined by an architectural element foreign to the wall, but by construction and material as they present themselves.

What this implies is that, for the exterior treatment of all architecture except that of the Greeks of old constructive polychromy is endorsed instead of painted wood or stone. Such, as we shall see (§ 9.4), is the predominant point of view in Der Stil as well. And so what happened is that, shortly after publication of the Preliminary Remarks, Semper already started to back out from the whole idea of exterior coloration through paint of buildings executed in stone or brick. In retrospect it seems mostly historic coincidence that his involvement in the wider issue of the nature of Greek art and architecture started with the polychromy debate--just like it was coincidence that, in the 1970s and early 1980s, renewed interest in Semper from the United States followed approximately the same route.

8.9.3 Material and Idea

This indirectly leads to another aspect of Semper's thought that has given rise to widely differing interpretations: was he a materialist, or an idealist, or something in between--and if so, in what sense? More in particular, the following questions are involved: (a) if, or in what sense, architecture should express ideas, (b) if it should also express its own material reality, or at most indirectly, or not at all, and (c) if Semper's architectural aesthetics are based on a philosophy of art that stays within the tradition of German idealism, and, if so, what variety of it. Let us consider these three questions in approximately that order. A first clue to some of them is contained in the following section of the Prolegomena:

**DS.XV-XVI** They [the 'materialists'] in general are to be blamed for having fettered the idea too much to the material, for falsely holding that the store of architectural forms has been determined solely by structural and material conditions, and that its further development likewise can only come from these. The material rather is subservient to the idea, and by no means alone responsible for how the idea physically enters the world of appearances. Form, the idea visualized, must not contradict the material it is made of, but that the material as such becomes an additional factor in the artistic appearance is not quite necessary.

Two things are clear from these few lines: the author does not want to be categorized as a materialist, and architecture must express ideas, somehow. As yet unclear is what ideas it should render, or at what point form starts to contradict material. Like truth of statements hinges on correct application
of the conventions of a language, in this case too it is very much a matter of convention what counts as 'contradictory,' and what can pass for consistent. But let us focus on the first question: what ideas? There is no straightforward answer in Der Stil to that, but piecing together half a dozen partial ones results in at least some idea of what the author must have had in mind.

Not held in high esteem, as indicated (§ 8.7.2), are ideas conferred by 'Tendenzsymbolik.' Highly appreciated, on the other hand, are 'primordial ideas' of enclosure, covering, support, and so on, as contained in the primeval types [Urtypen] or motives of all architecture--the mound, the wall, the hearth, and the roof--and as symbolically represented in conventional decoration (see § 8.7.2 above, or § 9.3 below). The same holds for ideas of nature in its inner workings, as mentioned in §§ 8.4.2 and 8.7.3. To these can be added as a third ideas of a festive event, commemorated in monumental architecture, of which we shall come to speak in § 9.3.

Slightly ambivalent is Semper in regard to a fourth: ideas in the sense of the mere thought that has gone into the making of a work of art. The notion of 'making a virtue out of a necessity,' which will likewise be discussed in § 9.3, appears to imply a positive appreciation of it, but it is never more explicitly endorsed. Quitzsch in his dissertation of 1962 sees this as proof of a materialistic, mechanistic philosophy of art and life, when he notes that in Semper's thought:

The categories of beauty are hardly more than a continuation and mechanical reflection of the lawfulness of nature. The active side of it that shapes things, the active role of man when he applies in art these proportions, derived from form in nature, is thus pushed back. The categories of beauty receive a real, material basis, but their conditions are essentially only mechanically derived from the lawfulness of nature. The final cause behind these categories is then located in the quite mystically expounded workings of forces in nature. As a result the major aspects [Momente] of beauty eventually have their origin only in laws of nature, and the artist must design in accordance with these laws. This mechanical consequence contradicts the whole philosophy of Hegel101.

There is, as will be pointed out later in this paragraph, little in Der Stil that actually supports this mechanistic interpretation. It takes a certain amount of Hegelian (or, for that matter, Marxist) bias to read it into it. So much, however, is true, that in Semper's view a work of art should transcend the visible imprint of the hands and mind of its maker. For precisely that is what is meant when a work of art is praised as looking like a necessity of nature. As long as this is not attained, it is bound to look somewhat contrived and artificial. As it is put in Science, Industry, and Art in regard to certain objects in the Pugin Room at the Grand Exhibition:
SLV [55] Those that adorned the main avenues of the building, such as the specimens of Gothic architecture and church models in the same style, showed careful study and great virtuosity in adopting the style yet lacked that something that eludes definition and makes us forget the effort expended on a thing—sometimes even turns its imperfections into a characteristic charm.

A fundamental difference between Hegel and his followers, like Marx, on one side, and Schiller, Semper, and whatever lies in between these two on the other, is that while to the latter man is most truly man when he plays, the former tend to see man that way most typically when he works. That the rift between the two camps was a deep and fundamental one speaks, moreover, from the way Hegelian idealism has, from the late-nineteenth century up to Quitsch in 1961, served as a driving force behind Semper's reputation as a materialist. An opposite point of view, that is, of Semper as a man who wanted the material basis of architecture masked, concealed, denied, evaporated, and forgotten, in order to enhance either the symbolism, the sensuousness, or the mere play in light of its forms and colors, has been endorsed by those who approached his writings as primarily a German extension to a predominantly French debate on classical polychromy—an approach that has been popular of late especially in the United States. Following a suggestion by David Van Zanten (1977), who as regards the concepts of 'Stoffwechsel' and 'Bekleidung' as expounded in Der Stil claimed that "The whole theory was the logical extension of his effort to solve the problem of polychromy, to understand the meaning of the apparent contradiction between the forms and the polychromy of the ancient Greek temples," Mallgrave, although aware of a certain discontinuity between the Preliminary Remarks and Semper's writings of the 1850s and 60s, notes.

For Semper, the wall and (by spatial extension) architecture gain their essential artistic meaning through the denial of their material basis. While such a conception was quite opposed to the materialist tendencies of the mid-nineteenth century (in particular, to the stress on material honesty by A.W. Pugin, John Ruskin, and Eugène Emmanuel Viollet-le-Duc), it did not stand in fundamental opposition to the tradition of German idealism. Architecturally, Semper's camouflage of reality recalls even more the rationalist theory of the late eighteenth century, in particular, Quatremère de Quincy's 'agréable fiction, ce masque ingénieux,' by which Greek architecture was construed as an elocutionary play on its trabeated timber origin. In Semper's theory, however, the fiction is proposed in a different way; the painted marble temple does not imitate the logic of its timber prototype, but denies its material basis altogether. In effect, the material disappears behind the radiant polychrome dressing and becomes pure form.
This view—of the immaterial Semper, so to say—can be backed up by half a dozen quotes in which Semper appears to say precisely that. For reasons that will be expounded in more detail below (§§ 9.3 and 9.4) I nonetheless hold it is untenable. Thus, for one thing, it is stated as an aesthetic principle, exemplified on these same Greek temples, that in its shape and color the dressing should refer to the material of the dressed\textsuperscript{107}. Accordingly, for most parts of these temples an evolution can be traced of how, without giving up all vestiges of earlier types, they increasingly came to look like truly stone parts (Fig. 23). And, for another, there is the mere number of pages in Der Stil devoted to the proper relationship of material to form. Besides, Mallgrave's account as quoted is inaccurate at a few more points. Thus Semper points out that most likely there was no wooden prototype to the marble Greek temple as a whole, but that the latter's roof and colonnade separately were each based on some.

In Herrmann's view, the reason why so much attention is given to this relationship is one of art historical method in the first place:

The reason that he [Semper] considered material and function to have this overriding importance lay in the task that he had set himself: to trace the way back to the archetypes and show that the primitive makers of the whole range of artifacts had instinctively followed principles identical with those that were in time established for architecture. It was a purely empirical approach; he did not intend to expound on art theory. When he did deal with art in general, however, it is obvious that he was aware of the important impact that factors other than materialistic ones had on artists and their creation\textsuperscript{108}.

This too is a questionable point of view, most of all for the empiricism which, as I will try to demonstrate, in this form is Herrmann's rather than Semper's\textsuperscript{109}. But at least Herrmann [p. 149] acknowledges that "The material employed, its properties, and its negative or positive effect on form and shape were of decisive importance for Semper." This he marks as a major difference with the archaeologist Bötticher, to whom:

.. it mattered only that the function was clearly expressed, and it was therefore of no consequence whether the part "was made out of silk, wool, hemp, raffia, skins, or any other stuff\textsuperscript{110}."

This and related issues will be more extensively reviewed in § 9.4. For now, let us turn to the third question as mentioned, the one about Semper's relationship to German idealism in general. As indicated (§ 8.5), Semper favored an 'idealist' education, but we ought to look more closely at the context this is stated in. It says:
DS.X During times when nations endorse the idea of artistic education (a point of view our philosophers consider obsolete), their actual education is idealist. Right now it is precisely the opposite, that is, realistic. Science and mathematics now dominate the scene.

The author leaves it open who in particular are referred to as 'our philosophers,' but let it be noted that the remark fits Hegel's thought quite accurately, so it is most likely in that direction that we must look. Semper's point apparently is that the idealism of these 'our philosophers' is not the true idealism. That too must be the purport of the following lines:

DS.XIX The philosopher of art is simply concerned with solving his problem, which has nothing in common with that of the artist, "to whom the phenomenal world is the beginning and the end of his activities; whereas to the aesthetician the idea is the first thing and the last, the germ and seed of everything, the fertile force to which all creation, including beauty, owes its existence."  

Although architecture is concerned with expressing ideas, aestheticians of a philosophical breed in Semper's view have no idea what kind of ideas are involved. Similarly in a footnote to § 62 [p. 218] the author lashes out at "the symbolists or the idealists, with whose dangerous doctrines Rumohr ... for good reason took issue in his writings .." Nonetheless it is hard to see in what intellectual tradition Der Stil should be placed other than that of, in a broad sense, German idealism. It is not so much the nineteenth-century idealism of Hegel, Fichte, or Schelling, though, that the author of Der Stil had most affinity with, but rather the late eighteenth century works of Kant and Schiller. Their impact is evident in virtually all of Semper's statements touching on philosophy of art. A first indication is in the aforementioned natural analogy. As it was stated (see § 8.4.2):

DS.XXXIII These factors, where they do not emanate from the beautiful object itself, still must be reflected in it, condition its particular configuration. Moreover, these factors must arise from and be consistent with the law of nature, for although art only has to deal with form and appearance [Schein], not with the essence of things, it still cannot create its form in any other way than following what it learns from external nature, be it only by complying with the general law which prevails in all domains of nature, appearing undeveloped here and elsewhere more matured.

This, if carefully read, gives no support to a mechanistic universe as attributed to Semper by Quitzsch. Art, instead of imitating nature, should try to emulate it by way of the suggestion of an inner organizing principle, analogous to
those that make a tree grow, a rock stand, or an animal move around. In other words, it is not so much a real idea as the suggestion of it which art is supposed to express—but as that inevitably involves some thought, some real idea, of course, will be expressed in it as well. Even so, a suggestion of nature in its inner workings as rendered in a work of art cannot be a very specific idea. Rather it is something in the spirit of Kant's 'purposiveness without a purpose', or his 'aesthetic idea,' defined as "that representation of the imagination which occasions much thought, without however any definite thought, i.e. any concept, being adequate to it." For details see § 9.2 below.

8.9.4 A Style of the Nineteenth Century

A fundamental ambiguity in Der Stil, last but not least, is whether or not the book should be read as a guide to the invention of a new style. Half of the problem lies in the aforementioned (§ 8.7.1) double meaning of the word 'style,' and can be put as follows: provided that the book will serve as a guide to inventing new forms, new solutions to problems, old and new, in architectural design, can we expect these to initiate a new style—in the sense that they will set a trend, get adopted as a new set of design conventions? The other half is whether the book's actual thrust is at inventing new forms in the first place, or rather at a more sensitive application of traditional ones.

Now it might be objected that none of the above is actually the author's problem. If to a few readers the book will serve as inspiration for the invention of superior new forms, great. If to others it turns out useful within a more traditional context, fine. If superior new solutions get no wide following, because everybody wants to be original and start from scratch, or because fashion is more powerful than reason and good taste, who is to blame? All that is beyond an author's reach. If his book is of use in illuminating the problems at hand, in pointing out what options a designer can choose from and what pitfalls he must avoid, what more can an author ask for? Liberal and, at the same time, cynical as he is, Semper often displays this kind of attitude to his own works.

Still that may not appease all of his critics. A book that so emphatically carries 'style' in its title, they are sure to object, ought to be more specific about the nature of current stylistic dilemmas and a possible way-out. Of this too Semper seems aware, and even though he does not altogether counter it in Der Stil, he does so in earlier and later publications. This he does in a way which, as it leaves many options unexplored, may not convince everybody, but at least has the virtues of being constant and consistent.

What does the answer consist of? If once again we start at the Prolegomena, what we see first is an aggressive rejection [DS.XV-XXI] of every new direction in architecture that rejects tradition as a basis for further development. This holds as much for the kind of historicism which results
in mere copying of historic prototypes as it does for a materialist approach that attempts to derive new forms from function (in a strict sense), material, and technology of production alone, turning its back on historic precedence. For the sake of convenience, those who endorse naturalist decoration are put in one class with the materialists. Other varieties of naturalism are not considered. In the same section the author takes issue with 'purists, shematists, and futurists,' which refers to a way of thinking about architecture rather than to a specific trend in it. So much, however, is clear from what the author has to say on this intellectual trend, that symbolism and a passion to endow built forms with deeper meaning are not considered a healthy way-out either.

In many other places (not so much in Der Stil) contemporary architecture is denounced for a lack of ideas, a lack of restraint, or both. This involves such a wide range of wholly different buildings that it is hard to decide from this alone where the author stands. The general strategy endorsed in Der Stil is to stay within some tradition, at least for architectural detailing. A better understanding of the roots and principles of the latter will increase flexibility while preserving integrity in its application. Freedom in functional layout can thus go along with a sophisticated appearance. As long as we stay on this track and keep the proper ends in sight, it is not altogether unthinkable that the accomplishment of classical Greece, or of the Italian Renaissance—to forge something convincingly new out of a wide variety of older formal themes—will be emulated. Meanwhile the author is aware that conditions at present are unfavorable to a gradual development of style:

DS.XIII The present has neither time nor leisure to immerse itself in the benefits almost enforced upon it, while such is absolutely necessary for an artistic mastery of these gifts. Consumption as well as invention are handed over to practice and industrial speculation, for these to mediate between them and exploit them as they please, long before a proper style gets a chance to establish itself through a thousand years of general usage. It takes a far greater artistic feeling than is usually found among our industrialists to chance upon the right artistic form for everything new and, without the benefit of time, to strike that mark by which the free work of man appears as a necessity of nature and becomes the commonly understood, formal expression of an idea.

Observe how growth of style is dealt with as an evolutionary process. Doubts in regard to that creep in already in the second volume, when it is noted

DS.169 [379n] History abounds in examples that prove how the founders of a new socio-political order were always intent on bestowing on the latter a consciously planned architectonic expression. One often errs in the assumption of a slow, so-called historical development of a new form. Nonetheless, such a new form will always turn out to be
restoratively combined and invoked from older ones, as a 'symbolon'\textsuperscript{115} which conceives in a new sense what already exists.

The point recurs in the next paragraph [DS.170, p. 386] in regard to Doric, but it is not until six years later in \textit{On Architectural Styles} (1869) that the idea is fully worked out. Examples ranging from ancient China, Egypt, and Mesopotamia to late-Roman times, and even from the Counter-Reformation and seventeenth century France are reviewed to show how one repressive system after another found a way to immortalize its rule in a new type of monumental architecture. What this implies for modern times is stated at the very end:

\textbf{AS} [426] People reproach us architects for a lack of inventiveness--too harshly, since nowhere a new idea of universal historic importance, pursued with force and consciousness, announces itself. We are convinced that where such an idea would really break through, one or the other of our young colleagues would prove himself capable of endowing it with a suitable architectural dress.

Until that time comes, however, we must be content to make do as best we can with the old.

This almost word for word repeats a footnote at the end of \textit{The Four Elements of Architecture} (1851). It is a kind of baseline position to which the author always returns--to strike out again at his opponents, if need be. What it comes down to is that new ideas for architects to digest and translate into new forms must come from outside, from his clients or from society at large. After all, that is the way it has always been when a major stylistic change occurred.

For a number of reasons, this line of reasoning remains unsatisfactory. Why should ideas always come down from above, as designated, in the first place? Was not already Semper's era characterized by an unprecedented freedom for architects and their clients, provided the two parties understood each other well and worked together as a team? And was there not precisely in this freedom and the resulting pluralism a new idea to be expressed?

It is tempting to speculate on deeper grounds of Semper's defaitism. Was it because he lived at the wrong time and place? Because no client would come to him with a request for a skyscraper that like a frozen fountain would spring forth from the soil, and so maintain a strong presence among adjacent buildings, only slightly less high? Or for a truly American prairie-style house? Or was it his reportedly hypochondriac character that prevented him from seeing the sunny side of current confusion?

Interesting though it may be, we must, for now, abstain from this kind of speculation, and focus on reasons that are internal to Semper's theorizing. Of these at least two can be pointed out. First, that most kinds of new idea (materialist, naturalist, symbolist) that could lead away from historicism and yet were within the reach of an architect and his client, had already been ruled
out as inappropriate. Others, like cultivating national and regional styles within a framework of more universal principles of architectural design, are hardly discussed but probably rejected. And, as a second, that the author is too much focused on classical Greece and the Italian Renaissance to even think of a truly worthwhile stylistic renewal which would come about in an altogether different way.
9 'Der Stil:' Theory Reconstructed

9.1 Introduction

So far, little more was done than that we have tried to take Der Stil apart, identify the elements of its discourse, and arrange them in accordance with a model of architectural theory as outlined in Chapter 4. Moreover, a whole range of questions has been raised and for the moment left unanswered. Now we have come to a point where these loose ends ought to be reconnected into reconstructed theory. From the outset let it be noted how in three regards at the most the result can be superior to the original texts: in being more concise, more transparent, and more focused on architectural theory in a strict sense, excluding as much as possible what belongs to history of style. Those things alone, however, certainly make it worth the try.

The crucial element, as indicated (§ 5.1), in such reconstruction is a leading concept to which all or most of the collected elements relate as illustrations or specifications. A few candidates--the ones to which apparently in Der Stil this sort of status has already been assigned--have been reviewed in § 8.7. Of those, unfortunately, none would do, either because their scope was too restricted, or because they were too diffuse. A more promising candidate, as I will now submit, is a play concept of art as worked out in the late-eighteenth century by Kant and Schiller, and for some of its aspects, notably the more tragic ones, further popularized in the nineteenth by Schopenhauer.

As likewise indicated in § 5.1, I do not intend to be overly concerned with the question how such ideas may have reached the author of the text(s) under investigation. If the question nonetheless is raised, the honest answer is that I do not know. The reason is not just that I have been unable to do the kind of basic research pertaining to that, such as going into the archives to read letters, lecture notes, lists of books Semper owned, notes he made in the margin of them, accounts by others of their contacts with Semper, and so on. If that were all, I could, to some degree, have relied on the accounts of others, like Mallgrave, who recently did precisely that kind of research. However, Mallgrave's findings at this point were that there is no indication that Semper ever read Kant, Hegel, Schopenhauer, or even Schiller's philosophical essays--although he must have been familiar with the latter's dramas. Likewise in his writings Semper rarely mentions an eighteenth- or nineteenth-century philosopher by name. This situation is profoundly fascinating, because on the other hand these works, and Der Stil in particular, betray a profound understanding of major issues in philosophy of art, and even some very good intuitions regarding philosophy of science.
If we intend to be faithful to the methodology outlined in § 5.1, we should, meanwhile, not let ourselves be led astray by such questions, but investigate patterns of thought in texts, irrespective of biographical evidence, to begin with. At a later stage the latter may as yet be included—for confirmation of textual findings, or for additional suggestions as to how texts could be read—but in the beginning it better be kept at bay. Those texts, in Semper's case, and Der Stil in particular, point irresistibly in the direction of Schiller (and hence of Kant), mixed with a dash of Schopenhauer, whereas speculative idealist philosophy in the sense of Hegel, Fichte, or Schelling, is consistently dealt with contemptuously, and indeed remains foreign to Semper's thought.

If nonetheless, without drawing any definitive conclusions, we want to speculate how these ideas may have reached Semper, and why he was not more explicit about their source, one option is that most of it was common knowledge among artists and intellectuals of his time and therefore in no need of reference or explication. Such, for instance, is quite plausible when it comes to Schopenhauer, whose work in the mid- and late-nineteenth century was enormously popular among German artist-intellectuals, particularly in circles around Richard Wagner. So even if he did not actually read these works, Semper may have familiarized himself with them through discussions with friends. As beyond Schopenhauer lie Kant and Schiller, that at once accounts for another link—provided that link was not the older one. On the other hand, one might consider that through the negative forces of a fundamental disagreement with rationalist aesthetics in architecture and an equally strong intuitive dislike of philosophical aesthetics in the spirit of Hegel, plus more positive ones like his admiration for the writings of Quatremère de Quincy, Semper was almost inevitably driven in the direction of Kant and Schiller, and, thinking things over with all the cynicism, and all the brainpower he had at his command, finally made most of their philosophical outlook his own—without ever fully realizing his indebtedness. Frankly, I am increasingly inclined to think that way, but, as was said, we will have to leave those questions in peace, for now.

9.2 Play Theory as Derived from Kant and Schiller

9.2.1 Play Theory in General

As Wittgenstein has pointed out in *Philosophical Investigations* (1953), 'play' [Spiel] is among those words for which a core of 'essential' meaning, valid in every situation where the word is correctly used, is hard to identify. Most but not all play is for fun, most but not all has rules; some is about win or lose, some is not; in some play people act-as-though, preferably with an audience to watch them, but once again not in all—and so on, and so forth. If this is the case, there might be room for as many play concepts of art as there are
types of play--and indeed we will see how Schiller, elaborating on Kant's cautious beginnings, moves on in directions Kant could hardly have anticipated. On the other hand, it is legitimate to ask if Wittgenstein is not pushing his nominalist position too far. 'Play' [Spiel] for one thing always refers to an activity. If that cannot serve as a starting point to identify a universal core of meaning, what can? Moreover, play as an activity stands in opposition both to unstructured action and to work: to the first by being structured at all, to the second by being so around a goal that is internal to the action, a drive to keep the action going for its own sake, or to excel in it. That the activity may serve other ends besides does not detract from this characteristic. And so the range of possible play concepts of art might likewise be more limited than would follow from Wittgenstein's conception of play in general.

The issue is a fundamental one, because the same nominalism which in Wittgenstein finds an opponent to a unified concept of play [Spiel], today opposes all effort to arrive at a unified concept of art, or of the aesthetic experience (see Appendix 3). Which need not bother us in this reconstruction of Semper's aesthetics, but whoever might feel inclined to subscribe to ideas as encountered in the course of it, should be prepared for opposition from people with strong nominalist leanings.

If subsequently the issue is approached from a historic point of view, let it be noted that the mere idea of a significant element of play in most, if not all art has been a commonplace in philosophy of art at least since Plato's Republic. This playfulness, this childishness, as it were, was not, for sure, what Plato valued most in art--and so it remained peripheral to his ideas about the latter's place in the society of his dreams. Basically it was not until Kant's Critique of Judgment [Kritik der Urteilskraft, 1790] that 'play' [Spiel] received an honorable place at the heart of a major philosophical system. Shortly afterwards Kant's ideas were taken up and given new dimensions in Schiller's Letters on the Aesthetic Education of Man [Briefe über die ästhetische Erziehung des Menschen, 1793-95]. Both works remained influential in German speaking lands until at least the late-nineteenth century. Thus Nietzsche's The Birth of Tragedy from the Spirit of Music [Die Geburt der Tragödie aus dem Geiste der Musik], which came out in 1872 and is pervaded by a spirit similar to that of Der Stil, owes as much to Schiller as it does to Schopenhauer. By that time, that is in the late-nineteenth century, the mainstream in German philosophy of art, however, had embraced Hegelian idealism at the expense of its competitors, including play theory. Elsewhere a comparable play concept of art, possibly somewhat popularized by Johan Huizinga's widely read and admired Homo Ludens (1938), would gain significant ground only after World War II. This perfectly reflects Semper's tragedy as a theorist. Schiller, by the time Der Stil gained wide attention, was out, Hegel was in, and so even the very first among his commentators were to overlook this most important dimension of his work.
And so it is on Schiller that, in relation to Semper's conception of art as play we must focus in the first place, whereas for a proper understanding of Schiller, Kant's ideas on the issue should receive some attention as well. Basic elements in Schiller's conception as expounded in the *Briehe* are the following:

1. Following Kant, Schiller accepts a play of the cognitive faculties as the defining characteristic of the aesthetic experience. A unity of thinking and feeling is emphasized as further qualifying this experience. When and where this unity is attained it sets the mind and soul free to reflect their situation and make moral choices. The proper domain of the aesthetic experience is identified as that of illusion [Schein]. In that domain art as play marks out its own time and place, and vice versa.

2. Like Kant, Schiller opposes mimetic theory of art in all of its varieties: naturalist, idealist, or symbolist. Art should try to emulate nature, not imitate it. For similar reasons he takes issue with expressionist conceptions of art, and eventually comes to defend a highly formalist position, though in a more dynamic sense than of traditional classicism.

3. Relative to Kant there is a growing awareness of art as a social type of play, rooted in man's desire not only to be pleased, but also to please, which finds expression in such primeval phenomena as bodily adornment [Schmuck]. A voluntary submission to rules accordingly is an important precondition for good art. Schiller moreover appears to accept these rules as at least partly conventional (but at this point, unfortunately, he is not very explicit).

Semper, as we shall see, eventually in *Der Stil* came to endorse all of this, which in architectural theory was new, and thus meant a significant extension to the scope of Schiller's views. Nevertheless it took a while before Semper had reached that point. Thus only the third element—that of art as a social type of play, and of 'Schmuck' in particular—features eminently in the *Preliminary Remarks* (1834), whereas at that point Semper does not as yet oppose mimetic theory of art, and subscribes to a few rationalist ideas that are hard to reconcile with his later emphasis on illusion [Schein] as the proper domain of the aesthetic experience. All this will be reviewed in more detail below (§ 9.3). Because of the importance and complexity of the concepts involved, this will be preceded by a more detailed review of the ideas of Kant and Schiller—in order to show what precisely is involved in the characteristics of a play concept as mentioned, and what is the intimate connection between them.
9.2.2 Kant

Even though the label 'play theory of art' remains appropriate to all of them, it is a long way from Kant's initial speculations on the issue, via Schiller's elaboration and popularization of these ideas, to a matured concept of art as play as found in the works of Semper and Nietzsche. Kant, for one thing, appears not to have been profoundly interested in art. His basic paradigm of beauty was nature, not art. Art, as Carl Dahlhaus puts it, served as "...an organ of philosophy, a means to grope forward in the dark domain from which knowledge, the convergence of perceptibility, imagination, and reason, emerges." 

Kant’s primary concern was not the production of art, nor even criteria for judging artistic excellence, but the nature of judgments of taste and their decidability. What transcendental basis must be assumed for the perception of beauty, in nature as in art, considering the claims at universal validity which, as Kant presumed, are implied in the resulting value judgments? Such basis he found in the 'play at knowledge' of man's cognitive faculties when these are idling, so to say. For precisely that is the state he held the mind to be in when it enjoys beauty. Conversely, beauty was supposed to consist in the potential of a thing or scene to stir this kind of play in an observer's, listener's, or reader's mind. Meanwhile this, though the basic one, is not the only sense in which the word 'Spiel' is used. In § 13 it is presented as the temporal variety of the 'form of purposiveness' that is perceived in art, as opposed to its spatial variety which is called 'Gestalt'—a word that sometimes is translated as 'figure,' sometimes not translated at all, but for which in this context 'shape' or (again) 'form' appears to be the best approximation. And, finally, in an attempt to mark the difference from handicraft, he might seem to refer to all art as some sort of play. A paragraph that lends itself to this interpretation is the following:

[43.3] Art also differs from handicraft; the first is called 'free,' the other may be called 'mercenary.' We regard the first as if it could only prove purposive as play, i.e. as occupation that is pleasant in itself. But the second is regarded as if it could only be compulsorily imposed upon one as work, i.e. as occupation which is unpleasant (a trouble) in itself and which is only attractive on account of its effect (e.g. the wage). 

Observe, though, that the analogon of play is here invoked only to discriminate between artistic and non-artistic activities. It is neither said nor implied that all artistic form should display the dynamics of play in order to be beautiful. A suggestion that this might nonetheless be Kant's idea is contained in the concept of 'purposiveness without a purpose,' which in § 10 is introduced as a quality inherent to all objects of beauty. The link of this to a play concept of art remains a vague one, though.
Equally vague and ambivalent is the *Critique of Judgment* when it comes to the difference between artistic and non-artistic play. So all there is about Kant's play concept of art so far is that 'play' stands for an activity, either mental or physical, that is pleasant and is free, and for those reasons practiced for its own sake. Even this freedom, however, is qualified when it comes to art. "Something compulsory" is called for "without which the spirit, which must be free in art and which alone inspires the work, would have no body and would evaporate altogether." Accuracy and wealth of language, prosody, and (in poetry) measure, are named as examples of such restricting forces—and it is concluded:

[43.3] It is not inexpedient, I say, to recall this, for many modern educators believe that the best way to produce a free art is to remove it from all constraint, and thus to change it from work into mere play.

What this suggests is that the concept of art as play was not so much Kant's own invention, as something which was in the air, and which, as a classicist choosing sides against eighteenth-century rococo and sentimentalism, he opposed rather than endorsed. Art in Kant's view has to comply with rules, but it is nature that, through genius, gives the rule to art [§§ 45–47]. Nowhere in all of the *Critique* such rules of art are linked to those of play, or of a game. Play in the context of Kant's aesthetics is a psychological mechanism in the first place. It may refer to physical activity, but even then this is emphatically free, an individual amusement rather than a social event. Art as play, it is noted, may be helpful in socializing individuals, but otherwise its social dimension is completely ignored. Accordingly, play [Spiel] is consistently held in opposition to what is serious or earnest [Ernst]—although it might be argued games and play (and a fortiori art as play) have a seriousness of their own.

All the while, Kant did a good deal more to pave the way for an encompassing play concept of art than just reintroducing the word 'play' in this connection. Such speaks, for instance, from the way he opposes naturalism and, more in general, mimetic theory of art. Art must try to emulate, not imitate nature, become a kind of nature on its own: "Nature is beautiful because it looks like art, and art can only be called beautiful if we are conscious of it as art while yet it looks like nature" [45]. Beauty in both depends on a potential to activate the cognitive faculties of the imagination and the understanding—in such a way that the imagination in its freedom still submits to the law given by the understanding. It does not rest on a particular cognitive concept being communicated from an artist to his audience. 'Aesthetic idea' is the expression used to describe what a work offers instead. It is introduced in connection with 'spirit'—in the sense in which we talk of 'a spirited conversation.' Spirit is described as the animating principle of the mind, the one that:
[49] .. puts the mental powers purposively into swing, i.e. into such play as maintains itself and strengthens the mental powers in their exercise.

To which it is added:

Now I maintain that this principle is no other than the faculty of presenting aesthetic ideas. And by an aesthetic idea I understand that representation of the imagination which occasions much thought, without however any definite thought, i.e. any concept, being adequate to it; it consequently cannot be completely compassed and made intelligible by language.

As such it stands in opposition to 'rational ideas,' considered as concepts to which no intuition (or representation of the imagination) can be adequate. With these ideas Kant had moved far from traditional mimetic theory of art in both its naturalist and idealist varieties. Let it be noted, though, that most of it remains compatible with British associationism as will be discussed in relation to Ruskin. Which is not altogether surprising if we consider that it was largely in an effort to define his position as regards these English developments, that Kant wrote his Critique of Judgment. And so, if Semper's thought is indeed as rooted in Kant and Schiller as I assume, this at once explains why in most of the positions he endorses Semper stands closer to Ruskin than to the Gothic and classicist varieties of rationalism they both oppose.

9.2.3 Schiller

Kant's ideas were to become extremely influential in the following decades. Almost immediately after the Critique of Judgment had come out, they were picked up by Johann Christoph Friedrich von Schiller (1759-1805), who in the years 1792-96, instead of writing dramas, devoted himself to philosophical issues related to art and criticism. This resulted in a number of essays, most important of which are the aforementioned 'Letters on the Aesthetic Education of Man.'

An indebtedness to Kant is frankly admitted when at the outset [1.3] it is stated "that it is mainly Kantian principles on which the following propositions will rest." But Schiller, for sure, is no slavish follower of Kant. Nor does he in this work argue against him, but, ignoring what he considers weak or inconsistent, takes over from the Critique of Judgment whatever seems most promising, and explores its consequences—for art, for education, and for humanity at large.

What made a difference, first of all, was that obviously Schiller had a profound interest in and knowledge of art. And so there is a shift in emphasis.
Kantian conceptions as regards the structure and limitations of human knowledge and perception are taken for granted, attention now is focused on the function of art in a humanist society as Schiller could only hope we were heading for—or would to some degree be able to maintain. What counts is the unity of thinking and feeling (and possibly by implication of thinking and acting) which can be perceived in man when he plays, and sets him free. This freedom may or may not be used for making the right intellectual and moral choices, but without play as the one and only way to bring it about, no moral choices can be made at all. And so, although like Kant Schiller is convinced true beauty does not rest on a particular cognitive concept being conveyed, he sees a major, be it more indirect moral function for art. Germany at the time made its first cautious steps toward a democratic order, and Schiller, as he explained in the first ten letters, felt not so sure the new order would hold out—unless a new mentality were to take hold of a majority of the people who together make up the state: a spirit of freedom and responsibility within the confines of voluntarily accepted laws. He hopes art will serve as a catalyst to bring about this change, and will sustain it once it is there.

Observe how in this case, even if play itself is not approached as a psychological mechanism in the first place (as it was with Kant), attention is focused on psychological mechanisms that it sets in motion and sustains. Human behavior in Schiller's conception is motivated by two opposite impulses: one pulling toward the material [Stofftrieb], another longing for form [Formtrieb]. The former, which is also referred to as 'Sachtrieb' or 'sinnliche Trieb,' is a longing for material existence, that is, for change, the latter aspires at order and intellectual control. Both drive away from freedom, one at subjection to the forces governing the material world, the other at the laws of a static order—moral, social, or intellectual. Both can be temporarily suspended when a third, the play-impulse [Spieltrieb], is activated. This one aims at freedom and brings the mind into a state where, free from material wants, it can reflect its existence and what order it likes best [§§ 12-14]. It is precisely in this state that the mind is open to the enjoyment of beauty, and conversely it is beauty more than anything else which brings the mind and soul into this state. As it is stated in the 15th letter:

[15.8] One will never be mistaken as long as one looks for a person's ideal of beauty on the same path as the one on which he satisfies his play instinct.

[15.9] For let it finally be said once and for all: man only plays when in the full sense of the word he is man, and he is only fully man when he plays.

The state of mind man is supposed to be in when he enjoys beauty is related to Kant's aesthetic experience, in which the cognitive faculties are idling, so
to say, while contemplating beautiful form and conjuring up from these so-called 'aesthetic ideas,' but there are major differences as well. For one thing, Schiller is aware that the demands an individual is to meet in order to arrive at a truly aesthetic experience in Kant's sense are hard to meet. Should he forget about all practical, emotional, or intellectual preoccupations of the moment, abstract from whatever practical use or whatever sensual quality the object of contemplation may have, as well as from all cognitive content? Greedy, lusty, and curious as they are, human beings are little inclined to do all that, but such, in Schiller's view, does not detract from the importance of Kant's aesthetic experience as an ideal:

[22.4] Because in reality no purely aesthetic impact is to be found (for man can never step outside all dependence on forces) the excellence of a work of art can only consist in its approximation of that ideal aesthetic purity ...

The power which enables works of art to captivate man even in his imperfect detachment from material life is the power of illusion [Schein]^{121}. Here lies a second major difference with Kant, in whose system this particular concept has no significant place. Apparently this emergence of 'Schein' as the proper domain of the aesthetic experience is related to the aforementioned shift from nature to art as the most typical aesthetic object. Moral as much as aesthetic value is assigned to it, when "the enjoyment of illusion, the inclination toward adornment and play" is marked as what distinguishes humanity from man in his animal state [26.3]. In a way such illusion, being a human accomplishment, is superior to the mere reality of things [26.4]. It is added, though, that this applies only to 'aesthetic,' not to 'logical' Schein—a distinction that roughly corresponds to the more familiar one between illusion and delusion:

[26.5] Only the former is play, as the latter is mere deceit. To let an appearance of the former kind stand for something never can hurt truth, as one is never at risk to let the one take the other's place, which after all is the only way truth can be damaged. To despise it means to despise all beautiful art, the essence of which is illusion.

There is an awareness of how play of the aesthetic variety marks off its own time and, in a sense, its own place, when it is noted:

[22.1] Any other situation we may get involved in points backwards to a previous one, and needs a next one for its resolution. Only the aesthetic one is a whole on its own, as it includes all conditions of its origin and its perpetuation. Only here we feel torn away from time; and our humanity expresses itself with a purity and integrity as if it had suffered no damage from the effect of outer forces.
[22.5] The heart of an observer or listener must remain completely free and undamaged, clean and complete it must step forward from the artist's magic ring, like from the hands of the Creator.

This aspect of play (which counts as one of its basic characteristics in, for instance, Huizinga's *Homo Ludens*) is not, however, more systematically explored.

Where Schiller stays closer to Kant is in the second set of characteristics as mentioned, that is, in a wholesale rejection of mimetic theory of art, including its symbolist and expressionist varieties, and in a corresponding endorsement of formalist positions. Communication of specific messages is not acknowledged as a legitimate function of art. Instead art's function is described in terms of an 'infinite emptiness' [unendliche Leere] in the listener's or observer's mind being replaced by an 'empty infinity' [leere Unendlichkeit]. The difference (literally, of course, there is none) appears to be that, while the former is a passive state, in the latter the imagination has been activated [§ 19]. Those who hold beauty to be "indifferent regarding knowledge and inclination" have a point:

[21.4] ... for beauty has no result whatsoever either for the brain or for the will, it does not complete a single intellectual or moral task, does not help us perform a single duty, and is, in a word, equally unfit to establish character as it is to illuminate the head. And so one's personal value, or dignity, for as much as this may depend on oneself alone, remains fully undefined by aesthetic culture, and nothing more has been achieved than that from now on a person has, from the side of nature, been enabled to make out of himself whatever he wants--that the freedom to be what he wants to be has been completely returned to him.

Whence it is concluded:

[21.6] So it is not just poetically allowed, but also philosophically right to call beauty our second creator. For even though she only makes possible our humanity, and otherwise leaves it to our free will to what extent we actually want to realize it, is this not something she has in common with our original creator, nature, who likewise endowed us with nothing but the potential to be human, but left the use of this potential at the disposal of our free will?

Which is another way of (by implication) stating that art should try to emulate nature. As regards expressionist art, or art which is out to teach us moral lessons, it is noted:
[22.5] A beautiful art of passion does exist, but a beautiful passionate art is a contradiction, because the inevitable result of beauty is freedom from passions. Equally contradictory is the concept of a beautiful teaching (didactic) or improving (moral) art, for nothing is more at odds with the concept of beauty than to push the soul in a particular direction [dem Gemüt eine bestimmte Tendenz zu geben].

Observe in passing how perfectly this section exemplifies how the word 'Tendenz,' as used by Semper in such phrases as 'Tendenzsymbolik' (see §§ 8.7.2 and 8.9.3) is to be understood. More in general, let it be noted how favoring art which, instead of communicating specific cognitive contents, brings about an ongoing activity of the imagination, is related to a Kantian relativism regarding human knowledge:

[23.4] Truth is not something which, like reality or sensorial existence, can be received from outside. It is something the brainpower produces autonomously and in its freedom..

To which in the next letter it is added that, whereas human reason instinctively insists on an absolute connection and an unconditional basis to account for the phenomena surrounding man, such will always remain beyond our reach:

[24.7] .. for reason always stays within the conditional, and forever keeps on asking without ever arriving at anything final.

It is the same epistemology which stands behind the formalist positions endorsed throughout this work. Early on it is noted how noble form survives ignoble content:

[9.4] The Roman of the first century had long since bent his knees for his emperor when the statues were still standing upright. The temples remained sacred to the eye when the gods had long since become an object of ridicule, and the outrage of a Nero and a Commodus was shamed by the noble style of the building that sheltered it. Mankind has lost its dignity, but art has saved it, and conserved in meaningful stones. Truth lives on in deception, and from the copy the original will be restored.

Towards the end this is amplified in the famous dictum that form should destroy content:

[22.5] In a truly beautiful work of art content should do nothing, form everything. For only through form the whole of man is affected, through content single forces only. So content, no matter how lofty and
encompassing, always curtails a mind, and true aesthetic freedom is
to be expected only from form. As a result, the actual master's trick
in art consists in this *that subject matter is destroyed by form* \(^{122}\);

A fascinating consequence of the ideas reviewed so far is that, the higher the
level of performance, be it in music, in literature, or in one of the visual arts,
the more it affects a human mind and soul in precisely the same way as any
other art [22.4]. In other words, it is not just architecture which should try
to emulate music, painting, or poetry, but likewise the other way around.
This, like so much in the *Briefe*, was definitely an original point of view.

As regards the social dimension of art as play--the third set of characteristics--it
was stated above that Schiller's ideas were more developed than Kant's, but
that he remained vague and ambivalent as to the natural versus the conventional
character of rules in art. Thus when it is noted how certain people:

\[18.4\] ... don't realize that the freedom, in which for good reason they
locate the essence of beauty, is no lawlessness, but harmony of laws,
no arbitrariness, but highest inner necessity;

only the importance of rules as such is acknowledged. Whether such rules
should be conventional, or, as Kant would have it, through genius derived
from nature, is left open, here as elsewhere in the same text. An increased
attention to this social dimension, nonetheless, speaks from passages in the
final letter [27], on bodily adornment [Schmuck]--of which we will come to
speak below in relation to highly similar observations as made by Semper
in the *Preliminary Remarks*.

If after this survey of main characteristics of Schiller's play concept of art
we should pause to see how complete and consistent his system actually is,
a few more imperfections turn up. Thus the distinction as made in the 15th
letter between artistic and non-artistic play remains about as problematic as
it is with Kant\(^{123}\)--but as this seems not profoundly relevant to an interpretation
of *Der Stil*, we better take that much for granted.

9.3 Masking, Dressing, and the Imperfections of Life

9.3.1 Semper on Art as Play

As indicated (§ 9.2.1) Semper's endorsement of a full-fledged play concept
of art in *Der Stil* is the outcome of a gradual evolution in his thought which
can be traced all the way from the *Preliminary Remarks* (1834) to his magnum
opus of 1861/63. Significantly, Semper first picks it up at the point of Schiller's
concluding letter: with a positive appreciation of 'Schmuck' as the beginning of all visual art—and as still of its essence in times of higher civilization:

PR  [223] Collectively the arts were born when man began to adorn the first raw shelters set up against the weather and hostile pursuit. This occurred very early, since play and adornment were among the first needs of early mankind. They varnished the unsightly surface of the raw material out of which the shelter was made. Their childlike imagination took delight in bright colors and motley combinations, as nature around procures them. At once one also thought of utility, and saw that a coating lends greater durability to wood, clay, or even stone. At the same time the first religious concepts evolved. People inhabited the earth with purely human-like gods. A human habitation befitted them, only one more noble, beautiful and exalted. The richest adornment was reserved for them.

When it comes to the ceremonial origin of decorative motives—and hence of art as play—Semper in the same essay clearly moves beyond Schiller. It is noted:

PR  [241] Plain constructions were consecrated for an ennobling purpose, for worship, for example. Decorations of a certain religious import (not always a clearly indicated one) were appropriately attached to the outside walls and interiors of the sanctuaries: suspended flowers, festoons, branches, sacrificial implements, weapons, the remains of sacrificial victims, and other mystical signs. With worship becoming more elaborate, and concomitant with increasing artistic sensitivity they became fixed as typical symbols. No longer were they simply fastened to the walls in their natural state, according to local conditions and their destination; they were figuratively represented and thereby incorporated in the monuments themselves as a characteristic part.

However, those ideas apparently are French, not German in origin. They echo, for instance, ideas expressed in the 'envois' Henri Labrouste (1801-75) sent home to Paris during his stay as a Grand Prix student in Rome (1824-29)\textsuperscript{124}. This being the case, one might wonder if the same does not hold for what is in the first quote—but watch the differences! Thus there is a suggestion that man's drive to adorn himself and his surrounding world gave rise to religious concepts, rather than the other way around, or that at best they arose simultaneously. In the second the argument runs in the opposite direction. The contrast becomes even clearer when shortly after our first quote it is submitted:
Architecture, in such a way marked as the sum total of all arts, in the stages of its development (however much this assertion may contradict traditional viewpoints) in no way passed from simplicity to riches and from riches to exuberance. Rather, it was very early, from its childhood, at all simplicity of its basic forms highly decorated and glittering. This glittering chaos sorted itself out. Order and style emerged.

In theory of architecture this was absolutely new. It is, as noted by Mallgrave, a direct challenge to Winckelmann's stylistic scheme, in which art passes from simplicity to riches to the superfluous. There is, for what I know, nothing like it in French theory of art, but it stands remarkably close to Schiller's concluding letter, where it says:

[27.5] Soon he [primitive man] is no longer satisfied with this, that things please him; he himself wants to please, at first only by what is his, eventually by what he is. What he owns, what he produces, should no longer show the marks of servitude, the anxious form of its function only. In addition to the service it is there for, it should at once reflect the spirited reason that conceived it, the loving hand by which it was executed, the cheerful and free mind that selected it and put it in its place. Now the old German picks out for himself more shining furs, more wonderful antlers, more gracious drinking cups, and the Caledonian chooses the nicest shells for his feasts. Even the arms no longer are to be mere objects of terror, but of pleasure as well, and the artistic sword belt wants to attract as much attention as the sabre's deadly cutting edge. Not satisfied to bring in an aesthetic abundance to the necessary, the freer play instinct at last completely tears itself loose from the chains of indigence, and beauty for its own sake becomes an object of his striving. He adorns himself. Free delight is included in the number of his wants, and the unnecessary soon is the best part of his pleasures.

But whatever its origin, it is a conception Semper will hold on to for the rest of his life. Thus it is a constant theme in Der Stil, where with sardonic pleasure and a mass of evidence Semper uses it to bring down established wisdom as regards the evolution of style.

Meanwhile that is about all there is about a Schillerian or Kantian play concept of art in the Preliminary Remarks. The work shares none of the other characteristics as mentioned, neither the anti-mimetic and pro-formalist positions, nor an insistence on 'Schein,' or on a freewheeling activity of the cognitive faculties. Such speaks, for instance, from a defense of naturalistically painted surfaces as opposed to mosaics, painted instead of white marble statues, and from a certain ambivalence regarding architectural symbolism. In the following lines there is once more a suggestion that man's impulse to ornament
his dwellings preceded and gave birth to a whole range of gods and goddesses—and of silent approval of such practice:

PR [226] The riches of primitive works of art is explained by the need of all youthful to endow their crude forms with a whole range of decorative accessories. Obscure religious conceptions early on attributed to them a secret meaning. Ethnology tells us about it. One only need to recall how Homer and Hesiod describe sumptuous dwellings, weapons, and implements. The older the monuments of Nubia and Egypt, the more they are overloaded with hieroglyphics and paintings.

In a footnote to the same section, however, the author (more conventionally) endorses religious inspiration and meaning in architecture:

PR [226n] Religion was in all times the wet nurse of the arts. They have aged with her. The stages of their lives thus can be measured by the symptoms of old age in the religious concepts and forms. The history of art has passed through mysticism, symbolism, and allegory. In its last period of degeneration it has lost all meaning and chose refined sensuousness as its general subject. The presentation of beauty should never be the purpose of a work of art. Beauty is a necessary attribute of a work of art, as extension is to bodies. It has occurred to no one to set up a colossus merely to represent the pure concept of size.

There is something fascinating in especially these last few lines. A rejection of representation of beauty as the final objective of art sounds like a rejection of mimetic theory in general—but that is not what Semper is after, or at least not at this stage. Instead he emphasizes that art should be meaningful. Thus when a little later it is stated:

PR [242] All the traditional and frequently repeated ornaments of the Egyptians, Greeks, and perhaps also of other nations probably had a symbolic meaning originally and the later artist was in no way freely allowed to follow his mood or play of imagination. He could simplify, modify, or enrich them, but he could not violate their type ...

this must be taken literally, as speaks from a footnote to the next page, where in regard to Doric and Corinthian capitals it is stated that:

PR [243n] Whoever imitates these forms and does not paint on the additional leaf tracings or even considers their origin must naturally produce something cold and disagreeable.

Or from a choice of words like the following [italics mine]:

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Sculpture, proud of its own resources, attained unsurpassed artistic skill under the Rhodian masters, yet lost its coherence, deeper meaning, and accord.

And so, in spite of incidental lip-service to the predominantly German idea that works of art should look 'like a necessity of nature', the spirit of French rationalism (in the sense of, let us say, the circle around Henri Labrouste) is what prevails. In this the Preliminary Remarks, on the other hand, stand alone among Semper's published writings. Everything he wrote during the 1850s and early 60s is more German in its outlook. Such speaks convincingly from the following section of the Prolegomena in the first volume of Der Stil, which for various reasons I want to quote at length:

What we denote by the terms 'sense of beauty,' 'delight in beauty,' 'enjoyment of art,' 'artistic instinct,' and so on, is in a more exalted realm analogous to those instincts, pleasures, and gratifications that condition ordinary tellurian existence, and that, all things considered, may be traced to pain and its momentary removal, numbing, or forgetting. Just as the fang of hunger impels the merely physical individual by its removal to extend his life, as frost and discomfort force him to seek shelter, as these and other needs make him respond with every kind of invention, and through his toil secure for himself and his species a continued existence and prosperity, thus mental sufferings are instilled in us which condition the existence and the ennoblement of the spiritual in man and of the human mind in general.

Surrounded by a world full of wonder, and forces whose law he surmises, would like to understand, but never deciphers, which reaches him only in a few fragmentary harmonies and suspends his soul in a continuous state of unresolved tension, man conjures up the missing perfection in play, creates a miniature world of his own where the cosmic law becomes manifest within strict limits, yet perfect and complete in this seclusion. In such play man satisfies his cosmogonic instinct.

When his imagination provides him with these images in a display of individual scenes from nature, expanding them and adapting them to his mood, all this in such a way that in such parts he believes to behold the harmony of the whole, and by this illusion is temporarily snatched from reality, this enjoyment of nature is not profoundly different from the enjoyment of art—just as the beauty of nature (because it first comes up in an observer's receptiveness, yes in his imagination that fills out what is incomplete) falls to the general beauty of art as a lower category.

This artistic enjoyment of nature's beauty, though, is by no means the most naive or original manifestation of the artistic impulse. A feeling for this rather is undeveloped in uncomplicated primitive man, who on the other hand already enjoys recognizing in a wreath, a string of pearls,
a curl, in choral dances and the rhythmic tones that attend these, in the beat of an oar, et cetera, nature's creative law as it gleams through in the regularity of space and time sequences. These are the beginnings out of which have grown music and architecture, the two highest purely cosmic (non-imitative) arts, whose legislative support no other art can forego.

But to these general phenomena of nature with their sublime terror, their bewildering charms, their incomprehensible lawfulness, are joined more active forces that grip our soul and make it receptive to the illusions of art.

A never ending struggle, a frightful law of the stronger by which one eats the other in order to be eaten himself, extends throughout nature, but manifests itself in its full cruelty and harshness in the animal world that stands nearest to us, forms the content of our own earthly existence and that of history. This never ending process of extermination of life by life has no end and no purport; the soul, vacillating between hate and pity, numbs itself with the disconsolate statement: Individual things have been created only to serve the whole as nourishment.

To this is added the accidental, the nonsensical, the absurd that we come across at every step on our earthly path, and that strikes the law we believed to have spied scornfully in the face. Then, there is the deep, unfathomable, stormy, private world of the soul, the chorus of passions at war with themselves and with fate, chance, custom, law; imagination opposes reality, folly is in conflict with itself and the universe--nothing but discord, from which the arts, as they seal off these battles and conflicts, hold them in a close compass, and use them as elements of a final atonement, snatch us for a while. From these moods arose the lyrical-subjective and the dramatic manifestations of art.

At the core of this conception of the function(s) of art--which in its pessimism, and in the high status assigned to music, by now betrays Schopenhauer's impact as well--is a concept of artistic illusion considered as an existential need. Nature in its pure state is not idyllic, social life often absurd. If not for his ability to 'conjure up the missing perfection in play,' man would feel lost in this world. As a result, beauty in art should not be seen as derived from beauty in nature. There is a more complex reciprocity between the two. It is basically in art that man develops his sense of beauty, which subsequently makes him sensitive to nature as an in many ways even superior work of art. Nature's inherent order, on the other hand, is already reflected in mankind's most basic, most primitive artworks.

A play concept of art in Schiller's sense here appears fully matured. At a few points it is more complete and more developed than the one of the 'Briefe.' Thus when it is noted how man 'conjugers up the missing perfection in play,' creating a 'miniature world of his own,' this is an equally beautiful
as piercing way of saying how art as play marks off its own time and place. Through the same imagery the ideal of art appearing 'like a necessity of nature' has been subordinated to a play concept of art, more radically than Kant would ever have allowed this to be done, and more convincingly than in Schiller's Briefe. Considering nature's cruelty in the above conception, such subordination seems only natural. Art is asked to do more than emulate nature: it must transcend it.

Equally clear is the anti-naturalist, anti-mimetic tenor of these pages. Observe how in passing music is taken as a paradigm for the kind of quality architecture should try to emulate, but with an emphasis on rhythm rather than static proportions. With dance as a third, music and architecture are defined as the only non-imitative, truly cosmic arts. Considering what follows in the rest of the book this is not meant as a rejection either of figurative ornament, or of selective imitation and recombination of traditional forms, but it does imply a subordination of meaning to form—or, for that matter, to color.

In a footnote it is explained how art structures reality in a way science will forever be unable to do—another indication of how unambiguously Semper stood in the tradition of German idealism, somewhere halfway Schopenhauer and Nietzsche.

The ceremonial function of art as play, and the way it survives in traditional ornament, recurs halfway the first volume, where, as regards the origins of monumental architecture it is pointed out:

DS.62 [215] ... how the wish to perpetuate commemoratively a festive act, a religion, a world-historical event, or an action taken by the leaders of a state, still provides the external occasion for monumental undertakings, and how there is nothing to keep us from assuming, even of being certain beyond doubt, that in a fully analogous manner the idea for monumental art (...) was suggested to its founders by similar festive celebrations.

The festival apparatus, the improvised scaffolding with all the special splendor and frills that indicate more precisely the occasion for the festivity and enhance the glory of the day--adorned and decorated, draped with carpets, dressed with boughs and flowers, adorned with festoons and garlands, fluttering banners and trophies--this is the motive of the permanent monument, which is intended to recount for coming generations the festive act and the event celebrated.

This may seem to bring little new, compared to similar passages in the Preliminary Remarks as reviewed above. In a long footnote to the same section, however, Semper does break new ground. The footnote reads:
I believe dressing and masking are as old as human civilization, and that the joy in both is the same as people have in such activities as drove them to be sculptors, painters, architects, poets, musicians, dramatists, in short, artists. Every artistic creation, as well as all enjoyment of art, demands a certain carnival spirit, or to express myself in a modern way—the haze of carnival candles is the true atmosphere of art. Destruction of reality, of the material, is needed wherever form is to appear as a meaningful symbol, as an autonomous creation of man. Make them forgotten is what we should do to the means needed for the artistic effect aimed at, and not proclaim them loudly, thus missing our part miserably. To this primitive man was led by his untainted feeling in all early artistic endeavors; to this returned the great, true masters in every branch of art—except that these, in times of high artistic development, masked the materiality of the mask as well. This led Phidias to that interpretation of the two tympanon subjects on the Parthenon. Apparently he considered his task, the representation of the double myth and its actors, the deities, as the material to be treated (as was the stone in which he formed them), which he veiled as much as possible—thus freeing it of all material and outwardly demonstrative notification of its non-pictorial, religiously symbolic nature. As a result his gods approach us, inspire us, individually and as a group, first and above all as expressions of purely human beauty and grandeur.

Observe how 'masking the materiality of the mask' refers to material in the sense of subject matter of figurative ornament, which has come to serve as merely an occasion to express something more timeless, more universally human—and how it has nothing to do with the way such sculpture presumably was painted. We shall recur to that later on. More in general, there is a world of difference between, on the one hand, this impassioned plea for 'destruction of reality' and, on the other, 'cette agréable fiction' as propounded by Quatremère de Quincy to account for similar phenomena of dressing and masking. In this context let it be noted how, whereas Quatremère de Quincy in Le Jupiter Olympien (1815) offered an explanation and justification of dressing, as exemplified on colossal statues, in terms of the Greeks' love of color, Semper turns this order upside down. Dressing and masking are now the basic phenomena to be understood, and they are explained in terms of illusion as a far more existential need than would correspond to that 'agréable fiction.' The artistic illusion should tear us loose from daily concerns and place us in the midst of a more timeless reality. Such holds not just for masking in architecture, but works the same in drama, or in music. As in the same footnote it is stated in regard to the works of Aeschylus, Sophocles, Euripides, as well as the Greek comedy writers:
The stage [Proskoenion] becomes a picture frame for a great piece of human history that did not occur somewhere sometime, but happens everywhere as long as human hearts will beat. "What was Hecuba to them?" A mood of masks breathes through Shakespeare's tragedies; a mood of masks and smell of candles, a carnival spirit (which definitely is not always cheerful) surrounds us in Mozart's Don Juan; for music too is in need of these reality destroying means, to the musician also Hecuba is nothing—or should be so.

### 9.3.2 Architectural Implications

Among the implications that this play concept of art has for architectural design at least one has often been noted and described (even if not in terms of a play model), which is a justification of ornament in terms of dressing and masking, and an opportunity to specify demands on ornament in the light of those same concepts. This has already been dealt with globally in § 8.7.4; details will follow in § 9.7.3. Two other implications, of which we will now come to speak, have received far less attention in Semper studies so far. Those are, first, an insistence on an air of permanence which buildings ought to exhume, and, second, a positive appreciation of the naive, and hence of improvisation in art.

That monumental architecture should look like it was made to last, and that all aspects of design (composition, detailing, choice of materials, construction) should enhance that impression, is on a more practical level insisted on throughout Der Stil, most notably in the sections on masonry ('stereotomy') and metalworks at the end of Volume 2. We shall recur to that in § 9.7.1 in particular. A link to a play concept of art is made in the footnote to § 62 as extensively quoted from in the preceding paragraph, where it is explained how an air of timelessness—and hence of permanence—must be considered basic to all great art. Nothing could be farther from Semper in the 1850s and 60s than to suggest monumental architecture should be enlivened by being endowed with the provisional character of a dressed scaffolding, such as most likely served as its prototype. That 'masking the materiality' (see quote above) is not meant as a denunciation of the material as an aesthetic factor is explained as follows:

DS.62n [217-18] Masking ... is of no avail when behind the mask things are not right or the mask is no good. In order that the material, the indispensable, be in this sense completely destroyed in the artistic creation, its complete mastery is an imperative precondition. Only by complete technical perfection, by judicious and proper treatment of the material according to its properties, and by taking these properties into
account while creating form, can the material be forgotten, can the artistic creation be completely freed from it, and can even a simple landscape painting be raised to a high work of art.

This neatly corresponds to the following section from the Prolegomena, where in regard to the 'empirical' theory of style he is to expound the author notes:

DS VIII Neither is the empirical theory of art (theory of style) mere aesthetics or abstract theory of beauty. The latter considers form as such; it sees beauty as a working together of single forms toward a total effect that satisfies and pleases our artistic sense. Therefore, all aesthetic qualities of formal beauty are of a collective kind, like harmony, eurhythmty, proportion, symmetry, et cetera.

The theory of style, on the other hand, conceives beauty as a unity, as a product or result, not as a sum or series. It looks for the components of form that are not form themselves, but idea, power, material, and means; the raw materials and basic conditions of form, as it were.

The point is that, whereas 'mere aesthetics' believes it can reduce the beauty of a work of art to qualities of pure form, sound, or color, abstract it from the material the work was made of, and from the way this was done, Semper holds them to be inseparable. An observer, in this view, takes it all at once, interpreting no doubt, completing what he sees with makings of his own imagination, but certainly not leaving out all of an artwork's apparent history or inner constitution. Complete mastery of the material [§ 62n], therefore, must not be understood as what it takes to arrive at a wax figure kind of realism. A more reasonable interpretation is that, as an observer joins the artist in his game (which after all is the literal meaning of illusion: in-playing) of creating order out of chaos, no doubts should creep in as to whether or not the raw material that carries the illusion is still there. An awareness of cheating immediately breaks the spell. What Semper advocates is not a denial of architecture's materiality, but its suspension in play.

Whereas this insistence on permanence obviously is among the static elements of Semper's architectural aesthetics, a positive appreciation of improvisation and of the naive (which, by the way, more easily and directly seems to follow from a play concept of art) features among its more dynamic elements. The word 'naive' appears to owe its currency in art criticism to another publication by Friedrich Schiller, On Naive and Sentimental Poetry (1795), and so it is not surprising that, if not the word, at least the idea already turns up in the Preliminary Remarks. Thus it is noted [pp. 226-27] how in the older monuments of Nubia and Egypt, overloaded as they are with hieroglyphics and paintings, there is an unpretentiousness and an inherent order which is painfully absent in later periods of exuberance and tastelessness. Richly embroidered, swaddling
clothes are mentioned as archetypal of this early stage, 'art's golden tomb decorations' as of the later period.

In the same vein it is, many years later (in a reflection on the Great Exhibition of 1851, which had just closed its doors to the public), concluded:

S.II [32] If single incidents had cogency, then the acknowledged triumphs which half-barbaric nations, especially the Indians with their magnificent industries of art at certain points carried away at the Exhibition would be sufficient proof that we with all our science have so far accomplished very little in these fields.

The same, shameful truth confronts us when we compare our products with those of our ancestors. In spite of all our technical advances, we stay far behind in formal beauty, and even in a feeling for the suitable and the appropriate.

Among the deeper causes of this unfortunate situation Semper senses an abundance of means as the first great danger art has to struggle with. It is immediately conceded that the expression is illogical:

S.II [32] There is no abundance of means, only an inability to master them. Even so, it correctly describes the inverted state of the situation we are in.

Practice wearies itself in vain in trying to master its material, especially intellectually. It receives it from science ready to process as it chooses, but before its style could have evolved through many centuries of popular usage.

And so it is concluded:

S.II [41] We possess a wealth of knowledge, an unsurpassed technical virtuosity, an abundance of artistic traditions and generally understood images, as well as an accurate view of nature, all of which we certainly must not give up in favor of half-barbaric ways. What we should learn from people of non-European culture is the art of catching those simple melodies in form and color which instinct grants to human works in their most primitive formations, but which with more extensive means are always harder to grasp and retain. We therefore must study the most primitive works of the hand of man and the history of their development with the same attentiveness as with which we study nature herself in her manifestations.

Economy of means as a quality in design was not as such a new idea, and besides, a solution as stated here remains abundantly vague. The problem, however, stays on Semper's mind, and when in Der Stil [§ 19] the principle
of 'making a virtue out of a necessity' is introduced, he has come a good deal closer to an answer. That principle—as though this would prove his point—is immediately linked to an etymological affiliation between the words 'Naht' (seam) and 'Not' (need), which need not concern us here. What matters is that here for the first time we have a clear acknowledgement of *improvisation* as a major condition of good art and artifice. Its relation to a play model of art lies, first, in a common emphasis on the unity of thinking, feeling, and acting that characterizes the creation as well as the enjoyment of good art, and, second, in an insistence that artistic problems should be solved *within* the circle of whatever game is being played—rather than by recourse to external means.

9.4 The Nature of Greek Paradigms

Among the issues on which Semper's position in *Der Stil* appears not altogether consistent with the main body of that text I have mentioned (§ 8.9.1) the special status assigned to Greek art and architecture, and more in particular his efforts to account for Greek polychromy in such a way that it would seem to be the perfect solution for them, though not for us (§ 8.9.2). It is time now to recur to this issue, to see if this apparent contradiction can be bridged in the light of a play concept of art as expounded above, or, if not, how it can otherwise be accounted for. Such, moreover, will enable us to expound in more detail Semper's ideas on conditions of successful architectural illusionism—which, as indicated (§ 8.3), must be considered the leading theme of *Der Stil*.

As for his role in the mid-nineteenth-century debate on the true nature of Greek art and architecture—what it had actually looked like, how it evolved, and what qualities in particular set it apart (as all participants in this debate agreed) from everything that came either before or afterwards, Semper is often mentioned in one breath with the archaeologist Karl Bötticher (1806-99), author of *Tektonik der Hellenen* (2 vols., Potsdam, 1844/52) and a professor at the Academy in Berlin, where after Schinkel's death in 1841 he and his colleagues kept on working in the spirit of their late master. As regards the first question, there was, for what I know, no fundamental disagreement, but on the second, its genesis, their visions were miles apart. As for the third, that is, its aesthetic evaluation, opinions vary as to whether there was a real difference in their several points of view. Herrmann argues there was none—but immediately adds that most others who have written about it hold there was.

Now it might seem that in the present study, where I have made it my business to focus on architectural theory proper, and to leave out what more strictly belongs to architectural history, we should only be concerned with the third of these three questions. Unfortunately, the very nature of this nineteenth-century debate prohibits this.
What both sides used to do was formulate an aesthetic principle which subsequently they projected on the Greeks of old as the moving force behind stylistic innovations. Greek achievements in architecture plus attendant texts by Herodotos, Vitruvius, and others were interpreted for aesthetic reasons—the way the Bible has long since been interpreted to prove one’s point on moral issues. An opponent's point of view, on the other hand, usually was contested on historical implausibilities. So the argument tended to be asymmetrical, but maybe that is just natural. In any event, perfect consensus on the aesthetic side seldom would go along with profound disagreement on the evolutionary aspect, or the other way around. So let us see what Der Stil has to say on both, and how its answers are interrelated. In doing so, we shall look at evolution first, and next at what positions can be inferred from that regarding the aesthetic side of the matter, for both sides tended to be more specific about evolution of style (no matter how speculative) than about reasons of its alleged perfection (even if that was more of an empirical issue).

Semper, for sure, was not among those who, like Bötticher (who in this connection is mentioned by name) held that Greek architecture exemplified the possibility of inventing from scratch a complete new array of forms for a new material, namely stone ("like Athena jumping forth fully dressed from Zeus's skull," as Semper put it), and based their admiration in part on that. Nor did he subscribe to the opposite point of view, which goes back to Vitruvius, and holds that the Doric temple in all its parts and members can be traced to a wooden cabin as its prototype. If that were the case, Semper argues, what prototype? Peristyle temples were a Greek invention, introduced to lend more authority to the temple's core, the cella, and possibly also to place it more in the middle of society, surrounded by fairs, and other kinds of public life. The oldest ones we know of are from about 600 BCE and were already built in stone.
That a wooden version of the same building type ever existed cannot altogether be excluded, but even then, he submits, there must have been at least two intermediary stages between the legendary wooden cabin and the stone temples we know.

First, the practice of covering wooden columns (or beams) with metalwork or with terra-cotta and plaster. As evidence for the latter, terra-cotta remains from Pompeii and Sicily are presented (be it for Corinthian rather than Doric columns) and accounts by Pliny and Pausanias about wooden columns that had been standing for more than a thousand years—which in Semper's view was impossible had they not been carefully dressed in a more enduring material. A genesis of classical Doric columns from earlier versions clad in terra-cotta is described in § 79 [p. 420]—see Fig. 22. The theme for their flutings, it is suggested in § 70 [p. 364], may have been provided by metal hollow tube columns as developed in Assyria and Persia (Fig. 23), but that Semper inferred a direct line of descent from these to the classical Greek columns we all know, is not what I can read in the corresponding sections of Der Stil. For Doric and Corinthian columns the line, as indicated, is assumed to run through terra-cotta clad wooden prototypes. Ionian capitals are held to originate in metal cladding. In either case columns supposedly were modeled after 'steles,' free-standing pedestals carrying some sanctified object. Illustrations of the latter occur on numerous vase paintings (Fig. 24).

The second step is a translation into stone of these dressed wooden prototypes, not into free-standing temple fronts to begin with, but first in those of graves or other sacred sites hewn into the rocks. In Semper's reconstruction, most of these developments took place in Asia Minor, Egypt, or even Phoenicia and Palestine. In other words, most elements of classical Greek architecture had fairly crystallized to what we are familiar with, when they first made their appearance on the European side of the Aegean. This holds as much for columns as for the entablature and pediment, or for the cella walls and openings in these.

The low-pitched gabled roof is a special case. As an age-old symbol of the sacredness of whatever it covers, it occurred almost everywhere.
Even the Egyptians, without ever fully adopting it in their formal vocabulary, occasionally used it to that end. Hence it is virtually impossible to say how it reached Greece. Emphasizing the provisional nature of its primeval type, Semper sometimes refers to it as a penthouse [Schirmdach] or baldachin$^{146}$. And so this upper part of the Greek temple is likewise acknowledged as a stone translation of wooden prototypes, but independently so from the lower half, and once more as an indirect, abstracted one. Sculptured incrustations on friezes and pediments are traced to an Assyrian source. Metal clad wood, or hollow metal, is assumed as the last stage of their material transformation [Stoffwechsel] before they turned into stone reliefs$^{147}$. 

These elements, meanwhile, occurred in all kinds of combinations. Examples abound of what we have come to know as 'Ionic' columns under 'Doric' entablatures, and the other way around, or elements of both plus Corinthian in an even more diffuse mixture. All efforts by art historians to identify these as post-classical, that is, as products of stylistic decadence and eclecticism, in Semper's view cannot obscure the fact that many of them are early-Greek or pre-Greek$^{148}$. "The orders," he concludes, "are nothing but the product of the organizing mind that made ordering distinctions in this chaos$^{149}$." As ordering devices, by the way, even Semper must have felt they might be useful, as in general he uses the words 'Doric,' 'Ionian,' and 'Corinthian' like everybody else. As the distinction was made at once for all three of them, and as at that time they all had a long history to look back on, the scheme of Doric first, Ionic next, and Corinthian last, on the other hand, is wholly rejected$^{150}$. The sources of Greek architecture are as manifold, and reach as far back as those of Greek mythology--but just like no one will deny that there is great authentic value in the Iliad and Odyssey as based on these, or in the later tragedies, there was a lot left to be done for Greek architecture--of which we will come to speak in a moment$^{151}$. 

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New in this historic interpretation of the Greek paradigm is an uncommon emphasis on historic continuity, an awareness that (to borrow Herrmann's phrase) "nothing is invented from scratch, and nothing ever created stops having an influence." This is reflected in a more positive appreciation of what preceded Greek art, as well as of what came afterwards. In spite of his no doubt sincere admiration of the Greeks, there is with Semper no such thing as stylistic exclusivism. Thus he is perfectly aware that the perfection of Greek architecture was confined to one building type, the peristyle temple, and that the Romans surpassed them in making more complex spatial arrangements, creating a more flexible, universal kind of architecture, whereas older civilizations, such as the Egyptian and Assyrian, even if they never arrived at the Greek kind of perfection, had their own charms and consistency.

After this historic excursion, let us now return to Semper's more strictly aesthetic evaluation of the Greek achievement. Early in the section dealing with the principle of dressing [Bekleidung] in architecture it is noted:

**DS.61 [206]** The creative genius of the Greek had a nobler task, a higher goal than the invention of new artistic types and motives—types that were handed down to them from times of old and remained sacred to them. Their mission consisted in something else, namely, in taking up these themes as materially they were already firmly established, and apprehend their nearest, as it were telluric expression and idea in a higher sense, in a symbolism of form in which opposites and principles that exclude and fight each other in barbarism, join each other in freest collaboration and perfect harmony.

What 'higher sense' and what 'symbolism of form'? Greek temple architecture, in Semper's view, rests on two artistic principles: the 'tectonic' plus a special version of 'dressing.' The former is no other than to create an architecture out of posts and beams, keep all walls subordinate to these, and allow for little in the way of vaults and arches. As such it was not new:

**DS.137 [233]** The Greeks, to be sure, were not the first to produce this (for it dominates the whole art of antiquity, up to the Romans), but the first to recognize it as such and consciously take care of it, while they most carefully excluded from their art whatever was not in accordance with it.

This principle rests on a general law in the world of appearances, according to which formal combinations, no matter of what kind, *if nothing in them raises even the thought, let alone any doubt regarding their material potential to exist and to last*, at least in this regard leave the eye most at ease.

With something that stands straight and perpendicular nobody
thinks of its weight, or, when its height stands in correct proportion to its base, of its stability. Equally little are we reminded of weight as an active force in something that lies horizontally. Rather it has become to us the telling image [Sinnbild] of absolute rest.

Semper infers it must have been for this reason that the Greeks chose not to use the vault (which they knew perfectly well), nor wall clamps of decorated iron, both of which would have reminded of heaviness and active forces in a construction. The triangular gable he considers a compromise. Its slanting sides, thanks to their low angle, appear as primarily resting on the horizontal beam of the entablature, but a little tension is felt in its outward corners all the same. Stronger doubts are raised in regard to the perfection of the cella walls [§ 82, p. 453]. Too much apparent weight is left on horizontal beams that top all openings in these. In this they compare unfavorably to the Roman system of arched openings, framed by half-columns or pilasters on the sides, and a horizontal architrave above.

The ideal of apparent weightlessness is nonetheless considered basic, and the driving force as well behind the special turn the Greeks gave to the age-old principle of dressing. "Indeed," it is concluded after a 200 pages long survey of how this practice evolved in older civilizations, "Greek art so far offers nothing new." But, it is added:

DS.78 [413] A richer being, the 'artwork of the future,' has just announced itself in the figurative ornament, which is being moved from without rather than experienced from within, starts getting bored with its walk-on part of objective representation—which has lost its sense anyway, as it is no longer understood—and for its entertainment begins to trash and run about in a most subjective way.

We first recognize this symptom of awakened life in figurative elements. Traces of simultaneous and analogous impulses in the more strictly architecturally formal and ornamental parts of the work, however, will not escape an attentive observer! But where was it heading for, this newly stirred life? It should not yet be our intention here to trace its more general tendency, so let us just ask what became of our principle of dressing, which in the barbaric styles of architecture we have come to know retained such an important and thoroughly realistic significance, what became of this after the grandiose metamorphosis had been completed from which the new Hellenic art arose?

Observe how Ruskin's intuition (see § 10.4.1) that in the Parthenon architectural detailing followed architectural sculpture receives support from Semper and the much greater historic erudition the latter had at his command. But let us stay with dressing. Its relationship to what is dressed is, in the same paragraph, described in terms of three alternatives. Before the rise of Greek
civilization there was the Assyrian/Asiatic system, where in hollow tube constructions (Fig. 23) the two increasingly had come to coincide. On the other hand there was the Egyptian (Fig. 17), in which they remain perfectly distinct, at least conceptually. What the Greeks brought about was an organic unity of the two, based not on literal identity (the Assyrian system), but on a 'symbolic' representation in the dressing of the function of the dressed—in such a way that the former organically seems to grow out of the latter. Semper's terminology to describe these three systems, and in particular his use of the word 'symbolic,' is slightly confusing. The Greek system is referred to as using ornament in a 'symbolically structural' [struktiv-symbolisch] sense, as opposed to the Assyrian which is 'technically structural' [struktiv-technisch]—the implication being that the former is of a higher order than the latter, although the latter is by no means bad. So far so good, but what about the Egyptian? It is described as follows:

DS.76 [390] Here the structure, the original wooden core, is carefully kept separate from the dressing [Umkleidung]. The latter has nothing to carry, only to dress and to adorn, or rather to speak a symbolic language, the sense of which does not refer to the work itself, but to its destination and sanctification.

So here too ornament is 'symbolic,' be it not 'symbolically structural.' Nor is it mere 'Tendenzsymbolik' (the negative end of the scale, especially if applied on constructive parts, or otherwise dominating the architectural whole), as it still refers to a function of the decorated, though not its structural role. It stands a good deal closer to the dressed scaffolding, discussed at the outset of the section dealing with the principle of dressing in architecture [§ 62, see § 9.3.1 above]. And so it is basically good, considered in the context of a civilization that as a whole stands on a lower level than the Greek. In any event, symbolism, as indicated (§ 8.7.2), in both its Egyptian and Greek variety is of a kind where signification rests as much on abstracted likeness and analogy as it does on convention. What matters is that the 'higher sense' in which the Greeks took up old themes and "apprehended their expression and idea" [DS.61, p. 206] is achieved by a loss of actual meaning. It is presented as an instance of, in Schiller's words, form that destroys content.

What other means are applied to this and related ends? Figurative ornament is relegated to neutral ground [auf neutralem Gebiet verwiesen], that is, concentrated in places with none or very little apparent constructive function. Constructive members, following figurative ornament, get animated in their outline, while dressing as applied to them shrinks, dematerializes, to mere color. The word 'organic,' as used in this connection is to be taken quite literally, as speaks from the following lines, where the resulting appearance is described as one in which:
DS.78 [415] ... the form explains itself only from itself and from the organic idea inherent in it, like that of living creatures, with whom one likewise does not ask what materials they are made of, though quality and quantity of the material are primary conditions of their existence and the latter varies with the former.

That these forms had to be painted, is explained as follows:

DS.78 [416] To avoid all unnecessary reference to the heaviness and inertia of the masses, therefore to banish the arch from the range of art forms, to exploit these properties of mass only to put forward more penetratingly the activity and life of the organic members, in short, emancipation of form from the material and from bare need is the trend of the new style.

In line with this trend the Hellenic principle of architecture primarily had to adopt color, and take care of it as the most subtle, most bodiless dressing. It is the most perfect means to discard reality, for while it dresses the material it remains itself immaterial. In other regards too it complies with the freer tendencies of Hellenic art.

Polychromy replaces barbaric dressing with noble metals, incrustations, inlaid gems, panelling, and other inessentials Asiatic work is so extravagantly dressed up with.

This sounds almost convincingly, but, considering how it relates to other principles of architectural design as expounded in Der Stil, problems abound. First, in the next paragraph [§ 79, p. 419] there is a claim, as mentioned, that the material of the dressed should find symbolic expression in the dressing. If so, what color, if any, best expresses marble, or, for that matter, travertine? Apparently the claim was made with an eye on terra-cotta or metal cladding in the first place, but as no exception was made for painting as a marginal case of dressing, it should hold for painting as well. The problem becomes even more acute if we consider how a painted surface might seem organically to grow out of a stone wall, or how it could possibly refer to its stoniness. There are a few recommendations in Der Stil on how to minimize these side effects of painting, such as keeping three-dimensional illusionism at bay, or framing figurative painting in order to tie it to the wall (see § 9.7.3 below), but no more positive suggestions. And, last but not least, it is hard to see how a painted surface can possibly enhance the impression of great durability, which in Semper's view singles out stone as the monumental building material 'par excellence' (see § 9.7.1 below). Thus as a justification of Greek polychromy Semper's argumentation carries all the marks of an ad hoc solution. Whether this must be considered a deep rift in his theoretical system or one that easily can be bridged will be discussed in a moment (§ 9.5).

For now let us return to how Bötticher's aesthetic evaluation of Greek
architecture relates to Semper's. In the introductory part of *Tektonik der Hellenen* Bötticher is at pains to explain how in Greek temple architecture one simultaneously observes a 'Kernform' and a 'Kunstform,' but never loses sight of the distinction\textsuperscript{155}:

Considered this way the tectonics of antiquity with perfect sense proceed in such a way that they wholly visibly separate the decorative dressing of the core as structurally unnecessary from the structurally necessary core volume of the same, and represent it as added or externally applied.

This way "one separates the real from the apparent [vom Scheinbaren] and lets the decoration appear as what indeed it should only be, a concept symbolizing cover to the truly active core." As a practical advantage of this two-level arrangement it is pointed out that thus the art-form can look--and indeed be--very fragile in its terminations, and yet secured against the destructive forces active in the core-form.

In the second of six 'excursus' added to the same first volume, the author further elucidates his position by stating that in Greek tectonics:

.. the intention is not to characterize the stone as dead stone but, on the contrary, to let the dead substance of the stone fade away ... As soon as the stone is covered by a form analogous to its idea, the concept of the stone has disappeared and that of the analogue takes its place.

The material of the art-form, it is subsequently explained, need not correspond or even sensibly relate to that of the core-form. The Greek habit of painting their stone temples is mentioned as a perfect illustration of precisely that principle.

Is this consistent with what was stated in the introduction? Significantly, Prinzhorn [op.cit., 1907, p. 23], when he submits that Semper's architectural aesthetics fundamentally differ from Bötticher's, quotes from the Introduction, whereas in an endorsement of the opposite point of view Herrmann [op.cit., 1984, p. 143] does so from the second 'Exkurs.' And indeed there is a difference between being simultaneously aware of an art-form and a distinct core-form, or forgetting the latter behind the radiant appearance of the former. Let it be noted, though, that both of the positions endorsed by Bötticher are at variance with Semper's. The former clashes with Semper's insistence on the fundamental, existential significance of 'Schein,' the latter with the role assigned to the material in the appearance of a work of art. And so, when Semper somewhat sarcastically notes that the author of *Tektonik der Hellenen* must have been inspired by Hermes Trismegistas\textsuperscript{156}, because what he did was evaluate the Greek system in terms of the Egyptian, this is as much to the point relative to Bötticher's work as it is consistent with Semper's own. Therefore it remains unclear why Herrmann should take recourse to personal envy on Semper's

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side to account for the latter's attacks on Bötticher\textsuperscript{157}. And it is ironic to see how Mallgrave's description of the immaterial Semper (see § 8.9.3), even if it does not fit the latter, perfectly applies to the Bötticher of the second 'Exkurs.'

As pointed out by Eva Börsch-Supan\textsuperscript{158}, the differences between the two men's conceptions of architectural illusionism were fundamental, and affected their appreciation of Renaissance architecture as well. For whereas Bötticher, like Schinkel, could only think of its earliest phase (Brunelleschi c.s.) as truly organic and rational, Semper sensed more of an organic character in the high-Renaissance architecture of Raphael and Bramante. Moreover, it corresponds to an equally fundamental difference in philosophical affiliation. Bötticher's work is pervaded by precisely that spirit of Hegel's, Fichte's, or Schelling's speculative idealism, which Semper resented so much\textsuperscript{159}.

And so, in its dealings with the Greek paradigm as well, conditions of successful architectural illusionism—of the kind that makes a building appear like a necessity of nature, and yet transcends nature's harshness—remains the leading aesthetic theme in Der Stil. Principles of formal aesthetics as expounded in the Prolegomena have a basic part in this, but there is more, such as the kind of animation that from sculptured friezes and pediments presumably is transferred to the more strictly architectural members of a temple, or the dynamics of endless variations on a few basic themes, which in successfully designed and executed parts of a building becomes as transparent as it is in plants or animals.

### 9.5 Greek Polychromy Reconsidered

Indirect evidence that may help understand why Semper had such a hard time finding a place within his system for painted architecture, is in the ease and enthusiasm with which precisely this type of decoration is handled in the first volume (1863) of Viollet-le-Duc's Entretiens. Painting, as indicated, may be considered a marginal case of dressing. It adds no significant volume to the actual construction, does not hide its constructive principle, but, on the contrary, offers a chance to articulate the latter. Thanks to all this it is among the few types of ornament that Viollet-le-Duc (who never held ornament as such to be unimportant) has no problem finding a theoretical justification for. In spite of the fact that much of this was based on a rationalist bias Semper was unable to share, some of Viollet-le-Duc's observations could have been of use to Semper in solving the aforementioned dilemmas. This holds particularly for the following section from the seventh 'Entretien'\textsuperscript{160}.
Nowadays we see the monuments of antiquity in ruins, pillaged, carrying the imprint of destruction by barbarians. These ruins are often lost in dust or mud, surrounded by unsightly debris. But when the ancients erected beautiful monuments, they did not neglect their surroundings, they chose their place. They knew how to conduct the crowd through skillfully arranged transitions from the public road to the sanctuary of the godhead. Unlike most of our public monuments, temples and palaces at Athens or Rome never stood with their feet in the mud. At that time, the exterior coloration of buildings, which among us would look ridiculous (like it is ridiculous to see a person walk the street dressed in a glittering costume), gained great value by the care that was taken to guard these monuments from being attained in any way, because of the place assigned to them, and of the accessories they were surrounded with. These feelings of respect for the work of art one finds highly developed among the people of the Orient. One understands why a pagoda is colored from base to top in vivid colors and with incrustations and enamels, when the roof's lower edge [perte] of this pagoda is reached only after having crossed several courts, constantly decreasing in size while increasing in riches, carefully paved with marble, adorned with shrubs and fountains. One understands the riches of Egyptian sanctuaries when, to penetrate there, one has crossed those pylons, those porticoes, those hallways, the luxury of which increases as one advances toward the holy place. One understands, finally, the glaring painting of the Greek temple when one sees with how many works of art it was surrounded. One should imagine those holy forests, those enclosures, those innumerable accessories, of which the presence was like an introduction to the final and most complete expression of the architecture.

We do not sufficiently remember that works of art need a *mise en scène*.

Observe how in this account of their appearance Greek temples can afford to look immaterial: for one thing because an impression of permanence is sufficiently secured by their setting, because they are the climax in a complex that in its lower stages is firmly rooted in the rocks from which it arises, and, for another, because they remain too far removed from the average eye to appear in their full materiality anyway. It is an interpretation that fits in quite well with a philosophy of art as expounded in the Prolegomena and a few other places in *Der Stil*, as reviewed above (§ 9.3.1). But evidently Viollet-le-Duc, to whom the Greek paradigm was not as unique as it was to Semper, but more or less on a level with French Gothic, could deal more comfortably with these issues, free to approach them in a more relativizing, more common sense way.
9.6 Gothic Reconsidered

Remarkably enough, something similar can be observed in regard to Semper's evaluation of Gothic. As indicated (§ 8.4.1), this was colored by the fact that in the 1850s and 60s Semper increasingly came to look at it through the eyes of his rationalist opponents, and hence felt it incumbent upon himself to reject it as integrally as he rejected their theoretical positions.

An indication that he could have endorsed a more positive interpretation of Gothic, one which was likewise in the air and more in tune with the enthusiasm which as a young man he himself had expressed for this style, and that he could have done so without betraying his basic philosophy of art, once again is in Viollet-le-Duc's *Discourses*, this time in the first [p. 32]. Considering what likenesses might be most appropriate for a temple devoted to the Christian God, who, unlike his Greek counterparts, does not represent one passion or function in particular, and whose being is not exemplified in a single myth, the author notes:

\[E1\] [32] But to erect a temple to God, to the God of the Christians, that is not so easy, for in himself alone he unites all things, he presides over it all, he is the principle and the end, he is the universe; so how to make him a home while he is everywhere, how to translate that abstract idea of divinity in stone, and make people understand that a building can serve as residence for the God of the Christians? The artists of the middle ages nonetheless attempted it with some success. How did they do it? They made the Christian church like a specimen of the creation, they made it the amalgamation of everything created in the visible as well as invisible order of things, like a universal epic in stone.
If the enterprise was difficult, who is to blame?

If such observations—which anticipate Von Simson's\[^{161} \] by some ninety years—could be made by the Frenchman, who otherwise often presents himself as a doctrinaire rationalist indeed (and had been made before by Fortoul and his friends in the 1830s\[^{162} \]), why not by Semper? What would be more in accordance with the latter's conception of man "conjuring up the missing perfection of life in play," and "creating a miniature world of his own where the cosmic law becomes manifest within strict limits\[^{163} \] than precisely this image of the Gothic cathedral as a microcosm? Here we face a fundamental weakness in Semper's system. Dressing and masking are aesthetically justified in terms of a play theory of art. Subsequently a more specific theory of dressing is presented, with mid-eastern, Greek, and Roman paradigms at its core. Once that is done, however, the author seems unaware of other, equally legitimate directions man's play instinct, and masking as a special case of it, can take.
9.7 Practical Recommendations

In spite of its subtitles, the greatest strength and originality of Der Stil is not in its practical recommendations, but in a philosophical approach to history of style, or, if you wish, a historical approach to the aesthetics of architectural design. Nevertheless Der Stil occasionally does deal with questions of a more practical kind, notably in the chapters 3, 7, and 9, that is, in the first part (entitled 'Allgemein-Formelles' or 'Zwecklich-Formales') of the sections on textile art, tectonics, and stereotomy. The results will be reviewed in the following order: material issues--choice of material (CS.MC)\textsuperscript{164}, composition (F), detailing (D), color (CO)--first, the procedural ones of how to educate architects (PD.2.E) and public taste (PE.E), and what an 'empirical' theory of style might be like (PD.2.R) next. For practical issues not mentioned here a referral to corresponding places in 'Der Stil' occasionally may be found in Appendix 4.

9.7.1 Choice of Material

A recurring issue in Der Stil is that constructions of iron rods or beams are unfit for monumental purposes. Stone is considered the most natural choice for that, now, in the past, and for all times to come. A major reason lies in a law, as quoted in § 9.4 above [§ 137, p. 233] which states that the eye is left most at ease when nothing in "formal combinations, no matter of what kind, ... raises even the thought, let alone any doubt regarding their material potential to exist and to last." This rest, this stillness so to say, is considered crucial for monumental architecture, and so any material that in its constructive application cannot meet this demand is ruled out for that purpose. Such holds for wood, and a-fortiori for iron or other metals. The issue is most systematically dealt with halfway the section on tectonics\textsuperscript{165}, where for instance it is noted that:

\textbf{DS.139} . . the proportions of the members of a piece of joinery ... are much less dependent on the material than it is generally assumed. For the material only serves the idea. It is either more or less appropriate for this or that artistic task than other materials, without affecting that task in its basic principles.

Thus solid iron is considered excellent for candlesticks, lamps, tripods, and other movable objects. Wood generally lends itself quite well for this too. Through dressing with more enduring materials its reach can even be extended to the more strictly monumental domain. Even then, however, it paves the way for stone rather than being able to do the same job equally well. Joinery, we are told [DS.140, p. 238-39] was never precursor or example for a
monumental art, the true material of which remains stone. The basic rule for stone applied that way is the inverse of the constructive, namely to remind of the material construction as little as possible. The proper domain of joinery is in household goods. In architecture it appears most favorably and authentically where it provides transitions between such movable objects and the monumental building.

Metals, when it comes to monumental applications, have all the disadvantages of wood plus a few more. For one thing, they are thinner, so that, if consistently applied in a construction of rods or cast metal, the ultimate ideal would be one of invisible architecture. And, for another, their drawbacks cannot be turned into advantages the way it can be done with wood [§ 141]. Allowance is made, though, for its non-monumental application in constructions of a more temporary nature, such as the roofings of railway stations [§ 140]. Applied in a construction of metal hollow bodies, combined with metal grids, it might even have a modest future for monumental ends [§ 142]. Nor does the author object to its invisible use as reinforcement of domes et cetera—a technique that, he submits, already was applied in imperial Rome [§ 185]. Otherwise metal is consistently dealt with as a material for hinges, locks, gates, lanterns, wall anchors, et cetera in the first place, including decorative uses such as go with these.

So much for Der Stil. In other publications, according to Herrmann, Semper speaks approvingly of iron buildings just twice: once for the interior of a church as designed by another German architect, and once in regard to the Crystal Palace. Herrmann presumes it was a matter of mere friendliness toward a colleague in the first case, and in the latter one of personal attachment to a building he had worked in and on. It is not clear from Herrmann's account, though, whether Semper spoke of the Crystal Palace as monumental architecture or as an emphatically temporary construction. If the latter, there is no conflict whatsoever with the positions defended in Der Stil. If the former, one should consider as a possible (although, I admit, totally contextual) explanation Semper's dependence on Henry Cole c.s. as the ones who were most likely to help him make a living in London at the time.

9.7.2 Composition

As indicated (§ 8.3), few of all the specific and often original ideas that as a practicing architect Semper displayed regarding functional layout of buildings, or a building's placement in its urban or rural setting, has found its way into Der Stil, or, for that matter, any other of his published writings. On a more strictly visual level, on the other hand, and on a scale no larger than, let us say, that of a building's facade, the book contains suggestions which should briefly be reviewed. Some of these, such as the basic concepts of formal
aesthetics expounded in the second half of the Prolegomena, have already been discussed in § 8.7.3. Now we will come to speak of how, in an attempt to lay down formal constraints on 'dressing,' these concepts are applied to walls, floors, and ceilings [§§ 9-13].

The result is somewhat disappointingly conservative and static. In tune with what was fashionable among mid-nineteenth-century reformers of design, the flatness of these elements is emphasized as of the essence of the covering they stand for. Strict symmetry and subdivision into elements that are less wide than high (and certainly not square!) is recommended for walls, a radial or concentric development around a clearly defined center for floors and ceilings. The latter are further analyzed in terms of center, border, and in-between, a tripartite scheme that is endorsed for all proportional development.

Observe that most of this does not actually follow from the concepts expounded in the Prolegomena. Thus 'symmetry' was specified by reference to a wide variety of natural phenomena (trees, animals, crystals), which allows as much for balancing of masses about a vertical axis as for more strict and formal kinds. The possibility of polycentric coverings of floors is not even discussed. Considering that among the Persian, Turkish, or Indian carpets so widely admired at the Great Exhibition, not in the last place by Semper himself, there must have been some polycentric ones, this is a bit surprising. One wonders if the issue is on purpose being simplified, in order to allow for more clear-cut conclusions.

Proportion, as indicated (§ 8.7.3), refers to the vertical dimension, symmetry to the horizontal. Or, more precisely, proportion deals with form as it develops along a major axis, symmetry with balancing of masses around the same. Musical analogies, in the sense of simple mathematical formulae that account for good form, are avoided. The author is extremely skeptical about them. As it is stated in the Prolegomena:

DS.XVIII-XIX But it is with philosophy in its application to art as with mathematics applied to natural science. Mathematics certainly can calculate the differential of very complex functions, but rarely succeed at integration, least of all in physics, where a complex interaction of forces takes place, of which the law must be determined.

When in the same section of the Prolegomena Gothic architecture is characterized as the 'lapidarian transformation of Scholastic philosophy' [p. XX], the mathematics of it are not mentioned in so many words, but elsewhere he is, as indicated (§ 8.4.1) more explicit--and explicitly critical--about it. Likewise in regard to the classical orders it is noted how:

DS.166 [369] In spite of all justification of the rules that are contained in those five orders, their unconditional and, as it were, literal application is unacceptable, because no universal rules of proportion with numbers
and measures can be exactly specified.

Incidental reference is made instead to manipulation of optical laws. Thus it is recommended\textsuperscript{167} to make round windows which are to be viewed from a low angle a bit higher than wide. In speculations on the proper size of masonry (which, by the way, nicely answer Ruskin's statements on this issue in the 'Lamp of Power,' of which we will come to speak in § 11.4.2), Semper distinguishes between an optical and a dynamic effect\textsuperscript{168}. The optical, which makes a building look larger the smaller its masonry, in Semper's view no longer holds when the distance to an observer becomes too large for the stones to be separately identified. Bold masonry, on the other hand, has a dynamic effect which small bricks are unable to achieve. And so, there is no simple rule as to what size of masonry is best. The author does endorse the idea of canons regarding size of masonry, related to those of the orders, allowing for individual expression by slight deviations from the rule--but that idea is not worked out any further.

And so these speculations, although interesting, remain a bit inconclusive. For the most part, when dealing with proportion, Semper relies on organic analogies and leaves it at that. Thus the tripartite scheme of base, body, and crowning is recommended for the whole of a building's facade [§ 166] as well as for its parts, such as a single column. Or, as it is stated in regard to the pillars of railway bridges:

\textbf{DS.142}  [253] What matters is to animate them again in the spirit of antiquity, so as to let them become organisms, to let them cooperate eurhythmically, to regulate their carriage [Verhalten] relative to the load.

Or, more in general:

\textbf{DS.138}  [236] This whole of what is supported should press down [lasten] precisely so much as is needed to keep the supporting parts busy, allow them a chance to employ their energy and lively, independent, inner resistance. What is in excess of this, or less, disturbs the absolute harmony; yet it is the gradations of these interactions between dead load and living support through which the finer characterization or expression monumental forms are capable of, is mainly achieved.

In the same context (of 'steles' or pedestals, which can be more or less complete works of art in themselves, even without the load they are to carry) another rule is presented as universal and fundamental: that of the whole which ought to be repeated in its parts:

\textbf{DS.137}  [225] Hence this paradox is linked to the important and generally valid synthetic rule of the repetition of the whole in its parts,
and of the latter's unification to a whole which is homogeneous to themselves, is as a germ already contained in them.

As a link between different levels on which composition takes place, this statement may serve as an introduction to our next subheading: architectural detailing.

9.7.3 Detailing

Five elements of 'dressing,' as introduced early [§§ 6-22] in Der Stil, have been summarized in § 8.7.4 above. The five--those of 'string,' 'belt,' 'cover,' 'seam,' and 'fringe,' in combination with the rules for their application, in Semper's view make up a kind of backbone to most systems of architectural decoration, a grammar of ornament, so to say. On our way down from the conceptual core of Semper's system to its more practical implications, let us now turn to additional demands which arise when this conceptual framework is applied to different parts of a building, like walls, floors, vaults, and ceilings.

WALLS:

For walls the most general demands are:

a. Proportional development in a cover should always be in a direction opposite to its heaviness. Decorative patterns should 'roll off' [abrollen], as it were. What this implies is that (aa) lines perpendicular or diagonal to the length of the cover must not be allowed to dominate, (ab) in coverings that hang (or are represented as hanging) the most elaborate decoration should be at the bottom, in those that stand (that is, in stretched ones) at the top; (ac) a hanging nature can be emphasized by decorative patterns at the bottom that point down; for standing (i.e. stretched) ones the reverse can be achieved by upward pointing patterns in the upper border; (ad) a standing nature can be emphasized by making a cover wider at the bottom than at the top, for those that hang the reverse is equally effective.

b. In figurative patterns the left side need not mirror the right. The demand of symmetry, moreover, applies more strictly to stretched covers than to hanging ones--where it is disturbed by foldings anyway.

A next thing to consider is how this in origin textile, but highly conventionalized framework goes along with figurative ornament. In this connection Semper generally tries to find the proper balance between a conception of architecture as 'Gesamtkunstwerk,' to which painting and sculpture, without betraying their
true nature or the level of excellence they have achieved in nineteenth-century Europe, are invited to make their contributions, and, on the other hand, a concern that the flatness of walls, floors and ceilings not be contradicted by realistic figurative ornament, which might give them a three-dimensional appearance.

Another reason to keep the figurative element at bay is implied in Semper's aforementioned dislike of 'Tendenzsymbolik.' More in general, following a Kantian conception of the aesthetic experience, some imitation of well-known forms is considered fine, because without it there will be little to activate an observer's imagination, but it is feared that with too much of a specific likeness an observer's mind will be filled with one thing only—and get bored. What it eventually comes down to is finding the right places for figurative ornament and the proper level of realism for each place. Floral motives are considered all right for most surfaces, but for the sake of flatness a conventionalized treatment in general is recommended. More large-scale and realistic painting can be tied to the wall, so to say, by elaborate framing. In most of this Semper subscribes to accepted points of view among architectural critics and theorists of his day—with the exception of the later Ruskin, the one of The Two Paths (see § 11.4.4 below).

FLOORS:

When it comes to figurative detailing on floors, vaults, and ceilings, Semper is more specific, and, I would say, more original. As a first rule it is stated they should not direct the eye too much toward themselves—".. a direction which is not becoming to God's lofty look-alikes on earth" [DS.13]. Complex geometrical patterns in strongly contrasting colors, therefore, are as inappropriate as naturalistic representations. Allowance nonetheless is made for various exceptions [§ 16]. Thus conventionalized floral patterns are considered acceptable on floors, although they tend to have an up- and a downside. One way to deal with that is to represent leaves and flowers solely as seen from above. A seemingly random distribution with no predominant direction is another. Patterns, finally, may be directed either in- or outward. In an outward-looking room—one that, for instance, has arcades on all sides and a vault above—floor patterns should be directed inward. If the room is more enclosed (windowless walls, light from above, door unobtrusively in one of the corners, and so on) floor patterns better be directed outward. Figurative patterns with a top and bottom, other than conventionalized flowers, are appropriate only on floors which are not to be walked on. Such may be located in an intermediate area between an entrance and a room, or as a 'temenos' around a statue or a vase. Human and animal figures in these cases should be directed with their feet toward the entrance, or toward the people who surround the temenos. Their heads will then face the room, the vase, or the statue respectively.
VAULTS AND CEILINGS:

Textile art provides the basic vocabulary of decorative forms as much for vaults and ceilings as it does for walls and floors. Even so there is a difference: as vaults and ceilings are not meant to be walked on, they may be left undressed. There is neither a practical, nor a stylistic law which forbids it. If one chooses to have them decorated all the same, there are far less restrictions regarding naturalism and contrasting colors than there are with floors. For although:

DS.17 all dressing, no matter of what kind (and to this belongs the ceiling [Decke] as well) must always remain subordinate, always background, never become the main thing ... the ceiling, at the climax of effect and ostentation, should be the highest step, ranking above decoration of walls. In the harmony of the decorative system it is the dominating and terminating chord.

So what figurative forms are most appropriate to decorate a vault or ceiling?

DS.18 Just like, to be in tune with the strictest style, everything represented on a floor should be seen on its head, and just like perfect Indian (or other) tapestry is really decorated in accordance with this principle, thus the same strict style demands that on a ceiling all figurative things show themselves from below, in an inverse birdseye's view, as it were.

Of everything created, though, no more than two or three things actually lend themselves to be viewed this way: stars, birds, and leafage. It is noted how in pre-christian times these indeed were the only objects rendered on vaults and ceilings. Subsequently abstractions of angels, such as Byzantine seraphim, made their appearance, followed by full-size angels, or even a whole bunch of them around the holy family. Rich figurative painting on vaults and ceilings is nonetheless endorsed:

DS.18 An opportunity here presents itself to defend rich decoration of ceilings, and especially to defend painting on ceilings. Puritans of art and neo-Gothicists angrily fight it, almost all theorists and critics of art, as well as most lay-people with artistic expertise, conspire against it, while at the same time it is noticed that the best painters, with great predilection and to the best of their ability, have solved precisely those tasks that are tied to places of the designated kind.

Wall painting in fact has long since been banished to the ceiling. In Gothic, like in most later churches, little wall was left to afford large-scale painting. In private dwellings people wished to have the chance to move their paintings,
like their furniture, about. Ceilings, on the other hand, are a good place for heroic, historic, or religious painting, as long as a few basic rules are observed. Thus an illusion should be created that they are a vertical extension of the wall. Painted figures ought to be standing on the upper edge of the surrounding walls, as it were, their heads pointing towards the center. Nor should vaults be made too high, as in Gothic cathedrals, where it prevents the human eye from looking up to and experiencing the painting as an integral part of the interior space.

9.7.4 Color

In spite of a contention [§ 80] that the whole section on dressing was written with no other objective than to point out "... this interrelationship of form and color," Der Stil, as indicated (§ 8.3), has little to offer in regard to the aesthetics of color in architecture. Some on this issue is found in the introductory part of the section on dressing. It is noted [§ 14] how nature sets an example as to how to color floors. Neutral, secondary, and tertiary colors should predominate. Gradual shadings from light to dark in the same color are recommended. Patches of light should be balanced by darker areas. Pure, unmixed colors in nature seldom occur in large quantities, and where they do, they are usually balanced by their complementary ones.

Similar ideas are expounded in the next paragraph [§ 15] for architecture in general. It is submitted there are two ways to bring about harmony and repose in color: by equal distribution of color patches and through subordination of the same. Following Owen Jones (who is mentioned in a footnote) the first is specified as what results from mixing yellow, red, and blue (if equally pure) in a proportion of 6:10:15—which for the sake of convenience is rounded off as 3:5:8. Mixed colors figure on this scale as weighted averages of their constituent elements. Black and white are neutral. They may serve as a background to, or as a border between patches of real color. Silver and gold can likewise be used to this end. The system as a whole is described as the oriental principle of ornamental coloration, and it is argued that, because of the subordinate role of dressed surfaces in architecture—which should direct attention to what they cover or surround rather than to themselves—it is the most appropriate for most dressing purposes. Subordination nonetheless is mentioned as an alternative possibility—but hardly worked out. An early reference to the former system is in the Preliminary Remarks, where it is noted:

PR [236-37] In a bright, consuming southern light and strongly tinted environment, the effect of refraction on well-ordered tones of color placed side by side is so mild that the eye is not offended but soothed by it. The secret lies in arranging the colors so that they do not harm each other. The recently excavated walls at Pompeii show how adept the
ancients were in applying brilliantly pure colors. And indeed, we begin to become accustomed to them. The ancients in their decoration knew of no subdued half-tones of color. The blending and mixing took place not on the palette but on the wall, through the juxtaposition of variegated and graceful decorations which at a certain distance appear to the eye as intermixed, but always retain a tender and highly seductive play [ein zartes Spielen ... das so reizend wirkt].

Van Zanten suggests it may as well have been Owen Jones who took over this idea, to which he owes much of his fame, from Semper (either directly or through Jules Goury, a travelling companion first of Semper and then of Jones) as the other way around. Even so, there is a problem when the principle, which in this quote is generalized from Pompeian wall paintings to all of antiquity, is to find application on a peristyle temple, where shafts of columns alone cover more than half of the building's exterior—unless their flutings would be painted separately in red, blue, and gold, but neither Semper nor Jones thinks in that direction.

9.7.5 Education of Architects and of Public Taste

Except for a few pages in the Prolegomena [DS.X-XIV] and a reference from there to Science, Industry, and Art, the issue of how to organize education of artists, industrial designers, and architects, or how to improve public taste is hardly dealt with explicitly in Der Stil. The few remarks the author makes about it nonetheless are important for the light they throw upon the structure of this work as a whole. So far, for instance, I have presented the reader with no good reason for the two long chapters on ceramics in Volume 2. If everything which seems not absolutely necessary to the argument as reconstructed in this study is cut out, only a fraction of the 200 pages Semper devoted to that issue will survive. What about the rest? What about the endless classifications of Greek pottery, which appear to be of remote interest at best to detailing, the function of ornament, or the evolution of style in architecture?

The most reasonable explanation I have encountered so far is in Rykwert's aforementioned (§ 8.7.1) contribution to the Semper symposium in Zürich in 1974, entitled 'Semper and the Conception of Style.' Classification, in Rykwert's view, is the heart and soul of Semper's scientific method. "The difficulty in reading Semper now," we are told [op.cit., 1976, p. 74],

is inherent in his method: we are used in a historic ordering of such material, and his is classificatory. ... His first interest ... was in an interpretative taxonomy in establishing the conditions under which style is generated.
The great example that in this view Semper tried to emulate was Cuvier's functional classification of animal types. An important, though secondary role Rykwert assigns to philology, as exemplified in the works of Karl Wilhelm von Humboldt (1767-1835). Accordingly, Der Stil is thought of as presenting a 'comparative morphology of the forms of art,' something like a written counterpart to the museum of architecture and applied art he envisioned in Science, Industry, and Art (1852). This looks like a weak theoretical claim, the more so as in Rykwert's view the system falters on its assumption that all of the fine arts originate in the applied ones, particularly in textile art. It is added, though, that "the enormous intellectual effort" which the creation of Der Stil involved, "has not been fully appreciated," and that the principle of 'Bekleidung,' which is at its core, allowed Semper:

.. to posit a unitary origin for all the arts; to give logical priority, paradoxical though it may seem, to ornament over structure, and so attempt to reconcile the ancient structure-ornament opposition which had dogged classical architectural theory.

So far, so good. What matters in the present context is the suggestion to think of Der Stil as, among other things, a written counterpart to the museum of architecture and applied art envisioned in 1852. Much of what otherwise might seem irrelevant to its main argument thus fits in again, and besides, it neatly corresponds to Semper's ideas on artistic education as briefly hinted at in the Prolegomena. These can be summarized as follows:

a. Training of specialists should be preceded by a broad education of 'man as such.' The present trend, he thinks, is the reverse, and he fears:

\[ \text{DS.X} \text{ Such a system effectively deadens the very faculty that is active in the perception and, to an equal extent, in the creation of art. I am thinking of the sense and the purely human [rein menschlich-idealen] impulse to be creative as an end in itself, and the gift, indispensable to the artist as well as to the person sensitive to art, of direct intuitive thinking.} \]

b. In education of designers (no matter of what kind) classroom instruction should remain subordinate to practical instruction and studio work. The reasons are twofold: first, that artistic education should not be reduced to a handful of simple formulae that everyone can master who has the patience to do so, and, second, that students will not be very receptive to whatever can be learned in a classroom, unless it answers problems they have encountered in the process of making things.

c. Let studio- or classroom education be combined with actual daytime
employment in the same field.

d. Organize schools around libraries and collections, and arrange the latter in accordance to the basic techniques of textile art, ceramics, carpentry, stereotommy, and metalworks.

e. A substantial improvement in design practice and in public taste can come about only through an at least temporary shift of attention from architecture and the fine arts to industrial design.

f. A system of competitions, like the one that since times immemorial has dominated French design training, for a number of reasons is not endorsed.

Of these six points some are expounded more extensively in *Science, Industry, and Art* than in the Prolegomena, but as explicit reference is made from the latter [DS.XII] to the former, we may in this case look at the two texts as an extension of each other.

### 9.7.6 Empirical Theory of Art

The question what claim Semper's system as expounded in *Der Stil* has at calling itself *empirical* could have been dealt above under the heading 'structure of argument' (§ 8.8), but as to answer this we must take recourse to a play concept of art as presented later on, we better discuss it here--under the heading of what kind of research, in Semper's view, is needed to improve conditions for design (theme PD.2.R, as rendered in Fig. 14).

The question which a twentieth-century reader can hardly fail to ask is why a study that so emphatically presents itself as an *empirical* theory of style, hardly includes any research of an observer's responses to a work of art or artifice\(^{71}\). The reason cannot have been that no such thing existed at the time. Rykwert in this connection points to the work of Gustav Fechner (1801-87), which marks the beginning of a behaviorist approach to aesthetics. Rykwert presumes Semper must have been familiar with this work, and rejected it--but does not tell us the reason of this latter\(^{72}\). It is just noted that Semper's work was empirical in a different sense. Like Fechner, Semper refused to indulge in speculative aesthetics, but unlike the former he focused on the producer rather than on the observer of art--why? In terms of a play concept of art the answer could be stated as follows: what Semper as a theorist attempted to do was to reconstruct from successful products of art the rules of whatever game was being played there. Assuming that an observer to a great extent follows the artist in his game, such would illuminate the appreciation of art about as much as its production.
9.8 Implementation and Testing

Because of the abstract and fundamental nature of Semper's theoretical investigations, it is seldom easy to decide whether a building represents a clear implementation of ideas as laid down in Der Stil, or not so. The problem is further complicated by the fact that in his orientation on classical antiquity Semper, like Nietzsche, stands at the end of a period which started with the Italian Renaissance and ended with World War I (at the latest), rather than, like Alberti or Auguste Perret, at the beginning of a new one. Actual influence of his writings, which probably was nowhere ever as strong as in 'Fin de Siècle' Vienna, came to an end when architects like Otto Wagner, Adolf Loos, and their followers increasingly confessed to rationalist principles of design, and simultaneously the same thing happened in most other corners of the civilized world.

Even so, cases of successful implementation can be looked for and investigated in various directions. One is that of the author's own architectural legacy. For even though, as indicated (§ 8.4.1), there is little reason to look at Semper's writings as an attempt at justification of his architectural works in the first place, and even though every building stands for a compromise between an architect's ideas, those of his client, constraints of the site, and available means, it is still reasonable to presume that as an architect Semper was driven by approximately the same set of convictions as in his writings. Starting there the circle can gradually be enlarged to include, first, works by other architects whose interest in Semper is well known and whose works betray that kind of influence. Next one may turn to architects for whom no such influence can be pointed out, but whose works are pervaded by a similar state of mind as is Der Stil. In that case we are simply dealing with two parallel developments (even if not altogether simultaneous) in which the kind of things for which Semper provided a theoretical justification were pursued more or less intuitively by others. Finally, one might consider to investigate more indirect impacts of Semper's writings on actual decision-making and design, through the works of other theorists, like Sitte, and possibly Schmarsow, Lipps, and a few more, who elaborated on some of the ideas they found in Semper's works. But as inevitably that would become a bit diffuse, and as tracing influence remains peripheral anyway to the approach endeavored in this study, the latter will not be pursued here.
So let us start with Semper's own works as an architectural designer, built or unbuilt. These can be studied from different angles, but in the present context I suggest we skip such aspects as urban design, preservation, or functional layout of buildings, for the simple reason that there is little about these issues in his writings, and hence little to compare. What we must focus on is choice of style, its interpretation, the way elements from different styles are mixed in a single building, and such phenomena as dressing, masking, or architectural illusionism.

In regard to the first, that is, choice of style, Semper made his way to the history books as the man who, via Paris, where he received most of his training, brought the Italian Renaissance to Germany. In this he may not have been the very first, as Leo von Klenze (1784-1847) and Friedrich von Gärter (1792-1847) had built in a Renaissance style before, but Semper's works in this category are generally considered more convincing. Thus Ettinger notes that, while in von Klenze's royal buildings in Munich the example of the Palazzo Pitti painfully gleams through, it is not so easy to point out what building served as a model to Semper's Painting Gallery, or to his Court Theater, both in Dresden. Apparently there is more than one, out of which Semper forged something new. Besides, what Semper brought about within this neo-Renaissance trend was a shift from its early phase (Brunelleschi c.s.) to later masters like Bramante, Raphael, and Palladio. Even the Winterthur Town Hall (1865-70), which has often been described as Greco-Roman, is basically Palladian in its conception.

This, on the other hand, does not mean that Semper worked in Renaissance or related styles only. His winning, though eventually unexecuted plan for the Nicholas church in Hamburg of 1844 was basically Romanesque--or, as he called it, 'Byzantine,' but a Gothic variant on the same layout was provided for as well, just in case, in spite of Semper's pleas, the commission might hold on to Gothic as the most appropriate style. Venetian Gothic has been tried in an even less fortunate design of 1842 for Hamburg's new townhall. A plan of 1861 for Zürich's main railway station--likewise unrealized--resembles Roman baths. Pompeian is the choice for a floating laundromat in the same town, as well as for his very first commission, a sculpture gallery for Mr. Donner in Altona. Moorish were his two synagogues, the one for Dresden (1837) which was actually built (though not with the dome Semper had envisioned) and the unrealized project for Paris (1849-50).

And so, if neither his written works can be seen as primarily a justification of his buildings, nor the latter as first of all an illustration of his theories, the two do not painfully clash either. For neither as an architect, nor as a theorist Semper had a particular stylistic axe to grind--in the sense of one style that he held to be superior to any other and the best choice for no matter what place or building type. His attitude in this has been described by Von Manteuffel as rational and pragmatic. Whereas Schinkel reserved his two favorite styles, Greek and Gothic, for buildings of a solemn nature, like churches,
palaces, and musea, where he applied them in an undiluted form, bestowing upon these buildings a compelling air of sacredness, Semper, even though his stylistic treatment, no matter what the style, is purer than with most later architects, remains more down to earth. A building's decorative treatment follows its functional and spatial layout rather than that a preconceived form would determine both. Choice of style is made dependent on place and nature of the building. At the same time the distance between the sacred and the profane is reduced. Thus the palazzo style of the Court Musea in Vienna is quite fitting for musea, but the buildings look as though they might as well house governmental offices.

It has been suggested that this Parisian Renaissance style was the one that most fitted Semper's liberal, cosmopolitan state of mind. It should be noted, though, that in many cases stylistic preferences of his clients may have played a decisive role. Thus it is remarkable that of his Renaissance-like designs a far greater share has been realized than of what was conceived in other styles. Moreover, the events around the competition for the Nicholas Church suggest that choice of style was very much considered a client's responsibility, one that an architect had to respect, even though he might disagree and was free, if not obliged, to tell the client his opinion.

On the other hand, Semper's choice of styles remains within the range of what was practiced at the Ecole des Beaux-Arts at the time, and, as indicated above, his stylistic treatment of buildings, without ever producing straightforward copies of historic prototypes, was purer than with most of his colleagues. So on the whole his attitude to style as a practicing architect may be characterized as pluralistic, with a certain predilection for the Italian Renaissance and some misgivings about Gothic, but a consistent effort anyway to play each game according to its own rules—and to find out, through historic research as well as by the trial and error process of actual design, what these rules are.

So much for Semper's own architectural legacy. Except for the mere choice of a Renaissance-related style, which Semper helped popularize in Germany and beyond, it is, as indicated, usually hard to say to what degree buildings by other architects can be taken as implementations of precisely Semper's ideas. The latter's influence on, for instance, Otto Wagner's wall claddings in Vienna, or Adler and Sullivan's Guaranty Building (1894-95) in Buffalo (NY), and hence on the Modern Movement, as indicated by Mallgrave, "has not been adequately explored."

Putting it this way, the more fundamental question whether that kind of influence can ever more than tentatively be assessed, and what, other than mere curiosity, could be the reason to insist on it, is skirted. So much, however, is sure, that during the final decades of the nineteenth century Semper enjoyed enormous prestige and was widely read in Germany, Switzerland, and the Austrian empire, but that after 1910 this was completely over. Adolf Loos
is mentioned as one who as late as 1910 presented a new interpretation of the principle of 'dressing', but this new one was more materialist and more space-oriented, while less focused on a building (or a building's parts) as organisms than it used to be in Semper’s writings.

A similar pattern occurs if lines of thought are traced from Semper to Berlage in The Netherlands—as it is done both by Singelenberg in his book on Berlage and by Mallgrave in the introduction to his Semper translations. Berlage in a lecture of 1904 endorses both the concept of architecture as "the art of spatial enclosure" and the principle of dressing, but the latter defined in such a way that physically the dressing coincides with the dressed. Such might seem to put him in line with the Gothic rationalism of Cuypers and his followers in The Netherlands, and hence with Viollet-le-Duc, rather than with Semper, but, as indicated (§ 8.9.2), even Semper was leaning toward this kind of polychrome effect as early as The Four Elements of 1851, so the gap seems bridgeable.

More problematic is a contention in a lecture Berlage delivered in 1908, that Viollet-le-Duc in his Dictionnaire and Entretiens carried through what Semper had developed in Der Stil. Singelenberg comments that "In the general sense this does not hold good, but for Berlage this was the truth," and that he must have meant: "I have been able to carry out, with the assistance of Viollet-le-Duc, what Semper has developed in me." Besides, Der Stil appeared more or less simultaneously with the first volume of the Entretiens, while by that time most of the Dictionnaire had already been completed. Semper’s influence on Berlage may nonetheless have been considerable.
An attempt to give his own (and in a way highly successful) interpretation to the principle of dressing can be pointed out on the interior of the Amsterdam Exchange (1898-1903), but in that case other influences are equally hard to ignore. Apart from Cuypers and Viollet-le-Duc, the works of the American architect H.H. Richardson should be mentioned in this context. The result is a building which in its gloominess, heaviness, constructive exhibitionism, and in the obsessive, puritanical flatness and nakedness of its walls exudes an atmosphere totally unlike anything Semper ever endorsed.

The point is not, to be sure, that no building can be in the spirit of Semper's architectural aesthetics which is not dressed with pilasters, architraves, and other commonplaces of the classicist tradition. Nor will it be suggested that Berlage only paid lip service to Semper's ideas when he developed a decorative system coinciding with the constructive as displayed in the Amsterdam Exchange. The point is that, even if there is dressing in this system, however abstract, there is no masking, no carnival spirit, no smell of candles, no festive event celebrated forever, in short, not the kind of architectural illusionism Der Stil is all about, while on the other hand there is much decorated construction (Fig. 25) and 'Tendenzsymbolik' (Fig. 26), the latter of an oppressively moralistic kind indeed!

Ironically, a perfect illustration of how without a trace of classicist detailing this carnival spirit et cetera can be attained is in that greatest building the nineteenth century has in The Netherlands left behind: Cuypers's Central Railway Station (Fig. 27), which happens to be just across the water from the backside of Berlage's Exchange. The final drawings for this complex were completed in 1881, and it is more than likely that by that time Cuypers, who was an educated man (even though not a writer) and had no problem reading German, was to some extent familiar with Der Stil\textsuperscript{190}--more likely than, for instance, that he would have known his way about in Ruskin's works.

27. P.J.H. Cuypers, Central Railway Station, Amsterdam, 1881-89
Now it so happens that Semper is never mentioned in this context—or at least not that I know. As the two major sources Cuypers drew on while designing Amsterdam's Central Railway Station are usually listed Viollet-le-Duc and the Dutch vernacular of late-medieval/early-Renaissance town houses and town halls. What in this connection is generally overlooked is that the writings of Viollet-le-Duc do not contain a theory of architectural aesthetics which even remotely matches the sophistication of Cuypers's built masterpiece, and that, moreover, nothing in Viollet-le-Duc's own output as a designer suggests he had one. Which is not meant to imply that, if Cuypers could not find his wisdom in the 'Dictionnaire' or 'Entretiens,' he must have found it in Der Stil. It is still quite possible that we are dealing with two parallel developments; that independently of what Semper as an architect-writer had done in Dresden, Zürich, and Vienna, Cuypers a little later did something analogous as an architect in Amsterdam. Once again, that is not the point. What matters is that even in that case, with no demonstrable lines of influence, we may still deal with Cuypers's building as an implementation of Semper's ideas.

On what grounds? There is hardly any formal characteristic that imperatively points in this direction. What we see (Fig. 27) is a 300 m (1,000 feet) long facade of average height, covering a building of little depth, stretched like a curtain\textsuperscript{191}, or lined up like a row of scenes, along an equally long railway shed, which it conceals, while at the same time very theatrically celebrating the activities going on there. They are celebrated in the building's rich coloration, but even more in its imagery. The scheme of an elevated and accentuated central part and two elongated wings, terminated by corner pavilions (which, by the way, was fairly common for nineteenth-century railway buildings) is reminiscent of Renaissance or Baroque mansions, and so are the steep roofs--although there is also something gothicizing about the latter. But unlike most other railway stations of that period, this one does not stop there. Two towers (which in the detailing of their upper part show some likeness to London's Big Ben), in the way of a medieval city gate, or of the ones that reinforce the corners of a Romanesque church, mark the main entrance. They have an echo in four minor, even more medievalizing towers at the corners of the original railway shed. The latter are too small to be clearly visible from the city side of the building, but the imagery of gates and towers guarding the entrances to the station, which arises on its own island like a kind of ideal city, is clearly and consistently carried through\textsuperscript{192}.

The two main towers in front are echoed in the corner pavilions, in slightly advancing vertical members, two on each side, gabled like regular town houses, in the elevated center part above the main entrance, which is almost as high as the towers themselves, and in two minor staircase towers on the side of the platforms. In combination with the horizontal rooflines, connected windowsills, and so on, these vertical elements produce an altogether pleasant rhythm of built forms, and being detailed in such a way that each of them displays a certain independence as almost (but not quite!) a building on its
own, exemplify the principle of the whole being mirrored in its parts and vice versa (see § 9.7.2 above). This principle is pursued on all levels of scale. Thus even the tiny dormer windows look like miniature buildings on their own—or, to use a more anthropomorphic analogy, like the casqued heads of soldiers guarding the city under the leadership of the towers.

Cuypers's mastery of form, moreover, speaks from the way he does not allow any major part of the composition too much independence, leaves them imperfect, if need be, in order to be more effective in the total work of art. This becomes especially evident if one takes a closer look at the central part of the building, the two main towers and what is in between. A striking feature is also how effective, in spite of its modest height, the building is at virtually all distances from which it can be observed.

In its figurative ornament the Central Railway Station is likewise more in accordance with Semperian principles of design than Berlage's Exchange. For even though there may be an educative element in some of it, this never enforces itself on a beholder. A festive atmosphere predominates throughout. Figurative painting or sculpture, moreover, is never applied to apparently constructive members. It remains 'on neutral ground,' so to say—which cannot be said for the Exchange.

9.9 Conclusions

In this case study I have tried to show how a model and method as expounded in the chapters 4 and 5 can be instrumental in specifying what a theoretical system as contained in a certain range of texts is about (§ 8.3), what kind of data its conclusions are based on (§§ 8.4, and 8.5), how its argumentation is structured (§ 8.8), what is the actual scope of leading concepts as introduced in these texts (§ 8.7), what apparent contradictions can be identified (§ 8.9), and how to some extent these can be bridged by introduction of a hypothetical implied concept (§§ 9.1-9.6). Subsequently some of the more practical recommendations as contained in the same texts have been reviewed in the light of that same concept (§ 9.7), and finally instances of their actual implementation in decision-making and design have been explored (§ 9.8).

General conclusions as regards Der Stil are that, apart from evolution of style—which strictly speaking is an art historical issue—conditions of successful architectural illusionism are the leading theme, that the aesthetic positions endorsed are formalist rather than symbolist, and that they have their philosophical background in late-eighteenth-century German idealism. This marks the difference with the Preliminary Remarks of 1834, which is still predominantly a product of French rationalism—in, let us say, the spirit of Henri Labrouste and other rebellious young architects of Semper's generation. More in particular I have tried to demonstrate how much of what at first sight appears incompatible or unrelated, fits in quite naturally when seen in the
light of a play concept of art as formulated by Kant and Schiller. Approaching it from this angle, one faces impressive unity as well as originality in *Der Stil*, much more so than it is widely assumed—even among Semper’s proclaimed admirers. A few elements, nonetheless, remain a source of tension. One is the author’s determination to defend by all means earlier ideas on Greek polychromy, another his resentment against Gothic. In either case there are some real incompatibilities involved, and so it is to be blamed on Semper, not on our method when these flaws cannot be altogether smoothed away. Yet I have indicated how, by some minor adaptations that fit in with the system’s general framework, these incompatibilities too in principle could be bridged.

How much of this interpretation is new, and, if so, for how much its originality is due to the methodology outlined and applied in the present study, will be considered in § 14.1, after a review of other readings of *Der Stil* in § 13.2. For now, let us see what problems of a structural kind we encountered in applying this methodology to this text, and how that affects the feasibility of objectives for this and other case studies as stated in § 7.1.

All things considered, *Der Stil* seems a perfect target for this type of reconstruction, for one thing because there is so much consistent thought to reconstruct, and, for another, because without such effort this extremely rich body of thought is not easily accessible. Nor was there any fundamental problem in identifying the elements of our model in this case, although it should be acknowledged a certain reliance on contextual evidence remains. This problem is not typical for *Der Stil*, and so we may as well discuss it in the context of Ruskin’s works—which will be done in § 11.6. Whereas in Ruskin’s case the problem turns up most clearly in the earlier parts of the case study, it is here most urgently felt in the second half, where everything is arranged about a hypothetical play concept of art. No matter how beautifully everything fits in when considered from that angle, it may be argued that in this case I have gone far out on a branch, and that some confirmation of all these conjectures through contextual evidence would do no harm to the strength and reliability of the whole thing. To this we shall recur in § 14.2.
The Seven Lamps of Architecture

(1849)

and

The Stones of Venice

(1851/53)

by

John Ruskin

For it is rather strange that, often as we speak of a "dead" wall, and that with considerable disgust, we have not often ... heard of a living one. But the common epithet of opprobrium is justly bestowed, and marks a right feeling. A wall has no business to be dead. It ought to have members in its make, and purposes in its existence, like an organized creature, and to answer its ends in a living and energetic way;

The Stones of Venice 1.IV.1
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10. 'Lamps' and 'Stones:'
Theory Laid Apart

10.1 Introduction

10.1.1 John Ruskin: Life, Times, and Works

John Ruskin (1819-1900) was born in London, son of a wealthy sherry merchant and his wife, a four years older cousin. His family on both sides was Scottish and protestant of a somewhat puritanical variety. By the time John was born, his parents were in their late thirties. He grew up well-protected, but also rather isolated, as their only child.

A passionate love of travelling was among the things his parents instilled in him. At an early age he joined them on trips along his father's wealthy clients, which brought them all over England and Scotland. Starting in 1833, when he was fourteen, most of their summers were spent abroad on trips through France and Switzerland to Italy—and back along approximately the same route.

A series of articles that as a nineteen year old Oxford student he wrote for J. Loudon's 'Architectural Magazine' and that later was published as The Poetry of Architecture, largely was based on his experiences on those trips. This earliest work completely fell within the scope of the picturesque movement. Architecture at this point quite literally was approached from a painter's perspective. 'Unity of feeling'—in the way cottages and villas are arranged and placed within their landscape setting—was the leading criterion of quality.

Landscape painting in general, and that of Turner in particular, was still Ruskin's main subject of study when a few years later he started working on Modern Painters, the first volume of which appeared in 1843, the fifth and last in 1860. After the second volume (1846) this project was interrupted for about eight years, to yield to architecture as by now the author's primary concern. Such resulted in The Seven Lamps of Architecture (1849), followed by The Stones of Venice, the first volume of which appeared in 1851, the second and third in 1853. Subsequently Modern Painters was somewhat perfunctorily completed, while simultaneously Ruskin delivered lectures all over England and Scotland to popularize his ideas as expounded in these major works. Most famous among these are the Edinburgh Lectures, also known as the Lectures on Architecture and Painting (1853) and The Two Paths, an anthology of five lectures he delivered at different occasions from 1857 to 1859. The tone of his writing and teaching turned increasingly moralistic, though, and by the end of the decade it was clear that his interest had shifted from art to socio-political issues. This resulted in works like Unto This Last (1860) and Munera Pulveris (1863).

Art and architecture returned as an everyday occupation when in 1870 Ruskin accepted a position as Slade professor of the fine arts in Oxford, which
he performed until in 1878 a deteriorating mental illness forced him to retire. From this period survive lectures that were collected and published as Lectures on Art (1870), Ara ra Pentelici (1870), and Val d'Ar no (1873), as well as two books that read like travel guides: Mornings in Florence (1875-77) and St. Mark's Rest (1877-84). An attempt in 1883 to resume his academic activities at the same place was short-lived: in 1884 he was forced to resign again, this time for good. His last major work, indeed a masterpiece on its own, is the autobiography he completed during periods of sanity that were granted him between the depressions of his late years: Praeterita (1885-89).

10.1.2 Structure of this Case Study

For basic objectives stated for this, as for the other case studies, the reader is once more referred to § 7.1 above. In how far those goals indeed have been attained will tentatively be evaluated in § 11.6, and, after a review of other readings of The Seven Lamps and The Stones in § 13.2, more fully in § 14.1. Like the former case study (on Der Stil), this second one conforms to the structure outlined in § 7.2. A list of quotes from Ruskin's works, or just places where interesting observations or opinions have been stated, all of them arranged by themes from the lists contained in Figures 13 and 14 (§ 4.4), with an indication of paragraphs (if any) in the current chapters where reference to those fragments of text is made, has been included as Appendix 5. Both there and in the main text the following abbreviations have been used:

PA: The Poetry of Architecture, 1838
MP: Modern Painters, 1843-60
SL: The Seven Lamps of Architecture, 1849
SV: The Stones of Venice, 1851-53
EL: Edinburgh Lectures (on Architecture and Painting), 1853
TP: The Two Paths (lectures), 1857-59

This will be followed by a designation of part or volume, section, chapter and paragraph. Thus MP I.II.I.23 refers to Modern Painters, Part I, Section II, Chapter I, § 23, which happens to be in Volume 1. SV2.IV.2 stands for The Stones of Venice, Volume 2, Chapter IV, § 2, and SL II.4 for The Seven Lamps of Architecture, Chapter II, § 4. Addenda, appendices, and introductions will be indicated as 'Add., 'App.,' and 'Int.' Other than the above works by the same author will be named by their full title. This system enables us to refer to Ruskin's works in a way that does not depend on one edition in particular. Only if there is no choice, reference will be made to the Cook & Wedderburn Library Edition of 1903-12. This will be done by the word 'Works' followed by volume and page number.
Reasons to devote two long chapters to the aforementioned two works by Ruskin have already been discussed in § 7.3 above, but a few complications remain which deserve our attention now. One is the already huge secondary literature on Ruskin, to which it may seem hard to add anything new. Some of this literature will be reviewed in § 13.2, not all, for sure, but hopefully enough to show that no study on Ruskin’s architectural writings exists (or is easily available) which even nearly meets the demands stated in § 7.1 for these case studies. So that need not be a reason to stay away from Ruskin, after all. Another, and more serious problem is the constant flux in Ruskin’s way of looking at art and architecture. Accordingly, a diachronic approach might seem more appropriate in Ruskin’s case than a synchronic one, but unfortunately such does not altogether meet the demands of our methodology. A reconstruction of systematic thought from a certain range of texts is impossible other than on the assumption of a certain constancy and consistency at their philosophical core, whereas in this regard Ruskin’s works appear to display at most a consistent evolution. To focus, as I chose to do, on Ruskin’s output of a relatively brief period (1849-53) does not altogether solve this problem, as even within these few years there was considerable evolution—in the evil sense that the later chapters of The Stones increasingly undercut the consistency of what seemed most promising in The Seven Lamps. There is no point in ignoring these problems, but it will be argued that, if properly acknowledged, they will remain manageable and provide no reason to give up on a unified treatment.

10.2 Recent Decision-Making: Ruskin versus Pugin

Holding on to the methodology outlined in § 5.1, a first aspect to be explored about the system contained in these texts is to what mid-nineteenth-century issues in architectural decision-making it most clearly responds. In the case of the aforementioned works by Ruskin these are of three kinds:

a. Questions related to choice, invention, or evolution of architectural style;

b. Restoration versus preservation (or neglect, and eventual destruction) of historic buildings;

c. Unwanted side-effects of industrialization.
As regards the latter two (b, c) Ruskin's position was quite clear: he endorsed preservation as opposed to either restoration or neglect, and he wanted to minimize side-effects of industrialization, such as man's alienation from nature, a partial or wholesale destruction of countryside and old city-scape, or a tendency to think of architecture as a disposable commodity, on a level with other mass-produced goods. With respect to the first, that is, the issue of style, the situation is more complicated. Did he, or did he not endorse a Gothic revival? And is this what these works (for as much as they are not a mixture of moral parable and travel guide) are all about? We shall recur to this in § 10.9.2 below, but at least one aspect of Ruskin's somewhat uneasy relationship to the Gothic revival in England deserves our attention now, first, because it has long since been a cause of serious misunderstanding, and, second, because it will enable us to indicate more clearly what kind of task in these two works Ruskin had set himself with regard to actual decision-making. That issue is his presumed indebtedness to the writings of August Welby Pugin (1812-52) and his unwillingness to acknowledge it.

To place Ruskin in line with Pugin has been commonplace among architectural historians ever since Charles Eastlake in 1872 wrote the first history of the Gothic revival¹⁹³, a book in which inevitably both men hold an important place. In doing so, Eastlake was followed by, among others, Kenneth Clark (1928)¹⁹⁴, Pevsner (1936, 1969, 1972), and, most recently, Kristine Ottesen-Garrigan (1973). Unfortunately, when in these works the comparison is made, it does not always work out to Ruskin's advantage. Thus Pevsner notes how "Ruskin, profoundly dishonest as he was, denied any influence from Pugin." Sir Gilbert Scott, he continues, was more honest when he declared: "I was awakened from my slumber by the thundering of Pugin's writings¹⁹⁵." Having observed that Carlyle, supposedly his spiritual father in most other things, had nothing to give him in architecture, Pevsner concludes:

Here he is wholly influenced by Pugin; his hysterical denial proves it ...

Yet Pugin's message, as we shall see, is Ruskin's message; only Pugin's was single, whereas Ruskin has so many messages that they get entangled and tend to fight each other¹⁹⁶.

Or, at another occasion:

... You see how marvelously Ruskin can express subtle qualities and how justly he felt about the Gothic style. But it is all feeling, not reasoning. ... Viollet's approach to the Gothic style is rational, Ruskin's emotional. That is where their Frenchness and Englishness lie. ... since Pugin was of French descent, the emotional and the rational mix in him. There is no such mixture in Ruskin. He is unreasonable throughout¹⁹⁷.

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What happens in these--to reverse the charge--hysterical comments, is simply that all those of Ruskin's ideas which cannot be traced to Pugin are pushed aside as irrational. Seventy years after his death, and more than a hundred since he completed most of his architectural writings, Ruskin still manages to bring out the worst in a man like Pevsner--quite an achievement, if you think of it. Yet if we follow Ruskin's whereabouts (see § 10.1.1) up to the time when he wrote The Seven Lamps and The Stones, nothing points to an indebtedness to Pugin in particular, or even to an involvement with the Gothic revival in general--although of course he may have sympathized. In fact, it was not until after he completed The Seven Lamps that, through a readership which first had come to look at Gothic through Pugin's eyes and now tried to harmonize the latter's views with what they liked in Ruskin's, that Ruskin came to realize the association was being made anyway, even though he had never intended it that way and thoroughly disliked it. In an appendix (12) to the first volume of The Stones, entitled 'Romanist Modern Art,' he tells us why. Though as a rule quite able to floor an opponent by pointing out inconsistencies in what he or she has said, this time he chooses a less subtle approach, speaks contemptuously of his presumed master and attacks him viciously. It starts with a sermon against Roman Catholicism in general and Pugin's adherence to it in particular. Subsequently the man is qualified as "not a great architect, but one of the smallest possible or conceivable architects; and that by his own account and setting forth of himself." The latter refers to Pugin's complaints how one by one all of his major works failed to turn out the masterpieces they were meant to be--and always by circumstances over which he had no control. Ruskin refuses to accept it as an excuse for all that he considers wrong in Pugin's churches, and concludes:

SV1.App.1 I am sorry to have to speak thus of any living architect; and there is much in this man, if he were rightly estimated, which one might both regard and profit by. He has a most sincere love for his profession, a heartily honest enthusiasm for piaxes and piscinas; and though he will never design so much as a pix or a piscina thoroughly well, yet better than most of the experimental architects of the day. Employ him by all means, but on small work. Expect no cathedral from him; but no one, at present, can design a better finial.

In the same vein any influence of Pugin's writings on his own is denied. In an appendix to Modern Painters 3 (1856), entitled 'Plagiarism,' Ruskin states how he "glanced at Pugin's Contrasts once, in the Oxford architectural reading room, during an idle forenoon ..," and how subsequently he "never read a word of any other of his works, not feeling, from the style of his architecture, the smallest interest in his opinion."

Is this fair? Historians seem to be unanimous that it is not, and that Ruskin cannot have been as ignorant of Pugin's writings as he pretended to.
It is seldom noted, though, that much of this familiarity may have been acquired without actually reading Pugin's works. Pugin's message was a comparatively simple and straightforward one, laid down in three or four tiny manifestoes, and his ideas were in the air. Besides, that Ruskin did not like Pugin's architecture, and made no secret of it, was nothing special, nothing personal. Few Gothic buildings recently completed or still under construction carried away his enthusiasm. That Pugin's greatest strength was in architectural detailing, rather than in layout and composition of buildings as a whole, is an opinion which eventually has come to be shared by most architectural critics.

And so, what the issue of Ruskin's fairness to Pugin comes down to is why he chose to attack the man on his personal creed. Pevsner's suggestion that what is involved is a claim to originality for ideas which in fact were Pugin's, makes little sense, because Ruskin's ideas are not Pugin's. Moreover, it is not altogether Ruskin's style to deny this kind of indebtedness. It is just not Pugin whom he mentions in this context, but Robert Willis, Charles Lindsay, and a few others. Neither can it altogether be explained from a dislike of Roman Catholicism in general. There were too many Catholics around even for Ruskin to attack them all. In all of Ruskin's architectural writings it is mainly Pugin who meets this fate.

So the reason must have been more specific: a wish to convince his protestant readers that, notwithstanding his love of Gothic, he had not left their ranks; or the kind of bigotry Pugin was infamous for, even with members of his own church, like cardinal Newman. To Ruskin it must have been all the more unsympathetic for the way it was linked to an artistic pretense he refused to acknowledge, and to the a priori character of 'True Principles' he never recognized as true. How he felt about the latter is explained at the outset of the first lamp, the one of Sacrifice, where architecture is distinguished from mere building as an art of the unnecessary, one that concerns itself "with those characters of an edifice which are above and beyond its common use" [SL.I.1]. Such might be considered a mere play of words, for it is neither stated nor implied that building is less important than architecture, and in so many words denied that there could be good architecture without good building. So strictly speaking nothing is actually said for the totality of architecture plus building.

Even so, it is seldom taken that way. And for good reason, for what is involved is a flat denial of precisely the 'True Principles' which in 1841 Pugin had introduced as his most personal discovery. Of these the first states "that there should be no features about a building which are not necessary for convenience, construction, or propriety," the second "that all ornament should consist of enrichment of the essential construction of the building." In 'pure' architecture, Pugin explains, "the smallest detail should have a meaning or serve a purpose." Most architects took this for granted. Opinions could vary as to what was necessary for convenience, for construction, or for propriety, or at what point ornament becomes too rich to remain 'an enrichment of essential
construction,’ but their validity as principles was not really at stake—except, of course, for Ruskin. Unless ‘meaning’ and ‘purpose’ were taken in a very broad sense—which would have made Pugin’s statements kind of empty, and certainly was not what the latter had in mind—there was, Ruskin felt, no way all major qualities in architecture could thus be rationalized. It is a recurring theme in all of his architectural writings. As it is noted in ‘The Virtues of Architecture:’

SV1.II.17 And, above all, do not try to make all these pleasures reasonable, nor to connect the delight which you take in ornament with that which you take in construction or usefulness. They have no connection; and every effort that you make to reason from one to the other will blunt your sense of beauty, or confuse it with sensations altogether inferior to it. ... Remember that the most beautiful things in the world are the most useless ones; peacocks and lilies for instance; at least, I suppose, this quill I hold writes better than a peacock’s would, and the peasants of Vevay, whose fields in springtime are as white with lilies as the Dent du Midi is with snow, told me the hay was none the better for them.

As we shall see (§ 10.7.3), it is by and large ornament’s independence of construction which Ruskin chose to emphasize, be it with important qualifications. Thus ornament should not contradict construction, nor is each part of a construction considered equally fit to receive no matter what kind of decoration. Much of the first volume of The Stones is devoted to an investigation of what ornament best fits what parts of a construction. It is a more empirical approach than Pugin’s, and one that does not sympathize with efforts to rationalize all ornament in terms of function and meaning. Buildings must ‘please by their presence’ [SV1.II.1]. After mere function that is the first thing we demand of them. The emotional value of specific forms in Ruskin’s system tends to be explained in terms of likeness with other forms, and of chains of association thereby set in motion, not in terms of conventional symbolism—although from the second volume of The Stones onwards symbolism as implied in figurative ornament is given more attention. We shall recur to this in § 10.9.4.
10.3 Questions

Efforts to identify the range of questions relevant to architectural theory and dealt with in *The Seven Lamps* and *The Stones*, is complicated by the multi-functional character of these works. To approach them as architectural treatises is just one among several ways they can be read. Thus Rosenberg (1961) highly admires *The Stones*, but as a book on Venice rather than on architecture. And indeed that is what, among other things, it is: a book for English lovers of art, architecture, and history, who some day might decide to go and see the place themselves. In the same vein Alexander Bradley in *Ruskin and Italy* (1987) deals with Ruskin as an architectural historian rather than as a critic or theorist. That approach, however, is unusual for as a historian Ruskin is not generally taken very seriously, whereas as a critic he is—not just as a critic of art, but as one of society as well. This points to yet another angle from which to consider those works, particularly *The Stones*: as a moral parable, a critique of modern times by setting them off against the way things were—if one is inclined to think so—in medieval Europe. As such it was, as indicated by Nick Shrimpton, a late exponent of a literary genre which had its peak some fifteen years earlier. And finally there have been efforts to integrate some of these views. Thus Elisabeth Helsinger in *Ruskin and the Art of the Beholder* (1982), and in an article, likewise of 1982, entitled 'History as Criticism: The Stones of Venice' argues that to Ruskin's nineteenth-century readers history and travel were strongly related experiences. Accordingly, his architectural writings should be seen as efforts to educate his readers in both simultaneously. By fostering a historical awareness of the relativity of nineteenth-century values, those writings, moreover, are held to aim at making the same readers more critically aware of what was fundamentally wrong about their own time and country. Unfortunately, this is an approach and an interpretation which, in spite of their apparent inclusiveness, leave little room for the same works as architectural theory. We shall recur to this in § 13.2. For now, let it be noted how these different approaches need not nicely complement each other, but frequently result in contradictory points of view. Thus 'The Nature of Gothic,' which in Helsinger's evaluation features as the central chapter of 'The Stones,' crucial to an understanding of the work as a whole and an intellectual milestone in itself, is criticized by Unrau for containing some of the worst anomalies in the same work as architectural theory, and some historical monstrosities as well, both of which originate in an impulse to use architectural theory as a medium of social criticism. So even if we are concerned with Ruskin's contributions to architectural theory only, it is important to consider his works from different angles as well, if
only to be prepared for flaws as mentioned.

What speaks in favor of an interpretation of The Seven Lamps and The Stones as more strictly architectural theory is the task which at the outset of both works their author sets himself: to lay down standards of right and wrong for all architecture of all times. As it is stated in The Stones:

SVI.II.1 We address ourselves, then, first to the task of determining some law of right which we may apply to the architecture of all the world and of all time; and by help of which, and judgment according to which, we may easily pronounce whether a building is good or noble, as, by applying a plumbline, whether it be perpendicular.

Besides, it is precisely what Ruskin does: try to infer such standards from a few dozen buildings which he has thoroughly investigated and describes in great detail. The range of examples may be too small to allow for truly universal conclusions, and Ruskin's interest may be in certain aspects of buildings rather than in others, but that does not alter the intention.

How, within this general framework, attention has been distributed over various aspects of architectural decision-making and design has been summarized in Figure 28. Codes refer to the list of themes and questions rendered in Figures 13 and 14 (§ 4.4), as well as to the listing of quotes and other interesting passages in Ruskin's works, arranged by theme, included in this study as Appendix 5. Major themes are demands on architectural detailing, ornament, and color, minor ones composition, preservation, choice of style, invention of a new style, and education of architects. Remarkably enough, this, as indicated (§ 8.3), is not too different from a pattern as can be identified in the works of Gottfried Semper. So if from a contemporary point of view the scope of Ruskin's interests is one-sided, this is not readily accounted for by his being an outsider to the architectural profession. The inverse argument, for sure, does not hold for Semper, whose greatest strength as a theorist is not in what might seem professionally most typically his own, that is in practical design—but in philosophy of art as applied to architecture, and in a somewhat speculative (in a positive sense) way of practicing art history. When it comes to actual decision-making regarding detailing, choice of materials, or choice of style, Semper backs out from any radical conclusions his theories might lead to. Precisely at that point he shows himself more conventional, ready to compromise. Ruskin, the watercolorist and literary man, has no such inhibitions, and makes his most original contributions, his most piercing observations, right there, whereas in abstract aesthetics he is always wavering, unable to hold on to a consistent point of view.
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28. Distribution of attention over different issues in The Seven Lamps of Architecture and The Stones of Venice.
10.4 Examples

Like Semper in *Der Stil*, Ruskin in *The Seven Lamps* and in *The Stones* only incidentally uses actual decision-making as a source for answering the above questions. Once again those of examples, built or unbuilt, and of value systems are the primary ones in this respect. Examples are next to be reviewed, value systems follow in § 10.5.

10.4.1 Art and Artifice

The range of examples, built or unbuilt, he chooses to write about is among the most constant elements in Ruskin's architectural writings, and so is, with only minor variations, his appreciation of these. The three domains of his major interest are (a) late-Romanesque and early-Gothic churches and palazzi in Northern Italy, (b) Twelfth-century Gothic cathedrals in France, and (c) nature as exemplified in the Swiss and French Alps. What varies are mainly the reasons he presents for their alleged perfection or incidental weaknesses.

But let us be systematic and look first what the author has to say on other than medieval art and architecture. Egyptian art, to begin with the oldest, he admires, but leaves for incidental notice only. The same holds for Mesopotamian art. Greek art and architecture could not so easily be skipped, as more of it survives in medieval buildings which were the author's primary concern. Besides, the Parthenon by that time, that is, in the 1840s and 50s, had become so universally accepted as a paradigm of excellence that no theorist of art or architecture could ignore it. One way or another, they all had to find it a place within their systems, and so did Ruskin. As early as *Modern Painters* 1 (1843) Phidias is put on a level with Dante and Michelangelo as one of the three greatest artists of all times. For to Ruskin it is Phidias and his sculpture that the Parthenon is all about:

SV1.XXI.7 Then there is the Greek system, in which the human sculpture is perfect, the architecture and animal sculpture is subordinate to it, and the architectural ornament severely subordinated to this again, so as to be composed of little more than abstract lines.

As a historical generalization this may seem a bit rude, as many a nice Greek temple had been erected before the Parthenon, without such perfect sculpture, but anyway, the Parthenon itself had been accounted for. Of other classic and classicist art and architecture the Roman variety is almost completely
ignored, while to the Renaissance the author takes a polemical stand. As he puts it in the first chapter of *The Stones*:

**SV1.I.39** It is in Venice, therefore, and in Venice only that effectual blows can be struck at this pestilent art of the Renaissance. Destroy its claims to admiration there, and it can assert them nowhere else. This, therefore, will be the final purpose of the following essay.

Such animosity, of course, was not always compatible with an unbiased search for universal principles of right and wrong, but, as indicated by Unrau, in his descriptions of Renaissance palazzi and Baroque churches, Ruskin as a true empiricist displays much sensitivity to at least such qualities as a nice disposition of masses.

As for 'exotic' arts of far-away lands, those of Mexico and China are despised, while Indian and Turkish art arouse mixed feelings: beautiful, yes, but devoid of any higher moral content [TP1]. It is not the architecture of any of these countries, though, that he ever discusses, but at most their applied arts: rugs, scarfs, and so on.

Products of applied art otherwise have no significant role in Ruskin's architectural reflections. The only indication I could trace of an awareness that others were taking this course is in the 'Lamp of Obedience,' where in regard to a new style it is noted:

**SL.VII.6** We shall not manufacture art out of pottery and printed stuffs; we shall not reason out art by our philosophy; we shall not stumble upon art by our experiments, nor create it by our fancies ...

Considering the date (1849) this cannot be a reference to Semper's writings on these issues, as these came later (from 1851 onwards). It could, theoretically, refer to Bötticher's *Tektonik der Hellenen*, the first volume of which had appeared in 1844, but considering Ruskin's indifference to 'German philosophy' such seems far-fetched. Most likely, it hints at the activities of Henry Cole cum suis, who by that time were preparing the Great Exhibition and aimed at reform in design education along lines that ran parallel to Semper's ideas on the subject. But anyway, in Ruskin's works the issue is no further explored. Nor does painting provide paradigms for architecture to emulate—or at least not in the *Seven Lamps* and *Stones of Venice*. In a way it did in *The Poetry of Architecture*, where picturesque ideals were taken very seriously, almost literally. In *The Seven Lamps* they are temporarily out of favor, and even though halfway *The Stones* they have regained much of their respectability, it is no longer suggested that buildings should be made to fit their urban or landscape context the way a painter arranges an arcadian or heroic landscape setting.

And so it is still medieval art and architecture that by far receives most
attention. Within this range Ruskin's choice of paradigms, even though nowadays such may no longer be obvious, shows considerable originality, particularly on the Italian side. Giotto's Campanile (Fig. 30) and other buildings in Florence may have enjoyed a certain prestige in England prior to the publication of The Seven Lamps, but with the 'streaky bacon' of Sienna cathedral, even though admired in the 1820s by young French architects like Léon Vaudoyer\textsuperscript{211}, it was a different story, and so it was with most of Ruskin's favorite buildings in Venice, like the Ducal Palace or the church of St. Mark's. Venice by then was favorite with painters like Turner and poets like Byron as a place to go and paint or write about, but architects, although aware of certain picturesque charms, were unable to take its architecture very seriously. Not so young Ruskin, who, by the way, was likewise among the first (though not necessarily the very first) to fully appreciate the greatness of painters as far apart as Fra Angelico and Tintoretto\textsuperscript{212}.

For an author who, as we shall see, took it upon himself to lay down standards of right and wrong for all architecture of all times, the range of buildings reviewed remains fairly small. If we say northern France and northern Italy, that is still too wide. Most of the Gothic cathedrals studied in the former were on the route the Ruskins used to take from England to Italy and back: Rouen, Abbeville, Amiens, and Chartres, most of all. In northern Italy the focal points of his attention were Venice, Florence, Pisa, Lucca, and incidentally Verona. There, as indicated, it is mostly churches and palazzi in stone or brick that are investigated, and of these only the public appearance--that is, their exterior plus the interior for as much as it has a public function.

Within this limited range of examples a wide variety of styles, nonetheless, is represented, and the qualities Ruskin singles out in, for instance, Pisan Romanesque need not be the same as the ones he adores in the cathedral of Chartres. If a gradation is to be made, Ruskin tends to favor his Italian churches and palazzi (which are not profoundly Gothic, after all) to the French cathedrals, but some ambiguity on this point remains. We shall recur to this in § 10.9.1.

10.4.2 Nature and Music

The paramount importance of nature as a paradigm of artistic excellence in Ruskin's works follows from a mimetic concept of beauty, according to which beauty in human work is, and always will be derivative on beauty in nature. Art can, and should be instrumental in making man see beauty in nature, but it cannot, in Ruskin's view, create it while altogether looking the other way. And even though, as we shall see (§ 10.7.1), this is not all there is to Ruskin's aesthetics (a mimetic concept of beauty is dealt with as just one aspect of a concept of greatness which is not mimetic at all), it is a major element, for sure, one that manifests itself in two ways. First, in an insistence that ornament
(with the exception of color) should be imitative, no matter how abstractly, of natural form, and, second, in organic (mostly zoomorphic) analogies for the composition of buildings as a whole. Both will be dealt with extensively in the next chapter, particularly in the paragraphs 11.1 and 11.3.

Musical analogies (notwithstanding Gombrich's account of the matter, which is based mainly on The Two Paths), have a role of some importance in Ruskin's system as expounded in The Seven Lamps and The Stones, be it a predominantly negative one. Thus they are mentioned in connection with 'proportionate design,' only to point out that for this there are no simple rules, and in relation to color just to show how successful coloration in architecture does not depend on accurate rendering of fact. For details see §§ 11.4.2 and 11.4.5 below.

10.5 Value Systems

The major obstacle that everybody seems to face in an effort to identify major value systems in Ruskin's architectural thought, their relative importance, and the kinds of information they provide, is to properly assess the role of religious conceptions, convictions, and institutions among these. A constant and profound preoccupation with religion no doubt is a major characteristic of virtually all his writings, but it is a restless, tragic involvement, which often makes it hard to decide when he is altogether serious, when at least partly rhetorical, and when in a schizophrenic way suspending his own disbelief in sacred dogma. Rosenberg (1961) sure has a point when he states:

Although it is just to accuse Ruskin of preaching, it is also naive. By writing sermons he got the Victorians to lend him their ears that he might open their eyes.

The point, however, cannot be generalized to include each and every religious statement Ruskin makes. As a way to avoid these pitfalls, I would propose to first take a wider look at value systems of some consequence, and subsequently to explore their religious dimension. Among those (other) systems the following stand out:
(a) Nature and the way humanity has traditionally (before industrialization gained momentum, or even further back) taken care of it and observed its restrictions;

(b) The worlds of visual art and of poetry;

(c) The human family, that is, the way good parents take care of their children, and the respect which, if they do, their children owe them.

(d) Society as organized in pre-industrial cities, or city-states, with their surrounding countryside;

(e) Religious life in medieval Europe, when it still displayed the noble simplicity which later on it lost.

The five are clearly interrelated. Practicing and enjoying art (b) in Ruskin's earlier works are presented as most of all two ways of cultivating Divine Nature (a). Destruction of nature (a) is among the evils of industrialization (d), whereas a patriarchal structure of society (c) was among the major assets of traditional urban (d), or rural life (a). Simplicity of medieval life (d) was reflected in and supported by the state of mind characteristic of medieval Christianity (e). But how are they related to Ruskin's own religious attitudes and convictions—or doubts?

At this point it is important to keep in mind the distinction, already hinted at in § 4.3.4 above, between value systems and whatever ideologies may seem related to these. To draw a reader's attention to what by many has been considered valuable so far and is at risk of going down the drain, or appears to have been worthwhile in the past and since got lost, is not the same thing as to preach a total freeze of the status quo or a wholesale return to archaic conditions. Nor is there much in Ruskin's writings which suggests that he obliterated the distinction. Such was done by his commentators, particularly those of a modernist persuasion, who thus tried to present a caricature of his ideas, or simply could not see beyond such caricature. Now what I want to submit is that, be it in a more sophisticated way, this is precisely what has happened in many recent Ruskin studies where they came to deal with the man's religious thought in relation to his ideas on art and architecture. Let me try to explain.

Opinions among Ruskin's commentators have long since varied as to whether, or for how long Ruskin truly endorsed his family's Protestantism, and, when he gave up on it (if he ever did so), what he confessed to instead. In 1931, in a biography which in many ways was a milestone in the study of Ruskin's life and works, Wilenski noted how at that time the more or less accepted point of view was that Ruskin's religious development had passed through
three stages. His life a sectarian protestant in the spirit of his mother, Margaret Ruskin, ended with an unconversion at Turin in 1858 (as described both in Praeterita and in Fors Clavigera). Thus began a period of skepticism, which lasted until 1874, when he became a loyal member of his family's church again. Wilenski adds he does not share this point of view, arguing that all his life Ruskin's relation to his God has been a very personal, and in no way sectarian one. Even so, the 'established' point of view has been more recently endorsed again by Landow (1971) and Van Akin Burd (1981).

Before choosing sides in this debate, it is important to distinguish between three interrelated aspects of Ruskin's (or anybody else's) religious thought and attitudes: (1) conceptions of man's relationship to his creator, directly or through certain aspects of the world as created, or as in a process of constant recreation; (2) faith in the literal and unfailing truth of certain texts which are accepted as divine revelation; and (3) loyalty to some form of organized religion. Now let it be noted that if, among these three aspects, one would focus almost exclusively on the second and have no eye for the first or the third, he would in a way focus on ideology at the expense of value systems--and that, I would like to submit, is precisely what has happened in most Ruskin studies, both before and after Wilenski's, when their authors tried to account for new developments in Ruskin's outlook on art and society from apparent changes in his faith concerning the truth of what is in the Bible.

By this I do not mean to rule out in advance any correlation between fluctuations in Ruskin's Christian faith in a narrow sense (2) and his ideas on architecture. Indeed we shall encounter cases (§ 10.9.4) where this type of correlation is hard to deny. What I intend to do is highlight the priority of value systems over ideology by drawing attention to the following. For one thing, much in The Seven Lamps and, even more, in The Stones happens to be about medieval Christian art. This Ruskin evaluates not by its formal qualities alone. He also enthusiastically explores its iconology and deeper meaning, praising whatever he considers worthwhile in the latter in such a way that it might seem as though he personally advocates this medieval way of thought. That, in a way, of course is what he does, yet it is important to keep in mind the rhetorical context, for as already hinted at with regard to 'The Nature of Gothic,' Ruskin is liable with equal fervor to endorse completely different and to some degree incompatible systems--in architectural design as in other things. Secondly, let it be noted how shifts in religious attitude as mentioned (1 or 3) in Ruskin's life occurred less often than fluctuations in his acceptance or rejection of religious dogma (2), but, when they did, were irreversible, whereas those others were not. Moreover, and that is a third point, those few shifts within '1' or '3' had a more palpable impact on value systems like the ones enumerated above (a-e), and hence on architectural theory, than most of the fluctuations within '2.' And, finally, I would like to point out how beneath all surface rhetorics of honest Protestantism versus corrupted Catholicism, much in the opening chapter of The Seven Lamps already
anticipates Ruskin's later, non-sectarian, less biblical, and in a way pantheistic position. Of these four points the first will be dealt with in § 10.9.4. In the remainder of this paragraph I will focus on the three others.

Two major shifts in religious attitude have (though not necessarily by that name) been pointed out by most of Ruskin's biographers. A first one, which took effect predominantly at the time we are presently concerned with, that is, in the course of the writing of The Seven Lamps and The Stones, has to do with changing conceptions of man's relationship to his creator. Ruskin always believed in some sort of divine immanence in this world, which, even if it could not strictly be observed, at least could be sensed, and, when thus experienced, was bound to have a wholesome effect on its beholder. However, he changed his mind as to where man was likely to encounter it in its purest and strongest form: in nature or in the human soul. The first two volumes of Modern Painters are based on the former conception, The Seven Lamps betrays already the beginning of a shift toward the latter, and in the final chapters of The Stones the move has been completed. The shift apparently was largely driven by two things. On the one hand, there was a growing awareness of nature as not always idyllic, sublime, reassuring, or even beautiful, but cruel and desolate as well, much of the time, suggestive of an awesome, punishing God rather than of a benevolent one. At the same time Ruskin became more sensitive to (and indeed a pioneer in exploring) all the ways in which in works of art or architecture a beholder encounters an artist or a craftsman, and how the nobility of such works largely depends on the greatness of heart and mind of their maker(s) as exemplified in those works. Such may seem a peculiar way to proceed—to reason from the way art is enjoyed to the modalities of God's presence in this world—but for Ruskin it is not unusual at all. When in 1877 in the April issue of Fors Clavigera he relates how in 1874 he found his way more or less back to the church, he mentions as the turning point a discovery how religiously inspired artists like Giotto or Cimabue produce works which are not inferior to those of basically irreligious ones (in their painting) like Titian and Tintoret. And so, in any event there was a significant correlation between those changes in religious attitude and Ruskin's ideas on art and architecture—although it is not always easy to tell which comes first. We shall recur to this in §§ 10.7.1 and 10.9.4.

Before we come to that, there is another major shift we must discuss, the one that is usually and most conveniently referred to as the 'unconversion' Ruskin experienced at Turin in 1858. The change has often been described as a final loss of faith in such dogma as that those who pray will go to heaven, or the presumed truth of all that is in the Bible. However, the account of the event in Praeterita [Vol.III, Chapter I] by way of an introduction focuses first on the observance of the Sunday as a day of neither work nor enjoyment. Ruskin relates how long since he had arrived at the conclusion that the projection of Sabbath rule on what was meant as a day to commemorate Christ's
ressurection found no support in the New Testament. It was all a protestant invention, as was the stripping it of the original Sabbath delight. So on this issue Ruskin felt it hard to choose sides with the few protestants in the Waldesian chapel he briefly visited there on that fateful Sunday in Turin, and what put him off even more was what he considered the stupid pretense of those gloomy few to think that only they would qualify for heaven. Such narrow-minded sectarianism he increasingly had come to loath. The actual unconversion apparently was a decision no longer to feel guilty about a loss of faith in protestant dogma, or in the superiority of his family's church, not that loss as such, which he had been struggling with for more than a decade.

Now was this shift actually irreversible? It may be objected that, as in 1874 Ruskin joined the protestant church again (though not exactly his family's church as he had left in 1858)²¹⁵, apparently it was not. A brief look at the relativizing tone in which such matters are discussed in Praeterita (1885-89), compared to the religious fervor of Ruskin's works of the 1840s and 50s, nonetheless makes it sufficiently clear that things would never be the same again. The change resulted, among other things, in a sincere regret of all the theological sermonizing in his earlier works, more in particular their anti-Catholic tone, and even in plans to rewrite The Seven Lamps and The Stones in such a way that this aspect would be neutralized. Opinions vary, on the other hand, as to what was left in him of religion after 1858. Landow (1971) qualifies Ruskin's state of mind from 1858 until 1875 as agnostic, with incidental flares even of atheism, although the latter never got the upper hand. Ruskin's continued observance of some of the formalities of the religion he abandoned, as well as his apparent return to it in 1875, Landow explains from a fear of death as well as from the general sense of desolation which the loss had brought along. To this it may be objected that Ruskin, even if he rejected the authority of the Bible or any other sacred text, always kept thinking of a divine immanence in this world as somehow knowable²¹⁶. 'Agnosticism' therefore does not appear to me the most accurate word to describe his new state of mind. Besides, it may not even have been so wholly un- or anti-Christian. Rosenberg insists it was not when, more or less in line with Wilenski, he submits that Ruskin "never lost his fundamental faith in Christianity," and that his social criticism of those years "was colored by his Augustinian sense of the mystery and tragedy of terrestrial life, and his 'socialism' ... rooted not in the age of reason but in the radical ethics of the Gospels"²¹⁷. It is a suggestion which, for one thing, makes more sense of Ruskin's writings of that period, and, for another, once again points to the priority in Ruskin's thought of value systems (which after all Christianity, whatever its imperfections, still was to him, and a very important one at that) over dogma and ideology--including the negative dogma that there is no God we can possibly have any knowledge about.
Of the impact those changes in religious conception and attitudes had on Ruskin's thought regarding art and architecture we shall come to speak at various places in the remainder of this and in the following chapter. For now, let us return to the suggestion that, beneath all the surface rhetorics of Protestantism versus Catholicism in the 'Lamp of Sacrifice' many of Ruskin's later, more liberal and less sectarian positions are already anticipated. A major element in this opening chapter of The Seven Lamps is an endorsement of richer ornamental treatment of churches than of houses. That, of course, puts Ruskin in a delicate position between Catholics and Tractarians on the one hand, and more strictly protestant readers on the other. So he has something to explain, must try to obtain support from at least some of these factions. Accordingly, the light which from this lamp should shine is specified as follows:

**SL.1.2** Now, of the principles which I would endeavor to develope, while all must be, as I have said, applicable to every stage and style of the art, ... I would place first that spirit which, having influence in all, has ... especial reference to devotional and memorial architecture—the spirit which offers for such work precious things simply because they are precious; not as being necessary to the building, but as an offering, surrendering, and sacrifice of what is to ourselves desirable. ... It is a spirit, for instance, which of two marbles, equally beautiful, applicable and durable, would choose the more costly because it was so, and of two kinds of decoration, equally effective, would choose the more elaborate because it was so, in order that it might in the same compass present more cost and more thought. It is therefore most unreasoning and enthusiastic, and perhaps best negatively defined, as the opposite of the prevalent feeling of modern times, which desires to produce the largest results at the least cost.

He adds he fears this feeling is not only "in most cases wholly wanting in those who forward the devotional buildings of the present day," but even would be "regarded as an ignorant, dangerous, or perhaps criminal principle by many among us." So he knows what he is up to. The principle raises questions that deserve a proper answer. For instance, why, if people feel an urge to sacrifice what might be useful to themselves, spend it on beautifying churches rather than on the poor? This, he agrees, makes sense, but it is immediately added [§ 7] that "The question is not between God's house and His poor: it is not between God's house and His gospel. It is between God's house and ours." Evidence that beautification of the former is indeed God's will is taken from the Bible. Three earlier paragraphs [§§ 2-4] deal with questions like: is what the Old Testament tells us about the way God wants offerings to him to be made still valid now that, after Christ's sufferings, a new covenant between God and mankind has become effective? Ruskin thinks it is, and from a section in Leviticus where it is stated the best of the flock are to be selected for
sacrifice, and that the Tabernacle should be adorned with the prettiest of hangings, infers that churches too deserve a costly treatment. This at once raises another question: does the church really need such rich adornment? Definitely not:

SL.1.8 The church has no need of any visible splendors; her power is independent of them, her purity is in some degree opposed to them. ... It is not the church we want, but the sacrifice; not the emotion of admiration, but the act of adoration: not the gift, but the giving.

And to forestall further misunderstandings as to where he stands:

... we must always fearfully and widely shun the thought that the magnificence of the temple can materially add to the efficiency of the worship or to the power of the ministry. Whatever we do, or whatever we offer, let it not interfere with the simplicity of the one, or abate, as if replacing, the zeal of the other. That is the abuse and fallacy of Romanism, by which the true spirit of Christian offering is directly contradicted.

On the other hand, he is convinced it will do the arts much good:

SL.1.9 God never forgets any work or labor of love; and whatever it may be of which the first and best proportions or powers have been presented to Him, he will multiply and increase sevenfold. Therefore, though it may not be necessarily the interest of religion to admit the service of the arts, the arts will never flourish until they have been primarily devoted to that service ... and with our present accumulation of means and of intellect, there would be such an impulse and vitality given to art as it has not felt since the thirteenth century.

The remainder of the chapter [§§ 10-15] deals with restrictions on the scope of this principle, which need not concern is here. What matters is that there is more involved than an endorsement of Gothic among protestants. Thus a major implication of the church being in no need of visual splendor is that the latter may be just as happily and devoutly bestowed on other public buildings. For public, as pointed out in the same chapter, such acts of sacrifice should be. Art's basic function in this conception is to sensitise man to the glory of God's creation. For the moment this meant sensitizing him to Divine Nature, later on there would, as indicated, be a shift to the divine core of the human soul, but in either case art's basic function supposedly was to deepen man's religious life outside the four walls of a church.
10.6 Humanities

A next thing to consider is through which of the humanities (or, for that matter, social science, although in this case that can hardly have been a major element) the above value systems are linked to theory proper, and how. The answer rests in part on contextual evidence, such as what books Ruskin owned at what period in his life, or what mention of them is made in letters and diaries, but a mere inventory of works to which explicit reference is made either in these two works or in the first two volumes of Modern Painters, combined with those he must have been familiar with given the things he writes, already gives a fair idea of the width of Ruskin's erudition at the early age at which he wrote The Seven Lamps and The Stones. On the other hand, an inevitable conclusion is that most of this relates to the first two value systems as mentioned (§ 10.5): those of man's dealings with nature (a) and the worlds of art and poetry (b). For the former, one even has to look outside the humanities and acknowledge Ruskin's considerable learning in botany, geology, and so on.

No such systematic learning can be pointed out with regard to the human family (c), pre-industrial and in particular medieval society (d), or religious life in medieval Europe (e). Family life and structures, in spite of his own rather peculiar domestic background, he knew like everybody else, and from that point of view there may have been no urgent reason (nor, by the way, much opportunity) to actually study them. For medieval society and medieval religion the reason for such study may have been felt, but once again I am not so sure about the opportunities. What Ruskin knew about these things was from the art and artefacts those times had left behind, combined with a shared knowledge of the Bible which was very helpful in interpreting that art. Besides, he must have been familiar with the basics of medieval political history, but as a non-professional in that domain in the mid-nineteenth century, what more could he reasonably be expected to know? However that may be, it is hardly surprising that in his ignorance it was on those issues that Ruskin most easily would turn ideological.
Critics who doubted Ruskin's knowledge of the issues he wrote about in either *Modern Painters, The Seven Lamps*, or *The Stones*, have often pointed to his lack of familiarity with and uninformed contempt of German philosophy, including Kant. As indicated by Landow\textsuperscript{220}, who considers it the one big gap on Ruskin's intellectual horizon, this however was the exception rather than the rule. Even so, by far most of the sources Ruskin drew on were English, or (as in the case of the Bible) available in translation and probably consulted that way. Among these are all the major British philosophers since John Locke (1632-1704), particularly all the protagonists of associationist philosophy of art and beauty, from the Third Earl of Shaftesbury (1671-1713)\textsuperscript{221} through Archibald Alison (1757-1839). These had a strong impact already on *The Poetry of Architecture* (1838), but mostly in an indirect way: through writings in the picturesque tradition, like Uvedale Price's *Essay on the Picturesque* (1794) and Richard Payne Knight's *The Landscape, a Didactic Poem* (1795). Much of the originality of *The Seven Lamps* lies in the fact that, as opposed to *The Poetry of Architecture*, which safely stays within the picturesque tradition, it moves beyond this to its philosophical source in the works of Burke, Hogarth, Alison, and others. Such speaks not only from its structure (of which we will come to speak in §§ 10.7.1 and 10.8), but likewise from a whole range of more specific ideas, such as that beauty and sublimity can fully be enjoyed only by an observer who is sufficiently at ease to let his or her imagination freely rove about (see § 11.4.3 below), the concept of 'the sublime' as dealt with in the 'Lamp of Power' (see § 10.7.1), more in particular 'power' through repetition, which comes from Burke (see § 11.4.2); the notions that one of the greatest dignities of architecture is in its mere age (see § 11.2) and that artists, that is, painters, sculptors, and architects, ought to grow up in the countryside rather than in the city (see § 11.4.7), both of which can be traced to Alison\textsuperscript{222}, that beauty of line is in its curves, which derives from Hogarth\textsuperscript{223} (see § 11.4.2); and, last but not least, the whole conception of Divine Nature as the model of all great art, the contemplation of which is so morally elevating that herein lies the greatest justification of all art (see §§ 10.7.1, and 10.7.3). Rosenberg [1961], like most of the older Ruskin's commentators (it is, as will be discussed later on, not until the early 1970s that Ruskin's roots in associationist philosophy begin to receive the attention they deserve\textsuperscript{224}), traces the latter to German Romanticism as it reached Ruskin through Wordsworth and Coleridge, others have pointed to Carlyle as the intermediary. However, even if this might be the case (which I doubt), it should be noted that most of those ideas had already been laid down in the works of the aforementioned Third Earl of Shaftesbury—-to which, moreover, Alison explicitly refers at the end of his *Essays on the Nature and Principles of Taste* (1790/1811).

On the other hand, Ruskin was not unfamiliar with classicist theory of art either. Thus the ideas of Sir Joshua Reynolds feature prominently in the first two volumes of *Modern Painters*\textsuperscript{225}—though hardly in any of his later works. In architectural history and theory (still by and large one field at that
time) his most important teacher was Robert Willis (1800-75), author of *Remarks on the Architecture of the Middle Ages, especially of Italy* (1835), to which frequent reference is made throughout *The Seven Lamps* and *The Stones*. Charles Lindsay (1812-1880) and Anne Jameson (1794-1860) were among those who showed him the way to early Christian art in Italy, such as the works of Fra Angelico. Among the classics in architectural theory Alberti's *De Re Aedificatoria* (1452) stands out as a work we must assume Ruskin studied conscientiously, even though he never refers to it.

Incidental reference has already been made to the extensive Bible studies which were a major element in Ruskin's childhood. Ruskin himself in *Praeterita* underlines its immense importance as a training in careful reading and interpretation, as well as in actual use of English, particularly as a written language. Sermons he and his parents listened to during the services they used to attend, or which he read in anthologies of some of the most famous preachers of his day, in this context deserve to be mentioned as well. For a more complete survey of Ruskin's intellectual sources the reader is referred to the aforementioned studies by Landow (1971) and Helsinger (1982).

10.7 Special Words with Special Meanings

Ruskin in general does not heavily rely on theoretical jargon—and when he does, like in the first two volumes of *Modern Painters*, he throws it aside again after a while as irrelevant after all. Nonetheless a few 'special words with special meanings,' so to say, in *The Seven Lamps* and *The Stones* demand our attention. These are the concepts of Greatness, Power, Truth, Beauty, and Ornament, plus a few words which more strictly refer to qualities of form. They are introduced as though to serve as a conceptual core to the whole system, and it will be argued that at least a concept of Greatness as can be identified in *The Seven Lamps* by and large does that much, at least for that work. The others are less convincing candidates for such role.

If subsequently it is asked which of these words has a special relationship to which, if any, of the humanities reviewed above, there is no clear, or at least not a uniform answer. The aforementioned concept of greatness owes most to associationist philosophy, but this preoccupation with greatness as
such seems more typical for classicist theory of art. Power refers to approximately the sublime, once again very much an associationist topic, but as it does so by a different name, one cannot say the word is actually from there. Truth was a major issue in the Gothic revival, about other contexts of its use in aesthetics prior to *The Seven Lamps* I am not sure. Ruskin's discussion of beauty in relation to ornament, finally, seems primarily a response to conceptions of both in classicist architectural theory.

### 10.7.1 Greatness and Power

How to account for the fact that in a treatise of architectural aesthetics—which after all *The Seven Lamps* is, more than anything else—only one 'Lamp' explicitly deals with beauty? Pevsner, as so often, completely misses the point when from this alone he infers "... that only one of them can possibly be concerned with the strictly aesthetic aspects of architecture." The point is that Beauty, which in all of Ruskin's writings stands in a somewhat complicated relationship to 'Greatness,' in this case is conceived as just one among six other aspects of the latter.

Why seven? The number varies with the growth of Ruskin's thought. In *Modern Painters I* (1843), where Greatness is defined as what distinguishes art:

MP1.II.II.9 .. which conveys to the mind of the spectator, by any means whatsoever, the greatest number of the greatest ideas, and I call an idea great in proportion as it is received by a higher faculty of the mind, and as it more fully occupies, and in occupying, exercises and exalts, the faculty by which it is received ..,

the relevant ideas are first categorized as five, those of Power, Imitation, Truth, Beauty, and Relation, but soon reduced to in fact two: Truth and Beauty. High claims at first are made for Truth. It is taken literally, that is, as a quality of statements—on the assumption that various kinds of statement are made in painting, some simple, others more sophisticated. Moreover, it is submitted that the organ which perceives beauty is a 'moral sense,' the 'theoretic faculty,' precludes the perception of anything as beautiful which is not true. Thus, of the two remaining kinds of idea to be conveyed by works of art, those of Truth initially seemed by far the most important. Halfway *Modern Painters* 2, however, it turns out the higher kinds of Truth a painting is to express are hard to define, so Beauty takes the lead—with the unintentional side-effect that Beauty and Greatness become synonymous.

Such is stated for painting, not for architecture, and so there is no straight contradiction when in *The Seven Lamps* six others than the one of beauty are assigned a role, but when in *The Stones of Venice* the number is again
reduced to two, 'Strength' and 'Beauty,' it becomes evident that in regard to architecture nothing is stable either.

For sure, there is something fascinating in this constant fluctuation. As Rosenberg notes in regard to *Modern Painters*:

The book would be less perplexing if Ruskin had known more about art when he began it, or learned less in the course of its composition ... If he had not constantly related all that he had ever discovered to all that he was in the process of discovering, forever modifying, acquiring, growing but never discarding, he might have written a much briefer and tidier book. Yet *Modern Painters* records with absolute fidelity the progress of an absolutely articulate mind.

Considering that this development, for as much as it is documented in works that either precede or follow *The Seven Lamps* and *The Stones*, is neither strictly relevant, nor altogether irrelevant to the present study, a more detailed account of it has been relegated to Appendix 6. For now let us return to *The Seven Lamps*. Why seven? There is a smell of holiness about the number, but that may be coincidence. Nor is it very helpful when, apologizing for all kinds of pressure under which the book had to be completed, the author states:

SL.Int. Both arrangements and nomenclature are those of convenience rather than of system; the one is arbitrary and the other illogical: nor is it pretended that all or even the greater number of, the principles necessary to the well-being of the art, are included in the inquiry. Many however of considerable importance will be found to develop themselves incidentally from those more specially brought forward.

There is considerable affectation in this confession, for sure. *The Seven Lamps* is a tightly organized essay, profoundly new and unconventional both in its structure and its basic tenets. Like *The Poetry of Architecture* of a decade earlier it is, as indicated, firmly rooted in associationist philosophy of art as epitomized in the works of Edmund Burke (1729-97) and Archibald Alison (1757-1839). In this tradition aesthetic enjoyment is explained in terms of chains of association triggered by the sight or hearing of something that is either beautiful or sublime—or, as a third category, holding the middle between the other two, 'picturesque.' If joy results from stirring the imagination as such, as well as from the pleasantness of what the resulting associations are with, its source is called beautiful. Is association with things that in themselves are not so pleasant (and hence probably all the more thrilling to the imagination), the object of contemplation is called 'sublime'. The originality of *The Seven Lamps* lies largely in the way Ruskin was not satisfied with these two or three directions such associative chains might take, but felt he needed more. He
stopped at seven. In order of the book's actual chapters these can be summarized as follows:

I. Sacrifice: with a God who gave us life, takes care of us, demands our obedience, and deserves our praise.

II. Truth: with honest intentions on the side of those who made a building, and with a constructive principle as inferred from a building's appearance, which, even if it does not altogether coincide with the actual construction, at least could be.

III. Power: with the Sublime in nature.

IV. Beauty: with Beautiful Nature.

V. Life: with freedom and happiness in the process of a building's design and construction.

VI. Memory: with a building's history as part of the history of mankind.

VII. Obedience With a state that, in order to coordinate the efforts of its citizens and their organizations, imposes rules and regulations.

This results in the scheme rendered in Figure 29. The underlying conception is not without certain imperfections. As the lamp of Truth has most in common with the one of Life, while those of Power and Beauty are nearest to that of Sacrifice, what would have been more natural than to let the lamp of Truth (Chapter II) come after those of Power and Beauty (III-IV)? The lamp of Truth, moreover, covers a number of issues that would be more appropriately placed under the one of life. Even so, there is something revolutionary in the scheme, which speaks even stronger from those dimensions of possible association that the author does not mention than from the ones he does. Absent is the array of personal experience from an observer's private past, as well as associations of a literary kind with an imaginary past or fairyland. These, plus an overwhelming attention to how a building fits its landscape surroundings, had been Ruskin's primary concern in The Poetry of Architecture, as in most publications issuing from what is usually referred to as the 'picturesque movement' of the late-eighteenth and early-nineteenth centuries. Compared to the sentimentalism of Ruskin's earliest architectural writings his scope by now has turned more cosmic and existential, while as compared to the central place held by Divine Nature in the first two volumes of Modern Painters it is already more humanist.
Within this scheme the lamp of Power demands special attention now, because it is through this one that an evolution in Ruskin's conception of greatness in art best be explored. In the reception of *The Seven Lamps* this lamp and the theory of the bounded outline based on it (see § 11.4.2 below) immediately were hailed as among its most important innovations, such as may have been in the air, but which no one so far had expressed more clearly and convincingly. In spite of an earlier rejection of 'the Sublime' as a separate aesthetic category beside Beauty, the light that shines from this particular lamp comes close to just that. Having observed that "there is .. a sympathy in the forms of noble building, with what is most sublime in natural things," the author notes:

**SL.III.3** I have seen, in recent efforts, much contest between two schools, one affecting originality, and the other legality—many attempts at beauty of design—many ingenious adaptations of construction; but I have never seen any aim at the expression of abstract power; never any appearance of a consciousness that, in this primal art of man, there is room for the marking of his relations with the mightiest, as well as the fairest, works of God; and that those works themselves have been permitted, by their master and his, to receive an added glory from their association with earnest efforts of human thought. In the edifices of Man there should be found reverent worship and following .. of that [spirit] also which reproves the pillars of the earth, and builds up her barren precipices
into the coldness of the clouds, and lifts her shadowy cones of mountain purple into the pale arch of the sky; for these and other glories more than these, refuse not to connect themselves, in his thoughts, with the work of his own hand; the grey cliff loses not its nobleness when it reminds of some Cyclopean waste of mural stone, the pinnacles of the rocky promontory arrange themselves, undegraded, into fantastic semblances of fortress towers; ..

The chain of associations works both ways: nature becomes more sublime when on a gigantic scale it reminds of human work, and human work, such as architecture, gets greater as it reminds of nature in its steep- or vastness. The traditional counterpart of the Sublime, the Picturesque, meanwhile is defined in terms of the former as 'parasitical sublimity' [SL.VI.11-12]--obviously not a very positive qualification.

Nonetheless, Ruskin could not stay at this. Be it for certain contradictions, which, for as much as they inhere in the concepts of Truth and Beauty, will be dealt with in the next two paragraphs, for the aforementioned shift from Divine Nature to the divine core of the human soul, or for some other reason, Greatness in The Stones is once more redefined. As it is stated in 'The Virtues of Architecture':

**SV1.IV.4** We have, then, two qualities of buildings for subjects of separate inquiry: their action, and aspect, and the sources of virtue in both; that is to say, Strength and Beauty, both of these being less admired in themselves, than as testifying the intelligence or imagination of the builder.

For we have a worthier way of looking at human than at divine architecture; much of the value both of construction and decoration, in the edifices of men, depends upon our being led by the thing produced or adorned, to some contemplation of the powers of mind concerned in its creation or adornment. We are not so led by divine work, but are content to rest in the contemplation of the thing created. I wish the reader to note this especially; we take pleasure, or should take pleasure, in architectural construction altogether as the manifestation of an admirable human intelligence; it is not the strength, not the size, not the finish of the work which we are to venerate: rocks are always stronger, mountains always larger, all natural objects more finished; but is the intelligence and resolution of man in overcoming physical difficulty which are to be the source of our pleasure and subject of our praise.

Does this reduction of seven lamps, or virtues, to two represent a major shift in Ruskin's thought on art and architecture, or is it just a minor reorganization? What happened to the lamps of Sacrifice, Truth, Power, Life, Memory, and
Obedience? Most of the ideas expounded under those headings turn out to have found a new place somewhere in *The Stones*. The situation as regards beauty and power is different. "We are not so led by divine work ..." we are told--why not? In the 'Lamp of Power' as quoted earlier it was suggested we were. Yet this is no coincidence, no slip of the pen. There is silence about 'power' throughout *The Stones*. The sublime turns up again in Volume 3, but now in a completely different context: that of the 'grotesque' (see § 10.9.3 below). Picturesque qualities implicitly regain respectability. This double shift--from divine nature to divine man, and from power to the picturesque--is most emphatic in the concluding chapter, where it is stated:

**SV3.IV.6** Here, therefore, let me finally and firmly enunciate the great principle to which all that has hitherto been stated is subservient: -that art is valuable or otherwise [?], only as it expresses the personality, activity, and living perception of a good and great human soul; that it may express and contain this with little help from execution, and less from science; and that if it have not this, if it show not the vigor, perception, and invention of a mighty human spirit, it is worthless. Worthless, I mean, as art; it may be precious in some other way, but, as art, it is nugatory.

Good art is qualified as what wakes people up from their lethargy:

**SV3.IV.21** ... there must be a summon in the work, which it shall be our own fault if we do not obey ... Most men do not know what is in them, till they receive this summon from their fellows: their heart dies within them, sleep settles upon them, the lethargy of the world's miasma; there is nothing for which they are so thankful as for that cry, "Awake, thou that sleepest." And this cry must be most loudly uttered to their noblest faculties; first of all to the imagination, for that is the most tender, and the soonest struck into numbness by the poisoned air; ... Once that is well awake, the guidance which the artist gives him should be full and authorative: the beholder's imagination must not be suffered to take its own way, or wander hither and thither; but neither must it be left at rest; and the right point of realization, for any given work of art, is that which will enable the spectator to complete it for himself, in the exact way the artist would have him, but not that which will save him the trouble of effecting the completion. So soon as the idea is entirely conveyed, the artist's labor should cease; and every touch which he adds beyond the point when, with the help of the beholder's imagination, the story ought to have been told, is a degradation to his work.

There is something condescending in the way the reader as an average observer is approached, which stands in marked contrast to play theory of art as reviewed
in the previous chapter. For while in the latter the content of a work of art need not be the same for every observer as for the artist who produced it, in Ruskin's view it does. Art more than ever becomes a tool for moral education of mankind, its basic function being interpretation. Having lost faith in the universal presence of a 'theoretic faculty' that accepts nothing as beautiful which is not true and right\textsuperscript{235}, Ruskin increasingly insists on choice of morally elevating subject matter, even more so in the second half of the 1850s than in \textit{The Stones}. We have by then entered the time of his involvement with the Pre-Raphaelite Fraternity\textsuperscript{236}, and of \textit{The Two Paths}. Later in the chapter from which the above quotations were taken [SV3.IV] an effort is made to present all of the above as just a slight revision of an earlier concept of Greatness, the one in \textit{Modern Painters 1}, where Greatness defined as what "conveys to the mind of the spectator, by any means whatsoever, the greatest number of the greatest ideas"—but continuity with this earlier concept is pretended rather than real. Major changes in the meantime have occurred in the author's outlook on art and society.

\textbf{10.7.2 Truth}

As one of seven lamps that shine, or ought to shine in architecture, 'Truth' is introduced in a remarkably sober way:

\textbf{SL.II.1} Speaking truth is like writing fair, and comes only by practice; it is less a matter of will than of habit ... To speak and act truth with constancy and precision is nearly as difficult, and perhaps as meritorious, as to speak it under intimidation or penalty; and it is a strange thought how many men there are, as I trust, who would hold to it at the cost of fortune or life, for one who would hold to it at the cost of a little daily trouble.

Just like the 'Spirit of Sacrifice' is held to be beneficial to \textit{architecture}, rather than that its visible results might further the cause of \textit{religion}:

\textbf{SL.II.2} ... so I would have the Spirit or Lamp of Truth clear in the hearts of our artists and handicraftsmen, not as if the truthful practice of handicrafts could far advance the cause of truth, but because I would fain see the handicrafts themselves urged by the spurs of chivalry.

Unlike the kind of truth that features in the first two volumes of \textit{Modern Painters}, the one he endorses for architecture has little to do with faithful rendering of subject matter. Rather it is the ideal of truth to material, an issue that traditionally ranked high among the priorities of the Gothic revival. Or at least that is how it is first introduced:
SL.II.5 The violations of truth, which dishonor poetry and painting, are thus for the most part confined to the treatment of their subjects. But in architecture another and a less subtle, more contemptible, violation of truth is possible; a direct falsity of assertion respecting the nature of material, or the quantity of labor.

What follows in the same chapter, however, aims at a careful qualification of this ideal rather than at a further endorsement. Thus, following Robert Willis (1800-75)\textsuperscript{237}, the author carefully distinguishes between an actual and an apparent construction--of which it is the latter that aesthetically counts. Thus in regard to Gothic vaults it is noted:

SL.II.7 Now, there is a nice question of conscience in this, which we shall hardly settle but by considering that, when the mind is informed beyond the possibility of mistake as to the true nature of things, the affecting it with a contrary impression, however distinct, is no dishonesty, but on the contrary, a legitimate appeal to the imagination. For instance, the greater part of the happiness which we have in contemplating clouds, results from the impression of their having massive, luminous, warm, and mountain-like surfaces; and our delight in the sky frequently depends upon our considering it as a blue vault. But we know the contrary in both instances; we know the cloud to be a damp fog, or a drift of snow flakes; and the sky to be a lightless abyss. There is, therefore, no dishonesty, while there is much delight, in the contrary impression.

The practice of cladding masonry walls with marble or other kinds of precious stone is justified by noting [§ 18] that it is generally understood such precious materials will not be used for the whole thickness of a wall, so there is no deceit. The same holds for marble facing of brick walls. It is immediately added, though, that from the point of view of truth there is a higher rectitude in whatever is solid. A few things are discussed under this heading of 'truth' which do not actually seem to belong there, such as the use of cast-iron. Of these we will come to speak in §§ 10.9.3 and 11.4.1 below.

10.7.3 Beauty and Ornament

Among the most disturbing elements in Ruskin's architectural writings are those broad generalizations for which these writings are most widely known--favorably or not so. Foremost among these is the thesis that ornament and beauty are the same thing. Such, for sure, is a weird contention, if only for linguistic reasons. The words do not cover the same range of phenomena and cannot be used the same way. Thus, while it is quite feasible to talk about the beauty of ornament, the reverse sounds odd. For Ruskin, who in general
shows considerable respect for the established meaning of words, this is atypical. So whence comes this idea of making 'beauty' interchangeable with 'ornament' and 'decoration'?

For what I know, the equalization does not occur in any of Ruskin's writings prior to The Seven Lamps, and even there is introduced with more negligence than dogmatism. It is more or less implied in the range of issues dealt with in the 'Lamp of Beauty.' These include: figurative ornament [§§ 4-23 and 30-34], so much composition as is needed to give figurative elements their proper place within an architectural whole [§§ 24-29], and the use of color [§§ 35-42].

Ironically, these are precisely those aspects of architecture which have most in common with the fine arts. Such would have been consistent with a conception, as endorsed by Semper and other Germans at the time, which takes beauty in nature as derivative on beauty in art—rather than the other way around. However, that is precisely the opposite of what Ruskin, once again in perfect accordance with Alison and other associationist philosophers, is after. Beautiful nature is the primary thing. As it is stated at the outset of the chapter:

SL.IV.1 I desire now to trace that happier element of its [i.e., architecture's] excellence, consisting in a noble rendering of images of Beauty, derived chiefly from the external appearance of organic nature.

To which in the next paragraph it is added:

SL.IV.2 It will be thought that I have somewhat rashly limited the elements of architectural beauty to imitative forms. I do not mean to assert that every arrangement of line is directly suggested by a natural object; but that all beautiful lines are adaptations of those which are commonest in the external creation; that in proportion to the richness of their association, the resemblance to natural work, as a type and help, must be more closely attempted, and more clearly seen; and that beyond a certain point, and that a very low one, man cannot advance in the invention of beauty, without directly imitating natural form.

So Ruskin's concept of beauty remains basically mimetic and pantheist. As it is accompanied by six other lamps, three on each side, it has, on the other hand, been integrated into a concept of greatness that is basically humanist. Such is the slightly paradoxical outcome of a struggle with associationism of which there is an interesting account in Modern Painters 2, Part III. What, as opposed to what he finds in the writings of Alison, Ruskin in these chapters is out to prove is, among other things, the objectivity of beauty and its autonomy—in the sense that its perception cannot be reduced to either merely cognitive processes or to other emotions like love, fear, sympathy, and so
on. To this end the aforementioned 'theoretic faculty' is identified as a separate part of a person's mind and soul, installed there by his creator for the perception of beauty—and for nothing else! More precisely, it is a faculty that enables man to sense a divine presence in nature. The choice of the word 'theoretic' is only negatively explained by a wish to avoid the word 'aesthetic.' Perceiving beauty, in Ruskin's view, is not a mere pleasing of the senses, but a moral experience. Accordingly, the theoretic faculty is characterized as a 'moral sense.'

What could be so moral about it, if it is independent of other cognitive and emotional faculties, remains unclear, but who cares? As God himself is one and the same at all times, this moral sense responding to his universal presence must be the same in all human beings, though some have more of it than others, or are more skilled in its sensitive application. And so, even though beauty itself eventually remains mysterious, there is an intersubjective basis to decide what is truly beautiful and what is not. From which it follows that, in a careful, empirical way, conditions that account for beauty can tentatively also be assessed.

This has resulted in interesting chapters [MP2.III.I.V-X] on six 'formal conditions of typical beauty:' Infinity, Unity, Repose, Symmetry, Purity, and Moderation. 'Typical beauty' is defined as "that external quality of bodies ... which ... may be shown to be in some sort typical of the Divine attributes," and stands in opposition to 'vital beauty,' defined as "the appearance of felicitous fulfillment of function in living things, more especially of the joyful and right exertion of perfect life in man" [MP2.III.I.III.17]. The chapters are a mixture of senseless categorization—from which Ruskin later dissociated himself, calling the theoretical faculty 'mere pedantry'—and fascinating observations, many of which have found their way into The Seven Lamps and hence (although not always) into The Stones.

Yet it would be misleading to suggest that this mimetic concept of beauty painlessly fits in with the rest of The Seven Lamps. Frictions, for instance, appear in the section on color [SL.IV.35-42], where it is contended [§ 36] that, as color in nature never follows form, and certainly not refined form, it should not do so in architecture either. Let it be noted, though, how the examples offered to illuminate this point (the rainbow, zebras, clouds, and flamings—as in marble shells and plumage) could easily be exchanged for cases where color in nature does follow form. Leaves tend to differ in color from the branch that carries them, or from the fruits and flowers they surround; a person's hair, eyes, and mouth contrast in color with one's skin, and so on, and so forth.

Subsequently it is stated [§§ 38-39] that figurative applications of color are basically unarchitectural, the more so as they become more realistic, and that straight lines, which are ugly as lines, are fine as boundaries of color patches. These points are backed up by a whole range of keen observations,
but the question remains: how can this be subsumed under the heading of 'beauty' as defined at the outset of the same chapter? For straight lines as recommended for color patches a justification in terms of resemblance with nature is not even attempted. Earlier in the same chapter [SL.IV.6] it has been noted straight lines in architecture often are a bare necessity, and as they do resemble nature in its seas, planes, horizons, and so on, can aesthetically be defended as expressive of 'power'--but then power is still not beauty. It all seems a bit artificial, and when a few years later in The Stones the qualities of buildings are reduced to two, their Strength and Beauty, this suggests that Ruskin was aware--but not that in the meantime he had come much closer to a solution, the less so when subsequently beauty is made interchangeable with decoration or ornament, as in the following lines [italics mine]:

SV1.II.4 And again, in decoration or beauty, it is less the actual loveliness of the thing produced, than the choice and invention concerned in the production, which are to delight us; ..

So why did Ruskin feel it incumbent upon himself to do so? An indication is the 'Answer to Mr. Garbett' [SV1.App.17]. Mr. Garbett, shortly after The Seven Lamps came out, had written an Elementary Treatise on Design (1850), in which he took issue with the way Ruskin in that work had made beauty interchangeable with ornament, and in doing so had presented it as dependent on 'superfluous features.' Ruskin's answer is confusing, and may not have convinced many of his opponents, but at least contains a potential clue to his obsessions at this point, so let it be quoted at length. "What right," he wonders:

SV1.App.17 .. has he [Mr. Garbett] to assume that ornament, rightly so called, ever was, or can be, superfluous? I have said before, and repeatedly in other places, that the most beautiful things are the most useless; I never said superfluous. ... The fact is, I never met with the architect yet who did not think ornament meant a thing to be bought in a shop and pinned on, or left off, at architectural toilets, as the fancy seized them ... they do not understand ... that a noble building never has any extraneous or superfluous ornament; that all its parts are necessary to its loveliness, and that no single atom of them could be removed without harm to its life. You do not build a temple and then dress it. You create it in its loveliness, and leave it, as her Maker left Eve. Not unadorned, I believe, but so well adorned as to need no feather crowns. And I use the words ornament and beauty interchangeably, in order that architects may understand this: I assume their building is to be a perfect creature capable of nothing less than it has, and needing nothing more. It may, indeed, receive additional decoration afterwards, exactly as a woman may gracefully put a bracelet on her arm, or set a flower in her
hair: but that additional decoration is not the architecture. It is of curtains, pictures, statues, things that may be taken away from the building, and not hurt it. What has the architect to do with these? He has only to do with what is part of the building itself, that is to say, its own inherent beauty.

The distinction Ruskin insists on between the useless and the superfluous sounds like a play of words, and otherwise the argument rests on stretching the concept of ornament so as to make it include more of what in common English is covered by 'beauty.' The clue to Ruskin's intentions rather lies in the remark that "You do not build a temple and then dress it." Why temples in a book on Venice? Because, of course, they have always served as the basic paradigms in classicist architectural theory, from Vitruvius and Alberti through Chambers and Cockerell, and because it is the conceptual scheme at the core of this type of theory which Ruskin wants to reverse. As opposed to Alberti, who in *The Ten Books of Architecture* (1452), Book IX, Chapter 8, argues that:

> We should erect our building naked, and let it be quite completed before we begin to dress it with ornaments, which should always be our last work, being best done at leisure, when we can do it without any impediment, and can take the advantage of such opportunities as may offer for that purpose..

Ruskin holds a procedure like that can hardly be expected to result in an organic whole. Similarly, a motive for beauty's equalization with ornament lies concealed in the following fragment of Alberti's Book VI, Chapter 2:

> But what beauty and ornament are in themselves, and what difference there is between them, may perhaps be easier for the reader to conceive in his mind, than for me to explain by words. In order therefore to be as brief as possible, I shall define beauty to be a harmony of all the parts, in whatsoever subject it appears, fitted together with such proportion and connection, that nothing could be added, diminished or altered, but for the worse. A quality so noble and divine, that the whole force and wit of art have been spent to procure it, and it is but very rarely granted to anyone or even to nature herself, to produce anything every way perfect and complete.

Subsequently a Greek of old is quoted, complaining that 'a handsome youth in Athens' is hard to find these days--and Alberti notes:

> This critic in beauty found that there was something deficient or superfluous in the persons he disliked, which was not compatible with the perfection of beauty, which I imagine might have been obtained
by means of ornament, by painting and concealing anything that was deformed, and trimming and polishing what was handsome; so that the unsightly parts might have given less offence, and the more lovely more delight. If this be granted we may define ornament to be a kind of an auxiliary brightness and improvement to beauty. So that then beauty is somewhat lovely which is proper and innate, and diffused over the whole body, and ornament somewhat added or fastened on, rather than proper and innate.

Observe how in this fragment Alberti too introduces a wide and abstract concept of ornament. It need not be added to the main form, but may as well be something hidden or removed from it. In the same vein it is stated in Book VI, Chapter 5, that "The chief and first ornament of anything is to be free from all improprieties," and toward the end of the same chapter:

But the principle ornament both of the wall and covering, and especially of all vaulted roofs (always excepted columns) is the outward coat: and this may be of several sorts; either all white, or adorned with figures and stucco-work, or with painting, or pictures set in panels, or with mosaic work, or else a mixture of all these together.

This somewhat vague but encompassing concept of ornament, which is the exception in Ruskin's dealings with it, is the rule in Alberti's. This corresponds to a difference in functions assigned to it. In Alberti's view this function is twofold: to articulate beautiful proportions in the main structure, and to endow a building with social decorum. Ruskin as a true romantic could not profoundly care for the latter, whereas the former is the one he wished to reverse. Refinement of proportionate design, he held, should follow from the choice of decoration, and from considerations as to how decoration is given its best place within a larger scheme.

This reflects different philosophical conceptions of beauty. For Ruskin as for Alberti it rested on imitating nature, but whereas Alberti—and all theorists of the classicist school after him—held that the most authentic, most divine varieties of beauty are in universals behind the particulars surrounding us, Ruskin endorsed the opposite point of view. The priority granted to naturalist decoration, as well as his skepticism regarding the idea that proportion in art could be deduced from a set of mathematical formulae, both followed from this basic assumption. Equalizing beauty with ornament was Ruskin's polemical device to get this message through.

Another place where a closer match between the concepts of ornament and of beauty is aimed at, by stretching the former so as to include more of the latter, is in 'Treatment of Ornament,' where it is noted:
SV1.XXI.25-27 ... the distance of ornament is never fixed to the general spectator. The tower of a cathedral is bound to look well, ten miles off, or five miles, or half a mile, or within fifty yards. The ornaments of its top have fixed distances, compared with those of its base; but quite unfixed distances in their relation to the great world ... How are we to manage this? As nature manages it. ... The lesser ornament is to be grafted on the greater, and third or fourth orders of ornament on this again, as need may be, until we reach the limits of possible sight; each order of ornament being adapted for a different distance: first, for example, the great masses, -the buttresses and stories and black windows and broad cornices of the tower, which give it make, and organism, as it rises over the horizon, half a score of miles away: then the traceries and shafts and pinnacles, which give it richness as we approach: then the niches and statues and knobs and flowers, which we can only see when we stand beneath it. At this third order of ornament, we may pause, in the upper portions; but on the roofs of the niches, and the robes of the statues, and the rolls of the mouldings, comes a fourth order of ornament, as delicate as the eye can follow, when any of these features may be approached. All good ornament is thus arborescent, as it were, one class of it branching out of another and sustained by it; and its nobility consists in this, that whatever order or class of it we may be contemplating, we shall find it subordinated to a greater, simpler, and more powerful; and if we then contemplate the greater order, we shall find it again subordinated to a greater still; until the greatest can only be quite grasped by retiring to the limits of distance commanding it. And if this subordination be not complete, the ornament is bad.

Unrue seizes this as crucial to a proper understanding of everything Ruskin has to say regarding ornament—*but* unfortunately, this multi-layered, arborescent conception of ornament stands alone in Ruskin's writings. The first two layers—buttresses, black windows, cornices, shafts, pinnacles—are not usually dealt with as ornament, not being imitative of anything in particular. Niches, as mentioned in the third, are a dubious case. If imitative at all, they tend to be so of human work: think of the diminutive architecture displayed on many of them, which, in 'The Material of Ornament' [SV1.XX] is categorically rejected as subject matter for decoration.

The status of color as ornament remains as unclear in *The Stones* as it was in *The Seven Lamps*, but the problem becomes less apparent, as color is virtually ignored in the chapters [SV1.XX-XXI] that most systematically deal with ornament. When later on it is dealt with in 'The Nature of Gothic,' it is repeated that in architecture color patterns better remain abstract. For details see § 11.4.5 below.
10.7.4 Concepts of Form

There is, at first sight, little in the way of special words with special meanings to describe form, neither in The Seven Lamps nor in The Stones. 'Symmetry' is defined as referring to the horizontal dimension, 'proportion' as dealing with the vertical—and that is about all one should know to be able to read the sections on form without serious misunderstandings.

Another concept of major importance in the analysis of form with Ruskin is that of 'unity in variety.' As that is expounded in an earlier work, the second volume of Modern Painters (1845), and is implied rather than actually used by that name in The Seven Lamps and The Stones, it is, however, more appropriately dealt with in the next chapter, that is, in § 11.3.

10.8 Structure of Argument

Having reviewed all the major sources of questions (decision-making) and information (ibidem plus examples and value systems), the range of questions dealt with, and intermediary levels of concept formation like Ruskin's studies in the humanities for as much as they pertain to issues dealt with in his books, or special-words-with-special-meanings, it is time now to return to theory proper, and to find out what structure of argument connects those questions to their answers. This will be followed (§ 10.9) by an inventory of apparent contradictions and incompatibilities—the ones that in Chapter 11 we shall attempt to bridge by way of a hypothetical implied concept.

In spite of numerous excursions into side-issues, both The Seven Lamps and The Stones are basically simple in their structure of argument. The seven chapters of the former correspond, as indicated (§ 10.7.1), to even so many dimensions of 'greatness,' which are one by one explored. What in particular is investigated are demands architecture should meet in order to let chains of association successfully come off. Its interest lies in the imaginative empiricism of Ruskin's approach and in the way it moves from an anti-formalist bias, as is inherent in associationist philosophy, to a whole range of interesting observations regarding form and color.
The 'stones' in the title of the second work should be read not only as indicative of the author's predilection for stone buildings, but even more as touchstones. In Volume I criteria by which a building should be judged to decide if it is good architecture or not so are expounded systematically, in the second and third actual buildings are evaluated by these, and this in chronological order, starting with the Byzantine and ending with the Renaissance period.

Even so, there is something maddening about Ruskin's approach: the constantly shifting conceptions of greatness and of beauty as reviewed above, his preaching and his moralism, a chapter like 'The Nature of Gothic,' which undercuts many of the positions carefully expounded before, and so on. Rosenberg nicely qualifies the situation when he notes:

His dialectic is confusing not so much because it is contradictory as because it responds so fully and sensitively to the antinomies of experience itself. Ruskin's life and books, however disorderly in themselves, reveal the order inherent in the struggle to achieve order.

Others have suggested the issue may be not so much Ruskin contradicting himself as commentators of his works who contradict each other. Nevertheless, some real incompatibilities remain between positions he defends in different works, or even in one and the same. On these, in an inaugural address to the Cambridge School of Art in 1858, he explains himself as follows:

Perhaps some of my hearers this evening may occasionally have heard it stated of me that I am rather apt to contradict myself. I hope that I am exceedingly apt to do so. I never met with a question yet, of any importance, which did not need, for the right solution of it, at least one positive and one negative answer ... Mostly matters of some consequence are three-sided, or four-sided, or polygonal; and the trotting round a polygon is severe work for people any way stiff in their opinions. For myself, I am never satisfied that I have handled a subject properly till I have contradicted myself at least three times.

It is an approach which indeed, as hinted at by Rosenberg, may be called dialectical. Although he believes in universal principles of right and wrong, in ethics as in aesthetics (the two being inseparable), Ruskin is not too sure whether these can be caught once and for all in a few simple formulae. Their seat is in the divine core of each human soul, and they find their most perfect expression in divine nature: no places from where human language easily will drive them out, neither Ruskin's nor ours--that is, if we are willing to follow him that far. In a reconstruction of theory from what is actually written down it hardly seems advisable to do so.
Fortunately, a number of remarkably constant elements in these writings can still be pointed out. Foremost among these is the author's choice of paradigmatic examples. Minor shifts in preference among these do occur, but there is never a fundamental break. What we see are the same buildings (or, for that matter, paintings) being studied in the light of ever-changing theories of beauty and greatness, and Ruskin discovering new qualities (or weaknesses) in his favorite examples all the time.

Constant too is the empiricism of Ruskin's approach. If actual qualities as perceived in actual buildings are at odds with theory, Ruskin tends to drop or adjust the latter rather than the other way around. It must immediately be added, though, that this empirical integrity is stronger in *The Seven Lamps* than in his later works, including *The Stones*.\(^{245}\)

### 10.9 Apparent Contradictions and Incompatibilities

Among apparent contradictions in Ruskin's thought as expounded in *The Seven Lamps* and *The Stones* one, which has to do with an equalization of beauty and ornament and with a cultivation of the latter as an art of the useless though by no means superfluous, has already been dealt with long enough (§ 10.7.3) not to recur to it. The list of topics on which Ruskin is apt to contradict himself (or at least to leave his readers with that impression), however, is a good deal longer, and so there are a few left to review.

#### 10.9.1 Northern versus Southern Gothic

As regards the relative merits of northern versus southern, or, more specifically, of French versus Italian Gothic, Ruskin's position in *The Seven Lamps* seems fairly clear, and remains so throughout the first volume of *The Stones*. Having noted in the 'Lamp of Sacrifice' that northern Gothic is superior to 'the latest Italian' in its treatment of decorative sculpture, it is more in general concluded:

> SL.I.14 There can be no question that theirs [the Italians'] was the greatest school ... Nevertheless the northern school is an admirable and delightful thing, but a lower thing than the southern. The Gothic of the Ducal Palace of Venice is in harmony with all that is grand in all the world: that of the north is in harmony with the grotesque northern spirit only.

This neatly corresponds to the following section from a chapter on roofs in Volume I of *The Stones*:
Circumstance and sentiment, therefore, aiding each other, the steep roof becomes generally adopted, and delighted in, throughout the north; and then, with the gradual exaggeration with which every pleasant idea is pursued by the human mind, it is raised into all manner of peaks, and points, and ridges; and pinnacle after pinnacle is added to its flanks, and the walls increased in height, in proportion, until we get indeed a very sublime mass, but one which has no more principle of religious aspiration in it than a child's tower of cards. What is more, the desire to build high is complicated with the peculiar love of the grotesque ... together with especial delight in multiplication of small forms as well as in exaggerated points of shade and energy, and a certain degree of consequent insensibility to perfect grace and quiet truthfulness ... 

The question is how this squares with that equally famous as infamous sixth chapter of the second volume of *The Stones*, 'The Nature of Gothic.' Part of the answer lies in a different use of the word Gothic, which in the above apparently refers to "Gothic in the most extended sense as broadly opposed to classical," and in 'The Nature of Gothic' more in particular to a late-medieval style of building with pointed arches and so on, and that, whereas in the above an Italian mixture of Romanesque or Byzantine and Gothic elements is compared to the more purely northern Gothic, in 'The Nature of Gothic' the issue is Gothic in its most undiluted form versus classicist and modern ways of building. To this end--and also as an introduction to the Gothic phase in the history of Venetian architecture, which after all was the occasion for inserting the chapter in the first place--the author states as his intention to present:

... an idea, at once broad and definite, of the true nature of Gothic architecture, properly so called; not that of Venice only, but of universal Gothic: for it will be one of the most interesting parts of our subsequent inquiry, to find out how far Venetian architecture reached the universal or perfect type of Gothic, and how far it either fell short of it, or assumed foreign and independent forms.

The tension, if not straightforward contradiction with earlier positions lies in the phrase 'universal or perfect type of Gothic,' which seems to imply that pure Gothic is better than its impure varieties, but on the other hand does not explicitly say so. Equally strange, when you think of it, is the mere project of defining 'universal Gothic.' A bit later in the same chapter [§ 7] Ruskin notes that "... whatever the date of its original usage, it [the word Gothic] was intended to imply reproach, and express the barbaric character of nations among whom that architecture arose." So he is aware of its relatively short history, which could be traced to the first man (Vasari, for what I know247) who used
it in this sense, without insisting on an 'essence' that marks the difference between true and false Gothic. Apparently such a nominalist approach (which in this case I think would have been perfectly appropriate) did not meet the polemical and rhetorical demands of the moment, so Ruskin goes on to define true Gothic, or, as eventually he puts it, 'Gothicness,' knowing quite well there are problems involved:

SV2.VI.2 The principal difficulty in doing this arises from the fact that every building of the Gothic period differs in some important respect from every other; and many include features which, if they occurred in other buildings, would not be considered Gothic at all; so that all we have to reason upon is merely, if I may be allowed so to express it, a greater or less degree of Gothicness in each building we examine. And it is this Gothicness ... of which I want to define the nature ... pointed arches do not constitute Gothic, nor vaulted roofs, nor flying buttresses, nor grotesque sculptures; but all or some of these things, and many other things with them, when they come together so as to have life.

The basic characteristics, we are told [§ 6], in order of importance are the following: 1. Savageness, 2. Changefulness, 3. Naturalism, 4. Grotesqueness, 5. Rigidity, and 6. Redundance. Put this way, they belong to the building. Corresponding qualities in its builders are: 1. Savageness, or Rudeness. 2. Love of Change. 3. Love of Nature. 4. Disturbed Imagination. 5. Obstincacy. 6. Generosity. The status of the first three differs from that of the last three. The latter are presented as characteristic of Gothic only, or mainly, without any special rebuke or applause on the author's side, the former (that is, Savageness, Changefulness, and Naturalism) are the ones that—at least in this chapter—he holds to be essential for each and every good building. Savageness is endorsed [§§ 7-25] as being indexical of the life and freedom of its builders. So is Changefulness [§§ 26-40], of which in an oft quoted passage it is stated:

SV2.VI.38 ... The variety of the Gothic schools is the more healthy and beautiful, because in many cases it is entirely unstudied, and results, not from the mere love of change, but from practical necessities. For in one point of view Gothic is not only the best, but the only rational architecture, as being that which can fit itself most easily to all services, vulgar or noble. Undefined in its slope of roof, height of shaft, breadth of arch, or disposition of ground plan, it can shrink into a turret, expand into a hall, coil into a staircase, or spring into a spire, with undegraded grace and unexhausted energy; and whenever it finds occasion for change in its form or purpose, it submits to it without the slightest sense of loss either of its unity or majesty ... So that, in the best times of Gothic, a useless window would rather have been opened in an unexpected place for the sake of the surprise, than a useful one forbidden for the sake
of symmetry. Every successive architect, employed upon a great work, built the pieces he added in his own way, utterly regardless of the style adopted by his predecessors; and if two towers were raised in nominal correspondence at the sides of a cathedral front, one was nearly sure to be different from the other, and in each the style at the top to be different from the style at the bottom.

The contrast as well as the correspondences with the section on roofs from Volume I [SV1.XIII.9] as quoted above are striking. To some extent it might be considered an illustration of Ruskin's dialectical method (see § 10.8 above), which considers the same phenomenon from as many different sides as possible, not caring too much about resulting contradictions—but even then the fact is that some of these contradictions are hard to ignore, and in a reconstruction of substantial theory somehow have to be accounted for. Thus let it be observed how Changefulness as presented here quite nearly coincides with the kind of picturesque functionalism endorsed by Pugin and his followers, and challenged in *The Seven Lamps*. 'Savageness' or 'Rudeness' remain consistent with earlier points of view as long as they refer to bold masonry or intentionally rough finishing of ornamental detail, so as to keep the latter subordinate to a larger architectural whole. Thus, when towards the end of the chapter, as a first characteristic of all good architecture, Gothic or not so, it is suggested to see:

SV2.VI.111 . . . if it looks as if it had been built by strong men; if it has the sort of roughness, and largeness, and nonchalance, mixed in places with the exquisite tenderness which seems always to be the sign-manual of the broad vision, and massy power of men who can see past the work they are doing, and betray here and there something like disdain for it . . .

this is perfectly in line with ideas expounded in the 'Lamp of Power.' But Ruskin does not stop there, and wants us to believe there is a noble rudeness in Gothic detailing, noble because it results from the freedom at self-expression that in medieval times was granted to stoncutters by their superiors. As pointed out by Unrath, such not only is completely at variance with everything we know about labor relationships at a large medieval building site, but also undercuts all of those subtle analyses of Gothic detail in Ruskin's own works where it is aptly demonstrated why this must be considered art of great sophistication. Historic truth as well as faithful rendering of Ruskin's own aesthetic response to Gothic architecture thus fall victim to social criticism the author is out to convey—in 'The Nature of Gothic' as well as in some of the subsequent chapters of *The Stones*.

Such flaws stand out even more dramatically if, as in Unrath's book, a theory of ornament is taken as the core of Ruskin's architectural writings. If, as it will be proposed here, a concept of 'living walls that are made to last'
is chosen instead, even 'The Nature of Gothic' still somehow fits in, but not all of its imperfections can thus be straightened out. Another way-out might be to look at this chapter as an essay in which from Gothic as we know it Ruskin tries to infer basic principles of a naturalist architecture, such as became a major theme in many of his later lectures.

10.9.2 Gothic as a Style of the Future

Throughout the 1850s and beyond Ruskin played a marked role in an ongoing and often heated public debate as to what kind of style of architecture would be most appropriate for nineteenth-century England. His often contrary points of view received considerable attention and had to be reckoned with. Still it has not always been clear to everybody where he actually stood. Was he a champion of the Gothic revival in general, or only of some Italianate version of it? Or did he, as Summerson suggests, point to no style?

The answer is that, at different occasions, he did all of these things. The idea of a Gothic revival is endorsed in at least three places: first in the 'Lamp of Obedience' [SL.VII], then in 'The Nature of Gothic' [SV2.VI], in the concluding chapter of The Stones [SV3.IV], and finally in a new preface which in 1855 he added to the second edition of The Stones.

The 'Lamp of Obedience' betrays a pessimistic mood. Its proposals are so unrealistic, that eventually little more is done than signalling a problem to which the author has no answer. "A day never passes," we are told [§ 4], "without our hearing our English architects called upon to be original and to invent a new style." This, Ruskin holds, is not the way the problem should be put: "We want no new style of architecture. Who wants a new style of painting or sculpture? But we want some style .."

The idea is worked out by way of a linguistic analogy. It is stated [§ 3] that "the architecture of a nation is great only when it is as universal and as established as its language," that "the work shall be that of a school, that no individual caprice shall dispense with, or materially vary, accepted types and customary decorations; and that from the cottage to the palace, and from the chapel to the basilica, and from the garden fence to the fortress wall, every member and feature of the architecture of the nation shall be as commonly current, as frankly accepted, as its language or its coin." So far so good, but how to get this kind of a language universally accepted in nineteenth-century England? Ruskin's answer is as simple as it sounds impossible: by submitting it to English law! "It may be said," he readily admits,

SL.VII.6 .. that this is impossible. It may be so--I fear it is so: I have nothing to do with the possibility or impossibility of it; I simply know and assert the necessity of it. ... We shall not manufacture art out of pottery and printed stuffs; we shall not reason out art by our philosophy;
we shall not stumble upon art by our experiments, nor create it by our fancies: I do not say that we can even build it out of brick and stone; but there is a chance for us in these, and there is none else; and that chance rests on the bare possibility of obtaining the consent, both of architects and of the public, to choose a style, and to use it universally.

The linguistic analogy subsequently is extended by pointing out how young architects should learn the chosen style the way a boy is taught how to write Latin, and how only after having obtained complete mastery of the language they should be licensed to make minor changes to it:

SL.VII.7 ... thus in process of time and by a great national movement, it might come to pass, that a new style should arise, as language itself changes; we might perhaps come to speak Italian instead of Latin, or to speak modern instead of old English; but this would be a matter of entire indifference, and a matter, besides, which no determination or desire could either hasten or prevent.

The only thing that matters, because it can be obtained, is that some style be chosen unanimously, one that is adaptable to modern uses. Gothic (in a wide sense, though the most primitive as well as the most degraded versions of it are excluded) is considered more fit for this than Greek. Other styles are not even mentioned as worthy of serious consideration. The choice, eventually (in one of the most often quoted passages from Ruskin's works) is narrowed down to four:

-1. The Pisan Romanesque; 2. The early Gothic of the Western Italian Republics, advanced as far and as fast as our art would enable us to the Gothic of Giotto; 3. The Venetian Gothic in its purest development; 4. The English earliest decorated.

To which it is added that "The most natural, perhaps the safest choice, would be of the last," provided that it be "well fenced from chance of again stiffening into the perpendicular," and that it be enriched with decorative elements of French Gothic from its best period.

Now let it be noted how in The Seven Lamps, or even in Ruskin's architectural writings as a whole, this use of a linguistic analogy remains highly exceptional. In Modern Painters 1 and 2 it is applied to painting, but that, as indicated in Appendix 6, belongs to an earlier phase in Ruskin's theorizing. In respect to architectural form the same analogy is generally avoided. Or, if it is used at all, it generally refers to the meaning of figurative ornament (see § 10.9.4 below). And all this for good reason, as acceptance of the analogy for architectural form would involve an acknowledgement of quality in such form
as largely a matter of convention—a point on which, as we shall see, Ruskin is highly ambivalent as well. The concept of architecture as a language, or of architectural styles as even so many languages, although enjoying a certain popularity in nineteenth-century England, had its origin in eighteenth-century France. Hence it is no coincidence that what in the above recommendation of architecture's submission to English law is implied comes close to the system of the French Academy as installed under Louis XIV, with English Early Decorated taking the place of Renaissance and classicist paradigms. But then, why all of a sudden promote this English style, while all criteria of excellence discussed so far were based on Italian and French examples? The most plausible, if not very flattering explanation appears to be that, on an issue he had never given much thought, Ruskin echoes opinions that were in the air, exaggerating them to a point of utter impracticality.

A second place where, as indicated, a Gothic revival is endorsed is 'The Nature of Gothic.' In this case neither linguistic analogies, nor the aid of English law are invoked, but for reasons as reviewed above it once again does not fit in too well with either The Seven Lamps or the first half of The Stones.

A third place as mentioned is the concluding chapter of The Stones. This time the tone is more liberal (because more optimistic) than in the final chapter of The Seven Lamps, but it is Ruskin at his most rhetorical when he suggests [SV3.IV.35] we should "cast out utterly whatever is connected with the Greek, Roman, or Renaissance architecture, in principle or in form ...," because it is "base, unnatural, unfruitful, unenjoyable, and impious. Pagan in its origin, proud and unholy in its revival, paralyzed in its old age ...", making "plagiarists of its architects, slaves of its workmen, and Sybarites of its inhabitants ...," and so on, and so forth, all of this issuing in the recommendation:

SV3.IV.36 In this [Gothic] architecture let us henceforward build, alike the church, the palace, and the cottage; but chiefly let us use it for our civil and domestic buildings. ... It is hardly possible at present to imagine what may be the splendor of buildings designed in the forms of English and French thirteenth century surface Gothic, and wrought out with the refinement of Italian art in its details ... the London of the nineteenth century may yet become as Venice without her despotism, and as Florence without her dispecce.

Observe that, even if a Gothic revival is endorsed, it is one of an eclectic kind. Moreover, it was the last time Ruskin would express such unconditional support for the idea. Dissatisfaction with what was actually accomplished in that manner, unhappiness about the way The Stones were used as a pattern book for ill-applied Venetian ornamental detail, and his involvement with the unfortunate Oxford Museum may or may not account for this, but anyway, he did not.
The four cases as mentioned, moreover, are the exception rather than the rule. The actual thrust of Ruskin's architectural writings is toward a more disciplined and more vital eclecticism, based on a medieval rather than classical, and on a Byzantine or Romanesque rather than truly Gothic vocabulary of forms, richer in color and more naturalist in its decoration than what people those days were accustomed to, and with considerable display of natural materials. All of the sometimes rather detailed rules of right and wrong, the 'dos and don'ts,' so to say, expounded in the first volume of The Stones, have a place in this scheme. Leaving architects and their clients maximum freedom of choice and invention in ornamental detail, these rules aim at a kind of framework to prevent gross mistakes against rational construction and effective decoration. "It is no sign of deadness," we are told in the 'Lamp of Life' [SL.V.4], "in a present art that it borrows or imitates, but only if it borrows without paying interest, or if it imitates without choice." The difference is tentatively explained in terms of Frankness and Audacity:

**SL.V.5** It will be asked, How is imitation to be rendered healthy and vital? Unhappily, while it is easy to enumerate the signs of life, it is impossible to define and communicate life ... Yet it is at least interesting, if not profitable, to note that two very distinguishing characters of vital imitation are, its Frankness and its Audacity; its Frankness is especially singular; there is never any effort to conceal the degree of the sources of its borrowing. ... There is at least a presumption, when we find this frank acceptance, that there is a sense within the mind of power capable of transforming and renewing whatever it adopts ... and the necessary consequence of this sense of power is the other sign I have named -the Audacity of treatment when it finds treatment necessary, the unhesitating and sweeping sacrifice of precedent where precedent becomes inconvenient.

More specific means to bring architecture alive, as expounded in The Seven Lamps and The Stones will be reviewed in the next chapter.

### 10.9.3 Conventionality of Style

Behind Ruskin's ambivalence regarding Gothic (or, for that matter, any other historic style) as a style of the future lies a more fundamental ambivalence regarding the importance of continuity of style, if that means an acceptance of basically irrational conventions. Continuity of style, for sure, in a number of places is acknowledged as essential to style in general. Thus in the 'Lamp of Truth' it is, as a major objection to the use of iron, stated that:
Abstractedly there appears no reason why iron should not be used as well as wood; and the time is probably near when a new system of architectural laws will be developed, adapted entirely to metallic construction. But I believe that the tendency of all present sympathy and association is to limit the idea of architecture to non-metallic work; and that not without reason ... I think it cannot but be generally felt that one of the chief dignities of architecture is its historical use; and since the latter is partly dependent on consistency of style, it will be felt right to retain as far as may be, even in periods of more advanced science, the materials and principles of earlier ages.

The argument, of course, can easily be reversed. If people dislike visible applications of constructive iron because it offends their sense of proportion as derived from traditional architecture based on stone, brick, and wood, there is reason to presume their response to it will gradually change as iron gets more universally applied. Besides, it is hard to see what is 'untrue' about metallic constructions, even if a distinction is made between actual and apparent construction. The only conceivable link between the two issues is that, without a language which holds on to its own conventions, it is hard to make sensible, universally understood statements at all, let alone statements of truth—and I presume that indeed is what Ruskin is driving at.

On the other hand, the position outlined here is consistent with the one endorsed in the 'Lamp of Obedience' as reviewed above, and it recurs some ten years later in The Two Paths, where it is noted:

TP.4 .. that the very essence of a Style, properly so called, is that it should be practised for ages, and applied to all purposes; and that so long as any given style is in practice, all that is left for individual imagination to accomplish must be within the scope of that style, not in the invention of a new one.

Even so, it is only as an argument against the invention of a new style, more in particular a style based on iron and glass, that the importance of continuity and conventionality of style is emphasized. The issue never received a place at the heart of Ruskin's theoretical system. Criteria of quality as expounded in the first volume of The Stones are of two kinds: the building must exhibit rationality, a pleasant sense of constructedness, so to say, and it should reflect nature's beauty. Allowance is made for a modest role of 'proportionate design' (though as a rule Ruskin is unwilling to generalize on that), but that is about it. Faithful adherence to the inherited vocabulary of a style is never highlighted as particularly relevant. On the contrary, all ornament (excepting color) that does not stand in some tangible relation to natural forms is in 'The Material of Ornament' [SV1.XX] rejected as senseless and ugly. Elsewhere [SV1.II.12] a love of triglyphs or pediments among present day Englishmen is qualified

to these poetical symbolisms in the formation of a national style. The human race are, for the most part, not to be moved by such silken cords; and the chances of damp in the cellar, or of loose tiles in the roof, have, unhappily, much more to do with the fashions of a man's house building than his ideas of celestial happiness or angelic virtue. Association of affection have far higher power, and forms which can be no otherwise accounted for may often be explained by reference to the natural features of a country, or to anything which habit must have rendered familiar, and therefore delightful; but the direct symbolisation of a sentiment is a weak motive with all men, and far more so in the practical minds of the north than among the early Christians, who were assuredly quite as heavenly-minded, when they built basilicas, or cut conchas out of the catacombs, as were ever the Norman barons or monks.

We need not worry whether in this historic interpretation of Gothic Ruskin was right. What matters is the anti-symbolist bias. In the same vein the author at the outset of that volume [SV1.II.2] points out that he does not intend to theorize on conventional meaning in buildings, not because by itself this is unimportant (in some cases a building's impact on a beholder does to a great deal depend on it), but because it rests on convention and therefore on historic coincidence, which makes it hard to generalize about. Apparently that still allows for some positive assessment of conventional symbolism in architecture, but considering all the subjects that in the Lamp of Beauty [SL.IV] are declared unfit for ornament, the allowance seems not very generous. Excluded are Greek frets [§ 4], heraldry [§ 8], texts [§ 9], scrolls and ribands [§ 10], drapery (other than to accentuate movement of a human body) [§ 11], garlands and festoons [§ 12], and certain kinds of dripstone--all of them because in their conventionality they carry no palpable relationship to nature, and also because there is evil pride in thus exposing images of human as opposed to divine work. Approximately the same list and explanation recur in 'The Material of Ornament' [SV1.XX.3-16], so on the face of it Ruskin at this point is consistent. A first crack in the system, however, has already appeared when in the Lamp of Memory [SL.VI.6-10] it is recommended to adorn public buildings with a visualized history of the organization it houses:

SL.VI.7 Better the rudest work that tells a story or records a fact, than the richest without meaning. There should not be a single ornament put upon great civic buildings, without some intellectual intention.

Even though in this case human beings (who do count as noble subject matter for ornament) are at the center of such visualizations, the proposal seems a far cry from humble adoration of nature. In the same chapter [§ 6] it is suggested that when a house is built one should leave blank stones in strategic places to be later on inscribed by one's children with an account of the builder's
life, aspirations, and accomplishments. So at that point even the ban on texts as decoration has temporarily been lifted.

Those cracks grow wider in the second volume. Thus in 'The Nature of Gothic' it is suggested [SV2.VI.114] that in order to decide whether a building is good Gothic, or, if not, whether it is good architecture anyway, one should read the sculpture. If it is readable,

SV2.VI.114 ... the criticism of the building is conducted precisely on the same principles as that of a book; and it must depend on the knowledge, feeling, and not a little on the industry and perseverance of the reader, whether, even in the case of the best works, he either perceive them to be great, or feel them to be entertaining.

Observe how a more active role has been assigned to an observer here than in The Seven Lamps. No longer should the latter just open his heart and mind to images of divine nature. He actively must work at it to decipher all levels of meaning installed there by a building's makers. Ruskin's evolution at this point is precisely the inverse of Semper's. Whereas the latter in the years that passed between the Preliminary Remarks (1834) and the first volume of Der Stil (1860) turned his back on symbolist decoration with a moral tenor (or at least in his theoretical works, I am not concerned with what simultaneously he endorsed as a practicing architect256), Ruskin increasingly became positively involved with it. The Seven Lamps, in spite of what was quoted above from the Lamp of Memory, generally focus on less intentional types of meaning (associative or indexical, see Fig. 28, § 10.3) and on likenesses which, in a more intuitive way, may trigger all sorts of association. In an earlier chapter of The Stones 2 (prior to 'The Nature of Gothic') many pages are devoted to the iconology of all the decoration in and on St. Mark's. At this stage Ruskin is still very much concerned with, on the one hand, finding a justification for all this religious imagery, and, on the other, leaving no doubt about his own protestant convictions at this point. It is argued how in medieval times, when even those who could read had not in general direct access to the Scriptures, this decoration functioned as a kind of poor man's Bible, and that:

SV2.IV.46 ... the whole edifice is to be regarded less as a temple wherein to pray, than as itself a Book of Common Prayer, a vast illuminated missal, bound with alabaster instead of parchment, studded with porphyry pillars instead of jewels, and written within and without in letters of enamel and gold.

Yet, in accordance with intentions as proclaimed in Volume 1, this chapter focuses not on the meaning of such ornament, but its relation to construction and other, more strictly visual demands to be made on it. In a detailed description of all the capitals on columns and pillars at the two main facades
of the Ducal Palace [SV2.VIII.33-132] attention is more equally divided between execution and subject matter, but both as indicative of the state of mind of its makers in the first place. It is only towards the end of the final volume, in a chapter entitled 'Grotesque Renaissance' [SV2.III], that symbolist content of ornament becomes the primary object of consideration, and is dealt with in a heavily sermonizing, almost prescriptive way.

The chapter adds little to a reader's knowledge of Venice, and even less to that of Renaissance architecture. It can variously be read as an independent essay on grotesque decoration (not necessarily architectural), as a postscriptum to The Stones, or as a first presentation of what was to become a major theme in Modern Painters 3. Grotesqueness had previously been mentioned as what negatively distinguishes northern from Italian Gothic ('the grotesque northern spirit' [SL.I.14] as quoted in § 10.9.1 above), or, in the 'Nature of Gothic,' as a funny but aesthetically neutral characteristic of its northern variety. This time grotesque art is dealt with as a playful way of coming to terms with the horrible and awesome aspects of life. As such it moves between the aesthetic categories of the picturesque and the sublime, its subject matter leaning toward the latter, the rendering of it toward the former. Thus there is always an obvious disproportion between grotesque image and what it stands for, no matter whether that relationship must be qualified as playful, witty, satiric, or seriously symbolic. Symbolism may refer to myth, folklore, or even Holy Scripture, but to some degree the playfulness involved must be a play with symbols. That in itself would not oblige to a symbolist concept of artistic excellence, if not for Ruskin's subsequent assumption that:

SV3.III.67 ... there is no test of greatness in periods, nations, or men, more sure than the development, among them or in them, of a noble grotesque, and no test of comparative smallness or limitation, of one kind or another, more sure than the absence of grotesque invention, or incapability of understanding.

So at that point (but not prior to it) and in that sense (though hardly in any other) Ruskin's conception of artistic excellence indeed turned symbolistic. We shall recur to this in § 13.2 in connection with an effort by Lauren S. Weingarden to link Sullivan's ideas on symbolistic ornament to Ruskin's. The shift in part resulted from, quite simply, Ruskin's close investigation of Gothic buildings, which eventually had to include the symbolism of their decorative systems as well. Some shift inevitably had to result from this study, but Ruskin's preoccupation with grotesqueness cannot be accounted for on such general grounds. Helsinger in this context convincingly points to a change in religious outlook. Having arrived at the conclusion that nature is not always beautiful or positively sublime, Ruskin inferred that the God he met there need not always be a benign God. He might as well be of the awesome kind who sends people to hell if they deserve it (or even if they don't), and every
now and then, through nature in its cruelty and desolation, gives his creatures a premonition of what lies ahead of them. As an effort to save his crumbling protestant faith, Helsinger adds\textsuperscript{239}, this solution would not hold out, but even as a temporary way-out it provides an example of how changes in adherence to religious dogma occasionally did affect Ruskin's ideas on art and architecture.

Confusion over Ruskin's symbolist conceptions of art in part may have been caused by his occasionally unsystematic use of the words 'symbol' and 'symbolism.' Thus when it is stated that:

\begin{quote}
SV1.XX.17 \ldots the proper material of ornament will be whatever God has created; and its proper treatment, that which seems in accordance with or symbolical of his laws \ldots
\end{quote}

it is not obvious at all (neither from these few lines, nor from the context in which they appear) what this "symbolical of his [God's] laws" can possibly mean other than that, as already stated, such treatment should be \textit{in accordance} with those laws. The section sounds vaguely similar to an earlier statement in \textit{Modern Painters 2}, where with regard to the subject matter of the 'theoretic faculty,' that is, to things which are generally considered beautiful, it is noted:

\begin{quote}
MP2.III.I.XV.4 It is either the record of conscience, printed in things external, or it is a symbolizing of Divine attributes in matter, or it is the felicity of living things, or the perfect fulfilment of their duties and functions.
\end{quote}

In this case "symbolizing of Divine attributes in matter" sounds like an appeal to medieval cosmology, of which at least by implication there was more in eighteenth-century associationist philosophy. As that cosmology is not, however, systematically explored or observed in any of Ruskin's works, the symbolism referred to in the above statement keeps floating in the air. As a basis on which to erect any theory whatsoever regarding Ruskin as a symbolist none of this seems particularly sound.

\subsection{10.9.5 Accumulation of Ornament}

Among the popular caricatures of Ruskin's architectural thought is that he endorsed something like 'the more ornament the better.' Such, for instance, might seem to be the purport of the following lines from the 'Lamp of Sacrifice':

\begin{quote}
SL.I.15 It is not less the boast of some styles that they can bear ornament, than of others that they can do without it; but we do not often enough reflect that those very styles, of so haughty simplicity, owe part
of their pleasurableness to contrast, and would be wearisome if universal. They are but the rests and monotones of the art;

This advantage of certain styles (elsewhere [SL.VI.7] identified as "Gothic in the most extended sense as broadly opposed to classical") nonetheless must be seen against the background of the following observation in the 'Lamp of Power' [italsc mine]:

SL.III.1 From about these two groups [of buildings one tends to remember], more or less harmonised by intermediate examples, but always distinctively marked by features of beauty or of power, there will be swept away, in multitudes, the memories of buildings, perhaps, in their first address to our minds, of no inferior pretension, but owing their impressiveness to characters of less enduring nobility -to value of material, accumulation of ornament, or ingenuity of mechanical construction.

Proclaiming ornament's identity with beauty, Ruskin no doubt owes much of the aforementioned caricature to himself. Nevertheless, that image does not square with the more subtle analyses which make up the bulk of his architectural writings. Generally, in these works it is not the quantity of ornament that counts, but its delicacy, the characteristic detail, so to say. Besides, numerous ways to enliven architecture, other than through accumulation of ornament, have been outlined as well--and of these we will come to speak in the following chapter.
11. 'Lamps' and 'Stones:'
Theory Reconstructed

Toward the end of the previous chapter a whole range of apparent contradictions and incompatibilities in The Seven Lamps plus The Stones has been identified. For some of these it could easily be demonstrated how they are only skin-deep, for others that they are quite real indeed, but many in-between cases remain for which it is worthwhile to consider if they can be bridged by some more encompassing concept which covers both sides of the matter.

It has also been noted how a concept of Greatness as expounded in The Seven Lamps to a large extent fulfills this role, at least for that work. The first half of The Stones already turned out to be based on a slightly different concept of the same, whereas the gap continually widens in the second half. So it is time now to look for another concept which may cover even more of both works. It will be argued such can indeed be pointed out, be it not, as in the case of Der Stil, in the sense of a clear and consistent concept of art and beauty. Rather, it is something more tangible: a conception of living walls which at the same time should be of an enduring quality and look like it; walls that apparently were made to stand forever.

11.1 Living Walls that are Made to Last

The most concise formulation of this conception is in the section from the first volume of The Stones [SV1.IV.1] quoted at the outset of this case study—the one that speaks of a wall having "no business to be dead," and of how it "ought to have members in its make, and purposes in its existence, like an organized creature," and so on. Immediately afterwards three basic members are distinguished [§ 2], the Foundation, the Body or Veil, and the Cornice. As regards the first it is noted:

SV1.IV.3 The foundation is to the wall what the paw is to the animal. It is a long foot, wider than the wall, on which the wall is to stand, and which keeps it from settling into the ground. It is most necessary that this great element of security should be visible to the eye, and therefore made a part of the structure above ground.
For the middle part, the 'body' or 'veil,' no such analogy seems available. A more cosmic one is chosen instead, when in § 5 the use of stringcourses is recommended as rendering "... something like periods of rest and reflection in human life, before entering a new career." For the cornice, however, there is an anthropomorphic equivalent, and for the whole triad one in the world of plants:

SV1.IV.6 .. the cornice, small or large, is the termination of the wall's existence, the accomplishment of its work. When it is meant to carry some superincumbent weight, the cornice may be considered as its hand, opened to carry something above its head; as the base was considered its foot: and the three parts should grow out of each other and form one whole, like the root, stalk, and bell of a flower.

Organic analogies in general, and zoomorphic ones in particular, have a long tradition in architectural theory, one that can be traced at least to Alberti's De Re Aedificatoria (1452)\(^{260}\). They still have an important place in Palladio's 'Four Books' of 1570, but pass into oblivion in later classicist architectural theory. This reaching back to Alberti, while ignoring most of what had since been produced, is a phenomenon we have noticed before (§ 10.7.3) in regard to beauty and ornament, and of which we will come to speak again (§ 11.3) in connection with Ruskin's concerns about 'unity in variety.' One can only speculate why that is, as Ruskin himself, for what I know, never refers either to Alberti or to any other Renaissance or later classicist theorist of architecture\(^{261}\). That many of Ruskin's favorite buildings must have loomed large on Alberti's architectural horizon too, as the latter grew up in Venice (1404-1416), Padua (1416-18), and Bologna (1418-28), and lived in Florence for quite a while (1434-43) before settling down in Rome for most of the rest of his life, may or may not have something to do with it, but anyway, Ruskin always seems involved in a debate with Alberti rather than with any other architectural theorist.

Organic analogies of the zoomorphic variety, meanwhile, are only one aspect of this concept of living walls that are made to last. Others, as will be reviewed in the following paragraphs, are that people should build with the intention, or at least the pretense, that what they build is to last forever (§ 11.2), that buildings should give a faithful account of their history, reaching back in time as far as possible (ibidem), a concept of unity in variety (§§ 11.3 and 11.4.2), stone as in general the most appropriate building material (§ 11.4.1), the integrity of the wall (§ 11.4.2), cosmic associations a wall may evoke (ibidem), decoration which one way or another is imitative of natural forms (§§ 11.4.3 and 11.4.4), and rich coloration in natural colors (§ 11.4.5).
11.2 The Lamp of Memory

SL. VI.10 For, indeed, the greatest glory of a building is not in its stones, or in its gold. Its glory is in its Age, and in that deep sense of voicefulness, of stern watching, of mysterious sympathy, nay, even of approval or condemnation, which we feel in walls that have long been washed by the passing waves of humanity. It is in their lasting witness against men, in their quiet contrast with the transitional character of all things, ... that we are to look for the real light, and color, and preciousness of architecture; ..

The opinion that the greatest glory of architecture is in its age, as indicated had been voiced by Alison before\textsuperscript{262}, but gets a boost from Ruskin's proclamation of it in the 'Lamp of Memory.' If a concept like that of living walls which are made to last is considered as the leading one in The Seven Lamps as well as The Stones, this chapter becomes crucial to the argument as a whole, so let us try to briefly summarize its contents.

It is argued that, without at least an aspiration to create 'a thing of beauty that is to be a joy forever,' so to say, there will be no lasting beauty, neither in architecture nor in other domains of human enterprise. Nor can there, without well-preserved old buildings, be much memory of old times to animate the present:

SL. VI.2 It is as the protectress of this sacred influence, that Architecture is to be regarded by us with the most serious thought. We may live without her, and worship without her, but we cannot remember without her. .. there are but two strong conquerors of the forgetfulness of men, Poetry and Architecture; and the latter in some sort includes the former, and is mightier in its reality ... The age of Homer is surrounded with darkness, his very personality with doubt. Not so that of Pericles: and the day is coming when we shall confess, that we have learned more of Greece out of the crumbled fragments of its sculpture than even from her sweet singers and soldier historians.

Memories evoked by buildings need not always be so specific. Their "quiet contrast with the transitional character of all things" sometimes will do. The power of the resulting animation can be experienced even in nature, which will not display all of its greatness if no human settlement of some age is felt to be near [§ 1]. And so "it is in becoming memorial or monumental that a true perfection is attained" [§ 3]. For public buildings of some importance this had long since been the common point of view\textsuperscript{263}. What Ruskin does is extend it to private and domestic architecture. Hence he insists [§ 6] that "The right over the house ... belongs to its first builder, and is to be respected by his children." The latter point has a moral dimension as well: the deeds,
accomplishments, wisdom, and, in a way, even the foolishness of older
generations are things we must remember and respect, just like we are entitled
to expect the same from those who come after us.

For public buildings (for which, as indicated, this was already more
or less the accepted point of view) the author subsequently [§§ 7-10] focuses
on how they should be decorated: with a visual account of the history of the
institution they were built for: "Better the rudest work that tells a story or
records a fact, than the richest without meaning."

In the next section [§§ 11-17] Ruskin is at pains to point out that the
qualities inherent in the age of buildings are not, as was widely assumed, and
as in fact he himself had suggested in The Poetry of Architecture, picturesque
ones. The final three paragraphs [§§ 18-20] contain his well-known defence
of preservation as opposed to either restoration or neglect—in Pevsner's view
Ruskin's most important contribution ever to architectural theory, so let us
give it a few quotations. In regard to restoration it is noted:

SL.VI.18 Do not let us deceive ourselves in this important matter;
it is impossible, as impossible as to raise the dead, to restore anything
that has ever been great or beautiful in architecture. That which I have
above insisted upon as the life of the whole, that spirit which is given
only by the hand and eye of the workman, never can be recalled. Another
spirit may be given by another time, and it is then a new building; but
the spirit of the dead workman cannot be summoned up, and commanded
to direct other hands, and other thoughts.

The solution is seen in careful preservation, which demands regular attention,
but not necessarily a lot of time or money. It is acknowledged a building's
existence cannot forever be prolonged that way, but even then, Ruskin insists,
it is better to eventually let it fall apart than to 'restore' it:

SL.VI.19 Its evil day must come at last; but let it come declaredly
and openly, and let no dishonoring and false substitute deprive it of
the funeral offices of memory.

All this is a matter of principle:

SL.VI.20 .. it is again no question of expediency or feeling whether
we shall preserve the buildings of past times or not. We have no right
whatever to touch them. They are not ours. They belong partly to those
who built them, and partly to all the generations of mankind who are
to follow us. The dead have still their right in them: that which they
labored for, the praise of achievement or the expression of religious
feeling, or whatsoever else it might be which in those buildings they
intended to be permanent, we have no right to obliterate.
Observe that what in these pages is endorsed is not so much an illusion of timelessness as actual historic objectivity. Part of Ruskin's originality as an architectural theorist lies in his emphasis on indexical meaning, more in particular of what in an indexical way accounts of a building's history and of the way it was made. Whether in a comparable way it relates of how it is being used, what activities are going on inside, to Ruskin (as opposed to his more rationalist contemporaries) is not a primary concern.

Another major implication, perfectly in tune with the romantic spirit of both this work and *The Stones*, is stylistic pluralism. No exception is made for buildings in a Renaissance or other style the author is not crazy about. As bearers of memory they are all entitled to the same protection.

### 11.3 Unity in Variety

A concept of unity in variety may serve as an intermediary between organic analogies as implied in the notion of living-walls-that-are-made-to-last and more practical recommendations regarding composition and detailing as will be reviewed below. Therefore, we ought to give it some attention at this point. Paradoxically, the concept is hardly mentioned by that name in either *The Seven Lamps or The Stones*. Instead, it is expounded in the second half of *Modern Painters 2*, and what is encountered in the aforementioned works are some derivative ideas. So it is to *Modern Painters 2* that one must turn in order to obtain insight in the interrelatedness of those derivatives.

The concept turns up in various forms in a chapter on Unity, most clearly in what is considered the latter's most basic and most important variety: Unity of Membership, defined as "the unity of things separately imperfect into a perfect whole"--of which it is stated:

**MP2.III.I.VI.4** .. that it cannot exist between things similar to each other. Two or more equal and like things cannot be members one of another, nor can they form one, or a whole thing. Two they must remain, both in nature and in our conception, so long as they remain alike, unless they are united by a third different from both. Thus the arms, which are like each other, remain two arms in our conception. They could not be united by a third arm, they must be united by something which is not an arm, and which, imperfect without them as they without it, shall form one perfect body; nor is unity even thus accomplished, without a difference and opposition of direction in the setting on of the like members. ...

**MP2.III.I.VI.5** Hence, out of the necessity of unity, arises that of variety, a necessity often more vividly, though never so deeply felt, because lying at the surfaces of things, and assisted by an influential principle
of our nature, the love of change, and the power of contrast. But it is a mistake which has led to many unfortunate results, in matters respecting art, to insist on any inherent agreeableness of variety, without reference to a farther end. For it is not even true that variety as such, and in its highest degree, is beautiful. A patched garment of many colors is by no means so agreeable as one of a single and continuous hue.

Like the zoomorphic analogies in Ruskin's works, the above stands in a tradition that goes back to at least Alberti. Thus in De Re Aedificatoria (1452), Book I, chapter IX, it is stated:

Variety is without dispute a very great beauty in everything, when it joins and brings together, in a regular manner, things different, but proportionable to each other; but it is rather shocking, if they are unsuitable and incoherent.

Ruskin takes it over almost word for word—subsequently to give it a new and wider interpretation. What more is needed for such unity is discussed in a section on proportion, that is 'the connection of unequal quantities with each other' [MP2.III.I.VI.10-17], and in a chapter on symmetry, defined as 'the opposition of equal quantities to each other' [MP2.III.I.VIII.2]. How this works out in, for instance, the 'Lamp of Beauty' [SL.IV.24-29] and the 'Lamp of Life' [SL.V.9-17] will be reviewed below.

11.4 Practical Recommendations

Having completed our survey of all the more complicated issues, like structure of argument and leading concepts in the texts under investigation, we shall in the present section confine ourselves to a straightforward summary of what the same texts have to say on more practical issues, like composition, detailing, choice of material, and so on—with a large amount of quotation and little in the way of comments. As most of Ruskin’s explorations on architectural detailing focus on decoration or ornament, either its distribution or its execution, those have been chosen as the headings for §§ 11.4.3 and 11.4.4. Other aspects of detailing will be included on the way. Color will be dealt with separately in § 11.4.5.

11.4.1 Choice of Material

An obligation to build for eternity in Ruskin’s view implies not just that constructions must be of an enduring kind, but also that they should look like it. This accounts for his silence on wood and his hostility to iron and glass.
An architecture of wood may display other qualities, but not those of an obviously great endurance, and so the author simply does not profoundly care about it. With iron and glass the situation is different. With truly missionary zeal Ruskin sets out to prove that no building constructed of primarily these materials can have any architectural quality at all. Why not?

The use of iron is discussed twice in the 'Lamp of Truth,' first under the heading of 'structural deceits,' [§§ 9-13], later under that of 'operative' ones [§§ 19-20]. The former are defined as 'the suggestion of a mode of structure or support, other than the true one,' and the argument, as indicated in § 10.9.3 above, hinges on continuity of style. Allowance is made for a restrained use of iron in combination with masonry:

SL.II.10 Yet it is evident that metals may, and sometimes must, enter into the construction to a certain extent, as nails in wooden architecture, and therefore as legitimately rivets and solderings in stone ... and if we grant this I do not see how we can help allowing Brunelleschi his iron chain around the dome of Florence, or the builders of Salisbury their elaborate iron binding of the central tower. If, however, we would not fall into the old sophistry of the grains of corn and the heap, we must find a rule which may enable us to stop somewhere. This rule is, I think, that metals may be used as a cement but not as a support.

Even within these constraints, however, the author holds we'd better not use such means, as long as we can avoid it:

SL.II.11 .. for it is in this license as in that of wine, a man may use it for his infirmities, but not for his nourishment.

A "noble submission to ... certain voluntarily admitted restraints" is endorsed. It is argued that nature herself offers perfect examples of this, like in the bones of mammals, which could have been of a stronger material than the phosphate of lime they are actually made of. We in our wisdom, he suggests [§ 13], "should, doubtless, have given the lizard a steel jaw, and the myodon a cast-iron headpiece," but God knew better: "God shows us in Himself, strange as it may seem, not only authorative perfection, but even the perfection of Obedience--an obedience to His own laws."

What to think of this? It is tempting to conclude with Clark and Pevsner that the author "relies on holy writ to save himself further thought"--except that there is no reference to holy scriptures here. It is wholly his own religious fantasies that Ruskin follows in this case. Hence it may be read as an acknowledgement that his bias against iron in architecture cannot eventually be rationalized; that iron is unnatural; that it just cannot be right when our environment is turned into a glass and iron megastructure; that there is evil pride in man who thinks he is permitted to uproot the laws of creation in this
way; and that there is no arguing with a person who refuses to understand all this. Such, of course, is a perfectly legitimate point of view—but why present it under the heading of 'Truth?'

'Operative deceits' are defined as 'the substitution of cast or machine work for that of the hand.' The two paragraphs [§§ 19-20] devoted to these focus on cast-iron ornament. The objections raised against it are as confusing and confused as those against constructive iron in the preceding section. Ruskin admits that, from the point of view of 'Truth,' there is nothing wrong with it, as nobody will ever think of such ornament as anything but cast, but adds:

SL.II.20 The common iron work of the middle ages was as simple as it was effective, composed of leafage cut flat out of sheet iron, and twisted at the workman's will. No ornaments, on the contrary, are so cold, clumsy and vulgar, so essentially incapable of a fine line, or shadow, as those of cast-iron.

So why not deal with these in, for instance, the 'Lamp of Life?" Most of the time when Ruskin talks of iron, there is something impatient in his voice and manners. When in Volume 1 of The Stones the topic is iron traceries and window-bars, he just notes:

SVI.XVII.4 Iron is, however, fit for window-bars, and there seems to be no constructive reason why we should not have iron traceries, as well as iron pillars, iron churches, and iron steeples. But I have, in the "Seven Lamps," given reasons for not considering such structures as architecture at all. The window-bars must, therefore, be of stone, and of stone only.

As if the reasons presented in The Seven Lamps were utterly conclusive! Objections of a more structural kind are raised in one of the next chapters, entitled 'Superimposition':

SVI.XIX.5 Nothing in architecture is half so painful as the apparent want of sufficient support when the weight above is visibly passive: for all buildings are not passive; some seem to rise by their own strength, or float by their own buoyancy; a dome requires no visibility of support, one fancies it supported by the air. But passive architecture without help for its passiveness is unendurable. In a lately built house, No. 86, in Oxford Street, three huge stone pillars in the second story are carried apparently by the edges of three sheets of plate glass in the first. I hardly know anything to match the painfulness of this and some other of our shop structures, in which the iron-work is concealed; nor, even when it is apparent, can the eye ever feel satisfied of their security, when built, as at present, with fifty or sixty feet of wall above a rod of iron not
If only the glass had been placed behind the iron columns instead of in front, the author's pains apparently would have been much less severe. So what is the problem, really? More fundamental are aesthetic considerations expounded in Appendix 17 to the same volume:

SV1.App.17 It is thought by many that we shall forthwith have great part of our architecture in glass and iron, and that new forms of beauty will result from the studied employment of these materials. It may be told in a few words how far this is possible; how far eternally impossible. There are two means of delight in all productions of art-color and form. The most vivid conditions of color attainable by human art are those of works in glass and enamel, but not the most perfect ... The delight which we receive from glass painting is one altogether inferior, and in which we should degrade ourselves by over indulgence ... Now, color is producible either on opaque or in transparent bodies: but form is only expressible, in its perfection, on opaque bodies, without lustre. This law is imperative, universal, irrevocable. No perfect or refined form can be expressed except in opaque and lustreless matter ... All noble architecture depends for its majesty on its form: therefore you can never have any noble architecture in transparent or lustrous glass or enamel.

Observe the explicit formalism that, in spite of his background in associationist philosophy, Ruskin at this point has come to endorse. Objections against glass are defined purely in terms of form and color. As its glare tends to destroy the effect of a beautiful facade, glass surfaces better be kept small, and in the shadow. "Generally speaking glass spoils all traceries," it is stated in the 'Lamp of Power' [SL.III.19]. The same idea is expressed in 'Filling of Apertures' [SV1.XVII.19], where it is suggested glass better be placed in deep recesses. Iron is more of an emotional issue. The appendix continues:

SV1.App.17 Iron is, however, opaque; and both it and opaque enamel may, perhaps, be rendered quite lustreless; and, therefore, fit to receive noble form. Let this be thoroughly done ... and you may have an architecture as noble as cast or struck architecture even can be: as noble, therefore, as coins can be, or common cast bronzes, and such other multiplicable things.

Not all iron, one might object, is cast-iron, but Ruskin does not seem to care. Years later, in the fifth and final lecture of The Two Paths, entitled 'The Work of Iron in Nature, Art, and Policy,' the distinction is made, after all. Having spent half of his listeners' time pointing out that the natural state of iron is its rusted state, and half of the rest in a sermon against cast-iron fences, the
speaker finally presents some nice examples of wrought iron flower work, and concludes:

TP5: ... that the quaint beauty and character of many natural objects, such as intricate branches, grass, foliage (especially thorny branches and prickly foliage), as well as that of many animals, plumed, spined, or bristled, is sculpturally expressible in iron only, and in iron would be majestic and impressive in the highest degree ...

thus paving the way (or at least not obstructing it) for the kind of wrought iron ornament that became so popular in Art Nouveau. Another more positive approach to iron, now as constructively applied in railway architecture, is in an address to the Royal Institute of British Architects in 1865²⁶⁶.

Cladding a wall with marble or other precious stone, as indicated (§ 10.7.2), is considered all right [SL.II.18], because everyone will understand such materials are not used for the whole thickness of the wall, so there is no deceit. Thus it is on a level with gilding. From the point of view of 'truth' there is, nonetheless, a higher rectitude in solid stone or brick.

11.4.2 Composition

What used to be called 'the art of proportionate design' was not among the things Ruskin liked to generalize about. In the 'Lamp of Beauty' it is argued that proportions:

SL.IV.25 ... are as infinite ... as possible airs in music: and it is just as rational an attempt to teach a young architect how to proportion truly and well by calculating for him the proportions of fine works, as it would be to teach him to compose melodies by calculating the mathematical relations of the notes in Beethoven's Adelaida or Mozart's Requiem. The man who has eye and intellect will invent beautiful proportions, and cannot help it; but he can no more tell us how to do it than Wordsworth could tell us how to write a sonnet, or than Scott could have told us how to plan a romance ...

Even so, many original and interesting recommendations are made regarding composition, not only in the 'Lamp of Beauty,' but also in those of Truth, Power, and Life, as well as in the chapter 'Superimposition' in the first volume of The Stones. Most of these can be arranged under three headings: the integrity of the wall, unity in variety, and organic analogies. Because of the way these three overlap, it will be more convenient, though, to review the recommendations chapterwise, beginning with the 'Lamp of Beauty.'
BEAUTY [SL.IV]

In tune with what was quoted above, compositional rules of right and wrong in this chapter are somewhat reluctantly presented as '... of no use, indeed, except as preventives of gross mistake' [§ 25]. The few rules that are laid down can be briefly summarized as follows. Symmetry refers to the horizontal dimension, proportion to the vertical [§ 28]. When it is stated, though, that proportion cannot exist between equal things, and that one of them somehow must dominate the others [§ 26], or that proportion is between three terms at least [§ 29], the examples listed have a horizontal dimension as well. Moreover, it is pointed out [§ 27] that these rules apply on all levels of scale, that they are as valid for composite traceries as for the distribution of the main building masses. Such further undercuts strict verticality of proportion. The horizontality of symmetry is more serious. It is specified [§ 28] that, apart from their quantities, the two halves of a symmetrical arrangement need not be equal. Already this balance of quantities, however, marks a difference with proportion:

SL.IV.28 Evidently there is in symmetry a sense not merely of equality, but of balance: now a thing cannot be balanced by another on the top of it, though it may by one at the side of it. Hence, while it is not only allowable, but often necessary, to divide buildings, or parts of them, horizontally into halves, thirds, or other equal parts, all vertical divisions of this kind are utterly wrong; worst into half, next worst in the regular numbers which more betray the equality ... There is but one thoroughly ugly tower in Italy that I know of, and that is so because it is divided into vertical equal parts: the tower of Pisa.

Obviously such 'balance' as opposed to perfect symmetry could not be justified by a zoomorphic analogy. Recourse instead is taken to the world of plants.267 Likewise in the 'Lamp of Beauty' it is stated as a rule:

SL.IV.6 ... that all perfectly beautiful forms must be composed of curves; since there is hardly any common natural form in which it is possible to discover a straight line.

The idea is further explored in 'The Material of Ornament' [SV1.XX]. In either case the rule is exclusively applied to ornamental detail, not to composition on a larger scale, and within the former an exception is made for color patterns—but for the sake of completeness let it be mentioned all the same.
SUPERIMPOSITION [SV1.XIX]

Some of the principles outlined in the 'Lamp of Beauty' receive a further specification in the chapter 'Superimposition.' The word refers to putting multiple layers of wall or arcade on top of each other, each layer finished by its own cornice or stringcourse. As opposed to those who disapprove of it Ruskin holds [§ 4] that "the thing is so sternly necessary that it has always forced itself into acceptance." On the other hand he agrees "that if a building can be kept in one grand mass, without sacrificing either its visible or real adaptation to its objects, it is not well to divide it into stories until it has reached proportions too large to be justly measured by the eye."

Once it is decided superimposition is inevitable, choice is between two mutually exclusive systems [§ 5]: of weight on lightness, or of lightness on weight--"while the superimposition of weight on weight, or lightness on lightness, is nearly always wrong." Examples reviewed are mostly the same as serve as illustrations in the 'Lamp of Power' (see below). First of all, the Doge's Palace, where the heaviness of an undivided wall-veil rests on the lightness of two galleries. In the cathedral of Pisa, like in the stylistically related San Michaele in Lucca, two or more galleries rest on walls that, to harmonize with what is on top, are segmented by shafts and arches, thin enough to make this lower part of the wall look by comparison flat and solid. Finally, the principle of lightness on weight is illustrated on towers [§§ 11-15].

TRUTH [SL.II]

An important distinction as mentioned (§ 10.7.2) in The Seven Lamps and The Stones is the one between actual and apparent construction. Practical recommendations as consequent on this are the following:

SL.II.7 The architect is not bound to exhibit structure; nor are we to complain of him for concealing it, any more than we should regret that the outer surfaces of the human frame conceal much of its autonomy; nevertheless, that building will generally be the noblest, which to an intelligent eye discovers the great secrets of its structure, as an animal form does, although from a careless observer they may be concealed.

For as much as the real construction is not exhibited, there may still be the suggestion of the apparent. The two may painfully clash, or in their incompatibility nicely strike the imagination. For instance what to think of Gothic vaulting?

SL.II.7 The resemblance in its shafts and ribs to the external relations of stems and branches, which has been the ground of so much foolish
speculation\textsuperscript{268}, necessarily induces in the mind of the spectator a sense or belief of a correspondent internal structure; that is to say, of a fibrous and continuous strength from the foot into the limbs, and an elasticity communicated upwards, sufficient for the support of the ramified portions. The idea of the real conditions, of a great weight of ceiling thrown upon certain narrow, jointed lines, which have a tendency partly to be crushed, and partly to separate and be pushed outwards, is with difficulty received; and the more so when the pillars would be, if unassisted, too slight for the weight, and are supported by external flying buttresses, as in the apse of Beauvais, and other such achievements of the bolder Gothic.

For reasons as mentioned in § 10.7.2 above, both the arborescent looks on the inside and the flying buttresses on the outside are considered all right. Likewise the practice of letting a wall widen toward its base, even when technically it is possible to keep its foundations invisible, in The Stones is defended [§ 7] on the grounds that "... we shall never suppose it to be done. The mind of the spectator does not conceive it; and he estimates the merits of the edifice on the supposition of its being built upon the ground."

POWER [SL.III]

The only architecture that, as indicated, Ruskin truly cares about is of strong walls in stone or brick. These should reflect life in their structure as in their decoration, but, no matter how much, or what kind of ornament is applied, their integrity as walls should always be observed. One of the clearest statements to this effect is in a section from the 'Lamp of Power' quoted before in § 10.9.5. Having noted how buildings which make a lasting impression upon our minds "generally ... fall into two broad classes," characterized by either "an exceeding preciousness and delicacy" or "a severe, and, in many cases, mysterious, majesty," Ruskin continues:

SL.III.1 From about these two groups, more or less harmonised by intermediate examples, but always distinctively marked by features of beauty or of power, there will be swept away, in multitudes, the memories of buildings perhaps in their first address to our minds of no inferior pretension, but owing their impressiveness to characters of less enduring nobility -to value of material, accumulation of ornament, or ingenuity of mechanical construction.

Observe how in these few lines we are presented with a neat hierarchy of values, which indeed can be taken as by and large representative of Ruskin's architectural criticism as a whole. Even so, Power and Beauty as conceived in The Seven Lamps need not run parallel. Some of the former may be
sacrificed to the latter or the other way around. The greatest architecture, nonetheless, is the kind that displays a high degree of both.

As formal conditions of 'power' are identified those of mere size [§§ 4-5], continuous bounding lines [§§ 6-7], unbroken surfaces [§ 8] which need not be oblong but may be round or square [§ 9], repetition of identical units over a facade [§ 9], bold masonry [§ 11], and masses of light and shade [§§ 12-23]. These I would like to review in that order. On size it is noted:

SL.III.4-5 The fact is, that the apprehension of the size of natural objects, as well as of architecture, depends more on fortunate excitement of the imagination than on measurements by the eye ... For there is a crust about the impressionable part of men's minds, which must be pierced through ... and the apathy ... can be broken through in a moment by the mere weight of a great wall.

This is not to be taken as that all future buildings should be at least one size bigger than current ones. What matters is that the apparent size exceeds the actual. The principle of the bounded outline is a special case of this more general rule. It is given both a two- and three-dimensional interpretation:

SL.III.6 It has often been observed that a building, in order to show its magnitude, must be seen all at once. It would perhaps be better to say, must be bounded as much as possible by continuous lines, and that its extreme points should be seen all at once; or we may state, in simpler terms still, that it must have one visible bounding line from top to bottom, and from end to end. This bounding line from top to bottom may either be inclined inwards, and the mass therefore pyramidal; or vertical, and the mass form one grand cliff; or inclined outwards, as in the advancing fronts of old houses, and, in a sort, in the Greek temple, and in all buildings with heavy cornices or heads. Now, in all these cases, if the bounding line be violently broken; if the cornice project, or the upper portion of the pyramid recede, too violently, majesty will be lost; not because the building cannot be seen all at once ... but because the continuity of its terminal line is broken, and the length of that line, therefore, cannot be estimated.

It is thus considered an error if much of the upper part of a building is concealed to those who stand near--as is the case with most churches that have their main tower over the crossing:

Hence, while, in symmetry and feeling, such designs may often have pre-eminence, yet, where the height of the tower itself is to be made apparent, it must be at the west end, or better still, detached as a campanile.
Whether, therefore, we have to do with tower or wall, there
must be one bounding line from base to coping; and I am much inclined,
myself, to love the true vertical, or the vertical with a solemn frown
of projection ... as in the Palazzo Vecchio of Florence. This character
is always given to rocks by the poets; with slight foundation indeed,
real rocks being little given to overhanging--but with excellent judgment;
for the sense of threatening conveyed by this form is a nobler character
than that of mere size. And, in buildings, this threatening should be
somewhat carried down into their mass. A mere projecting shelf is not
enough, the whole wall must, Jupiter like, nod as well as frown.

As further illustrations are mentioned the front of the Doge's Palace, that of
the Dome of Florence, and the Tour de Beurre in Rouen. Within this bounded
outline the wall should remain flat and substantial wall, no matter what or
how much decoration it is to carry:

Of the many broad divisions under which architecture may
be considered, none appear to me more significant than that into buildings
whose interest is in their walls, and those whose interest is in the lines
dividing their walls. In the Greek temple the wall is as nothing; the
entire interest is in the detached columns and the frieze they bear; in
French Flamboyant, and in our detestable Perpendicular, the object is
to get rid of the wall surface, and keep the eye altogether on tracery
of line; in Romanesque work and Egyptian, the wall is a confessed and
honored member, and the light is often allowed to fall on large areas
of it, variously decorated. Now, both these principles are admitted by
Nature, the one in her woods and thickets, the other in her plains, and
cliffs, and waters; but the latter is pre-eminently the principle of power,
and, in some sense, of beauty also. For, whatever infinity of fair form
there may be in the maze of the forest, there is a fairer, as I think, in
the surface of the quiet lake; and I hardly know that association of shaft
or tracery, for which I would exchange the warm sleep of sunshine on
some smooth, broad, human-like front of marble.

This power derived from large, unbroken surfaces is considered strongest on
walls which in their outline approach a circle or square:

This then being, as I think, one of the peculiar elements of
sublime architecture, it may be easily seen how necessarily consequent
upon the love of it will be the choice of a form approaching to the square
for the main outline. For, in whatever direction the building is contracted,
in that direction the eye will be drawn to its terminal lines; and the sense
of surface will only be at its fullest when those lines are removed, in
every direction, as far as possible. Thus the square and circle are pre-
eminently the areas of power among those bounded by purely straight or curved lines; and these, with their relative solids, the cube and sphere, and relative solids of progression ... the square and cylindrical column, are the elements of utmost power in all architectural arrangements.

These were revolutionary observations, some of those that could only be made by an outsider to the architectural profession. The generally accepted point of view—as endorsed by, for instance, Semper, see § 9.7.2—was that surfaces should be either visibly wider than high, or higher than wide. Ruskin admits this may be more graceful, but repeats it has less power. Another way power may be achieved is:

SL.III.9 ... by a continuous series of any marked features, such as the eye may be unable to number; while yet we feel from their boldness, decision, and simplicity, that it is indeed their multitude which has embarrassed us, not any confusion or indistinctness of form.

The principle is illustrated [§ 10] on the Cathedral of Pisa. Bold masonry is discussed next:

SL.III.11 ... there is a very noble character always to be obtained by the opposition of large stones to divided masonry, as by shafts and columns of one piece, or massy lintels and architraves, to wall work of bricks or smaller stones ... I hold, therefore, that, for this and other reasons, the masonry of a building is to be shown: and also that, with certain rare exceptions (as in the cases of chapels and shrines of most finished workmanship), the smaller the building, the more necessary it is that its masonry should be bold, and vice versa.

This too was no conventional wisdom. In the True Principles (1841) Pugin had endorsed the opposite point of view. The remainder of the chapter is devoted to effects of light and shade. As a rule it is stated that, if these are handled well, a wall needs little more:

SL.III.12 Now, it does not seem to me sufficiently recollected, that a wall surface is to an architect simply what a white canvas is to a painter, with this only difference, that the wall has already a sublimity in its height, substance, and other characters already considered, on which it is more dangerous to break than to touch with shade the canvas surface. And, for my own part, I think a smooth, broad, freshly laid surface of gesso a fairer thing than most pictures I see painted on it; much more, a noble surface of stone than most architectural features which it is caused to assume.
Observe how in this fragment stone facing is dealt with as equally respectable as masonry. It is added painters have more freedom than architects in handling light and shade. Even so,

SL.III.13 ... there must be, in this magnificently human art of architecture, some equivalent expression for the trouble and wrath of life, for its sorrow and its mystery: and this it can only give by depth or diffusion of gloom, by the frown upon its front, and the shadow of its recess. ... and I do not believe that ever any building was truly great, unless it had mighty masses, vigorous and deep, of shadow mingled with its surface ... [For] masses of one or other kind there must be. No design that is divided at all, and is not divided into masses, can ever be of the smallest value.

As for light and shadow on the level of a building as a whole, that is about it. The remaining paragraphs [SL.III.14-23] deal with its effect on architectural detailing, which will sideways be dealt with in the next paragraph (11.4.3).

LIFE [SL.V]

A section of the 'Lamp of Life' [SL.V.9-17] devoted to facades of some of Ruskin's favorite buildings--the Duomo of Pisa, the San Michaele in Lucca, the San Giovanni Evangelista in Pistoja, the San Marco and Ducal Palace in Venice, and the Cathedral of Bayeux--highlights the phenomenon of strong visual unity which appears to be based on regularity, but turns out to rest on subtle irregularities. Pretended symmetry and the like are shown to result from arrangements which, when submitted to accurate measurement, are not regular at all. What is more, these irregularities and their resulting harmony are far too subtle to be explained from imperfections of the site or archaic technology. Instead, it is suggested they result from a thoroughly empirical approach to composition. More cases of the same phenomenon are reviewed in the chapter 'Byzantine Palaces' [SV2.V.4-12]. An insistence in 'The Nature of Gothic' [SV2.VI.39] that repeating motifs should be perpetually varied, is in the same vein. A clear, well-illustrated survey of this side of Ruskin's theorizing has been compiled by Unrau.271

11.4.3 Distribution of Ornament

As a first rule regarding quantity and distribution of ornament it is stated in the 'Lamp of Power:'

SL.III.5 ... the architect who has not large resources, choose his point of attack first, and, if he choose size, let him abandon decoration; for,
unless they are concentrated, and numerous enough to make their concentration conspicuous, all his ornaments together would not be worth one huge stone.

The point recurs in 'Treatment of Ornament' [SV1.XXI.35-36]: if budgets are low, decoration better be concentrated in a few places, or confined to a few kinds or levels. On the other hand, "You cannot have too much of it, if it is good ..," but do not take more of it than you can manage, for ".. remember its essence, -its being ornament at all, consists in its being governed." What counts is the small detail that makes the big difference. As in response to complaints that he dwells too much on "little things and contemptible details" it is noted in the addenda to the first two Edinburgh Lectures:

EL1/2.Add. I do with a building as I do with a man, watch the eye and the lips: when they are bright and eloquent, the form of the body is of little consequence.

Now if we follow the recommendations consequent on this in The Seven Lamps and The Stones, it turns out figurative detail is to be concentrated on edges of walls and openings in walls, while color, if used at all, should seize a building's large surfaces. Both rules follow from the same underlying principle: the integrity of the wall. This hardly allows for a wall's subdivision (by pilasters, mouldings, buttresses, and so on) just for the sake of subdivision. And so the classical orders are treated with utmost contempt (see § 10.9.3)—by Ruskin as by Pugin and most other leading Gothicists of the day. More remarkable is that Ruskin speaks of buttresses in the same vein. Like pilasters, they are not accepted as merely ornamental features. They are supposed to have a constructive reason. The latter, however, is questioned in most cases where the author finds them applied:

SV1.XV.11 Indeed, in most modern Gothic, the architects evidently consider buttresses as convenient breaks of blank surface, and general apologies for deadness of wall. They stand in the place of ideas, and I think are supposed also to have something of the odor of sanctity about them; otherwise, one hardly sees why a warehouse seventy feet high should have nothing of the kind, and a chapel, which one can just get into with one's hat off, should have a bunch of them at every corner;

It might be objected that the walls of a warehouse receive support from inside floors in a way those of a church do not. Even so, Ruskin has a point, the more so when he subsequently raises doubts regarding the constructive need of pinnacles placed on top of buttresses. He notes:
SV1.XV.7 ... if this were all for which they were put there, a few cubic feet of lead would much more securely answer the purpose, without any danger from exposure to wind. ... If the reader likes to ask any Gothic architect with whom he may happen to be acquainted, to substitute a lump of lead for his pinnacles, he will see by the expression of his face how far he considers the pinnacles decorative members.

What is at stake is a suspicion of hypocrisy in contemporary Gothic architecture. If only such decoration is admitted as can be justified as an embellishment of essential construction, and people want to have quite a bit of it anyway, what they will do is invent useless construction, just as a means to carry ornament. With this Ruskin wants to have nothing to do. In 'The Virtues of Architecture' [SV1.II.17] the reader is warned not to confuse the pleasure he takes in decoration with the gratification derived from good construction, as "they have no connection." Further illustrations of this point are presented some twenty years later in A r a t r a P e n t e l i c i (1870). In the first lecture of this series the entrance to the San Zeno in Verona is praised for its clear anatomy and pleasant surface decoration, but it is insisted that the two are independent, as indeed they should be; that although decoration should never contradict structure, the former never actually follows from the latter. Attention is drawn to the Baptistry in Florence as an even more extreme case:

... which is, in reality, as much a buttressed chapel with a vaulted roof, as the Chapel House of York - but round it, in order to conceal that buttressed structure, (not to decorate, observe, but to conceal) a flat external wall is raised; simplifying the whole to a mere hexagonal box, like a wooden piece of Turnbridge ware, on the surface of which the eye and intellect are to be interested by the relations of dimension and curve between pieces of encrusting marble of different colors, which have no more to do with the real make of the building than the diaper of a Harlequin's jacket has to do with his bones.

As if, in spite of a profound contempt for German philosophy\textsuperscript{272}, Ruskin by then had arrived at his own dressing theory of ornament! Let it be noted, though, that in the early 1850s the author may have been a bit more conservative regarding the relationship of ornament to construction than when as an Oxford professor he wrote the above.

However that may be, if wall veils are to be large, flat, and approximately square, if, moreover, subdivision of them can only be right if it is in masses of light and shadow--which means that openings must be concentrated in shadowy ranges, for instance galleries--and if, to avoid glare, windows must be kept small and in the shadow, there is hardly a place sculptured ornament can go but on the edges of the wall veil, on terminations of columns and arches that constitute those galleries, on tympantes, traceries and fences within such
openings, or on spandrels between arches. And indeed these are the elements that are painstakingly investigated in *The Stones*, first (in Volume 1) systematically, and then, in the next two volumes, as they occur on the buildings that are one by one reviewed. As not all interesting observations in regard to them can be summarized here, suffice it to give just a few examples and otherwise refer to the index on theme or question in Appendix 5. Thus in regard to the decoration of shafts it is noted:

SV.I.XXVI.13-14 Now the principal beauty of a shaft is its perfect proportion to its work,—its exact expression of necessary strength. If this has been truly attained, it will hardly need, in some cases hardly bear, more decoration than is given to it by its own rounding and taper curvatures. ... It is, however, carefully to be noted, that decorations are admissible on colossal and on diminutive shafts, which are wrong upon those of middle size.

Shafts of "... some twenty feet in height, by eight or nine in circumference" are estimated to be the ones:

SV.I.XXVI.15 ... on which decoration is most difficult and dangerous: and shafts become more and more fit subjects for decoration, as they rise farther above, or fall farther beneath it.

Successful examples of the former kind are the enormous Egyptian shafts, of the latter those on the fronts of Pisan Romanesque churches [§ 18]. Flutings, the most common type of ornament on medium-sized shafts, are not particularly loved by Mr. Ruskin [§ 17]. Neither are caryatids, as he holds it to be essential "... that the form of the shaft be clearly visible," and that no "... sculpture is either so bossy, or so deeply cut, as to break the contour of the shaft, or compromise its solidity" [§ 18].

It may be argued these are personal opinions of a young man who could hardly boast of being an expert on the issues he wrote about. Yet there is something fascinating about many of his observations. Well-known are his remarks on the corners of the Ducal Palace and other Gothic structures [SV2.-VIII.31-32], which will not be repeated here. The wall veil itself meanwhile is open to all kinds of coloration:

SV1.XXVI.1 No subject has been more open ground of dispute among architects than the decoration of the wall veil, because no decoration appeared naturally to grow out of its construction; nor could any curvatures be given to its surface large enough to produce much impression on the eye. It has become, therefore, a kind of general field for experiments of various effects of surface ornament, or has been altogether abandoned to the mosaicists and fresco painter.
Bands of differently colored stone or brick are recommended for bold masonry [§§ 1-3], chequered patterns of it if the masonry is to be small [§ 4]. Allowance is made, though, for 'richer modes of wall decoration,' as to which it is noted that:

SV1.XXVI.7 ... it is impossible to institute any general comparison; they are quite infinite, from mere inlaid geometrical figures up to incrustations of elaborate bas-relief. The architect has perhaps more license in them, and more power of producing good effect with rude design than in any other features of the building; the checker and hatchet work of the Normans and the rude bas-reliefs of the Lombards being almost as satisfactory as the delicate panelling and mosaic of the Duomo of Florence. But this is to be noted of all good wall ornament, that it retains the expression of firm and massive substance, and of broad surface, and that architecture instantly declined when linear design was substituted for massive, and the sense of weight of wall was lost in a wilderness of upright and undulating rods.

Observe how, as a whole, recommendations reviewed so far have their clearest paradigm in Venice's Ducal Palace—or possibly Giotto's Campanile, which at one point [SL.IV.43] is said to rank even higher on the author's scale of values—but do not so easily apply to northern Gothic. The last few lines of the above quotation hint at that. For northern Gothic a distinction is made, first in the 'Lamp of Truth' [SL.II.21-28] and then in half a dozen other places, between the perfection attained in Chartres and Beauvais, and the degeneration which set in immediately afterwards, when line was substituted for mass. That did not altogether solve the problem, though. The greatness of the best French Gothic still had to be accounted for, and this could not be done in terms of what is so great about the Ducal Palace.

It is to this end, I would like to suggest, and not as a universal concept of ornament, that the 'arborescent' conception of the latter [SV1.XXI.25-27 as quoted in § 10.7.3 above] is introduced. Let it be noted, though, that as long as they are not simultaneously applied to the same buildings, the two conceptions can easily exist side by side. Considered from this angle, the only problem is in Ruskin's desire to present them both as valid for all architecture of all times.

So far, distribution of ornament has been considered from a formal-aesthetic point of view. It may also be approached—and in the nineteenth century it often was—from a functional angle. In Ruskin's works this never became a major issue, but for the sake of completeness let us see what he did say about it.

Churches, as indicated (§ 10.5) are considered worthy of a more costly treatment than houses. More in general it is stated in the 'Lamp of Beauty'
[SL.IV.16-23] that ornament tends to devalue when indiscriminately applied to places where people are too busy to watch it at ease, or where it serves no other end than camouflaging a construction's vulgar, commercial nature: on storefronts, railway stations or places of work. This culminates in the well-known demand--eagerly taken up by later generations to ridicule Ruskin:

SL.IV.21  Better bury gold in the embankments, than put it in ornaments on the stations ... Railroad architecture has or would have a dignity of its own if it were only left to do its work.

This reflects an idea, cherished by eighteenth-century associationist philosophers, that beauty and sublimity can only be enjoyed to their full extent if one is sufficiently at ease to let one's imagination have its way274. Even so, one wonders why railway stations should be the primary target of Ruskin's anger. Passengers waiting for a train have plenty of time to look around for nice and interesting decoration. A trip by train, moreover, in those days used to be a special, holiday-like event. Railway stations, accordingly, were prestigious objects for most cities entitled to build one. So they were lavishly decorated--very much to the delight of later generations.

11.4.4 Execution of Ornament

This is an issue Ruskin has dealt with extensively, but as this aspect of his thought has been excellently reviewed in Unrau's Looking at Architecture with Ruskin (1978), I prefer to be brief on it.

Five kinds of reason are at different places in The Seven Lamps and Stones of Venice presented as to why figurative detail should not become too realistic but remain coarse in a degree dependent on its place at a building. A first one, put forth in the 'Lamp of Sacrifice' [SL.I.10-15], is that "waste of actual workmanship is always painful, so soon as it is apparent," and that "work may be wasted by being too good for its material, or too fine to bear exposure."

A second--and in fact the most important--is that as ornament architectural sculpture can only be all right as long as it remains subordinate to a larger architectural whole. This is dealt with briefly in the 'Lamp of Beauty' [SL.IV.30-34], and at greater length, with a wealth of interesting examples, in 'Treatment of Ornament' [SV1.XXI]. When seen from a certain distance, too much refinement renders figurative sculpture visually ineffective. From nearby, too much realism tends to make it independent of its architectural context. Because such independence is less to be feared in subordinate subject matter like plants and reptiles than in the representation of man, allowance is made [SV1.XXI.9] for more realism with the former than with the latter. This is an important qualification of a rule laid down in The Seven Lamps [SL.IV.33]
"...that the closest imitation shall be of the noblest object"—mankind being
the noblest thing that any artist can hope to represent. Otherwise naturalistic
perfection is still considered all right, if subsequently the architectural context
is made subservient to the sculpture, as in the case of the Medici Chapel, or
(in Ruskin's view) of the Parthenon. In that case sculpture is no longer truly
ornamental, though.

A third, more practical reason is that great sculptors almost by definition
are hard to find, so most work must be done by lesser talents. Execution of
figurative detail must be delegated, and those who do so must transmit their
ideas in a way that enables 'the feeblest hand' to do a good job, while leaving
those hands a certain freedom to do it their way.

Implied in this is a fourth reason: the 'Lamp of Life' refuses to shine
whenever the work of stonecarvers is reduced to slavish copying of someone
else's design. This freedom has a price—that of imperfect work. As long as
realism is kept at bay, such is all right, though.

A fifth reason is implied in the idea, as expounded in the concluding
chapter of The Stones [SV3.IV.20-21] that art is to interpret nature, not imitate
it.

11.4.5 Color

It has been suggested that Ruskin looked at architecture from primarily a
watercolorist's point of view. Whether that makes sense or not (I would say
only part of all his interesting observations on architecture can be explained
that way), sure is that he had a good eye for the effects of color. Conclusions
on this issue arrived at in The Seven Lamps and further elaborated in The
Stones belong to the most original and provoking in these books.

What was so new about them? In a way, the attention to color as such,
an assessment of the pleasures to be derived from color as in no way inferior
to those of form. In Modern Painters I, in tune with the classicist bias of
that work, the author still endorsed an opposite point of view. In The Seven
Lamps color had moved to a far more respectable position, but in this the
work was no longer unique. Rejoicing in colorful architecture was the latest
fashion, and Ruskin's enthusiasm part of what in retrospect can be identified
as the second major wave in the polychromy debate. The first, in which,
as indicated, Gottfried Semper had a role of some importance, left England
largely untouched, the second had its center of gravity precisely there. Thus
The Seven Lamps was preceded by Owen Jones's studies of the Alhambra
(1836-45) and followed by Street's Brick and Marble in the Middle Ages
(1855) as well as Owen Jones's Grammar of Ornament of the same year, while
it is still undecided whether the polychrome brickwork of Butterfield's Church
of All Saints in Margaret Street was inspired by The Seven Lamps, or the
other way around—or neither.
Equally tuned to what was in the air (though Ruskin may have given it some extra momentum) was a recommendation to use the colors of natural stone and brick, rather than paint. This marks the difference between the second phase in the polychromy debate and the first. Somewhat fashionable too, finally, was the idea, endorsed throughout The Seven Lamps and The Stones, that the effects of color should be understood as analogous to those of music, and that its figurative application is a risky thing, the more so the more realistic and three-dimensionally illusionistic color patterns are allowed to become.

Ruskin's originality lies, most of all, in an awareness, as expressed in the 'Lamp of Beauty,' that it is an illusion to think perfect color can ever go along with perfect form--from which it is inferred that color should not follow form. This was at odds not only with all rationalist ethics and aesthetics, but with conventional wisdom in the picturesque movement as well. Nor does it allow for much painted sculpture, the discovery of which had been such an important factor in the polychromy debate of the late-1820s and early 1830s. As opposed to sculpture, which is basically the representation of an idea, architecture, we are told in the 'Lamp of Beauty':

\[ \text{SL.IV.35} \] .. is itself a real thing. The idea may, as I think, be left colorless, and colored by the beholder's mind: but a reality ought to have reality in all its attributes: its color should be as fixed as its form. I cannot, therefore, consider architecture as in any way perfect without color.

Further justification is found in an organic analogy that conceives of every building as a single creature:

\[ \text{SL.IV.36} \] .. we are to consider our building as a kind of organized creature; in coloring which we must look to the single and separately organized creatures of Nature, not to her landscape combinations. Our building, if it is well composed, is one thing, and is to be colored as Nature would color one thing--a shell, a flower or an animal; not as she colors groups of things.

Similar claims for ornament in general would be made two decades later by Semper, when in Ueber Baustile (1869) he states that ".. the striving for individuality tends to express itself in adornment, for by adorning anything, be it alive or inanimate, I bestow upon it the right of individual life." Ruskin never gave the principle this wide scope, but works it out consistently for color, as he continues:

\[ \text{SL.IV.36} \] And the first broad conclusion we shall deduce from observance of natural color in such cases will be, that it never follows
form, but is arranged on an entirely separate system ... The stripes of a zebra do not follow the lines of its body or limbs, still less the spots of a leopard. In the plumage of birds, each feather bears a part of the pattern which is arbitrarily carried over the body, ... I hold this, then, for the first great principle of architectural color. Let it be visibly independent of form. Never paint a column with vertical lines, but always cross it. Never give separate mouldings separate colors (I know this is heresy, but I never shrink from any conclusions, however contrary to human authority, to which I am led by observance of natural principles); and in sculptured ornaments I do not paint the leaves or figures (I cannot help the Elgin frieze) of one color and their ground of another, but vary both the ground and the figures with the same harmony. Notice how Nature does it in a variegated flower; not one leaf red and another white, but a point of red and a zone of white, or whatever it may be, to each.

This much, fascinating though it may be, unfortunately is easier said than done. The organic analogy works both ways. Leaves, as indicated, tend to be differently colored from the branch that carries them, and stand in even stronger contrast to the fruits and flowers they surround. In architecture, successful coloration which completely ignores all formal aspects of what it colors are extremely rare. There must at least be some sort of a dialogue between the two--and this indeed appears to be what Ruskin is heading for when he adds:

SL.IV.36  In certain places you may run your two systems closer, and here and there let them be parallel for a note or two, but see that the colors and the forms coincide only as two orders of mouldings do; the same for an instant, but each holding its own course. So single members may sometimes have single colors: as a bird's head is sometimes of one color and its shoulders another, you may make your capital of one color and your shaft another; but in general the best place for color is on broad surfaces, not on the points of interest in form.

Or, when it comes to what kind of outline should be given to single patches of color:

SL.IV.38  Infinite nonsense has been written about the union of perfect color with perfect form. They never will, never can be united. Color, to be perfect, must have a soft outline or a simple one: it cannot have a refined one; and you will never produce a good painted window with good figure-drawing in it. You will lose perfection of color as you give perfection of line.

Which is explained as follows:
... in all cases, their shape will be effective only as it
determines their quantity, and regulates their operation on each other
... Curved outlines, especially if refined, deaden the color and confuse
the mind ... I believe, therefore, that it is impossible to be over quaint
or angular in architectural coloring; and thus many dispositions which
I have had occasion to reprove in form, are, in color, the best that
can be invented.

Heraldry, which is considered 'monstrous' in form, but "may be delightful
as themes of color," is named as an example of the latter. Even so, a
fundamental question is raised but hardly answered in these pages: if perfect
form and perfect color will not go together in single color patches, why should
they do so on the next higher level of scale, be it an interior, a facade, or
a building as a whole? For instance, what to think of painting the exuberant
exterior of a Gothic cathedral? When Ruskin comes to speak of this [SV2.IV.42-
46], he appears to be at a loss, partly because he is not sure whether these
buildings ever were painted on a large scale to begin with$^{283}$ (and hence whose
side he would be on if he would either praise or condemn such practice) and
partly from an awareness that painting, even if it enhances a building's living
presence, in this case would have to follow form—which of course would be
bad taste.

More convincing is Ruskin's justification
of what others, including Willis$^{284}$, had
condemned: the coloration of late-
Romanesque or Gothic buildings in Italy
like St. Mark's and the Ducal Palace in
Venice, the cathedral of Sienna, or
Giotto's Campanile in Florence (Fig. 30).
What qualities mark the difference
between these and other richly colored
buildings? In general, that they meet
the demands outlined above, or most of
them. Colors of natural stone are
secured by the fact that most of them
are dressed with inlaid marble, alabaster,
and porphyry, in a few places alternating
with mosaics or sculpture in bas-relief.
The Ducal Palace marks an exception,
in the sense that the upper half of its
famous facade is in exposed masonry$^{285}$.
However, as the colors of baked clay
in Ruskin's system are usually mentioned
in one breath with those of natural stone,
this makes no fundamental difference.
Color, moreover, is largely independent of form in most of the buildings as mentioned. The Campanile (Fig. 30) at first may seem a dubious case. On a small scale color often, though not always (note the horizontal bars that run across all kinds of vertical members), follows form. In the larger constructive elements, on the other hand, it does not. As a result, the structure as a whole is covered by the coloration as by a continuous dress.

Otherwise it is with color as with proportion: there are no simple rules that will enable anybody with no special sense for color to become a successful colorist. The most that verbally can be achieved is, once again, a few basic rules 'to prevent gross mistake,' so to say. Most of these, for as much as they have not yet been dealt with so far, have to do with painting in relation to the integrity of the wall. As it is noted in the 'Lamp of Truth':

SL.II.14-15 Evidently, then, painting, confessedly such, is no deception: it does not assert any material whatever. ... To cover brick with plaster, and this plaster with fresco, is, therefore, perfectly legitimate, and as desirable a mode of decoration as it is constant in the great periods. Verona and Venice are now seen deprived of more than half their former splendor; it depended far more on their frescoes than their marbles.

If, on the other hand, it does become so realistic as to deceive, painting is a disgrace to the walls it is to decorate. The Camera di Correggio of San Lodovico at Parma is named as an example. A representation of the Assumption on the cupola of the duomo in the same city, which is equally realistic, is considered acceptable: "... for the subject at once precludes the possibility of deception." A little later it is added, though:

SL.II.18 ... this is to be remembered, with respect to all the points we have examined; that while we have traced the limits of license, we have not fixed those of that high rectitude which refuses license. It is thus true that there is no falsity, and much beauty in the use of external color, and that it is lawful to paint either pictures or patterns on whatever surfaces may seem to need enrichment. But it is not less true, that such practices are essentially unarchitectural; ...

Such is in tune with what is stated in the 'Lamp of Power' [SL.III.12], as quoted above (§ 11.4.2): walls in general better remain blank. For truly great painters an exception can be made: "If Tintoret or Giorgione are at hand, and ask us for a wall to paint, we will alter our whole design for their sake, and become their servants" [SL.IV.35]--but then architecture is to become subordinate to wall-painting. As long as such men of genius are not around, natural stone remains the safer choice. If figurative coloring is demanded all the same, different versions of it can be placed in the following descending order of fitness for architectural ends:
SL.IV.40 primarily, and as most fit for such purpose, the mosaic, highly
abstract in treatment, and introducing brilliant color in masses; ... next,
the purely decorative fresco .. ; finally, the fresco becoming principal,
as in the Vatican and Sistine.

To which it is added that a nice degree of abstraction in old frescoes and
mosaics more often than not may have resulted from an archaic manner of
execution rather than design. Even so, it is an order Ruskin will cling to until,
in *The Two Paths* (1857-59), naturalism and choice of noble subject matter
gain such importance that everything else is sacrificed to it. As this belongs
to a later phase in Ruskin's career as an art critic than we are presently
concerned with, this may be taken for granted, though.

11.4.6 A Style of the Nineteenth Century

Even if, as indicated (§ 10.9.2), Ruskin was unable or unwilling either to
consistently endorse one historic style in particular, or to point out how to
arrive at a new one, at least he contributed to a better formulation of the
problems at stake. Most clearly this speaks from the following, gloomy
reflections in an address to members of the Architectural Association in 1857:

TP4.79-81 Perhaps the first idea which a young architect is apt to be
allured by, as a head-problem in these experimental days, is its being
incumbent upon him to invent a "new style" worthy of modern civilization
in general, and of England in particular; a style worthy of our engines
and telegraphs; as expansive as steam, and as sparkling as electricity.

But, if there are any of my hearers who have been impressed with
this sense of inventive duty, may I ask them first, whether their plan
is that every inventive architect among us shall invent a new style for
himself, and have a county set aside for his conceptions, or a province
for his practice? Or, must every architect invent a little piece of the
new style, and all put it together at last like a dissected map? And if
so, when the new style is invented, what is to be done next?

He admits a new style *can* be invented:

The furnace and the forge shall be at your service: you shall draw out
your plates of glass and beat out your bars of iron till you have
encompassed us all, -if your style is of the practical kind, -with endless
perspective of black skeleton and blinding square, -or if your style is
to be of the ideal kind -you shall wreathe your streets with ductile leafage,
and roof them with variegated crystal -you shall put, if you will, all
London under one blazing dome of many colors that shall light the clouds
round it with its flashing, as far as to the sea. And still I ask you, What
after this? ... whatever may be done by others, you still want to do
something for yourselves; if you cannot rest content with Palladio, neither
will you with Paxton.

The 'blazing dome of many colors' is to be read as an allusion to recent projects
by Owen Jones, so it is not altogether futuristic. "A style worthy of our
engines and telegraphs; as expansive as steam, and as sparkling as electricity"
anticipates Viollet-le-Duc's first lecture at the Ecole des Beaux-Arts (1864),
his other fantasies those of Mies van der Rohe, and of Jugendstil architects
like Gaudí. And so the argument gives little ground to the assumption,
popularized by Giedion and Pevsner, that Ruskin was blind to the possibilities
of iron and glass, or unaware of what would happen if a combination of these
two materials would on a large scale come to be applied. He knew, but did
not like the prospect.

So what did he recommend we should do instead? Build Gothic? Be satisfied
with Palladio? Ruskin's critics are perfectly right when they suggest he did
not provide much of an answer. Most of his architectural writings, as indicated,
are about rules of right and wrong in detailing and composition, largely
independent of style. Such rules need not apply to the finished product only.
They may, within a design process, direct refinement of a composition or its
detailing. However, they are of little use either in translating a program into
a three-dimensional layout, or in choice of an approximate style for its detailing.

11.4.7 Education of Designers

What Ruskin has to say on procedural issues at all is mostly about education
of designers, or about conditions (social, political, religious, or whatever) that
are favorable (or not so) to a healthy design practice. Most of that, moreover,
is in lectures delivered after publication of The Seven Lamps and The Stones,
not in these works themselves. Even so, a few incidental remarks about
education of designers in these earlier works deserve attention at this point.

A recurring theme in this category is that composition cannot be taught,
or at least not by way of a handful of simple rules and procedures. What,
on the other hand, Ruskin considers highly useful, if not absolutely necessary,
is that a young man who aspires to be an artist takes every available chance
to familiarize himself with nature:

SL.III.24 An architect should live as little in cities as a painter. Send
him to our hills, and let him study there what nature understands by
a buttress, and what by a dome.
The point recurs in the 'Lamp of Beauty.' Having explained why to him Giotto's Campanile ranks highest among all the buildings he knows, how it exemplifies all the rules of right expounded so far, Ruskin concludes:

SL.IV.43 And if this be, as I believe it, the model and mirror of perfect architecture, is there not something to be learned by looking back at the early life of him who raised it? ... Not within the walls of Florence, but among the far away fields of her lilies, was the child trained who was to raise that headstone of Beauty above the towers of watch and war.

The same idea, as indicated (§ 10.6), had been expressed by Alison in Essays on the Nature and Principles of Taste (1790/1811), a work Ruskin must have been thoroughly familiar with. It turns into a real dogma in his lectures of the 1850s and 60s, as well as in Modern Painters 3 (1856) where as further evidence it is pointed out [MP3.IV.X.19] how all the greatest architects in history, from Phidias to Giotto and Michelangelo, were painters or sculptors first, and developed their basic skills as designers in the study and faithful rendering of natural form.

11.5 Implementation and Testing

Historians who have dealt with Ruskin's architectural writings as primarily a product of the Gothic revival in England, generally gave their author credit for at least three things: (a) for making Gothic as an ecclesiastic style acceptable among non-Catholics; (b) for endorsing its application to other than religious buildings, and (c) for promoting the use of structural polychromy in Gothic revival buildings of either kind. His role as a spiritual father of the Arts and Crafts movement in England is also widely recognized, and so is the impulse he gave to historic preservation—as opposed to either restoration or neglect. Thus he obtained the status of a crucial link between Pugin and William Morris. Fundamental differences between Pugin's rationalism and Ruskin's empiricism are thus glossed over, but, as the same was widely done in nineteenth-century England, it nonetheless nicely reflects Ruskin's impact on English architecture. Incidentally Ruskin is also credited with, or blamed for a role in discrediting the use of iron to monumental purposes, and for undermining a sense of restraint and discipline in Gothic revival architects—but that is about it in this line of thought, which will be reviewed more extensively in Chapter 13.
As opposed to this, the approach in the present study will be, first, to consider the possible relevance of Ruskin's theoretical constructs to actual decision-making and design, and, next, to look for architects—not necessarily of the Gothic revival variety—who may have actually used them that way.

Unfortunately, such practical implementation of his theories could hardly be expected from Ruskin himself. Opinions vary as to his role in the conception and completion of the Oxford Museum of Natural History (1855-60)\textsuperscript{292}, but sure is that otherwise he never worked as a practicing architect. Nonetheless, this unfortunate project—which is often mentioned as a major reason why Ruskin turned away from 'Ruskinism' in architecture, precisely when this was at its peak—points to a first domain where Ruskin's writings had a strong impact indeed, that of Gothic revival architecture in Victorian England. By the time \textit{The Seven Lamps} and subsequent writings came out, this movement as such was well under way, but it was subject to change. Application of Gothic to non-ecclesiastic, monumental public architecture, a craze for Venetian detailing and structural polychromy, and a return to straight rooflines and flat walls, possibly colored, all these were new trends in the late 1850s and 60s which owed much of their momentum to Ruskin\textsuperscript{293}.

On a modest scale the same trends manifested themselves in the United States, with P.B. Wight (1838-1925) as their most outspoken and prolific champion. Wight and six kindred spirits, all very much devoted to Ruskin, in 1863 organized themselves in the short-lived 'Association for the Advancement of Truth in Art,' which for a few years (1863-65) disseminated its ideas through its periodical \textit{The New Path}. The word 'Truth' in the association's name points to a rationalistic interpretation of Ruskin's message, and so it is not altogether surprising to see how, when their (or their clients') passion for naturalist ornament and Venetian detailing had faded, Wight and his companions confessed to the teachings of Viollet-le-Duc\textsuperscript{294}. Frank Furness (1839-1912) and the buildings which, in a very personal, gothicizing style he designed and built in Philadelphia in the years 1871-91, should be mentioned in this connection too, although it has been suggested that from the very start Furness took his inspiration in the works of Viollet-le-Duc rather than in those of the Englishman\textsuperscript{295}.

Two other movements on which, as indicated, Ruskin's influence was strong were those of historic preservation and of the Arts and Crafts. Both started in England, with William Morris as a driving force behind them, and from there spread to continental Europe, and, in the case of the Arts and Crafts, to the United States. Considered from this angle, even Frank Lloyd Wright may be considered a disciple of Ruskin. Rosenberg (1961) assigns an even more prominent role to Ruskin as an influence on Wright (and hence on Modern architecture), but as Wright's architecture is not very Ruskinian, after all, such is not profoundly relevant in the present context. Biographical evidence, moreover, has occasioned conflicting visions at this point\textsuperscript{296}.
The link is more convincing in the case of Wright's great American predecessors, Henry Hobson Richardson (1838-86) and Louis Sullivan (1856-1924). Few nineteenth- or early-twentieth-century architects showed greater understanding of Ruskinian principles of design. Even so, it was not until the late-1960s or early-70s that architectural history became aware of this. The turning point appears to be a book that, remarkably enough, is not about architecture in the first place, but on history of ideas in general: Roger Stein's *John Ruskin and Aesthetic Thought in America: 1860-1900* (Cambridge, Mass., 1967). Its importance to architectural history lay, first, in the way it pointed out how massive had been Ruskin's impact on American appreciation of art in general, and, second, in drawing attention to a remarkable similarity between Sullivan's ornament and some illustrations in *The Seven Lamps* and *The Stones*. These ideas are further pursued by Lauren Weingarden in two studies to which we shall recur in Chapter 13. In the meantime biographical evidence has surfaced which likewise points to an early exposure of Sullivan to Ruskin's ideas. Thus James O'Gorman in *The Architecture of Frank Furness* (Philadelphia, 1972) notes how it must have been during his apprenticeship with Frank Furness that Sullivan came into direct contact with Ruskinian theory and design.

For Richardson the time, place, and circumstances of his first encounters with Ruskin appear to be in the dark, but, as indicated (§ 5.1), that is not the kind of problem we should be deeply concerned with in the present study. What matters is not whether Ruskin actually influenced these men or if we are witnessing two parallel developments, with Ruskin expressing in words what, independently, these architects intuitively did in their designs, but through the works of these architects to show how viable were Ruskin's ideas; that successful implementation, more interesting than mere copying of Venetian detail, was perfectly possible, after all.

If, on the other hand, there is actual influence involved, rather than some mysterious parallelism of thought, it is safe to state that Ruskin's impact on American architecture went deeper and lasted longer than it did in Europe. Thus, while in Europe in the early-twentieth century the mere idea of a Gothic revival had altogether become a thing of the past, it started all over again on American campuses, and in skyscrapers like the Woolworth Building of 1913. In this case, too at least some influence from Ruskin's writings is hard to deny.

For the sake of completeness a few words should be said on the impact of Ruskin's works, not on architecture itself, but on architectural theory and criticism, its style and ways of argumentation. As pointed out by Brooks this part of Ruskin's influence was strong and wholly beneficial. He lifted architectural criticism to a level it had never attained before—and it is tempting to speculate to what extent the strong position of English writers and scholars in this field up to the present day is due to Ruskin.
Having completed this reconstruction of what systematic body of thought we could discover in *The Seven Lamps* and *The Stones of Venice*, it is time now to consider in how far the result meets the demands laid down in § 7.1. Of these a first states that all levels of concept formation, and all the sources of information and of questions, both as described in our model, must be appropriately identified for those texts, a second that all the questions dealt with there, for as much as they belong to architectural theory, must be reviewed, and a third that what unity of thought there is, but is not immediately apparent, must be made more easily conceivable and accessible by introduction of a hypothetical implied concept to which all (or most) of the answers to all the questions as identified in those texts relate as illustrations or specifications. Has that much been achieved?

For sure, it could be established beyond reasonable doubt that these two works do contain a considerable body of systematic thought, not just an abundance of sensitive observations, laid down in the best possible English but inconsistent and unrelated to a wider vision on architecture as, let us say, a problem solving art of construction and design. Under the surface of a good deal of rhetorics and sermonizing, alternating with lyrical descriptions of buildings or even natural scenery, there is substantial theory in the sense that (a) a wide range of questions, relevant to architectural decision-making and design, is conscientiously explored, that (b) a powerful structure of argument can be identified, as well as a few leading concepts, and that (c) it provides a wealth of new and interesting observations regarding form, color, and (in a wide sense) meaning in architecture.

Otherwise I presume that, as the one who did the reconstruction, I am not particularly qualified to judge how good it is. What I can do, though, is relate what problems I have encountered on the way, and what I came to see as inherent restrictions of the approach--aware that shortcomings in these reconstructions need not be blamed on the approach in general, but may as well be held against me for the way it was applied.

A first problem, then, which ought to be acknowledged is that not all the elements of our model could, with regard to the aforementioned works, be properly identified without recourse to other sources of evidence than just those texts. Some could, for sure. This holds for the range of examples discussed (although for most of them one still has to go outside those works to see what they actually look like) including choice of paradigmatic examples. Within theory proper it is structure of argument, apparent contradictions, and questions dealt with, which can thus fairly independently be assessed. For a correct appreciation, on the other hand, of what questions are the most basic, and which of them subordinate, one ought to take a look at how the system hooks on to issues in current decision-making. As usually this is only hinted
at in the texts at stake, it involves taking recourse to contextual data—concerning what went on in architecture at the time, and in what ways the author was involved in that.

Likewise the whole branch that runs from value systems via humanities/social science and semantic core down to theory proper cannot be adequately evaluated on textual data alone. Additional information in this case should come mostly from other literature of the same period or before, occasionally from biography. As the state of the art in the humanities at the time when the texts under investigation were written, and what of this the author of those texts can possibly have been familiar with, are major factors in an effort to reconstruct seemingly unrelated points of view around a hypothetical implied concept, the same contextual (though mostly literary) evidence indirectly comes in at that point too. So why this sustained effort to get along with as little contextual evidence as possible? Primarily as a heuristic device to arrive at new interpretations which are more powerful, that is, more inclusive and at least as consistent, or equally inclusive and more consistent than current ones. Once that such new interpretations of a promising kind have tentatively been arrived at, one need not have strong inhibitions against exploring contextual aspects, including biography, but, as I have tried to show and will again insist on when we come to speak of other readings of the same texts (Chapter 13), to work the other way around is a sure way to perpetuate prejudice based on superficial reading.

A second problem, one that is more typical for Ruskin, is that little seems wholly stable in his theorizing. This entails a dilemma: one may, as a way-out, focus on a small range of texts (e.g. only The Seven Lamps) or on the few things that are constant, but neither approach will bring to light Ruskin's thought in its full richness—neither the way it was in Chapter 10 demonstrated how strongly and consistently The Seven Lamps is organized around a concept of greatness rooted in associationist philosophy, nor a reconstruction as in Chapter 11 of interesting observations in both works around a concept of living-walls-that-are-made-to-last. If this were all one could hope to get out of reading Ruskin for his contributions to architectural theory, one might still feel a little disappointed.

Fortunately, though, there is more. Most of the steps that lead up to these reconstructions have a certain value of their own, independent of what eventually there will be left to reconstruct. Sifting out rhetorics and dogma from doubt and honest fascination with value systems as they are (§§ 10.5, 10.7.3), or those apparent contradictions which evaporate at more careful reading from the more fundamental and tenacious ones (§§ 10.7, 10.9), is rewarding even if the confusion which is thus laid bare cannot subsequently be repaired. What it does is place us in the middle of a nineteenth-century debate on architecture in relation to non-architectural values to which Ruskin made memorable contributions. Ruskin's achievement as an architectural critic and
theorist goes beyond having written a few beautiful books, and having lectured on those issues in an equally provocative as entertaining way. What he did was lift the whole discussion to a higher level--higher not only than it was before, but higher also, in various ways, than where more recently it would be carried on. To sort out all these unresolved dilemmas, and to trace their evolution, is interesting not only from a wider art historical point of view, but in various indirect ways for architectural theory in a more restricted sense as well. Thus, for one thing, it illuminates contributions to architectural theory as made by others who were involved in the same debates. And, for another, it deepens understanding in nineteenth-century architecture as an outcome of nineteenth-century thought and decision-making. If subsequently those same buildings serve as input to an architectural data base as outlined in the introductory chapters of the present study, the circle is complete.
Community & Privacy
(1963)
by
Serge Chermayeff and Christopher Alexander

and

Notes on the Synthesis of Form
(1964)
by
Christopher Alexander

The form is a part of the world over which we have control, and which we decide to shape while leaving the rest of the world as it is. The context is that part of the world which puts demands on this form; anything in the world that makes demands on the form is context. Fitness is a relation of mutual acceptability between these two. In a problem of design we want to satisfy the mutual demands which the two make on one another. We want to put the context and the form into effortless contact or frictionless coexistence.

Notes on the Synthesis of Form, pp. 18-19
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12. Alexander's Early Works

12.1 Introduction

Christopher Alexander\textsuperscript{299} was born in Vienna in 1936 and moved with his family to England in 1938. Before moving to the United States in 1958 he studied mathematics and architecture in Cambridge (England). As a grad student of architecture at Harvard during the next few years he wrote *Notes on the Synthesis of Form*, which was published by the Harvard University Press in 1964. *Community and Privacy*--to which Alexander contributed a method of decomposition for design problems, but which otherwise appears to be a project of Serge Chermayeff (1900-), Alexander's supervisor at Harvard, in the first place--had come out the year before. After his graduation Alexander moved to California, where he had been appointed professor in architectural design at Berkeley, and a few years later became director of the newly founded Center for Environmental Structure--positions he has kept ever since. Writings from those later, Californian years have briefly been reviewed in § 2.8, and incidentally will turn up again in the present chapter as well as in Appendix 3, but otherwise we shall from now on focus on the aforementioned two works of Alexander's years at Harvard. To these we shall refer by the abbreviations:

CP: *Community and Privacy*, 1963
NS: *Notes on the Synthesis of Form*, 1964,

both of them immediately followed by page number\textsuperscript{300}.

Reasons for this choice have already been expounded in § 7.3, but a few questions are likely to linger on. Thus it seems fair to ask in how far the two works are complementary expositions of the same body of knowledge. At various points they overlap, and when they do *Notes* is consistently the better book: stylistically, in rigor of argumentation, and in actual contributions to architectural theory. At times they conflict in their basic orientation and basic points of view. Thus from the very start of his architectural education Alexander, as indicated by Grabow\textsuperscript{301}, felt highly uncomfortable about modern architecture. Chermayeff never had such qualms. The dedication of *C&P* to Walter Gropius ("with admiration, affection, and gratitude"), hard as it is to relate to the later Alexander, thus fits in naturally. Besides, the *Notes* do not explicitly reject the basic tenets of modernism either. What happens is that Alexander picks them up, consistently works them out, and pushes them to the edge, where, to the embarrassment of many of his readers, he will shortly afterwards let them explode. Yet the two works in various ways are complementary and together give a better idea of what is at stake than
either of them alone. Thus the Notes focus on methodology of design, whereas C&P has a good deal to say on material issues as well. We shall recur to this in the next two paragraphs (§§ 12.2 and 12.3).

Another question one should consider is to what degree two works of such modest size (some 50,000 words each) together or alone can be expected to embody a complete body of architectural theory--or how they relate to a wider body laid down elsewhere, or still to be worked out. As we shall see, this point is truly problematic. The range of questions dealt with (see § 12.3 and Fig. 31 below) is small--what about those that are skipped? Is the methodology of design expounded in the Notes so tight, so flexible, and so secure that it makes systematic study of material issues superfluous? Or has reference been made to other works where more on the latter can be found? Or are the authors operating in a well-established field of research, implied in much that is not explicitly dealt with? As we shall see, none of these options applies. The Notes can be read as an attempt to arrive at a methodological core for a more encompassing body of architectural knowledge, to be worked out in the following decades. Contradictions and incompatibilities as encountered in this brief work, however, turn out to be quite real, and instead of bridging them the author in his later works would dissociate himself from many of his earlier assumptions and expectations.

For the present study what this situation implied was that it seemed unpromising to devote a whole chapter to bridging the gap between apparent contradictions as identified in § 12.9. So it never outgrew its first chapter. To make up for the unwritten second one, some paragraphs of the first have been expanded with a critical summary of theory which otherwise would have been relegated to the second.

### 12.2 Recent Decision-Making

As opposed to what was noted with regard to the works of both Semper and Ruskin, recent decision-making in Community & Privacy and the Notes is a major provider not only of questions, but of information to be employed in answering these questions as well. C&P focuses not so much on procedures of current decision-making as on its outcome. It is concluded that the whole ecological situation, the whole of man's interactions with his environment, built or unbuilt, is completely running out of hand. The balance of human life has been profoundly disturbed by the very products which, for everyone who could afford them, were introduced to make life more
comfortable: cars, radio, TV, and other means of communication and mass transportation. The world's population grows at an unbridled pace, nature is everywhere in retreat. Questions architecture has to address are how, in the face of all this, to prevent total dissolution of urban settlements; how to preserve what is left of nature, of clear water and fresh air; how to keep out noise from where it is not wanted, and how to ensure a decent level of privacy for everyone without complete atomization of society—-but is it prepared to face such Herculean tasks? It is concluded that in its present shape it is not, and that what is called for is a more scientific approach.

Observe how thus an answer to problems of environmental decision-making is sought, even though not in current architectural practice, at least in other domains of contemporary problem solving. A refusal to rely on historic precedent and an insistence that those problems should be tackled by ruthless analysis of their functional core is wholly in line with this approach.

*Notes on the Synthesis of Form* likewise derives its questions directly and explicitly from current decision-making, but focuses on a slightly smaller scale, one that ranges not from a single dwelling to global ecology, but from a tea kettle to the layout of a village. Its leading question is why, within that range, products of modern, *selfconscious* design appear to miss several of those qualities which are abundantly displayed in products of the *unselfconscious* variety, and which are crucial.

### 12.3 Questions

A more complete and systematic survey of the range of questions dealt with in both works has been rendered in Figure 31. The range is fairly small. On the material side only patterns of layout are investigated, and these only for residential architecture, ranging in scale from a single house to clusters of a few dozen. Technical facilities (as a source of trouble to be reckoned with in functional layout) receive some attention, all the rest none whatsoever. On the procedural side the scope is wider, even though by and large everything related to procedure of evaluation stays out. Procedure of design, on the other hand, is dealt with on various levels of abstraction, ranging from methods of functional layout (PD.1.L) to how adaptation of form to context is conditioned by general levels of civilization and technology (PD.3.CU, PD.3.TE).
<table>
<thead>
<tr>
<th>Little attention</th>
<th>Some attention</th>
<th>Much attention</th>
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<tr>
<td>CO Color</td>
<td>PD.1.F Feedback: design as a learning process</td>
<td>PD.1.L Layout of buildings</td>
</tr>
<tr>
<td>CS Construction</td>
<td>PD.1.O Optimizing a plan</td>
<td>PD.1.IN Inventory of demands on New construction</td>
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<td>D Detailing</td>
<td>PD.1.P Presentation of plans</td>
<td>PD.1.S Siting</td>
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<td>F Form—abstracted from likeness</td>
<td>PD.2.RD Research on methods of Design</td>
<td>PD.2.E Education of designers</td>
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<td>Q Quantitative demands</td>
<td>PD.2.RE Research on methods of Evaluation</td>
<td>PD.2.O Organization of a design process</td>
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<td>R Resemblance</td>
<td>PD.2.RM Research on Material issues</td>
<td>PD.3.CU Design as influenced by culture at large</td>
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<tr>
<td>SA Signification Associative</td>
<td>PE Procedure of Evaluation</td>
<td>PD.3.TE Design as influenced by general level of technology</td>
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<tr>
<td>SI Signification Indexical</td>
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<td>SS Signification Symbolic</td>
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31. Distribution of attention over different issues in *Community & Privacy* and *Notes on the Synthesis of Form*
Obviously there is no reason why a dissertation of modest dimensions like the Notes, let alone a personal manifesto like Community and Privacy, should deal with the whole range of issues traditionally covered by architectural theory. Considering the absence, painfully felt by Alexander at the time, of a well-established field of study and corresponding body of knowledge to which the Notes could make their modest contribution, it is not, however, altogether clear what is implied in this total silence on procedure of evaluation, on the aesthetics of form and color as such (that is, unrelated to function), or on 'meaning' (in a wide sense) of built forms. As for evaluation of a completed design, the underlying idea might be that this is a client's rather than a designer's responsibility—but there is no indication that either Alexander or Chermayeff makes that kind of a distinction. More in line with the way of thought expounded in C&P and the Notes is to presume evaluation of a finished plan must go by the same criteria, the same list of possible 'misfits' (see below), as the actual process of design, and so there is little use in dealing with evaluation as a distinct procedure. Or the idea might be that it is more rewarding to incidentally evaluate the methodology as a whole than to do so for each of its products anew. Frankly, I think the latter is the approach of the later Alexander, the former that of the author of the Notes—but instead of answering such questions now, suffice it at this point to just signal them.

That typically aesthetic issues as mentioned are given marginal attention in a methodological study like the Notes, or in a functionalist/humanist manifesto like C&P, may be something we are generally accustomed to, yet it might be worthwhile to think about underlying assumptions. Chermayeff at the outset [p. 20] of C&P states as his and Alexander's intention to contribute to "...a Science of Environmental Design to supplement high purpose, creative ability, and technical skill before it is too late," and subsequently quotes a man named Eric Gill as saying that "Beauty will look after herself." I presume this must be taken as that, once one has arrived at a satisfying functional layout, a major condition for an aesthetically pleasing result has been met and one should not worry about the rest: a little refinement here and there while working out the plans will do. It is equally possible, though, that, especially in the Notes, aesthetic aspects are presumed to be included in the list of possible 'misfits' (see below) a designer starts out with. At this point the text remains ambivalent.
12.4 Examples

12.4.1 Art and Artifice

A striking feature about both *Community and Privacy* and *Notes on the Synthesis of Form* is that they contain neither pictures of buildings, nor even drawings other than of floor plans—and those only in C&P, not in the Notes. All we get to see, apart from these floor plans, are diagrams and (once more only in C&P) some schematic urban layouts plus cartoons by Saul Steinberg.

So much for the illustrations. In the accompanying text we witness a fascination with qualities that are typical of 'unselfconscious' design. Few cases are studied in great detail, though. A farm compound in Cameroon, a medieval fortress in Sardinia, a temple complex in Cambodia, a monastery in China, a Renaissance urban palazzo in Italy, and something from Japan that likewise goes by the name of palace are presented in C&P [pp. 123, 125] merely as illustrations of a hierarchy of privacy among clearly articulated spaces—a principle that is considered equally applicable to contemporary residential architecture and urbanism. Examples to illuminate the same point on an urban level are three fairly modern but as yet unrealized plans: Tony Garnier's 'Cité Industrielle' of 1901-04, and Le Corbusier's plans for St. Dié (1945-46) and Candigah (1950). The latter, for sure, was under construction at the time (1963), but still, none of them actually could be (or had been) observed as a functioning reality, which lends an airy quality to the argumentation.

Such unwillingness to rely on built examples is consistent with a functionalist bias, with the idea that form should be based on study of the actual problem to be solved, of activities to be accommodated and consequent demands—rather than on historical precedent. Accordingly, most floor or street plans in C&P are fairly recent, and, for as much as they are not by Alexander or Chermayeff themselves, serve primarily as illustrations of how certain demands have not been met which the authors consider basic.

12.4.2 Nature and Music

*Community & Privacy* is traditional at least in assigning some role to nature as paradigmatic of the kind of quality architecture should try to emulate. In particular, this is done regarding the concept of hierarchical order. Thus Ludwig von Bertalanffy, author of *Problems of Life* (1952) is approvingly quoted twice, first on p. 116 as saying that "The architecture envisaged in an organism is
typical of a pattern which is of wide occurrence not only in the biological but also in the psychological and sociological fields," and that it can be called *hierarchical order*, subsequently on p. 134, where it is stated:

An organism displays not only a morphological *hierarchy of parts* but also a physiological *hierarchy of processes*. More accurately stated: an organism does not represent one hierarchy that can be described thoroughly in morphological terms. Rather it is a system of hierarchies that are interwoven and overlapping in many ways, and that may or may not correspond to the levels of the morphological hierarchy.

In the *Notes* an inkling of doubt seems to creep in. Nonetheless it is contended:

NS.129 The organization of any physical object is hierarchical. It is true that, if we wish, we may dismiss this observation as an hallucination caused by the way the human brain, being disposed to see in terms of articulations and hierarchies, perceives the world. On the whole, though, there are good reasons to believe in the hierarchical subdivision of the world as an objective feature of reality.

Music as a paradigm of quality plays no significant role in either of the two works. It is not even mentioned as such, only as something which man, unless he explicitly asks for it, should be sheltered from. On the other hand, there is no clear rejection of musical analogies in formal aesthetics either. As indicated by Grabow [op.cit., pp. 31-33 et passim], 'geometry of space' and related aesthetic concepts were a major concern to Alexander, both before he wrote the *Notes* and afterwards. It is just that qualities of pure form are not investigated there or in *C&P*, only those of form in relation to context, and the latter conceived in a functional rather than visual sense.

**12.5 Value Systems**

Modest interest in built examples and historical precedence is, at least in *Community and Privacy*, amply compensated by loud endorsement of value systems. The whole first part, entitled 'Mass Culture' [pp. 21-111], in fact half of the book, is devoted mainly to that. Systems at stake, all of them threatened in their very existence by an uncontrolled spread of easy transportation (cars in particular) and mass communication, are those of traditional urban society, nature and its preservation, the
family, and the individual. By contrast, no value *systems*—other than the mere value of 'good fit'—are highlighted in the *Notes*. 'Unselfconscious' architecture is praised for this, hardly for anything more specific.

### 12.6 Humanities and Social Science

This choice of value systems does not invite a major role for the humanities, but all the more for social science plus whatever may be of use to methodology of design, like mathematics, logic, and so on. And indeed those were all fields in which, by the time they wrote the aforementioned works, the authors (or at least Alexander, I am not so sure about Chermayeff) had acquired a certain expertise: science and math, psychology of perception, linguistics, and so on, and so forth. Useless to say that the approach to architectural decision-making presented in these works was thoroughly ahistorical.

### 12.7 Special Words with Special Meanings

Does this preoccupation with behavioral science result in an elaborate behavioral science jargon? Not really! Among the few words that acquire a special status in are 'form,' 'context,' 'fit/misfit,' and 'diagram,' but even if they do, this should be seen against the background of a general disbelief in the analytical power of verbal concepts. As it is stated in *Community & Privacy*:

**CP.149** In view of the conceptual changes that are taking place it is hardly helpful to continue using in connection with housing problems words that are firmly anchored in the cultures of days gone by; they can only mislead us in our present search for better solutions. "Apartments," "row houses," "single-family houses," "yard," "garden," "garbage," "parking lot," "living room," "kitchen," "dining room," "bedroom," "bathroom," are all heavily loaded words that make any
number of irrelevant images spring to mind. Designer and user alike may imagine that these words stand for something immutable, though in fact they are just names for the familiar.

In the Notes the role of verbal concepts in theory-driven design is even singled out as a major reason why 'selfconscious' processes of design perform so poorly compared to 'unselfconscious' ones. In situations where tradition no longer shows the way, the complexity of design problems soon rises to a level where one no longer can do well without such verbal devices. Echoing John Summerson the author states:

**NS.62** To help himself overcome the difficulties of complexity the designer tries to organize his problem. He classifies its various aspects, thereby gives it shape, and makes it easier to handle. What bothers him is not only the difficulty of the problem either. The constant burden of decision which he comes across, once freed from tradition, is a tiring one. So he avoids it where he can by using rules (or general principles), which he formulates in terms of his invented concepts. These principles are at the root of all so-called "theories" of architectural design. They are prescriptions which relieve the burden of selfconsciousness and of too much responsibility.

The point is that, in Alexander's view, conventional labels like 'acoustics,' 'economics,' 'safety,' and so on, do not refer to those problem sets that are most independent of each other--and for that reason the natural candidates for decomposition of a design task. Moreover, once adopted they tend to keep us hostage:

**NS.69** The arbitrariness of the existing verbal concepts is not their only disadvantage, for once they are invented, verbal concepts have a further ill-effect on us. We lose the ability to modify them. In the selfconscious situation the action of culture on form is a very subtle business, made up of many minute concrete influences. But once these concrete influences are represented symbolically in verbal terms, and these symbolic representations or names subsumed under larger and still more abstract categories to make them amenable to thought, they begin seriously to impair our ability to see beyond them.

This being said, it is interesting to see how the same pitfalls are avoided (if they are) in the triad of concepts that are most central to the argument of the 'Notes:' those of 'form,' 'context,' and 'fit' or 'misfit.' Appropriately, the three are introduced together early in the study, where for instance it is stated:
The form is a part of the world over which we have control, and which we decide to shape while leaving the rest of the world as it is. The context is that part of the world which puts demands on this form; anything in the world that makes demands on the form is context. Fitness is a relation of mutual acceptability between these two. In a problem of design we want to satisfy the mutual demands which the two make on one another. We want to put the context and the form into effortless contact or frictionless coexistence.

As yet, this may not squeeze us into a corner, but prospects turn more gloomy when with admirable candor it is noted:

In the case of a real design problem, even our conviction that there is such a thing as fit to be achieved is curiously flimsy and insubstantial. We are searching for some kind of harmony between two intangibles: a form which we have not yet designed, and a context which we cannot properly describe. The only reason we have for thinking that there must be some kind of fit to be achieved between them is that we can detect incongruities, or negative instances of it. The incongruities are the primary data of experience. If we agree to treat fit as the absence of misfits, and to use a list of those potential misfits which are most likely to occur as our criterion for fit, our theory will at least have the same nature as our intuitive conviction that there is a problem to be solved.

Accordingly, the concept of misfit is no further defined, but presented as primitive [p. 101]. It is pointed out how precedents for this occur in the practice of common law, psychiatry, medicine, engineering, and anthropology, and reference is made to Popper's concept of 'piecemeal engineering' as expounded in *The Open Society and its Enemies* (1950). All this corresponds to a conviction that:

A design problem is not an optimization problem. In other words, it is not a problem of meeting any one requirement or any function of a number of requirements in the best possible way (...). For most requirements it is important only to satisfy them at a level which suffices to prevent misfit between the form and the context, and to do this in the least arbitrary manner possible.

Now let it be observed that this is mere dogma; that if one thinks about it for more than five minutes there is absolutely nothing self-evident about it that a designer should not, within constraints of available time and means, go after the best possible solution for whatever problem a client has come to consult him for. In a post-war era fed up with utopian planning in a
totalitarian political setting, the idea of 'piecemeal engineering' understandably had a strong appeal, but that is no reason to hold on to it in the face of all the dullness and mediocrity, particularly in built environments, this insistence on conflict reduction rather than value enhancement has brought about. And anyway, even if some readers might disagree with me on this, let it be clear that the concepts of form, context, fit, and misfit, as expounded in the Notes, are far from neutral in regard to how one should go about in solving design problems; that they do precisely what other verbal concepts were rejected for: reduce the apparent complexity of problems at the expense of a full assessment of their real complexity.

Another crucial concept in both works is that of a 'diagram,' or, as it would come to be called in Alexander's later works, a 'pattern.' "Any pattern," it is stated [NS.85], "which, by being abstracted from a real situation, conveys the physical influence of certain demands or forces is a diagram." The information conveyed in a diagram may be about the forces active in a context, or about a form invented to meet them, but ideally a diagram illuminates them both and links them conceptually. In that case it emulates what in science is called a 'unified description,' one that describes form and function simultaneously:

NS.90  The solution of a design problem is really only another effort to find a unified description. The search for realization through constructive diagrams is an effort to understand the required form so fully that there is no longer a rift between its functional specification and the shape it takes.

It is added that, if a diagram is strong, the resulting design will not just passively follow its context, but enlighten the life it is to accommodate. At the same time it is acknowledged a completely accurate description of the context is seldom possible, and, even if it is, a corresponding diagram cannot be derived from it by way of logical deduction:

NS.91-92  It is therefore quite reasonable to think of the realization [of a design through diagrams] as a way of probing the context's nature, beyond the program but parallel to it. ... Each constructive diagram is a tentative assumption about the nature of the context. Like a hypothesis, it relates an unclear set of forces to one another conceptually; like a hypothesis, it is usually improved by clarity and economy of notation. Like a hypothesis it cannot be obtained by deductive methods, but only by abstraction and invention. Like a hypothesis, it is rejected when a discrepancy turns up and shows that it fails to account for some new force in the context.
The conclusion that a diagram is not so much a very specific solution to a unique situation as a way of physically meeting a certain set of forces and constraints that may occur anywhere and in innumerable combinations, is not yet drawn in the Notes, except in the preface to the paperback edition of 1971. Even so, that is the leading thought of Alexander's later works. We shall briefly recur to this in § 12.9.

12.8 Structure of Argument

Community & Privacy, like Notes on the Synthesis of Form, consists of two parts, one in which the problem is outlined, another where it is solved—or at least it is indicated how this could be done. In Community & Privacy this first part, entitled 'Mass Culture,' is informally structured. It consists of eight brief chapters, each preceded by a number of quotations for which it is never altogether clear whether the authors wholly subscribe to them or merely wish to draw attention to an interesting point of view. The chapters themselves are little more than an endless lament about the evils of contemporary mass communication and transportation, suburbanization, and the resulting loss of both nature and urbanity. The authors' point, to be worked out in the next half of the book, is that modern man is urgently in need of more privacy, both as a family and as an individual, and that this can—and must—be attained in residential districts of higher density than is common in most new suburbs.

In the second part, entitled 'The Urban Dwelling' (Chapters 9-14) this is specified [p. 121] as a need for six clearly articulated domains of increasing privacy and decreasing publicness, starting with the 'Urban public' (1) of roads, sidewalks, public parks, et cetera, and ending with the 'Family-private' (5) and 'Individual-private (6) of the home. The intermediary domains are labeled 'Urban-Semi-Public' (2), 'Group-Public' (3), and 'Group-Private' (4). 'Urban-Semi-Public' (2) covers "areas of public use under government and institutional controls," such as a post office, a city hall, public schools, hospitals, theaters, garages, parking lots, and so on. I presume stores are in this category too, because there is no other where they might fit in. 'Group-private' (4) refers to spaces and accommodations that a group of residents keep under collective control: reception area, playgrounds, laundry rooms, storage, and so on. 'Group-public' (3), finally, stands for the meeting ground between the private (5-6) or collective (4) and the public (1-2): places for mail delivery, garbage collection, emergency rescue devices, and so on. The need for a clear articulation and
hierarchical organization is illustrated in Chapters 9-10 by way of the examples mentioned above (§ 12.4.1), and worked out for the semi-private domains 3 and 4 in Chapters 11-12, and for the private ones (5-6) in Chapters 13-14.

Chapter 11 has a pivotal role in the argument, for it is here that Alexander's methodology is briefly outlined and applied to the design problem at stake. The method is more fully expounded in the Notes, therefore we shall recur to it in a moment. Other ways of clustering houses than the one worked out in Chapter 11 are reviewed in Chapter 12, but as the criteria by which these are evaluated are precisely those that served as input to the authors' solution, and as the latter is not checked in a more encompassing way, this whole twelfth chapter adds more to the circularity than to the completeness of the argument.

Equally disappointing are the final chapters, 13 and 14. In the former, seventeen floor plans of houses are evaluated by six criteria which are so typically Chermayeff's that it is hardly surprising to see Chermayeff's own designs eventually stand out as the only ones that meet them. Chapter 14, finally, presents some inconclusive remarks on the importance of carefully conceived barriers between the six domains as mentioned. And so the book's most interesting part remains the one that refers to the Notes--which was to appear the next year.

As indicated, Notes on the Synthesis of Form likewise consists of two parts, one in which a problem is identified, another that aims at its solution. The two are preceded by an introductory chapter (1) and followed by an epilogue which emphasize the urgency of the kind of rationality endorsed in this book. Part I opens (Chapter 2) with definitions of form, context, fit, and misfit as reviewed above, and continues (Chapters 3-5) with contemplations as to why 'good fit' apparently is so much harder to attain in a 'selfconscious' way than it was under conditions that favored traditions of 'unselfconscious' design. It is, by way of simple but imaginatively applied mathematics demonstrated how 'good fit' cannot come about if a large number of interdependent variables must be dealt with simultaneously. It is further submitted that in traditions of unselfconscious design this situation could not occur because the mere power of tradition would ensure that misfit in one or two aspects of a form-context ensemble would not affect a wide range of other variables, and so the problem would be contained. Having lost the innocence that characterizes unselfconscious design, a return to such happy conditions for modern man unfortunately is impossible. A more realistic way-out lies in decomposition of the design problem at hand--in such a way that each of its subproblems contains a manageable number of variables and interdependence among these subsets is minimized.

A method of programmatic analysis and design, based on this idea, is expounded in Part II (Chapters 6-9) and in Appendix I applied to the design of an Indian village. Another appendix takes care of the mathematics of
decomposition. The method as a whole can be briefly summarized as follows:

1. Make a list of misfits that are likely to occur in a design task; choose them in such a way that overlap among the items on the list is minimized, and that the list covers the problem as a whole.

2. Assign values to relationships of dependency among misfits as listed: positive if solving one enhances the chance that another will be solved as well, negative if the reverse seems to hold, and zero for independence. This assignment is an intuitive affair. Choice therefore should be among a few simple values, for instance whole numbers.

3. Arrange the list in such a way that it falls apart in clusters with many internal and few external dependency relationships. These clusters stand for sub-problems that can be tackled one by one. It is at this point that the computer comes in.

4. Invent 'diagrams' for those sub-problems that for their proper solution need one.

5. Combine the diagrams for each of the sub-problems in an overall diagram for the problem as a whole.

### 12.9 Apparent Contradictions and Incompatibilities

It may be argued that the problem with *Notes on the Synthesis of Form*, or even with *Community & Privacy*, is not so much a lack of rigor in their argumentation as that they start from questionable premises. As a result, there is a fair chance the conclusions arrived at will turn out to be consistent, even if they are unacceptable. The main virtue of the two works in that case is in exploring consequences of erroneous assumptions up to a point where they explode. If, on the other hand, the argumentation is really strong, the chances are that even after the explosion something valuable will remain.

However that may be, a question that almost enforces itself upon a reader of these texts is the following. If it is acknowledged that the context of a form to be designed cannot exhaustively be described, that a listing of misfits can never be more than a rough approximation of the design task, that assigning dependency values to relations between potential misfits is an intuitive affair, that some dependency between relatively independent clusters of potential misfits, even in a simplified representation of the design task, will linger on, and that diagrams display all the characteristics of hypotheses--how to escape the conclusion that the methodology at stake can be no more than an heuristic device? And if so, should not the solutions this methodology results in be
evaluated by other criteria than precisely those which served as their input?
If, on the other hand, no such conclusion is conceded, the work must be considered the fairly logical outcome of the following questionable assumptions:

1. A conception of design as conflict- or error-reduction rather than value-enhancement.

2. A rejection of design as fundamentally a trial-and-error process.

3. A rejection of methods and criteria of evaluation distinct from those of design proper.

4. A hierarchical, tree-like organization of clearly articulated spaces, each with its own sets of functions, is considered as natural and desirable in architecture and urban design as it is in living organisms.

5. Such prejudice as that "No end product is better than the program behind it" [CP.109].

If the latter were true, what about, for instance, the Colosseum? In order to enjoy the greatness of its structure and appearance, must one subscribe to its 'program' of feeding Christians to the lions for the mere amusement of the Roman crowds? There is an amount of moralism and wishful thinking implied in this statement comparable to those of Ruskin's one time conviction that "nothing can be beautiful which is not true"--with the difference, of course, that Ruskin eventually changed his mind.

In any event, there is, as indicated at the outset of this case study, little use in looking for an implied concept to bridge incompatibilities as encountered so far. Of the five questionable assumptions enumerated above, the fourth was categorically revoked in Alexander's rightly famous article of 1965, 'The City is not a Tree'\(^{304}\). The first and fifth implicitly were pushed aside in the pattern-oriented approach of his later works, the second and third, I would say, remain problematic aspects even of the latter. Entangled as they are with a conception of architecture as a language, they indeed have become an integral part of this new system, but as here the linguistic conception with admirable consistency has likewise been pushed to the edge, so to say, there is hope for another explosion.

What, on a subordinate level, might be considered contradictory in *Community & Privacy* is the endorsement of a new urbaniy on the one hand, versus proposals to seal off a whole range of semi-public/semi-private domains on the other. Has not, in sociological studies, dissipation of precisely these interme-
diately domains generally been considered an almost defining characteristic of urban society?

Slightly puzzling too is the opening sentence of Part I of the Notes: "The ultimate object of design is form." If read as a neutral definition of design as inventing form, why this 'ultimate'? A glorification of 'form' as something that acquires a life of its own and should be permitted to direct function as much as the other way around, on the other hand, does not well fit in with the work's fundamental functionalism. It might be taken as anticipating Alexander's later work, where indeed there is more of an interactive relationship between form and function, or as a phrase (and an antimony) somewhat unthinkingly taken over from le Corbusier c.s.--but both remains guessing. The issue, even though it connects to quite fundamental ones, may not in itself be crucially important.

12.10 Conclusions

One reason to include this relatively brief third case study was to show how our model, which so far had been only applied to nineteenth-century architectural theory, fits more recent varieties of it just as well--provided, of course, that these do contain substantial theory to begin with. Applying it to the early works of Alexander, and comparing the results to those of the two other case studies, a first thing that is hard to overlook is a huge shift in attention, both in the kinds of question that are raised and in the basic sources of information on which to base the answers.

The range of questions dealt with, as indicated, remains small. Emphasis is on procedure of design, more in particular on a sure way to arrive at good functional layouts. When methods outlined to that end are applied to the design of residential areas, patterns of functional layout are critically reviewed as well, but other material issues receive little or no attention, nor do procedures of evaluation. The biggest loser, compared to the works of Semper and Ruskin, is architectural detailing.

Among sources of information the whole category of built examples is intentionally left out. In doing so, Alexander and Chermayeff merely carry through what others in the tradition of modernism always said they should do, but seldom actually did. The attempt to do without is all the more interesting because of the equally radical and consciously anti-modern reaction of the later, pattern-oriented Alexander. Remarkably constant as a source is nature and a whole range of organic analogies. Value systems and decision-making, the other two main sources as identified in our model, are both dealt with extensively.

And so another conclusion can be that for a proper application of our model these shifts are not really problematic. What in this process does turn out to be a problem is how in both works a method which, by standards that
in *Notes on the Synthesis of Form* are strongly hinted at, can only count as an heuristic device, is presented as one that, if correctly applied, virtually guarantees a good result. Even that hardly counts as a contradiction, though, but as a fairly logical outcome of a whole range of questionable assumptions. In Alexander's later works some of the latter are revoked, others silently dropped, while still others linger on. Either way it is unpromising to look for an interesting concept--one that would bridge apparent contradictions--in these early works. As a result, this third case study did not outgrow its first chapter.
13. Other Readings of the Same Texts

At numerous places in the preceding chapters reference has been made to other readings of the same text, but at no point these other readings, which together define the state of the art in interpreting writings by Semper, Ruskin, or Alexander, were reviewed as a whole. Such will be done in the present chapter. By thus assembling other readings for all the texts included in the case studies, and setting them off against my own, I hope a clearer pattern will emerge than if it had been done for the three authors separately at the end of each case study.

13.1 'Der Stil'

A major fact one has to take into account while studying the secondary literature on Semper and his writings is the language barrier that effectively exists between German lands and the English speaking world. Thus, to begin with, none of Semper's major writings, with the exception of On Architectural Styles and parts of The Four Elements of Architecture, until recently was published in translation. In the late-nineteenth century this would not prevent his works from somewhat penetrating to the United States, particularly to the Chicago area where many of the leading architects were first- or second-generation German immigrants, but later on it became a major obstacle, the more so as Semper's German is not particularly easy. That many Americans, especially if involved in the humanities, have learned or are in the process of learning German, and that Semper is being translated now, may somewhat soften this barrier in the future, but in an overview of what has been published on Semper's writings so far, the barrier is bound to show up as big as life. Thus it could happen that in his otherwise admirable study of 1979, The Aesthetics of Architecture, Roger Scruton somewhat haughtily remarks [p. 291] that "There are few works of architectural theory which make any contribution to aesthetics, although there are many that claim to do so ...," and subsequently leaves out Semper from the short list that follows this statement. Nor is his name in the book's index--for sure a grave omission, but in no way one that is unique to this particular book. Others have been vaguely aware of Semper's works as ranking among the most remarkable in their field, but once again without actual knowledge of them.

Given this situation, it is hardly surprising that after World War II it were mostly Central and Eastern European refugees who took care of popularizing Semper's ideas in English speaking lands. Foremost among these is Wolfgang Herrmann (1899-), whose name has already turned up frequently,
and to whom we shall recur in a moment. Others are Pevsner, Gombrich, and Rykwert.

Nikolaus Pevsner (1902-83) in *A Dictionary of Architecture* (1966, second edition 1972) still subscribes to a rather traditional point of view when he qualifies *Der Stil* as:

.. the most interesting application of materialist principles to craft and design, an attempt at proving the origin of ornament in certain techniques peculiar to the various materials used.

This passes over the fact that in Semper's view the technique represented in ornament is usually another than the one peculiar to the ornamented material. The representation as such once again is demanded to be in accordance with the material it decorates, but still the whole thing somewhat undermines the alleged materialism of Semper's approach. A chapter on Semper in *Some Architectural Writers of the Nineteenth Century* (1972), does more justice to the latter's views, although arguably they are approached too much as an attempt at justification of the styles Semper preferred to build in: those of the Italian Renaissance. In the same chapter, by the way, Pevsner is among the very few to link Semper's ideas to those of Schiller. The observation is made in passing, though, and so it is hardly surprising that others failed to pick it up.

Ernst Gombrich (1909-) in *The Sense of Order* (1979) emphatically dissociates himself from the traditional view of Semper as a materialist, for which he holds Alois Riegl responsible—erroneously, I am afraid. Gombrich in this connection refers to the introduction of Riegl's *Die spätrömische Kunstindustrie* (1901). There (pp. 8–9) Riegl indeed takes issue with materialist explanations of evolution in ornamental forms, but refers to these as the 'sogenannte Sempersche Theorie.' Whoever takes the trouble to read the introduction (pp. VI-VII) to his earlier *Stilfragen* (1893) as well (Gombrich apparently is not among them, even though he considers *Stilfragen* ".. perhaps the one great book ever written about the history of ornament") will see how completely Riegl is misunderstood when this 'sogenannte' is overlooked. For what in the introduction to *Stilfragen* Riegl tries to do is precisely to dissociate Semper from materialist points of view ascribed to him. And so Gombrich's conjecture has come to rest on two other assumptions: that this reputation of Semper, to which in 1893 Riegl referred, at the time existed in Riegl's imagination only, and that, moreover, the great majority of Riegl's readers at this point read him as carelessly as Gombrich did. These two combined seems rather far-fetched--but let us return to Gombrich's own reading of *Der Stil*. That Semper's reputation as a materialist could go unchecked for so long Gombrich blames on the style of his writing. It is stated [op.cit., pp. 47-48]:

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Those who come to Semper with the expectation of finding a functionalist and materialist will ... be somewhat bewildered. In his own buildings and designs he certainly was a true Victorian ... His writings are even less easy to reconcile with his posthumous reputation. To tell the truth, they are almost unreadable. Where Ruskin is rhetorical and rousing, Semper is pedantic and soporific. It is not always easy to know what his two volumes of 1860, Der Stil in den technischen und tektomischen Künsten, are about. They are certainly not meant as an attack on decoration as such. Semper was looking for the proper relationship between decoration and purpose.

Subsequently it is noted how from a defense of Greek polychromy Semper moved on to one of the duality of a wall's support and covering. It is concluded:

The investigation of this practice seems indeed a far cry from functionalism, but Semper's rather scholastic mind was led from there to consider the relation between structure and decoration on a priori principles. He aimed at a kind of axiom-system of the decorative arts in which these basic interactions could be described and classified.

Is this fair? Problematic at least are the axiom-system and the a priori character of principles Semper allegedly is looking for. What in Der Stil most nearly answers this description are the formal aesthetics expounded in the second half of the Prolegomena [pp. XXIII-XLII] and as reviewed in §§ 8.4.2 and 8.7.3 above. Even if one insists on calling this an axiom-system (I would say that, to deserve this name, its formalization should have been more complete), what reason do we have to consider this system a priori rather than hypothetical? Sure it is not the most accessible part of Der Stil, but it gradually fits in as one familiarizes oneself with Semper's way of thought. In any event, it does not justify Gombrich's condescending tone. As Gombrich's own book testifies to a renewed interest in issues which to Semper and his contemporaries were a primary concern, but with the rise of modernism lost their relevance to all but a few, this skepsis regarding Der Stil cannot simply be dismissed as narrow-minded, but it does betray what Summerson has called the 'gap of understanding' which separates the Victorians from the generation that grew up in the early twentieth century.

Next there is the architectural historian and anthropologist Joseph Rykwert (1926-) who, although a good deal younger than Herrmann, Pevsner, and Gombrich, is still among the pre-war eastern-European immigrants. Among his contributions to the study of Semper are a chapter in Gottfried Semper und die Mitte des 19.Jahrhunderts (1976) and a preface to Mallgrave's translations (1989). As some of his most interesting observations as made in these have already been reviewed in § 9.7.5, suffice it at this point to refer to that earlier paragraph.
Now let us return to Wolfgang Herrmann. Whoever has an interest in Semper's writings must be grateful for Herrmann's efforts in sorting out manuscripts, correspondence, lecture notes, and whatever else has been collected in the Semper archives at the ETH Zürich, and for the way he reconstructed from these sources the genesis of *Der Stil*. This resulted first in two Swiss/German publications, and then in the aforementioned English work of 1984. In his historical reconstructions Herrmann in general is quite thorough--although, as indicated (§ 8.1.1), Mallgrave's more recent findings contain numerous corrections and refinements. In the context of the present study we nonetheless must focus not on these, but on more strictly textual analysis and interpretation. A section of some size in Herrmann's book, entitled 'Semper's Aesthetic Theory' [op.cit., 1984, pp. 121-183], deals with this. Written in a clear and unpretentious style, and obviously based on much research, it is a lively and mostly accurate account indeed of some of the positions Semper came to defend, but it is precisely these qualities which, I would like to submit, make it a perfect illustration of what is liable to go wrong in the absence of a clear concept of architectural theory as theory--that is, as something distinct from architectural history.

How the two kinds of issue are dealt with simultaneously or alternatingly speaks most directly from a survey of the contents of the section as a whole. It consists of six chapters, each of which tackles one aspect of Semper's theoretical legacy. First comes his alleged materialism (Chapter 1). This--whether Semper must be considered a materialist or an idealist, and, in either case, in what sense--can pass for an aesthetic issue indeed, but unfortunately this first chapter is so brief (about 1,000 words) that it can do no justice to the complexity of the problems involved. The chapters 2, 4, and 6 deal with Semper's appreciation of Gothic (2), his position on contemporary architecture, that is, the problem of historicism versus the chances of inventing a new style (4), and his ideas on iron as a building material (6). So all these have to do with contemporary problems of style, which is very much an aesthetic issue, except that current stylistic confusion in Semper's days was so widely acknowledged as a problem that emphasis in the discussion was shifting to finding a way-out--which is more of a procedural problem than a strictly aesthetic one. Chapter 3 is devoted to Semper's relation to the archaeologist Bötticher. This is art historical for as much as it deals with the visions of the two men on the genesis of Greek architecture, and more strictly aesthetic where the nature of its excellence is at stake. Chapter 5, finally, entitled 'Semper's Position on the Primitive Hut,' deals almost exclusively with art historical speculation.

And so, in making up the balance of these six chapters, what we see is that at least three aspects of 'Semper's Aesthetic Theory' are carefully explored: his thoughts on Gothic, present-day historicism, and the use of iron. His aesthetic evaluation of the Greek architectural paradigm is discussed at some length as well, but as indicated (§ 9.4), as a result of focusing on architectural
symbolism rather than architectural illusionism major differences between Semper and Bötticher are overlooked. A whole range of other aesthetic issues is not discussed at all. Apart from the one of materialism versus idealism, and that of architectural illusionism, these include his position on color in architecture--painted or structurally applied--and the kinds of symbolism Semper endorsed versus the ones he rejected. What is more, the argument consistently remains on an average level of abstraction, roughly the one where architectural theory verges on architectural history. Aesthetic positions are explored neither in depth, that is, in their philosophical background, nor in their practical specification and implementation.

Structures of argument in Der Stil, or what that work contributed to contemporary debates on style, hardly fare better. A first place to expect something in that vein is the chapter (4) on Semper's position regarding the architecture of his days. However, all we find there is that at the end [pp. 163-64] it is noted how in Semper's view the individual architect, active in the present, has little influence on the near-cosmic event that sometimes occurs, when all of a sudden genius gives "artistic form and expression to the idea that for a long time had been present in society, striving to become manifest"--to which Herrmann adds:

Semper's theoretical writings contributed a great deal to the pursuit of the less distant aim. His main work, Der Stil, contained the practical instruction, while the manuscript of "Theorie des Formell-Schönen" (and in shorter form the 'Prolegomena') outlined the theoretical foundation comprising the three basic qualities of formal beauty--symmetry, proportion, and direction.

What 'practical instruction'? There is, for what I know, no answer to this in Herrmann's book, but for sure the above statement must be seen in combination with the following from Chapter 1 [pp. 122-23] of the same section:

Realizing that his contract for Der Stil precluded the possibility of publishing any other manuscript he had in hand, he decided to make use of the greater part of the preface and introduction to Theorie des Formell-Schönen and work it into the prolegomena to Der Stil. In this way he hoped to ensure early publication of his theories of art, apparently not minding that these purely theoretical observations would appear to have little relevance to the empiricism of Der Stil.

Observe how an important element of Der Stil (one that, as indicated, § 8.8, has an impact on virtually every chapter of it) is dismissed as irrelevant on biographical evidence, and how the claim of Der Stil's empiricism is subsequently based on that dismissal. Such reliance on biographical evidence in cases where the chances of finding an explanation in Semper's writings

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have not been exhaustively explored is a recurring trait in Herrmann's book—and another way to obliterate the distinction between history and theory. Two other cases have already been reviewed: the way Semper presumably changed his mind about the virtues of Gothic architecture after in 1844 he had fallen victim to a Gothic conspiracy that sneaked away from him the commission for the St. Nicholas Church in Hamburg (§ 8.4.1) and how Semper's repeated taunts at Bötticher are explained (§ 9.4) from envy about discoveries Semper would have loved to claim as his own.

But let us return to Der Stil's alleged empiricism and practical instruction. The question as regards the former is whose empiricism is at stake: Semper's or Herrmann's. Early in the Prolegomena, to be sure, Semper presents his magnum opus as an 'empirical theory of art (or of style)' when he states [DS.VIII]: "Die empirische Kunstlehre (Stillehre) ist auch nicht reine Aesthetik,..." (see § 8.3 for a longer quote), but, for one thing, that is to mark the difference with speculative aesthetics in the first place, and, for another, even if Semper's approach was empirical, this, as indicated (§ 8.8), was not the naive kind of empiricism which holds it can do without hypotheses, or that facts alone prove much. Therefore, Semper would never separate theoretical observations from empirical ones the way Herrmann does in the above quotations. With respect to the aforementioned 'practical instruction' Herrmann notes elsewhere [op cit., p. 121]:

The reason that he [Semper] considered material and function to have this overriding importance lay in the task that he had set himself: to trace the way back to the archetypes and show that the primitive makers of the whole range of artifacts had instinctively followed principles identical with those that were in time established for architecture. It was a purely empirical approach; he did not intend to expound on art theory.

This suggests such principles can be induced from a careful examination of history, that this, moreover, is what Semper did, and that the ones he found in applied art were directly applicable to architecture. If this indeed is Herrmann's idea, it is all the more incomprehensible that the principles Semper presumably arrived at are not more clearly expounded in Herrmann's book. Or are we supposed to read Der Stil as an instruction on how to 'dress'—in architecture as in everyday life when we get up in the morning or go out at night? The honest truth is, I do not know.

In the meantime interest in Semper in the United States was spurred by a rising interest in French Beaux-Arts architecture and attendant theory. Scholarly interest in these phenomena surfaced first, long before such was fashionable, in the writings and teaching of Donald Drew Egbert (1902-73). It has an echo in the writings of Vincent Scully (1921-), who at least expressed a positive
appreciation of American Beaux-Arts buildings\textsuperscript{313}. In the early seventies it received a strong impetus from a new generation of architectural historians, many of them students of Egbert, like Neil Levine and David Van Zanten. Semper's contribution to the polychromy debate was explored in Van Zanten's dissertation (1970) and subsequent publications, but a first book to be completed on this side of the Atlantic and wholly devoted to Semper had to wait another decade, that is, until Harry Mallgrave's dissertation of 1983, \textit{The Idea of Style: Gottfried Semper in London.}

Unfortunately (for those like me who are in search of other readings of \textit{Der Stil}) this is not a study of that work in the first place. Instead, it focuses on what came before and afterwards, that is, on Semper's writings of the 1850s and the lecture \textit{On Architectural Styles} (1869) plus the few pages, largely based on that, which were completed of the third volume of \textit{Der Stil}--as well as on what others (philosophers, artists, and art historians, whose works make up the intellectual background against which those by Semper appeared) had to say on this and related issues. In particular Mallgrave states as his intention [p. 325]:

.. to explore the contention I posed at the start of this work--namely, that Semper's architectural theory over the course of its development can be read with greater thematic unity than previously stated, and that the principal theme of his architectural investigations centered on his search for a concept of style. The continuity of Semper's thought stretches from \textit{Vorkäufige Bemerkungen} and his inaugural Dresden lecture in 1834 to his attempt to complete \textit{Der Stil} in 1870. This underlying conception of style, initially grounded for Semper in the Winckelmann-Rumohr tradition in Germany, eventually came to be based, not on his ostensible attempt to define mechanically the coefficients of style, but on a more radical idea of style, rooted, as any authentic stylistic conception must be, in an artistic attitude similar to that found in classical rhetorical theory.

As indicated in the phrase ".. as any authentic stylistic conception must be .." a bias toward an elocutionary concept of style is frankly confessed. The claim that Semper eventually endorsed it too is based on, among other things, the impression that in \textit{On Architectural Styles} a more important role is assigned to personal expression and individual invention as determinants of style than had been done in his earlier writings.

Of the material collected in Mallgrave's dissertation much is valuable for whoever is in search of Semper, and numerous interesting observations are made on the way, such as [p. 99] that the greatest strength and originality of the \textit{Preliminary Remarks} lies neither in the archaeological discoveries it reports, nor in the aesthetics of Greek polychromy, but in fundamental observations regarding evolution of style in general. Besides, at least a serious effort is made to do what Herrmann refuses to do: explore the wider philosophical
and literary background to Semper's conceptions of art and architecture. And at least so much is achieved, that Semper's thought is emphatically placed in a German tradition, very different from what at the same time was going on in England and France. That the Preliminary Remarks are the exception, still strongly rooted as they are in French rationalism, and the resulting discontinuity between this and all of Semper's later works, is largely overlooked, and so is the whole line of thought that runs from Kant and Schiller to Schopenhauer, Wagner, Semper, and Nietzsche\(^{314}\). Only Kant is mentioned, as one whose way of thought may have reached Semper through his teacher at Göttingen, K.O. Müller\(^{315}\), but against which in the Preliminary Remarks he revolted.

And so, whatever interest there may be in the several parts of the book, the choice to focus on a concept of style in retrospect seems unfortunate. It draws attention to numerous statements which, even though issued by celebrities like Winckelmann, Lessing, Goethe, Schelling, Hegel, Müller, Rumohr, Quatremère de Quincy, and Semper himself, are so diffuse that it is hard to make anything truly interesting out of it--but that, of course, remains a matter of taste.

In 1989 this dissertation was followed by an anthology of Semper's most significant texts, entitled The Four Elements of Architecture and Other Writings, translated and introduced by Mallgrave, with a preface by Joseph Rykwert, and Wolfgang Herrmann listed as co-author. To this I have likewise frequently referred, and there would be no reason to go over it again, if not for certain differences in interpretation which appear to be intimately related to different translations of the German. Of these at least two are interesting enough to be reviewed. One is a translation of 'Vernichtung der Realität' (which occurs in a number of places in Der Stil, most prominently in the footnote to § 62 quoted in § 9.3.1 above) as 'denial of reality.' A more literal translation, of course, is 'destruction of reality,' but considering that that is unusual in common English, whereas 'denial of reality' is not, and that, whatever the differences in purport between the two expressions, they cannot be of great consequence, Mallgrave and Herrmann decided on the latter\(^{316}\). However, 'destruction' reminds of conquest, 'denial' of escape, so there is a difference, at least in connotation. 'Vernichtung,' moreover, intentionally or not so, holds an allusion to Schiller's dictum that in art form should destroy content\(^{317}\). So in the present study I have held on to a literal translation. The issue might seem an academic one, if not for the fact that it is but a small step from a denial of reality to a denial of the material in architecture, and that the latter is precisely what in his introduction to these translations Mallgrave holds Semper to endorse\(^{318}\).

A second instance is the way Mallgrave and Herrmann deal with the words 'Tendenz-' and 'Tendenzeln.' They occur twice in the following fragment of the Prolegomena, quoted before in § 8.7.2:
Another retroactive effect of speculative philosophy on the arts is evident in the iconographic art of moralists and futurists [Tendenz- und Zukunftskunst], in the hunt for new ideas, the boastful display of thoughts, profundity, richness of meaning, and so on, and so forth.

This appeal to nonartistic interest, this moralizing [Tendenzzeln] (deservingly echoed in the ecstatic explanations of art and the often comical mania for interpretation on the part of connoisseurs and archeologists) are typical either of times of barbarity or of decline. Art on its highest level hates exegesis.

The words, for sure, are hard to translate. In the above case I chose 'moralistic' and 'moralizing,' but actually they hold the middle between this and 'didactic'—with undertones that either teaching or moralizing proceeds in a strongly biased way (as accurately reflected in the Dutch word 'tendentieux'). Mallgrave translates the first occurrence as "the iconographic art of the trendists and futurists," the second is simply skipped, ignored, left out 319--why? Because it had already occurred in the preceding sentence, and so there was no need to repeat it? Or because it seemed irrelevant anyway—as indeed it is, when translated as 'of the trendists?' The fact is that in all of the aforementioned works by Herrmann and Mallgrave the whole issue of Semper's profound dislike of 'Tendenzsymbolik' is completely overlooked—and hence another major link to Kant and Schiller. Observe, for instance, how in the Briefe Schiller employs the word 'Tendenz:


Or, in English:

A beautiful art of passion does exist, but a beautiful passionate art is a contradiction, as the inevitable result of beauty is freedom from passions. Equally contradictory is the concept of a beautiful teaching (didactic) or improving (moral) art, for nothing is more at odds with the concept of beauty than to give the soul specific directions.

So much for English speaking lands, now let us turn to the German speaking world. In Germany and Switzerland for almost a hundred years dissertations on Semper have appeared at a pace of about one every decade. Among the
oldest is Prinzhorn's *Gottfried Sempers Aesthetische Grundanschauungen* (Stuttgart, 1909). This was followed by Leopold Ettlinger's *Gottfried Semper und die Antike: Beiträge zur Kunstanschauung des deutschen Klassizismus* (Halle, 1937), E. Stockmeyer's *Gottfried Sempers Kunsttheorie* (Zürich, 1939), Claus Zoeger von Manteuffel's *Die Baukunst Gottfried Sempers* (1803-75) (Freiburg, 1953), Heinz Quitzsch's *Die ästhetischen Anschaungen Gottfried Sempers* (1962), and most recently one by Heidrun Laudel (1992)—which unfortunately I have been unable to read, so far.

Nor did I see the one by Zoeger von Manteuffel—but as this is a case study, not a monograph, I presume that is excusable. About Prinzhorn's I will be brief. It is a clear, well-written summary of ideas as expounded in *Der Stil* and other writings by Semper, with interesting observations every now and then, but no very remarkable theses to submit. What is refreshing, though, when compared to more recent Semper studies, is the emphasis on textual as opposed to contextual evidence—and that holds likewise for those by Ettlinger and Stockmeyer.

What Ettlinger, as indicated in the title of his work, intends to lay bare is Semper's position relative to the classicist tradition—in architecture as, more generally, in post-Renaissance European culture. Semper's writings, like his architecture, are considered partly a continuation of, partly a reaction on those of Karl Friedrich Schinkel (1781-1841). The comparison does not always work out to Semper's advantage. Thus it is noted that the unity of words and deeds in Schinkel, who thought Greek and built Greek, is tragically disturbed in Semper, who like Schinkel took classical Greece as his highest paradigm, but built in an Italian Renaissance style. It is acknowledged, though, that this was partly due to his greater learning, in face of which Schinkel's naivety had to yield. As regards Semper's relationship to the archaeologist Bötticher, who more faithfully continued Schinkel's teaching, Ettlinger [pp. 93-95] like Prinzhorn [op.cit., 1909, pp. 22-28], but unlike Herrmann [op.cit., 1984, pp. 139-52] thinks there was a real issue in their disagreement on the relationship of ornament to construction in Greek temple architecture.

Stockmeyer's book of 1939, which I did not see until the present study was in a final stage of completion, turned out to be the one that in its conclusions regarding Semper's philosophical outlook stands closest to mine. That is, Stockmeyer pays as little attention as anybody else to ideas that are linked to the name of Friedrich Schiller, but Semper's indebtedness to Kant is fully acknowledge, and so is his conscious rejection of post-Kantian developments like Hegel's and Schelling's type of idealism. Likewise, Stockmeyer is the only one among all the authors reviewed so far who pays due attention to 'tendenzeln' and 'Tendenzsymbolik' as crucial to a proper understanding of what *Der Stil* is about.

Quitzsch's book, which was produced in Eastern Germany in the early 1960s, in many ways reflects the ruling culture in that country at the time. This speaks most clearly from the first part [pp. 1-33], which deals with Semper's
political outlook and his ideas on interactions between art and society. This first part is linked to the larger second half, which focuses on Semper's more strictly artistic conceptions, by way of a short chapter [pp. 34-38] in which two phases are distinguished in his literary output. The first stretches from the *Preliminary Remarks* through his years in London, the second from his early London years (apparently there is some overlap) till his death in 1879. During the first his major concerns were the polychromy debate plus the relationship of architecture to society, but then he made his peace with society as it was, and for the rest of his life concentrated on more technically aesthetic matters. It is obviously the first phase which carries away Quitzsch's most profound approval when he states [p. 36]:

Every theory of art that dissociates the growth of art from the history of society, in order to explain the laws that govern the development of art must take refuge to mystic powers, or speculatively assumed eternal laws. This, for instance, is very obvious in Semper's works.

*Science, Industry, and Art* (1852) with its explicit criticism of capitalist artistic production and speculation is held in high regard, whereas toward *Der Stil* the author has mixed feelings. Even so, this does not entitle us to push aside as irrelevant all of Quitzsch's findings. On the contrary, when he notes [p. 70]:

Thus Semper's "practical aesthetics" eventually becomes an investigation of form, whereas aspects of content are drastically pushed back [unter weitgehender Zurückdrängung der inhaltlichen Seite] ...,

or [p. 73]:

But this idea of the emancipation of form from matter should not be understood as meaning that now form could exist independently of the latter ...,

he has a point which in more recent interpretations by and large got lost. As indicated in § 8.9.2, there is, on the other hand, little ground for Quitzsch's mechanistic interpretation of Semper's views.

So much for either English or German speaking lands—what about the rest of the world? Because, for what I know, there has never been much of a reception of Semper's works at all in countries like France, Spain, Italy, or Russia, this remainder of the globe eventually may very well come down to The Netherlands plus the Flemish part of Belgium, and possibly Scandinavia or some more remote parts of the former Austrian empire—but as I know nothing about the latter, let us for now confine ourselves to the former. Of Berlage's
rationalist interpretation of Semper's ideas I have already come to speak in § 9.8. That in Belgium his almost exact contemporary Henry Van de Velde (1863-1957) stood in a similar relationship to Semper is quite possible, but once again I am not sure. More recently, Semper's ideas were reviewed in a dissertation by Pieter Singelenberg, *H.P. Berlage, Idea and Style: the Quest for Modern Architecture* (Utrecht, 1972). As indicated in its title, this is a Berlage study in the first place. Nor does it aim at a new interpretation of Semper's theoretical legacy. As it contains the at the time (1972) arguably most complete and accurate summary in English of Semper's theories, it deserves to be mentioned all the same.

More that relates to other readings of Der Stil is collected in the aforementioned *Gottfried Semper und die Mitte des 19. Jahrhunderts* (Basel/Stuttgart, 1976, Birkhäuser), a collection of twenty essays by twenty scholars from all over the world who in December 1974 convened for a conference at the Eidgenössische Technische Hochschule (ETH) in Zürich, and in an extensive catalogue to an exhibition in Dresden in 1979, entitled *Gottfried Semper 1803-1879: Baumeister zwischen Revolution und Historismus* (München, 1980: Callwey)--but as in a case study like this there is, as indicated, no sense in trying to be complete, suffice it to refer to what reference has already been made to these works.

13.2 'The Seven Lamps' and 'Stones of Venice'

Much as has been written about Ruskin's life, works, and influence (a complete, up-to-date bibliography is a book in itself), the portion of it that may count as systematic analysis of his architectural thought is remarkably small. Most Ruskin studies were written from different angles—literary, philosophical, socio-moral, or whatever. Some of these, particularly those by Rosenberg (1961) and Stein (1967), had a noticeable impact on architecture-oriented studies that would follow, but they themselves leave many questions in that field unanswered. And as for studies that do focus on Ruskin as an architectural critic and theorist, for as much as they do not indulge in biographical detail, they tend to give more attention to influence emanating from the man's architectural writings than to their content.

Traditionally, the questions that have dominated the works of Ruskin's architectural historians concern (a) his role within the Gothic revival, and (b) his contributions to the rise of modern architecture. Such is exemplified not only in the works of Pevsner (see § 10.2) and Giedion, but in older ones, like Charles Eastlake's *A History of the Gothic Revival* (1872), or Kenneth Clark's *The Gothic Revival: An Essay in the History of Taste* (1928) as well. More recent works written from this perspective are Kristine Ottesen-Garrigan's *Ruskin on Architecture: His Thought and Influence* (1973) and Michael Brooks's
John Ruskin and Victorian Architecture (1987). Let me deal with this category of architectural Ruskin studies first, and then see what others are left to discuss.

In Eastlake's study of 1872 one chapter [pp. 264-280] is devoted to Ruskin's writings in particular. As an influence on Gothic revival architecture his name occurs in a dozen more places. The chapter on his writings, which praises Ruskin's powers of observation and his style, while finding little coherence in his ideas, least of all in those of The Seven Lamps, sets the tone for many Ruskin studies to come. The Stones is considered in every way the better and more important work [p. 274]. It is praised for having opened its readers' eyes to beauties they were unaware of. As an actual influence on the architecture of his days, this widening of the artistic horizon is considered a mixed blessing, though. Thus Ruskin is held at least in part responsible for much 'reckless extravagance' by architects who revelled in his writings [p. 357]:

Under the influence first of Pugin and afterwards of Ruskin, architects found themselves suddenly emancipated from the conditions and restrictions which had hampered their efforts, and the result was at first a reckless extravagance of design. It was delightful to invent new mouldings ... They had their liberty, and like all liberty thus suddenly and lawlessly attained it was woefully misused. The absurd and barbarous specimens of modern architecture which have been erected in this generation under the general name of Gothic have done more to damage the cause of the Revival than all that has been said or written in disparagement of the style.

Sir Kenneth Clark (1903-) is a remarkable figure in the history of Ruskinology, so to say, if only for his profound and prolonged interest in the subject at a time when that was no longer the fashion among architects, art historians, or whoever. In The Gothic Revival: An Essay in the History of Taste (1928), where just one of ten chapters deals with Ruskin and his architectural impact, this is not yet wholly evident, but when eighteen years later (1946) Clark's inaugural lecture in Oxford is about 'Ruskin at Oxford,' it is. In 1949 follows a highly informative introduction to a reprint of Praeterita, and in 1964 an anthology of fragments from Ruskin's works, initially collected and arranged for personal use, but eventually published as Ruskin Today. In the introductory chapter Clark points out how reading Ruskin became unusual during the first two decades of this century and would remain so until the present day (1964). "No other writer," he suggests, "perhaps has suffered so great a fall in reputation as Ruskin." Such, I presume, with equal or more justice could have been said for Semper, but the remark is made for Ruskin and blamed on his moralism, his pulpit style in the first place, which was as fashionable in Victorian times as it is not today. Nonetheless Clark sees three reasons why people should still (or again) read Ruskin. The first is literary (Ruskin as a 'poet'), the second
biographical (Ruskin as a fascinating character), and only the third remotely theoretical. Regarding the latter, attention is drawn [pp. XX-XXI] to his rejection of "theories of beauty founded on taste or rules of proportion," his insistence on the importance of sensibility, his "passionate writing about the supremacy of colour," and "a conviction of human wholeness which exposed the hollowness of 'aesthetic man.'" This closely parallels Rosenberg's findings of a few years earlier (1961), but it all remains abundantly vague and in no way suggests that Ruskin made a significant contribution to architectural theory proper. Nor does one encounter anything beyond the above in the pages [125-26] that deal specifically with *The Seven Lamps* and *The Stones*. It is noted [p. 124] that of "Kant and Hegel, and the other founders of modern aesthetics he was, and remained, totally ignorant," and that his only philosophical basis when he started working on *Modern Painters* was "a slight acquaintance with Aristotle's *Ethics* and Locke's *Essay on Human Understanding.*" As indicated by Landow (1971, see § 10.6 above), the statement is correct as far as Kant and Hegel are concerned, but not in general. Most curious is this identification by an Englishman of German philosophy of art with such philosophy in general, and the consequent lack of awareness of British associationist philosophy as a major force in this field, older than Kant and in many ways occasioning the latter's thought. Apparently it was not until the late 1960s or early 70s that Ruskin's commentators became aware again of this line of thought and influence. We shall recur to this when in a moment we will come to speak of Landow's Ruskin study of 1971.

Among those who loved to quote Kenneth Clark as the greater authority on Ruskin was Sir Nikolaus Pevsner, whose slightly biased ideas on the issue have already surfaced at various places in Chapter 10 above. Thus when Clark in the introduction to *Ruskin Today* confesses that:

> Whenever I have seen a biblical quotation in the offing, I have begun to lose interest, because I know that at this point Ruskin will cease to use his own powers of intelligent observation, and rely on holy writ to save him further thought.

Pevsner eagerly accepts it as an excuse to do the same. Clark's remark, however, should be seen in context with an acknowledgement, earlier in the same book [p. IX], that "Ruskin, all his life, was deeply preoccupied with religion," but that he (Clark) could not relate to this branch of his thought, and therefore included very few quotations of a religious purport in this anthology. What nonetheless he could relate to, and as early as 1928 (long before Rosenberg would do the same) described very lucidly, was Ruskin's rhetorical use of biblical references and quotations. Thus in regard to the opening chapter of *The Seven Lamps* he notes [op.cit., 1928, p. 196]:

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Ruskin's protestant eloquence achieved its end. Had he not salted his description of Italian Gothic with attacks on Rome, he would certainly have been considered a Roman Catholic apologist.

And a bit later [p. 198]:

Read in the light of modern art criticism, Ruskin's constant appeal to ethics seems strange, and it is with this that his doctrines are now associated. But his contemporaries felt the exact opposite. They always spoke of Ruskin as putting architecture on an esthetic basis; and in doing so they were perfectly right.

At the same time, again like Rosenberg thirty years later, Clark is aware of deeper layers of religious experience in Ruskin which are not biblical. So it is questionable whether at this point Pevsner really shares the company he thinks he is in.

Approximately on a level with Pevsner's is Sigfried Giedion's affinity with Ruskin. In one of the latest (1982) editions of Space, Time and Architecture the latter is mentioned twice in relation to William Morris, and twice as the archetypical hater of industrial society, each time very briefly. More famous is in the same work a comparison with Winckelmann who, when his carriage crossed the Alps, pulled the curtains not to have to watch the ferocious countryside. Ruskin, so the argument goes, reacted the same to the unspeakable beauties of a future architecture in iron and glass--and that is about it, as far as Giedion is concerned.

On Garrigan's book of 1973 we can likewise be brief. She is way too busy exploring what Ruskin ignored in architecture (three-dimensional composition, most of all) and playing down his alleged influence on either the Gothic revival or modern architecture, to notice what he actually wrote, or to acknowledge what influence he did exert. She might in this connection have pointed to movements in architecture which came after the Gothic revival and before modernism, but she does not. The method of research she confesses to is odd. Following Graham Hough who is quoted as saying that "Ruskin's thought has a way of accumulating around a few focal points," she states:

... it is the sheer persistence with which an idea appears rather than the brilliance or extremity of its expression that is crucial to establishing these focal points and evaluating Ruskin's thought justly. Quantity becomes more important than chronology--even than quality.

It is a method that seems more appropriate to assess the symptoms of a sick mind than to reconstruct substantial theory--and indeed Garrigan's work gives
little evidence of a serious effort at the latter.

Brooks's study of 1987, although comparable in scope, is much more sympathetic to Ruskin and, as a result, arrives at altogether different conclusions. Far from playing down Ruskin's influence on Victorian architecture, Brooks presents an accurate account of it, which leaves no doubt as to its magnitude. On the other hand, Ruskin's architectural writings and theories as such are only briefly reviewed. The book is about 'Ruskinism' in the first place.

If subsequently we turn to studies which approach Ruskin from different angles than his place within the Gothic revival, a first one (if once again we hold on to a roughly chronological order) of major interest is Roger Stein's aforementioned (§ 11.5) *John Ruskin and Aesthetic Thought in America: 1860-1900*. As indicated, this does not deal with Ruskin's architectural writings in particular—and when it does, not very accurately, presenting him as an advocate of photographic realism in naturalist decoration, and so on. Its basic subject matter, the reception of Ruskin's works in nineteenth-century America, is highly fascinating, though. It is convincingly argued that the impact of Ruskin's works on American thinking about art was tremendous, and why that was. What Ruskin did was extend his readers' interest from two issues they were familiar with, nature and religion, to a third with which they were not: fine art. What made his views all the more acceptable was that, unlike Emerson and other romantics in their own country, Ruskin convinced his readers that he could be trusted as not having surrendered to some heathenish form of pantheism. That in the final volume of *Modern Painters* he did what he could to spoil this image, apparently made little difference.

When a few years later (1970) John Summerson for once stepped over his dislike of the Victorian period and wrote a book about it, it turned out that he did not altogether share the commonly accepted view of Ruskin as a Gothic revivalist. Instead of endorsing a Gothic or any other historic revival, Ruskin, in Summerson's view, pointed to *no style*. In this connection Robert Kerr (1823-1904) is mentioned as one who as early as 1860 endorsed this point of view. It should be noted, though, that Kerr's interpretation was based on *The Two Paths* in the first place and adapted to his own polemical needs. For reasons that have been expounded in § 10.9.2, Summerson's view is also contestable, but his independence from the predominant opinion in 1970 remains noteworthy.

Meanwhile nothing could be farther from the truth than to suggest Summerson's incidental remarks raised a wide interest in the subject. It would take almost another decade before a first study would appear which in an unassuming, straightforward way presents a systematic, well-illustrated survey of what Ruskin actually had to say on architecture. We are talking about John Unrau's *Looking
at Architecture with Ruskin of 1978, to which frequent reference has already been made in the above. At the outset the author states as his intention to deliberately ignore "the ethical, religious, and historical theories woven around architecture in his writings," considering that these "are intriguing, but have already received attention from many able scholars; whereas a simple, concentrated survey of how Ruskin looked at buildings and interpreted what he saw has long been overdue." In the light of Ruskin's fundamental empiricism this choice is defendable, although it does result in a certain lack of depth. On the other hand, it is precisely in its simplicity that Unrau's study makes it painfully clear how most others who have written about Ruskin in relation to architecture have indulged either in biographical detail or in speculations on influence--without looking first at the actual content of Ruskin's supposedly influential message. Thus Unrau has little trouble showing how, as opposed to what Frankl and Garrigan thought, Ruskin most emphatically deals with buildings as three-dimensional things. Pictures and drawings as added to Unrau's text are very helpful in making Ruskin's writings more accessible.

Nonetheless, Unrau's thesis that what Ruskin offers is a truly encompassing and consistent theory of ornament, remains slightly problematic. As indicated (§§ 10.7.3), it is precisely in broad generalizations regarding function and nature of ornament that Ruskin tends to be most blatantly inconsistent. Besides, at a time when it is no longer fashionable to discuss buildings in terms of construction plus ornament, Ruskin's works, approached as theory of ornament, may loose some of the topicality they might retain when dealt with as, for instance, theory of architectural detailing--which moreover covers their actual content even better. Another problem is that all of Ruskin's writings by and large are dealt with as one synchronic whole--which obviously they are not. Referring to these writings by way of page and volume number of the Cook & Wedderburn edition further obscures the source of quotes and summaries. This becomes particularly evident in the section on color. Unrau, who is a bit skeptical about Ruskin's claims regarding color's independence of form, insists that another, and probably more important principle of architectural coloration is its gradation. Most of the quotes from Ruskin's works, however, which pertain to this are from texts that deal with drawing and painting. In regard to architecture Ruskin hardly ever brought it up, and besides, there is nothing of the kind in some of Ruskin's favorite polychrome buildings, like Giotto's Campanile, or the 'streaky bacon' of Sienna's cathedral.

A work to which frequent reference has been made throughout this study, both in connection with Semper and with Ruskin, is Gombrich's The Sense of Order (1979). The book is about history and psychology of decorative art, not about either of our two authors in particular, but Ruskin's name is among those which turn up most frequently, and one paragraph [pp. 38-46] is wholly devoted to him. Gombrich praises his intellectual power which
he qualifies as "a power wrested from despair" [p. 38]. What in this view made Ruskin so desperate were the effects of industrialization on art and architecture. His originality in countering this situation is localized primarily in emphasizing "the importance of organic rhythms in the creation of artistic orders" [p. 41], his graphological approach of art, which made him a precursor of expressionism. It is an idea which already in 1955 had been propounded by Herbert Read, and the least one can say about it is that indeed it is an element in Ruskin’s work that one can choose to emphasize. So much does not hold for the way in which Gombrich in full seriousness contends [pp. 38 and 47] that the political unrest which swept Europe (though mostly continental Europe) in 1848-49 was what prompted Ruskin to write The Seven Lamps. No source is mentioned, and all I could find about it in Ruskin’s own works is a remark in the preface to the first edition of The Seven Lamps (1849), about "the Restorer or Revolutionist," who might have done irreversible harm to the author’s favorite medieval buildings before the latter even got a chance to describe them properly, and who so had forced him to interrupt work on the remaining parts of Modern Painters, in favor of this architectural manifesto which he presents as something put together in a hurry. We have seen, though, how the latter is hardly the case. Considering how most of the material for the book was collected during that most decisive trip to Italy which Ruskin made in the summer of 1845, and how in his aesthetic theories there is perfect continuity between the final chapters of Modern Painters 2 (which he completed shortly after his return from that trip) and The Seven Lamps, it may as well be argued that his career as an architectural critic, which started with The Poetry of Architecture in 1838, was interrupted by the sudden need he felt a few years later to defend Turner against contemporary criticism, and the resulting first two volumes of Modern Painters. So what is the background of Gombrich’s theory? Is he trying to stigmatize Ruskin as an impossible reactionary? Or did he thoughtlessly take it over from someone else who did have such malicious intention? I fear we can only guess.

Equally questionable, for reasons that have been expounded in §§ 10.4.2 and 11.4.5 of the present study, is the way Gombrich presents Ruskin as the great opponent of all musical analogies in the study of decorative art. It is stated [p. 38]:

The proposal to regard the art of ornamental design as a sister art of music rather than of painting was to have enormous consequences for the status of decoration. But this retreat into a theory of pure form was opposed by the greatest of the Victorian critics, one who took decoration at least as seriously but approached it from a very different angle—John Ruskin.

So much for Gombrich. In the United States it has, as indicated (§ 11.5), been in studies on the life and works of Louis Sullivan most of all that over
the last two decades Ruskin has received renewed attention from architectural historians. It started in 1969 with a dissertation by Paul E. Sprague, *The Architectural Ornament of Louis Sullivan and his Chief Draftsmen*\textsuperscript{334}. That is to say, Sprague does not believe in any direct influence from Ruskin (who is considered a prophet of unrestrained naturalism\textsuperscript{335}) on Sullivan (who in his view dealt with nature in a more abstract and spiritualized way), but does point to the Gothic revival as the ultimate source of Sullivan's ornament. His apprenticeship at Frank Furness's office in 1873 in this regard was a major event, but, as Sprague indicates [pp. 57-58], Sullivan's interest in Gothic detailing must have been older and may well have been what directed him to Furness.

Sprague's book on the issue was followed by an article of Theodore Turak\textsuperscript{336} and two more dissertations, both of 1981: Narciso Menocal's *Architecture as Nature—The Transcendentalist Idea of Louis Sullivan* (Madison, WI) and Lauren S. Weingarden's *Louis H. Sullivan's Metaphysics of Architecture: Sources and Correspondencies with Symbolist Art Theories* (Univ. of Chicago)--but as far as Ruskin's role is concerned, none of these presented anything new. It was only a few years later, in a contribution to *Chicago Architecture 1872-1922* (1987) entitled 'Louis A. Sullivan's Ornament and the Poetics of Architecture,' that Weingarden picked up the issue where Stein had left it in 1967. She submits that Sullivan must have been quite familiar with *The Seven Lamps* and *Stones of Venice*, and that these count among the major sources of his own ornamentation. The point is argued convincingly as far as visual and biographical evidence are concerned, much less so where the author claims that in the aforementioned works Ruskin presents a symbolist theory of art, comparable in spirit to what a few decades later Sullivan endorsed. It is stated [p. 230]:

Sullivan's verbal methods for reading, interpreting, and articulating a primal language of nature can be discerned in his use of metaphor as a literary feature and in his paraphrasing of scientific, philosophical, and poetic texts. Since he concurrently formulated a visual language of nature's text, his metaphorical and language-making procedures can also be demonstrated by verbal and visual references to aesthetic texts. The second part of this essay will show that Sullivan used John Ruskin's symbolic readings of nature and of Gothic ornament as guides to formulate an original, natural language of ornament in order to articulate what Sullivan called a "Poetic Architecture."

And in regard to other recent interpretations of the same phenomena [note 21]:

Because of their formalist methods, Sprague denied and Menocal may have overlooked Sullivan's artistic engagement with Ruskin; see Sprague .. [op.cit.], pp. 64-65.
Having made this allegation it would seem fair if the author had indicated what methodical imperfection accounts for the same omission in her own dissertation of 1981, but anyway, what should concern us here is the claim [p. 234] that:

In *The Seven Lamps of Architecture* (1849) and in *The Stones of Venice* (1851-53) Ruskin presented a symbolist interpretation of the "organic" form and content of Gothic imagery.

The idea is not altogether new. As early as 1872 Charles Eastlake [op.cit., p. 280] speaks of undulations in the pavement of St. Mark's as reflecting "Mr. Ruskin's tendency to natural symbolism"--but can the claim be justified? In Weingarden's article it is based on sections from the Lamps of Sacrifice [SL.I.1], Beauty [SL.IV.6], and Life [SL.V.5-13], as well as from 'The Material of Ornament' [SV1.XIII.17, 20], and 'The Nature of Gothic' [SV2.VI.4-6, 10, 22, 25, 42-44, 68-69], but the way this evidence gets mixed up in order to prove the point is bizarre. Thus it is stated [p. 236] that Sullivan:

.. adapted from Ruskin artistic procedures for designing a symbolic mode of ornament derived from nature. Ruskin described such procedures in "The Nature of Gothic," in which he explained how the medieval craftsman transformed "the wayside herbage" into a symbol or "Mental Expression" of the spiritual bond between the maker and nature.

When references are checked, it turns out that "the wayside herbage" is from § 69, "Mental Expression" from § 4, and that the connecting phrase 'into a symbol' has no counterpart in any of the eleven paragraphs from 'The Nature of Gothic' to which reference is made, nor in those from *The Seven Lamps*. This leaves us with only two sections from 'The Material of Ornament' where indeed we do encounter the words 'symbol' or 'symbolical.' The first one, which claims that the proper treatment of the material of ornament is "that which seems in accordance with or symbolical of His [God's] laws" [SV1.XX.16] has already been reviewed in § 10.9.4 above, the second reads as follows:

**SV1.XX.25** The reasons which prevent rocks from being used for ornament repress still more forcibly the portraiture of the sea. Yet the constant necessity of introducing some representation of water in order to explain the scene of events, or as a sacred symbol, has forced the sculptors of all ages to the invention of some type or letter for it, if not an actual imitation.

The italics are mine and mark the only part that Weingarden actually quotes or mentions--thus once again pulling things out of context. For there is no doubt that, whereas Ruskin is aware of *water* as a sacred symbol, he sure does
not endorse a symbolic representation of it as opposed to real or conventionalized (that is, stylized) likeness. There is an amusing statement to the contrary later on in the same volume [SV1.III.30]. If there is point to the whole argument it is no other than that Ruskin frequently endorses a 'stylized' or 'conventionalized' as opposed to realistic treatment of ornament. Even then, however, this conventionalism refers to its form, not to its content, and so the whole idea of symbolism does not actually apply.

A recent interpretation of Ruskin's art criticism which also highlights its symbolist traits, but in a much more thorough and sophisticated way, is Ruskin and the Art of the Beholder (1982) by Elizabeth K. Helsinger. This brings us to a whole new category of Ruskin studies, the ones that were written from a primarily literary angle. Therefore it may be better to start with a slightly older one in the same category, The Aesthetic and Critical Theories of John Ruskin (1971) by George P. Landow, to which Helsinger frequently, and most of the time approvingly refers. One thing the two works have in common is that they both focus on Modern Painters and the last two volumes of The Stones, whereas they don't know much to do with either Volume 1 of the latter or The Seven Lamps. This fact alone accounts for many of the differences with views that have been propounded in the present study, but there are similarities as well. Thus from the outset Landow takes issue with those like Kenneth Clark, Quentin Bell, or Joan Evans, who, much as they were fascinated by Ruskin as a writer and a man, refused to acknowledge any coherent system of aesthetics in his works. To counter such popular bias, Landow sets out to reconstruct a theory of beauty from the aforementioned works, particularly from the second half of Modern Painters 2, which is most explicitly devoted to this. Such is done in an accurate and illuminating way, with due attention to Ruskin's intellectual background both in British associationism and in classicist theory of art. My main objection to Landow's approach is that, by focusing on beauty in its pure, its picturesque, and its sublime varieties, rather than on greatness, he overlooks most of what is new and important in The Seven Lamps and the first volume of The Stones. Both works (including the later volumes of The Stones) are evaluated as primarily excursions from the domain of beauty proper into those of the picturesque and the sublime, but that makes no sense for either the Lamp of Sacrifice, or those of Truth, Life, Memory, and Obedience. The Lamp of Power indeed deals with the sublime, and picturesque qualities are discussed both there and in the one of Memory--but always as something second-rate, something unauthentic that better be avoided. Besides, this one-sided attention to beauty and its correlates does no justice to another fundamental aspect of Ruskin's thought: his refusal to accept a dichotomy of aesthetic as opposed to ethical values. As ten years earlier Rosenberg put it [op.cit., 1961, p. 21]:

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The same impulse which led him to attack the deleterious fiction of Esthetic man in art led him to attack the fiction of Economic Man in society—a device for exploiting man the mechanism without worrying about the debasement of man the organism. He fought estheticism not because he feared what was lovely, but because he thought it too important to divorce from what was good and true.

Helsinger, as indicated (§ 10.3), focuses on Ruskin as an educator of tourists and art lovers, a man who shows the latter how to read and enjoy works of art and architecture they may encounter either on a Grand Tour of Europe or in the National Gallery, who points out what is particularly valuable about those works, and indicates how their excellence relates to other, non-artistic values those readers are supposed to share. Thus what Ruskin tries to do is serve as an intermediary between artist and audience, and present a way of looking at art which suits the latter as much as the former. This point of view Helsinger has worked out in a remarkably consistent and interesting way, but once again The Seven Lamps and the first volume of The Stones do not fit in so well, neither in the concept of travel guides, nor in a symbolist reading of Ruskin, nor, finally, in a growing awareness on Ruskin’s side as spotted there by Helsinger, that all truths are relative and historical. Nor has it actually been tried to make them fit in by all means. The Seven Lamps are mentioned only incidentally, and as far as Volume 1 of The Stones is concerned, the problem is acknowledged when the author notes that 'The Foundations' (the title of this volume) refers not just to the stone foundations of the Venetian buildings Ruskin is to discuss in the later volumes,

...but also to the "canons of judgment" (...) on which Ruskin’s subsequent historical and aesthetic interpretations of Venetian architecture are founded. Volume I is arranged as a systematic presentation of principles of construction and decoration illustrated by the history of Western architecture from ancient Greece to nineteenth-century England. The book is not a narrative of either the traveler's or the Venetian experience.

The only explanation she presents for this state of affairs, however, is that:

There are ... precedents for this kind of preliminary essay in eighteenth-century travel literature and in the histories Ruskin read. Although the first-person narrative was the indispensable heart of an eighteenth-century travel book, a separate section of "General Reflections" was not uncommon—as, for example, in Arthur Young's Travels in France or James Boswell's Account of Corsica; ...
writers in this genre had done the same. Holding on to a basic principle in reconstructing Ruskin's or anybody else's thought that, unless there is strong evidence to the contrary, one must assume a reasonable ground to an author's decisions, I do not think this will do.

13.3 'Community & Privacy' and 'Notes on the Synthesis of Form'

A major problem in an effort to provide an overview of critical readings and interpretations of the aforementioned works by Alexander and Chermayeff is that few studies of some size and scope seriously deal with them. For sure there is Christopher Alexander: The Search for a New Paradigm in Architecture (1983) by Stephen Grabow, to which incidental reference has already been made, and which provides an illuminating account of the evolution of Alexander's architectural thought as can be traced not only from his writings, but from his work as a practicing architect as well. The book, however, is based primarily on interviews, not on a close reading of Alexander's major publications. And so, even though very useful for its background information, it does not actually provide an interesting 'other reading' to be checked against ours. So where to find them instead? The Avery Index lists a few dozen articles about Christopher Alexander in architectural magazines from all over the world, but when these are consulted the pattern turns out to be that a brief and superficial review of those writings is followed by a more extensive discussion of how ideas as expounded there have proven their applicability in actual design or, incidentally, in design education. Besides, most of those articles give more attention to Alexander's later works (written or built or something in between) than to what he produced before 1965.

The paradoxical thing about this situation is that by all accounts Alexander's early works had a considerable impact on architectural theory and methodology of design worldwide. If so, the question is: how to arrive at an accurate idea of the reception of those early works if such cannot be reconstructed from articles in architectural magazines as mentioned? I presume that to that end one would have to concentrate on publications about issues Alexander has dealt with also, and where, accordingly, Alexander is mentioned in passing. Of these there must be hundreds, and I am afraid they are not listed in any convenient index, but in principle it should be possible to take a sample that is more or less representative for that reception in general.

Unfortunately, there has been no time to do so in the context of the present study. Nor do I think it is strictly relevant, because for this brief case study on Alexander it will be conceded (see § 14.1 below) that, if it discloses anything new not about our methodology but about the Alexander's texts, this might have been attained in various other ways as well. Nonetheless there is, among those texts that sideways deal with Alexander's early works one
that I think is interesting enough to be briefly reviewed here. In *Towards a Non-Oppressive Environment* (1972) Alexander Tzonis takes issue with the presumed 'unselfconsciousness' of environmental decision-making and design in primitive societies like that of the Dogon in Africa. Anthropological evidence points to an anthropomorphic-cosmological model that affects all major decisions in this field and of which the decision-makers are perfectly conscious. What to think of that? The evidence is strong and indeed appears to have certain consequences for the selfconsciousness of the process. On the other hand, those cosmological models are flexible and constrain the decision-making process within margins that leave considerable room for self-correcting processes of gradual adaptation and refinement as described by Alexander. So the truth may still be somewhere in the middle.

### 13.4 Emerging Patterns

After this survey of other readings of the texts investigated in the three case studies it is time now to return to the 'seven mortal sins' (aa-ag) likely to be committed in the interpretation of such texts (see Chapter 3). For three of these we have encountered so many instances that they need no further comment: readings based on too small or one-sided selection of fragments from those texts (ab), texts that are unduly dealt with as one synchronic whole (ac), and conclusions derived from contextual evidence long before textual evidence has been exhaustively explored (ae). The situation in regard to the four others is more complicated, so let them be considered one by one.

Of readings that are simply incorrect (aa)—in the sense that the conclusions arrived at do not follow from precisely those fragments of text on which they are based—we did encounter a few, but, with the exception of Weingarden's reading of Ruskin as a symbolist (§ 13.2), they had to do with minor issues, such as the role Semper assigns to metal hollow-tube columns from Persia or Asia Minor in the genesis of the Greek orders, Ruskin's recommendations on gradation of color in architecture, or Gombrich's reading of Riegl's reading of Semper. By and large the problem is not so much that other commentators of the same texts read incorrectly as that they read incompletely, or fail to check primary sources at all.

Of rhetorical means in the texts under investigation which are not acknowledged as such (ad) we have seen a few examples, but they are amply compensated by cases where serious and sophisticated argumentation is unduly pushed aside as 'rhetorical.' As can be observed in readings of Ruskin, the two phenomena often go hand in hand: elements that are obviously rhetorical, like an equalization of ornament and beauty, are used to ridicule Ruskin's work as a whole, including many of his more subtle reasonings and observations. In other words, a distinction between rhetorics and actual theory is not systematically pursued.
Of interpretations to which I cannot agree because I think they are based on erroneous translations (af) we have discussed a few in relation to Semper—but of course that remains a matter of opinion. In connection with the works of Ruskin, Alexander, or any other originally English texts the problem is less likely to occur, and French texts do not seem to raise many such problems either. As other languages than Latin, Italian, French, English, and German have a modest role in architectural theory as an intellectual tradition, and as not all the interfaces between these five are as hazardous as the transition from German to English, the problem after all may be an incidental one, but sure it does exist.

Different conceptions of the nature and function of architectural theory (ag) as what occasions different readings are not so easy to point out. Once again, the real problem appears to be the mere absence of a clear conception of these things. Herrmann's uncertain efforts to sketch a core of Semper's aesthetic theory are a case in point, particularly illuminating because all the other assets are there: great knowledge of Semper's writings, perfect command of both English and German, accuracy as a historian, and a pleasant, unassuming style of writing. Looking for a really different rather than merely absent conception of these things one might think of Quittsch's conviction as mentioned that "Every theory of art which dissociates the growth of art from the history of society, in order to explain the laws that govern the development of art must take refuge to mystic powers or speculatively assumed eternal laws." Apparently, however, this is almost of a piece with poststructuralist efforts to simply replace theory with history, so suffice it at this point to refer to Appendix 2, the one on structuralism and poststructuralism.
14. Conclusions and Suggestions for Further Research

Findings from an application to texts of a model and method as expounded in Chapters 3-5 have been summarized at the end of each case study. There it was emphasized that, even if my reconstructions would contain nothing that is absolutely new as compared to other readings of the same texts, there may still be a useful contribution to architectural theory or metatheory in the mere presentation of such reconstructed systems. If this is done with due attention to all relevant levels of concept formation and their interrelationships, and so that the resulting text remains concise yet has a certain completeness, that thanks to innumerable references each part can easily be checked or studied in more detail, and that, through a uniform structuring of themes and questions, eventually (that is, when more of such studies will be completed) the reconstructed system can easily and accurately be compared to other systems in the same tradition, that is worthwhile in itself. Few if any of the available other readings, no matter whether it concerns Semper, Ruskin, or Alexander, appear to do precisely that. Having reviewed a whole range of other readings of the texts under investigation, we nonetheless now come to the point where it is appropriate to ask, first, what is actually new in our reconstructions as compared to those other readings, and, second, for how much those new findings are due to our new methodology. This will be discussed next (§ 14.1). How those results can further be tested will be the issue of the final paragraph (14.2). A major question there will be what additional information to expect from contextual sources—the ones which so far, in accordance with the methodology outlined in the earlier chapters, have been intentionally kept at bay.

14.1 Dependence of New Findings on Methodology

Identification of Der Stil’s basic and subordinate subject matter might be a first domain where our case study presents something new, so let us start there. I have insisted on a clear distinction between art historical issues (like everything related to evolution of style) and questions which more strictly have to do with architectural theory. Now that is a methodological principle, not in itself a new finding, but a direct consequence is a rejection of a theory of dressing
[Bekleidung] and material transformation [Stoffwechsel] as the basic subject matter of Der Stil considered as a study in architectural theory. For as much as there is such theory indeed (and obviously there is), it is historically descriptive in the first place. A fortiori this holds for a theory of dressing as an extension of Semper's ideas on polychrome architecture as expounded in the Preliminary Remarks of 1834. Additional reasons not to hold on to this as the leading theme are that Der Stil provides little with regard to the aesthetics of architectural color, whereas, on the other hand, it repeatedly insists on an impression of permanence as crucial to monumental architecture. Both points in a direction opposite to that of external coloration, especially if effected through painting. And so it has been argued that if there is an inconsistency in Semper's position as regards painted architecture, the conflict is not so much between theory and praxis as between his mature system of thought versus ideas he endorsed as a young man—and refused to give up when in fact they no longer fitted in with the rest of what he had to say.

Likewise rejected is the idea that what Der Stil contributed to architectural theory was a clear and encompassing concept of style. For sure, the word as it features in the work's title refers to problems of great urgency in Semper's days, and sure the work wants to address them, but then eventually it does so in a very indirect way—and intentionally so. Semper by that time had arrived at the conclusion that to this cluster of problems there were no easy solutions. Rejected too, last but not least, is an interpretation of the aesthetics expounded in Der Stil as symbolist. Rather it is concluded that aesthetically the work focuses on conditions of successful architectural illusionism, that in doing so it recurs to and elaborates on a play concept of art as formulated in the late-eighteenth century by Kant and Schiller, and that, as a result, its perspective is formalist rather than symbolist.

Now if we look what of the above is altogether new, it must be concluded that, with the possible exception of linking Der Stil to Schiller's Briefe über die ästhetische Erziehung des Menschen (1795), nothing is. Rather it means a return from recent Anglo-American interpretations to what can be collected from various mostly older and mostly Swiss or German Semper studies. Thus Prinzhorn in a dissertation of 1909 shows himself quite aware of architectural illusionism as a leading theme, and of fundamental differences between Semper's views on this issue versus those of Karl Bötticher. Eva Börsch-Supan in a paper of 1974 does the same. Etlinger (1937) presents a plausible account of the place of classical polychromy in Semper's writings, the early as well as the later ones, and Stockmeyer (1939) links Semper's architectural aesthetics to Kant in a way I can wholly subscribe to—except that Stockmeyer too wholly overlooks Schiller's role as an intermediary between Kant and Semper.

And so, apart from a new way to evaluate and present Semper's contributions to architectural theory, the most important renewal in the Semper part of this study is in the discovery how innumerable seemingly disparate ideas of Semper as regards form, color, and choice of material, neatly fall

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into place when considered in the light of precisely this play concept of art. Those sections of Der Stil which deal with formal aesthetics, and which of late have been so problematic to various commentators, quite simply stop being so. No biographical explanation is needed to account for them. More importantly, the puzzling issue of Semper's alleged materialism as opposed to the equally striking idealist aspects of his thought begins to lose most of its mystery. Minor renewals lie in the presentation of single elements of Semper's system. Thus I have not actually encountered in other studies a decent description of Der Stil's structure of argument--and even if mine is imperfect too, at least I hope it is a step in the right direction.

So far, so good. Even if most of the above indeed is new, there is, as indicated (§ 7.1) no way to prove that the same results could not have been attained in any other way. All I can do is try to convince a reader that it is no coincidence when one approach results in findings which in others have been overlooked. Thus if, as I contend, older and mostly German studies, because they stay closer to the text while relying less on contextual evidence, in general are more successful than recent English and American ones in making sense of Semper's aesthetics, this has important methodological implications. If so, it may subsequently be asked what more specific claims can be made for the particular way of close reading expounded and exemplified in the present study. The answer is fairly easy (but also a bit trivial) for minor renewals, such as the aforementioned account of Der Stil's structure of argument: if in other approaches such elements are not separately investigated, of course it is easy to come up with a new way to do it--but what for? Does a major innovation like the aforementioned reconstruction around a Schillerian play concept of art actually depend on it? Although I cannot prove it, I insist that to a large degree indeed it does, both heuristically and as a way to account for new findings: the former because all those inventories of questions and examples dealt with, value systems referred to, actual scope of concepts that are introduced with some pretence of being leading ones, structure of argument and apparent contradictions, all of them are important steps to gradually arrive at a fresh look of the texts under investigation, the latter because without a decent account of these steps a conceptual reconstruction as presented in Chapter 9 would be suspended in midair.

So much for Semper and Der Stil. If subsequently the account is made of new findings in the second case study, the one about The Seven Lamps of Architecture and The Stones of Venice, one will likewise run into a whole range of ideas that are somewhat original but not quite. New they may seem in their new setting, but for most of them an older study can be pointed out where something similar has already turned up. Thus it has for a long time been unusual to acknowledge a systematic body of thought in Ruskin's writings on art and architecture at all. Older studies, even if they praised Ruskin for
his style, sensitivity, and perceptiveness, seldom did so for the consistency
or conceptual unity of his works. As moreover these older studies tend to
deal with the same works as a critical footnote to Gothic rationalism in the
spirit of Pugin, only marginal attention is paid to fundamental differences
between the two. Among more recent studies some do recognize a substantial
body of ideas in Ruskin's architectural writings, but as the outcome of an
empirical approach to ornament, material, color, and other surface effects,
and once again without much conceptual unity or philosophical sophistication.
Studies that recognize both a whole range of interesting observations and a
conceptual core of some substance, even though rare, however do exist. A
relatively early one is George Landow's *The Aesthetic and Critical Theories
of John Ruskin* (1971). That this was also one of the first studies to fully
acknowledge Ruskin's roots in eighteenth-century associationist philosophy
can be no coincidence, for an awareness of the one naturally entails a recognition
of the other. Nonetheless, and although I would not dare to call it a major
discovery, I have not seen another study yet which properly describes the
relationship between a concept of greatness as implied in the whole structure
of *The Seven Lamps*, and, on the other hand, associationist philosophy.
Consequently, most commentators do not seem to realize that *The Seven Lamps*,
even though older and apparently more chaotic than *The Stones*, is conceptually
the strongest of the two.

Even so, and as opposed to what was stated above for the first case
study, in regard to this second one I am not so sure that its two conceptual
reconstructions--one of *The Seven Lamps* alone around the aforementioned
concept of greatness, another of both this older work and *The Stones* around
one of living-walls-that-are-made-to-last--are its most interesting new elements.
Eventually that, of course, is up to the reader to decide, but compared to what
in this vein could be achieved for *Der Stil*, I would say the results remain
a bit thin. On the other hand, these works by Ruskin provide a perfect
opportunity to demonstrate two other things. One is the importance of
distinguishing between value systems and their role within systems of
architectural theory versus what place should in the same context be assigned
to ideologies. In an assessment of the place of religious elements in Ruskin's
thought this turned out to be particularly helpful, but I would like to submit
that it can illuminate a wide range of topics in (the history of) architectural
theory. Another is why one should not from an incidental use of the words
symbol and symbolism, or from an equally incidental linguistic analogy, too
easily decide that in these works Ruskin endorses a symbolist view on the
nature and function of architecture (the latter, of course, for as much as it
transcends 'mere building'). These two points, I presume, are somewhat new
as well, and so are a few links that through simple comparison of texts suggested
themselves between some of Ruskin's works and those by Alberti, Alison,
and the Third Earl of Shaftesbury.

For the dependency of these results on the methodology employed, suffice
it to refer to what was stated above in regard to the first case study, for the two situations are analogous.

As for the third case study, the one on Alexander's early works, it is much harder to show, and indeed less likely, that the conclusions arrived at could not have been attained in various other ways. The reason is that much of our methodology could not be deployed there. After an inventory of apparent contradictions there was little left to bridge by way of a unifying concept. Instead, the contradictions seemed quite real. The relevance of this third study relative to the methodology expounded in the earlier chapters lies elsewhere: in demonstrating how a more recent system, focusing less on architectural detailing, more on procedure of design and on functional layout, can be neatly summarized in terms of the same model as applied to mid-nineteenth-century systems, and thus can be made comparable to the latter.

14.2 Further Testing of the Results

Model and method can be further tested by adding to the number of case studies, but that is so obvious as to need no further explanation. More interesting is to see how contextual evidence, which so far has intentionally been ignored, might as yet affect the conclusions of the three completed case studies, either in the sense that these conclusions must be revised, or that they can be better substantiated. Thus it would be fairly disastrous if a letter or a set of lecture notes might turn up in which Semper either hails Hegel, Fichte, or Schelling, or in a knowledgeable way makes fun of Schiller and Kant--and as few statements by Semper are known which directly refer to any of these philosophers, how can we be sure no such thing will happen until we have a more or less complete survey of both his correspondence and unpublished lecture notes--or even what other people have laid down in accounts of conversations they once had with the man. Of course, one can also leave it open, publish the results as based on systematic reading of his published writings alone, and leave it to others to attack them from those more contextual angles, but that does not change the situation that these secondary sources do exist and have a certain bearing on the conclusions of strictly textual research.

Other sources of contextual evidence which often have a significant place in architectural monographs are an author's output as a designer and his private life--that is, all those of his activities, and all relationships he was involved in, which at most indirectly relate to his career as a writer. Obviously this cannot altogether be ignored either, but I insist that efforts to explain an author's writings from his life, or to read actual design decisions as even so many theoretical statements, remains a hazardous way to proceed.

Whatever, on the other hand, can be found of written advice or justification regarding design decisions on which Semper's opinion was asked, must be
considered highly relevant. In particular one might in this connection think of whatever activities he deployed in the fields of conservation, restoration, and urban design. Nor should there be any inhibition against further exploring the intellectual setting in which his theoretical works either originated or were received. As for their reception, I have in the above suggested that Semper's tragedy as an architectural theorist is that Hegelian aesthetics and Hegelian idealism, which he resented, during the final decades of the nineteenth century became so dominant that his own work was likewise evaluated—and finally rejected—in terms of it. However, that is a story which deserves to be traced in more detail, if only to see how it relates to the apparently huge prestige that nonetheless Der Stil enjoyed in the late-nineteenth and early-twentieth century. And as for its intellectual background, I did explore similarities between Der Stil and the aesthetics of Kant and Schiller, because I felt these were most urgently in need of such exploration, and most illuminating to our current interests. Many other intellectual contexts in which the work originates, and which might likewise throw new light on it, have received only marginal attention. Hegel's aesthetics, for one thing, even though I am convinced Semper did not want to have much to do with them, should be studied more thoroughly for whatever Semper's system might yet have in common with them. The same holds for the works of Schopenhauer, and of philosophers who are largely forgotten these days, but were widely read in the mid-nineteenth century, like Moleschott, Herbart, and Creuzer. Moreover, one should think of historians and classical philologists like Heeren, Rumohr, and Müller, the works of the archaeologist Karl Bötticher (which have been mentioned occasionally, but should be studied in more detail), the world of Richard Wagner, older architectural treatises in the classicist tradition up to the works of Quatremère de Quincy in France and Schinkel in Germany, and the rise of anthropology, to which Der Stil owed some and contributed some. All that is waiting to be explored, either by others, or in a follow-up study by myself.

Parallel to this, a data base of architectural knowledge as described in Chapter 4 could actually be built, implemented, and tested on its applicability, first in architectural research, next in design education, and finally in actual decision-making. It might even be a good idea to do that first, for once available such a data base might considerably accelerate a study of contextual literature (contextual to Der Stil) as meant.
APPENDICES:

1. Facts and Values

2. Structuralist and Poststructuralist Theory and Criticism

3. Timeless Value

4. Questions Dealt with in 'Der Stil'

5. Questions Dealt with in 'The Seven Lamps' and 'The Stones of Venice'

6. Greatness and Truth in Earlier and Later Writings by Ruskin
Appendix 1: 

Facts and Values

It is widely assumed that between the worlds of fact and of value there yawns a 'gap' which science, bound as it is to the realm of facts, will never be able to bridge. As opposed to this, it has been noted (§ 2.1) that many factual statements are value-loaded, that the ones which are most obviously so, which most directly suggest what should be done about them (such as those that refer to human needs or to clearly felt shortcomings in a current situation), feature most prominently in so-called rational planning, but need not be the best guides in this domain, the less so when highlighted at the exclusion of facts that carry a more subtle load of value. Those remarks were made in response to a behavioral science approach to architectural theory (as exemplified in a recent study by Jon Lang) which holds the 'gap' among its basic assumptions. In this appendix I would like to draw attention to some recent studies in which from a philosophical angle the 'gap' is seriously questioned.

The issue is generally referred to as the fact-value dichotomy. As many statements, and a whole range of concepts as well, are neither factual nor evaluative, but mythical, metaphysical, hypothetical, mathematical, or whatever, what is at stake is, strictly speaking, not a dichotomy. What goes by this name is the assumption that 'truth' has no place in the domain of values, but exclusively applies to the world of facts. The idea, which has haunted western philosophy, behavioral science, and the humanities since the mid-eighteenth century or thereabout, must be so familiar to everybody who grew up in the twentieth century that it is strange thought how fairly recent it actually is. Hume's *A Treatise of Human Nature* (1739) counts as possibly the first text where the question how one can reason from facts to values, or vice versa, is carefully explored. Reasons why such issues were seldom raised before were partly metaphysical and partly more strictly religious. If the former, what was involved was mostly an Aristotelian conception of living creatures as endowed with an *essence* which determines not just what it *is*, but also how or what it *should be*. If the latter, it used to hinge on a faith in divine revelation (a historic event) as laid down in holy texts (likewise factual) which tell mankind in great detail what is truly worthwhile in life, and what is not. With the rise of a more scientific (or scientific?) world view, both conceptions have lost much of their authority, but such happened gradually. Thus it has been pointed out that Hume, even though no longer reasoning in terms of
essences or revelation, if carefully read still allows for considerable exchange of ideas between the categories of fact and value. Auguste Comte (1798-1857) who in his *Course of Positive Philosophy* (1830-42) coined the term 'positivism' and invented sociology, must likewise have spotted crossroads between facts and values. Characteristically, it was the same Comte who later in life founded a 'Positivist Church'. Insistence on a strict separation of facts and values grows stronger in the works of Max Weber (1864-1920)--and hence in modern sociology and related disciplines.

At about the same time the English philosopher G.E. Moore in *Principia Ethica* (1903) rejected as 'naturalistic fallacy' any attempt to derive statements of value from statements of fact alone. That is, Moore does not categorically deny the existence of objective values, but these are relegated to a domain of 'non-natural properties.' Wittgenstein (who was among Moore's students in Cambridge for a while, in fact it is Moore who reportedly came up with 'Tractatus Logico-Philosophicus' as a title) specifies this domain in the aforementioned work (1918) by stating that ethics, like aesthetics (the two being one) is transcendental [6.421]. In doing so he declares their rules (if there are such) unspeakable [6.41-6.42]. As the subject has been declared transcendental as well [5.632: "The subject does not belong to the world, but is a limit of the world"] this points to a radical subjectivization of ethics and aesthetics. On the other hand, Wittgenstein leaves it open whether or not in choosing its ethical positions the subject still communicates with something unspeakable and unknowable 'out there.' And when it is stated: "One cannot speak of the will as the carrier of the ethical" [6.423], this suggests that 'subject' and 'will' are not identical. Such marks the difference between Wittgenstein and post-war existentialists, who carried the subjectivization of ethics one step further by virtually ignoring that distinction.

It is against the background of the resulting existentialist nihilism in matters of moral values that in recent years a reaction has set in which claims a more intimate and inevitable intertwining of facts and values. Thus in a paper entitled 'How to derive "ought" from "is"' (1964) by J.R. Searle, attention is drawn to how the mere fact that somebody has promised something, in every culture that deserves this name implies that he or she ought to act accordingly. It has been objected that here two kinds of fact are involved: on one side the mere act of promising and, on the other, a culture which expects a certain conduct as consequent on such acts. From this it is subsequently inferred that the truth of the claim like that one ought to act as promised is dependent on culture, not absolute. Unfortunately, in this case that whole cultural context is contained in the meaning of the word 'promising.' Besides, even if (in other cases) additional truth conditions could be pointed out, dependent on culture but not implied in that culture's language, would truth-relative-to-that-culture not also be a kind of truth? Is there a fundamental difference with a statement that makes sense (or is true) in novel A, but would not do or be so in the context of novel B? Or, in other words, when a statement
is pronounced 'true' or 'not true,' what is more normal than to take into account at least some context of speech?

Examples of 'ought' being derived from 'is' can be collected from many other domains of human life. When in environmental planning people want to stick to the facts, planning objectives, as mentioned, tend to be derived from human needs and obvious shortcomings in the current situation--but indeed it is questionable whether this is a sound way to proceed. Less problematic is how, once we know the functions an object X is to perform, each observation regarding how these functions are performed has immediate implications as to whether or not this is a good X. Considered from this angle, the sole problem with setting 'true' standards for human conduct is that nothing is known about the purpose of human life (Wittgenstein) or that we must assume it has no purpose (existentialism).

A leading exponent of a train of thought in current philosophy that insists on the entanglement of fact and value is Hilary Putnam, who points to John Dewey (1859-1952) as one who a long time ago, and within the same pragmatist tradition, has drawn attention to this phenomenon. Putnam approaches it from two sides simultaneously: by questioning the non-cognitive status of evaluative statements, and by casting doubt on the non-evaluative character of statements one might consider eminently descriptive.

As regards the former it is argued that, if positivism was (or is) right about the feasibility of a strict separation of facts and values, it should be possible either to split evaluative descriptions into a descriptive and an evaluative component, or altogether to do without them. Such splitting was propounded in the 1930s and 40s by Anglo-American philosophers of a predominantly positivist state of mind. Most famous in this category is an article by Charles L. Stevenson, 'The Emotive Meaning of Ethical Terms' (1937). Stevenson notes there is little difference between a statement "It was wrong of you to steal that money," and saying in a way that leaves no doubt as to one's disapproval: "You stole that money!" He concludes that the whole descriptive content of the former sentence is contained in the latter, and that the pseudo-descriptive addition "It was wrong of you ." only serves (a) to communicate the speaker's attitude to the presumed theft, and (b) to induce the listener to share this attitude. Generalizing from this observation it is inferred that all ethical judgments must be of this logical structure. In some words that are frequently used in such judgments the emotive element predominates, others are fairly descriptive as well. Good and right are examples of the former, mean, courageous, vulgar, cruel, pert, inconsiderate, or chaste of the latter. It is for the latter category in particular that, according to Putnam and others, the theory does not work:

The attempt of non-cognitivists to split such words into a "descriptive meaning component" and a "prescriptive meaning component" founders on the impossibility of saying what the "descriptive meaning" of, say, cruel is without using the word cruel itself, or a synonym.
Following Bernard Williams, Putnam refers to evaluative criteria with considerable cognitive content as 'thick' ones. 'Thin' are those which, like good or right, carry little of the same. Statements involving 'thick' criteria are held to be the ones with the strongest truth-claims. Thus, by all common notions of truth, "Caligula was a mad tyrant," as used to refer to the Roman emperor by that name, is true. Or, if we want to be more strict, it is true because (a) the sentence is of the descriptive type, and (b) it makes a statement in which the rules of common English, syntactical as well as semantic, have been correctly applied.

For statements like this, which involve no problematic reference or ambiguous qualifications, one could leave at that, but in a determined effort to explore the relationships of facts and values more encompassingly, Putnam outlines a concept of truth meant to also cover more problematic cases, such as the kind of truth to be assigned to scientific theories—or to single statements couched in terms of such theories.

Putnam rejects what is called a 'correspondence theory of truth,' that is, the notion that truth consists in a correspondence between one or more statements and an actual, non-linguistic state of affairs to which this or these statement(s) refer. On the other hand, he is not among those who play down truth as of little relevance either to science or to moral issues. Even though perfect truth may be a rare thing in either domain, he sees a role for it as an idealization. 'Truth' is defined as 'idealized rational acceptability' or 'idealized justification'. Such is done from a philosophical perspective referred to as 'internal realism' and proclaimed to be in the tradition of Kant. 'Internal' refers to the idea that, rather than qualifying a relationship between a text and the world outside, truth remains internal to texts. 'Realism' points to a conviction that nonetheless there are better and worse ways to describe the world. This inevitably raises the question what criteria to apply in assessing either the internal consistency of texts (that is, theories) or the way they fit onto the world—and it is at this point that Putnam launches another attack against the fact-value dichotomy. The argument can be summarized roughly as follows:

1. As pointed out by Quine, the truth of single statements couched in theoretical terms cannot be assessed separately, but only in terms of how it fits the larger body of theory to which it refers, and how the latter fits the phenomena it describes.

2. It is generally impossible to decide by a single experiment which of two competing theories that cover the same class of phenomena is right. As pointed out by Duhem, and later by Quine, theories are tested via auxiliary hypotheses, and if a theory fails to match the outcome of an experiment, it is a matter of choice or convention whether to reject (part of) the theory or some of the auxiliary hypotheses.

3. In the absence of conclusive evidence (Einstein's theory of gravitation...
was accepted and Whitehead's alternative theory rejected fifty years before anyone thought of an experiment to decide between the two) a choice as made by a scientific community between competing theories is based on criteria like simplicity, coherence, and instrumental efficacy.

(4) These, however, are not strictly cognitive values at all:

... 'coherent' and 'simple' are used as terms of praise. Indeed, they are action guiding terms: to describe a theory as 'coherent, simple, explanatory' is, in the right setting, to say that acceptance of the theory is justified; and to say that acceptance of a statement is (completely) justified is to say one ought to accept the statement or theory\textsuperscript{351}.

... without the cognitive values of coherence, simplicity, and instrumental efficacy we have no world and no facts, not even facts about what is so relative to what. And these cognitive values, I claim, are simply a part of our holistic conception of human flourishing\textsuperscript{352}.

Whence it is concluded:

If coherence and simplicity are values, and if we cannot deny without falling into total self-refuting subjectivism that they are objective (notwithstanding their 'softness,' the lack of well-defined 'criteria,' and so forth), then the classic argument against the objectivity of ethical values is totally undercut. For that argument turned on precisely the 'softness' of ethical values--the lack of a noncontroversial 'method,' and so on--and on the alleged 'queerness' of the very notion of an action guiding fact. But all values are in this boat; if those arguments show that ethical values are totally subjective, then cognitive values are totally subjective as well\textsuperscript{353}.

In the same vein Putnam points out how common language consists of a system of distinctions that became institutionalized because they were felt to be relevant, and that such relevance cannot, in the final analysis, be purely cognitive.

All this has been primarily brought up here to point out how weak are the philosophical foundations of a behavioral science approach to architectural theory as endorsed by Jon Lang and many with him. What consequences it may have not just for ethical, but for aesthetic relativism as well, will be further explored in Appendix 3.
Appendix 2: Structuralist and Poststructuralist Theory and Criticism

As indicated (§ 2.3), neither structuralist nor poststructuralist architectural theory can fully be identified with any of the current varieties of architectural theory that have been more extensively reviewed in Chapter 2. Because of the emphasis in both on meaning—as opposed to form, or even space—one might be inclined to think of them as variants on the linguistic model, but, apart from the problems inherent in a linguistic model, poststructuralist critics and theorists mostly refuse to be thus categorized, whereas among their structuralist forebears many already had mixed feelings. This being the case, one might think of dealing with them as just two more current varieties of architectural theory, independent of those reviewed so far, but unfortunately such endeavors get stuck on the fundamentally anti-theoretical nature of poststructuralism in particular, and of structuralism (for as much for what goes by that name is not contained in any of the varieties already reviewed) very much the same. For this appendix I have chosen two texts to illustrate why that is: Manfredo Tafuri’s Theories and History (first Italian edition 1968, an English translation of the fourth edition of 1976 appeared in 1980), and the introduction to a recent anthology of poststructuralist theory and criticism, Restructuring Architectural Theory (1989), by its joint editors, Marco Diani and Catherine Ingraham.

Tafuri in the aforementioned work [p. 230] qualifies the function of criticism—and hence of history and theory—as follows:

.. criticism as one of the dimensions of architectural activity, has to satisfy two basic conditions:

A. It has to renounce systematic expression in favor of a compromise with daily contingencies. Its model should be journalistic extravaganza rather than the definitive essay which is complete in itself. The continuity and promptness of the polemic is, in this sense, more valuable than the single article. Criticism in depth is dropped in favor of an interrupted critical process, valid globally and outside the contradictions met in its evolution. The varying objectives of the polemic will justify the arbitrariness of the critical cuts, their alteration and the casual errors
committed on the way.

B. The critical field will have to adjust its scale: from the analysis of the architectural object to the criticism of the global contexts that condition its configuration. The structure of this context--laws, regulations, social and professional customs, means of production, economic systems--will confront individual works only in a secondary way: these will appear as particular phenomena of a more general structure representing the true context on which criticism will act\textsuperscript{354}.

.. criticism must be aware of the artificiality of its own operations: it must be prepared to reveal the artificiality of its own attributions of meaning.

From this point of view the truth of criticism is in its functionality. One can accept or reject a certain chain of historical facts only after having put the questions: what does it tell us about the hidden reasons determining architectural choices, and what present condition does it bring to light? Does that historiographic hypothesis manage to pose new positive doubts or is it not rather superfluous, consolatory or taken for granted? ... Identifying criticism with history means, in fact, accepting the continuous co-presence of the unsolved problems of history\textsuperscript{355}.

To this identification of criticism with history, which indeed is pivotal to Tafuri's book, we shall recur in a moment. For now let us focus on the pragmatism of locating "the truth of criticism ... in its functionality\textsuperscript{356}". I am not sure whether from a Marxist point of view such is compatible with serious theorizing, but the question may be irrelevant, as Tafuri's criticism does not claim to be based on theory. Not on aesthetic theory, to begin with:

We have ... already noted that we do not think it is possible to deduce a criticism from traditional aesthetics\textsuperscript{357}.

'The American semantic schools' and half a dozen Italian scholars are named whose works have "revealed a deep 'crisis of aesthetics,'" and it is concluded:

It is a crisis that can only be solved, it seems, through a strongly historicist attitude, able to determine, each successive time and with an eye to the future, a horizon for the study of aesthetic problems that is constantly variable and determined by the concrete experience of art's unforeseeable changes. ... This does not, of course, imply the disappearance of historiographical criticism into a historicistic aesthetics or vice versa. It implies, rather, that the two fields of studies--criticism and general reflections on art--become historically complementary. But only because they start from the same premise: the concrete experience of the dialectic
inherent in the dynamic and changeable character of artistic studies. The identity of criticism with history subsequently is reiterated with truly moral fervor. Whoever does not subscribe to it must be a redneck, coward, idolizer, hypocrite, useless exploiter, or, most likely, all of the above:

It should be clear, therefore, that we have already stated a fundamental postulate: the identification of criticism with history. Any attempt to separate criticism and history is artificial and hides an unconfessed conservative ideology. To relegate criticism to a limbo, given to abstract analyses of the present—as if there really existed a 'present' time, quite apart from historical time—means accepting the ransom demanded by the most transient and mystifying mythologies.

Anyway, criticism always wrenches the present event from its daily context, simply by looking for its meaning and reasons: it is impossible to define those meanings and reasons without placing the artistic event back in the structure of history. Otherwise we shall not have criticism, but empty hagiography and abstract exegesis (in other words, failed criticism). The hypocrisy of these approaches to the basic themes of our time—including those of architecture—can be measured by the mountain of useless exploits that, day by day, threatens to crush the professional reader.

Following which it is concluded:

For these reasons, all methods of architectural analysis based on ahistorical criteria must be considered phenomena in need of historicisation: from the standpoint of criticism it does not make much sense to speak of theory of architecture, but it does from the standpoint of the definition of new planning instruments.

Such definition of new planning instruments is not, however, what Tafuri's book is about. The role assigned to theory in criticism remains less than marginal. "To criticize," it is stated at the outset:

.. means to get the historical scent of phenomena, put them through the sieve of strict evaluation, show their mystifications, values, contradictions and internal dialectics and explode their entire charge of meanings.

How is this to be understood? I have no clue as to 'the sieve of strict evaluation,' so that I must skip. Demystification, on the other hand, is a recurring theme, as is demythologizing. "Myth is against history." The 'myth of organic architecture,' for one thing, must be relentlessly exposed. A "demystifying attitude" is called for that goes "beyond what architecture
shows, in order to examine what it hides. Consequent on this is a shift from architectural objects to the forces that produce them. At this point Tafuri's conception of architectural criticism converges with structuralist ideas in literary theory, as exemplified in the works of Roland Barthes. The architectural product must be taken apart and reassembled in order to find out what non-architectural reality it stands for. Such is the critic-historian's task, defined elsewhere as "the recovery, as far as possible, of the original functions and ideologies that, in the course of time, define and delimit the role and meaning of architecture."

Why this insistence on meaning in general, and why locate the latter in architecture's history, including the whole context of its production? It could be objected that, once completed, a building becomes a marketable piece of real estate to some, a daily place of work or residence, or an occasional one for shopping and entertainment to others, a useful and agreeable or obnoxious element in a larger urban fabric to everyone concerned, but that, as time goes by, the forces that produced a building lose most of their relevance to all but a few. Under the surface of what people think they are dealing with, a building's objective history may, as Tafuri insists, keep playing its role, but even then, what right or reason do we, or do they have to presume this role is more important than, for instance, a building's qualities of form, color, and material, or the private histories of its observers, users, and owners?

Such common sense questions, unfortunately, appear to be beside the point, as the actual value of actual buildings for those who have to live with them from day to day is not what Tafuri's criticism is primarily about. Its focus is on historical validity of contemporary design: what attitude to human history does a building display, what to think of that attitude in general, and how well does it work out in a particular case? These are the questions that haunt the book from its first page to the last. An identification of criticism with history is a self-evident consequence of this orientation, its proclamation an almost elliptical statement.

Considered this way, one of the most fascinating, and from our point of view most urgent questions is how, without taking recourse to some sort of artistic theory, criteria can be laid down to discriminate between correct and incorrect attitudes to history, and how to apply these in evaluative processes. Tafuri's ways-out tend to be pseudo-literary on one level, and ideological on another. By ideology I mean a system of related convictions pertaining to human values, explicit only on a few levels of abstraction, and resisting full explication from its basic premises to its most particular points of view, unwilling as it is to be exposed to criticism from outside. This may or may not square with Tafuri's choice to use the term specifically as "the structure of the false intellectual conscience," but in any event I hope will point to a fundamental reason why Tafuri's book must be ideological: because a fuller explication of its underlying assumptions would result in what it adamantly opposes: theory regarding human values. A lengthy quotation from a section
dealing with 'the subtle ambiguity of Kahn's historicism' may further elucidate this point:

... Kahn's complex cultural operation diffuses and vulgarises a problem—that of the ambiguous link between contemporary architecture and its historical sources—rather than producing a concrete, motivated and to the point analysis of the values of the contaminated architectural systems.

At this point one can well ask whether Kahn has not already achieved his task through the transience of his historiographical data. In effect, as Kahn is certainly not trying to accentuate, polemically, the dehistoricisation of modern art through the pastiche, or (against all appearances) to fix, unequivocally, a new code, or, again, to sieve critically the historical material he, successively, refers and alludes to, one begins to suspect that the misty and variable inconsistency of the Kahnian poetic, might be, after all, entirely coherent with its purposes. If we look at Kahn's work in the light of American architectural history, we see that it had a precedent in the City Beautiful movement, and that its ambiguity is a sort of denunciation, a way of coldly observing an unsolved dilemma of the modern American tradition and immediately loading it with a suggestive theoretical luggage.

Kahn's is indeed a new objectivity. The kind of objectivity that presents with detachment the terms of a problem difficult to solve, lining them up in an abstract series: the high didactic quality of Kahn's architecture—or, rather, of his designs and methods, more than of his, often disappointing realisations—is in the ability of making objective and verifiable the path that leads to architectural communication, throughout its complex structures. We can say, therefore, that for Kahn too, history is only an ingredient to be manipulated. He uses it to justify choices already made or to shed semantic light, through the open allusion of the references, on values that aspire towards the symbol and the institution, but that, at the same time, try to be open and readable without betraying the code that rejects myths, symbols and permanent institutions.

And so on, and so forth. What is the point? To find out and to make it clear whether Kahn's architecture is consistent with Kahn's intentions as regards historical references in otherwise modern buildings, what these intentions are, and whether they are noble, sane, realistic, promising, or whatever. These are tricky questions, for one thing because by and large we can only guess at Kahn's inner motives, and, for another, because criteria to judge the sanity, nobility, et cetera of these intentions are even more elusive. A reader must be left with the impression that serious efforts are made in these directions, but the result is anything but transparent. If one is not yet on other grounds convinced that Kahn's historicism is more promising than Philip Johnson's,
though not as rich and sophisticated as Borromini's—as I understand Tafuri's order of appreciation to be—what compelling reasons to think so are presented here?

On a pseudo-literary level a whole range of labels, most of them metaphorically transferred from the domains of language and science, including medicine, are glued on top of each other over the object of critical attention, Kahn's architecture. On an ideological level many assumptions are made regarding attitudes to history and their relative merit—but it is far from obvious what these assumptions are. Some can be reconstructed, though, from the rest of Tafuri's book and the sources it refers to. At the core is a Marxist-Hegelian conception of a dialectical process in history which, through the clashing and subsequent synthesis of opposites, results in self-realization of the Spirit, its emancipation from material bondage, and hence an ever greater freedom for mankind. Such evolution is inevitable in the long run, but human intervention can speed it up, slow it down, or even temporarily reverse it. And so what matters is to produce an architecture that will serve as a catalyst to this dialectical process. What are the demands architecture must meet in order to optimally serve in this capacity? First of all, that it puts in swing a critical reflection on the historical situation we are in, and "historicizes the dramatic meanings of the present." This must be seen as a two-way process:

.. the justification for the history of architecture is in the search for the meaning of present architecture.

While, on the other hand:

It is not history, any more, that offers the architect a horizon of stability and values. It is, rather, architecture that, in its making, in its changing, in its attempt to recreate from nothing its own purpose and values, gives a constant metamorphosis of meanings to history.

History offers no solutions. As an instrument of planning it is sterile. If it is instrumental at all, it is in "suggesting a multiplication of the problems rather than solutions to the existing ones." History is not for fun:

Rather than turning to the past as a sort of fertile ground, rich in abandoned mines to be successively rediscovered finding in them anticipations of modern problems, or as a slightly hermetic maze good for amusing trips leading to a more or less miraculous catch, we must get used to seeing history as a continuous contestation of the present, even as a threat, if you like, to the tranquillising myths wherein the anxieties and doubts of modern architects find peace.

This moves one step beyond the position endorsed by nineteenth-century
rationalists like Viollet-le-Duc—who, by the way, is praised for having reunified history and theory\textsuperscript{376}. For while the latter likewise rejected history as a warehouse of ready-made solutions, at least they saw it as a school of rational design process. To Tafuri it is just "an enormous collection of utopias, failures and betrayals\textsuperscript{377}" waiting to be demystified and demythologized. And so, if present-day architects are licensed to become eclectics once more, it is in the sense that from this huge reservoir of unsolved problems they can pick a few and make them themes for new design.

Does this mean that there is a theory at the core of Tafuri's criticism, after all? In a way, yes, but, for one thing, instead of being clearly expounded at an early stage it is imposed upon a reader through moral terror. And, for another, it skirts actual choices involving human value, leaving it to an enlightened course of history to do so on our behalf. If that will work, if history indeed will be so kind to do so in the best possible way, remains a matter of faith—and one wonders how many among all contemporary architects and critics who have embraced the style and jargon of structuralism, including its bias against theory, are fully aware of this faith, let alone share it.

If I am correct in assuming that most of them do neither, this sheds a harsh light on actual uses of architectural history, theory, and criticism in design. As noted with respect to Tafuri, its scope may not be so much rational decision-making in a wide sense as justification of unconventional solutions to design tasks, old or new, a new look at the nature of these tasks, or freeing designers from old and outworn patterns of thought—in short, problems which typically occur at a designer's side in a decision-making situation, and for which quick relief is sought that will put nothing in the way of the designer's freedom. Structuralist architectural criticism meets these demands to a high degree.

Does the same hold for its poststructuralist offshoot? At this point let us turn to our second text, Diani & Ingraham's introduction to Restructuring Architectural Theory. Major differences between structuralist and poststructuralist theory and criticism are there stated as follows:

The structuralist moment in architecture—which was worked through with rigor and insight during what can be called the "Oppositions years," when Oppositions was, at least in the United States, the main publication for architectural theory—has, as in other fields, given way to the broader scope of critical endeavors in the poststructuralist era. But it has given way with a noticeable loss of faith in the capacity of the linguistic and the philosophical model to explain architecture, and thus a loss of faith in the transparency promised by the "age of textuality."

To this it is immediately added that:
Perhaps this is because architecture cannot even be thought apart from "form" and formalisms ...,

but nothing in particular is inferred from the latter, least of all a demand for a theory of architectural and urban form. What is meant by 'the philosophical model' remains unclear. It is noted that in the current situation:

Theories are not denied once and for all but have ... historical and changing constructions, common uses, and elementary structures ... 378

Apparently this refers to current theories as much as to those of the past. As though an awareness of the inevitably time-bound character of theories were a sufficient reason no longer to work on them, it is concluded that:

We do not have a theory of cities that instructs us how to think.

Why not? The problems faced by architecture and architectural theory are, in the authors' view, related to 'a loss of center' in philosophy as well as in politics:

... philosophy today delineates itself, among other ways, as a leave-taking from foundational thought, in other words, as a recognition of the failure of the faith in the possibility of finding a first principle, a reliable and definitive reference point, on the basis of which to order experience. Now this situation, which in philosophy is called the dissolution of foundations, finds its very clear and striking equivalent in the transformation undergone by the idea of the project in the experience of architects and city planners 379.

Here, like so often in this anthology, more questions are raised in a few lines than can reasonably be answered in the context of their appearance. The point, as I understand it, is that current situations in planning have become so volatile that 'projects' no longer are the answer; that a more flexible response is called for; that a-fortiori theory as a basis for project-making cannot give a clear direction to planning; and that, moreover, the whole concept of a timeless, universal set of first principles for theory has lost its philosophical basis. Let it be noted, though, that in drawing these comparisons the authors fail to observe that neither science nor philosophy, even if no longer so sure of first principles, has ever given up the idea of structured thought, or of creating bodies of systematic knowledge. The chance that a substantial body of knowledge, in architecture like elsewhere, might facilitate rather than frustrate a flexible response to planning situations, is likewise overlooked.

And so, if we have to go by the way it is presented in this anthology, all effort to make sense of poststructuralist 'theory' as theory may be misguided
from the start. For sure, such 'theory' does share ground with other varieties of the same in its search for a methodical and informational basis to architectural criticism, but such basis eventually is found in history rather than in theory. So far there is little difference with earlier works by Tafuri and others who are designated as 'structuralists.' So what is it that puts them apart? A "loss of faith in the capacity of the linguistic and the philosophical model to explain architecture?" This demands some qualification, for how can something be lost which may not have been there to begin with? Tafuri, for one, while defending the 'semanticity' of architecture against Brandi, sees no future in efforts to introduce a new unitary language of architecture. In general he considers the linguistic model too constraining anyway. As an alternative approach he states:

.. in defining the substance of an architectural code, we go to the formula elaborated by Roman Ingarden and by Welleck and Warren for literature: code as system of systems.

On the other hand, some of the contributions to Restructuring Architectural Theory do follow a linguistic model of architecture. This holds most clearly for the ones by Stanley Tigerman, Peter Eisenman, and Jacques Derrida. Now these already belong to a somewhat older generation, so one might guess it concerns leftovers from the "Oppositions-years," courteously invited to this new forum—except that at least Derrida is much to central to the poststructuralist movement to qualify for that kind of position. So if there is a fundamental break between structuralism and poststructuralism, after all, it must lie elsewhere. Nor is there much of a difference when it comes to history as opposed to theory as the only legitimate basis of criticism. Whatever was left of a tangible concept of theory when poststructuralists began to take control of many of the leading architectural magazines (with Assemblage filling the void left behind by Oppositions) now is butchered in an avalanche of paradox and metaphor. Diani and Ingraham note:

It is a curious and necessary irony of poststructural theory that, in its radical critique of structure, it creates an intoxicated desire for the same aesthetic procedures and performances that it must count, when sober, as repressive. In architectural theory this irony is felt very deeply. It is perhaps the source of architecture's current dedication to the metaphoric power of deconstruction: metaphors of rupture, fragmentation, unbuilding the built; the artistry of demolition; the pastoral quality of the ruin; the twisted grid, have all become symbolically inscribed in contemporary architectural events. And yet these architectural metaphors, indeed this conception of metaphorization and symbolic architectural inscription, come from precisely the same impulse toward the control of architectural meaning that created the reductive structures of modernism.
It is metaphor indeed that rides the bus:

.. one might say that the "authority of the architectural metaphor," to use Derrida's words, in language and philosophy is, paradoxically, also the chief source of architectural authority itself. But what this authority is is of course undecided ... 384

In which context Derrida is quoted saying:

Metaphor circulates in the city; it conveys us like its inhabitants, along all sorts of passages, with intersections, red lights, one-way streets, crossroads or crossings, patrolled zones and speed limits. We are in a certain way--metaphorically of course, and as concerns the mode of habitation--the contents and tenor of this vehicle: passengers, comprehended and displaced by metaphor.

Here indeed we do encounter a significant difference with structuralist theory and criticism in the sense of, for instance, Tafuri. Ideology, demystification, and the contradictions of history are the latter's central preoccupations, not metaphor or paradox. And so it is not that a linguistic model is more strongly present in the one than it is in the other. Both have their doubts about it, neither has an alternative that could do the job--for as much as there is still a job to do, apparently there is. So lacking serious competition, the linguistic model lingers on. Only the way it is applied evolves.
Appendix 3: Timeless Value

It has been noted (§ 2.8) how Alexander's search for timeless quality, and his confidence that in this direction substantial results can be obtained, are equally unfashionable as, considered over a longer period of time, traditional. The former has been amply illustrated in the previous appendix (on structuralism and poststructuralism). How traditional, on the other hand, it is can be inferred from, for instance, nineteenth-century reactions on London's Crystal Palace. No matter if we look at Ruskin, Semper, or Fergusson, critics and theorists alike were of the opinion that, no matter how admirable in other ways, this huge construction in iron and glass could not be taken seriously as monumental architecture, because it failed to communicate to an observer an impression of permanence. To this it may be objected that an impression of great durability is not the same thing as enduring quality, but the two issues used to be related, and so they are up to the present day. In this appendix it will be explored whether the current insistence on the historicity of all quality in art makes as much sense for architecture as it presumably does for literature, painting, or even music. Or, if it does not, what this entails for methodology of architectural theory.

In philosophy of literary criticism the historicity—or, as she calls it, the 'contingency'—of all artistic quality of late has found an eloquent defender in Barbara Herrnstein Smith, author of Contingencies of Value: Alternative Perspectives for Critical Theory (1988). At the core of this work's argument is a conception of 'radical contingency,' a conviction that value in art is always value for someone, counts more for some people than for others, and for all of them varies with the circumstances of life. Evaluation—which, she insists, in literary criticism ought to be taken as seriously, and practiced as methodically as interpretation—should proceed in terms of the multiple functions a work of art is liable to perform in the total economy of an observer's, reader's, or listener's thoughts, feelings, capacities, and dispositions. What is referred to as the axiological tradition is blamed for aiming instead at a one-dimensional ranking of works of art in terms of true, intrinsic, strictly aesthetic, and everlasting quality.

Indeed Smith's study convincingly points out how literary criticism has traditionally based itself on very different assumptions than that of 'radical
contingency.' The eighteenth-century debate on 'taste' is a case in point, and as this, even if it became more subdued, has cast long shadows over literary and related criticism in more recent times, the author singles out for special attention the ideas of two protagonists in that debate: those of David Hume as expressed in Of the Standard of Taste (1757) and of Kant as laid down in Critique of Judgment (1790). In Hume's argumentation some vicious circularity is elegantly and convincingly described. More problematic remains her evaluation of Kant's ideas. Because, moreover, in the present study these ideas hold an important place (see § 9.2), let us review this part of Smith's argument in more detail.

A first objection to Kant is that he fails to distinguish between mental and verbal judgments of taste, and as a result too easily assumes that statements of the form "This is beautiful" claim validity for all of mankind, whereas those of the "I like this" type should have no claim at intersubjective validity at all. Value judgments, she notes, come in all shapes and sizes, ranging from "How odd!," "That is great," or "Why, for heaven's sake?" to "Business is business" and "Gee, you could try Archie's," or the asterices ("****") encountered in the Guide Michelin. Nor can it be decided on syntactical grounds alone what claims at wider validity are made. It is equally possible for a superior in the army to say "I don't like this!" in a tone which leaves no doubt as to whether the person addressed should feel the same, as to call something 'beautiful' without any such implication. Accordingly there is, in Smith's view, no reason to assume or to demand a clear dichotomy between statements of value and of fact. Unlike Hilary Putnam, Iris Murdoch, and others whose related views have been discussed in Appendix 1, she does not, on the other hand, infer from this that value statements have important truth claims to be reckoned with. Instead, it is argued that in the marketplace of ideas regarding artistic excellence 'truth' does as little to actually guide transactions, or give direction to research, as it does in science. We shall recur to this in a moment.

Kant's faith in even the possibility of universal validity as an attribute of judgments of taste is blamed on cultural elitism mixed with provincialism. Had he been more sensitive to cultural context, he never would have made such claims, so the argument runs.

Thirdly, there is, in Smith's view, no future in Kant's efforts to single out a strictly aesthetic type of experience as what aesthetic judgments are about. The joy derived from contemplating works of art (for no matter how the aesthetic experience is demarcated, it must include that much) is anything but disinterested, so what is the use of defining an idealized experience which, in order to delight in form alone, abstracts from all content, material, and practical usefulness of the observed? Little, if anything in real life is held to answer this conception, and so:

.. since there are no functions performed by artworks that may be specified as generically unique and also no way to distinguish the "rewards"
provided by art-related experiences or behavior from those provided by innumerable other kinds of experience and behavior, any distinctions drawn between "aesthetic" and "non-aesthetic" (or "extra-aesthetic") value must be regarded as fundamentally problematic.

A nominalist bias as underlying this position is frankly admitted a few pages later. Finally [pp. 71-72], Smith wonders why, as Kant insists, there ought to be a consensus in matters of artistic taste. What higher social, moral, or political ends, she wonders, could possibly be served in bringing it about?

As indicated, at least some of this remains problematic. Not the first point--about the impossibility of deciding on syntactical grounds alone what claims at wider validity are made in value statements. That is a strong one--except for the subsequent conclusion that, as long as no claims at universal validity can be made, there can be no truth claims at all. Truth, after all, may be considered relative to what audience or cultural minority is implicitly addressed in a statement--and still be honest truth. If so, Kant's argument will essentially survive a little relativizing at this point--and respond likewise to Smith's second objection: Kant's lack of sensitivity to cultural context as a determinant of taste. In this, no doubt, Kant was a child of his time. Besides, there is little indication that Kant's primary concern in the Critique of Judgment is to establish, or philosophically underpin uniform standards of taste. Rather, he appears to have taken for granted the existence of such standards, basing this intuition in part on the endurance of great works of art, and the remarkable convergence of taste on these. It is the mere possibility of that phenomenon which, within his overall conception of man's cognitive faculties, Kant tries to account for. Remarkably enough, Smith appears to be aware of these priorities, and yet most of the time deals with Kant as one of the high priests of 'axiology'--and hence as not profoundly interesting, after all.

Here we touch on another weak spot in Smith dealings with Kantian aesthetics: the fact that she cannot altogether explain away this strange phenomenon of the endurance of artistic quality--although she gives it a try. It is noted [p. 36]:

Certainly any theory of aesthetic value must be able to account for continuity, stability, and apparent consensus as well as for drift, shift, and diversity in matters of taste. The tendency throughout formal aesthetic axiology, however, has been to explain each in a quite different way: specifically, to explain the constancies of value and convergences of taste by the inherent qualities of certain objects and/or some set of presumed human universals, and to explain the variabilities of value and divergences of taste by historical accident, cultural distortion, and the defects and deficiencies of individual subjects.
One wonders, at first reading, how it could be otherwise. Are we supposed to explain divergences of taste from constancies of human nature, or its convergence on certain works of art from imperfections in the latter? The point, as becomes evident later on, is that there is historical coincidence as well in what works of art to later generations turn paradigmatic. Products of a culture which as a whole prevails stand a better chance to endure than equally good or better ones from a civilization that sinks into oblivion. Thus, to put it architecturally (these are not Smith's words!), the dissemination of the Greek orders throughout the Western world may owe as much to Plato and Aristotle, who happened to teach and argue under those very colonnades, as it does to their own formal perfection. As subsequently the Greek style was applied to all kinds of culturally prestigious buildings, the process eventually sustained itself: "Nothing endures like endurance."

In response to Hume's observation that "The same Homer who pleased at Athens two thousand years ago, is still admired at Paris and London," Smith objects [p. 48] that people did not encounter the same Homer at all these times and places. Let it be noted, though, that, if successive generations in dealing with that text found constantly new meanings there, this in no way detracts from the timeless quality of these texts. Meaning and quality, even though reinforcing each other, never coincide.

Besides, human response as such to classic works of art may be more constant than the reasons presented to account for the delight they bring. The Parthenon—to return to architecture, for a while—is a case in point. What is so great about this badly damaged heap of stones—or about the building one may imagine it once to have been? The way its design is based on a system of geometric proportions? Or an enhancement of its physical presence precisely through subtle deviations from that system? These and other anthropomorphic associations the building evokes in a beholder? Organic relationships between the building as a whole and its parts? A form that is a clear and unambiguous expression of the building's function, or of its construction? Or should its shape be abstracted from this, and admired as a perfect piece of non-figurative sculpture, a 'play of volumes in light,' so to say? Or rather as a neutral setting for great figurative sculpture? Each of the above visions has, at one time or another, been endorsed. The only thing on which, with a few exceptions, all critics seem to agree is the building's unique quality as such. Likewise, Homer may not have come through as variously as is suggested by a comparison of how, throughout the ages, people have described their reactions to his works.

As for Smith's third objection—that nothing in real life appears to correspond to Kant's idealized strictly aesthetic experience—let it be noted how already Schiller in the Briefe was aware of this, and yet felt no restraint to use those brand new Kantian aesthetics as a basis for his own. Suffice it at this point to refer to § 9.2 of the present study.

Her fourth point—why people should agree in matters of taste to begin
with--as a question seems perfectly justified, but at the same time reflects a fundamental difference between, on the one hand, the tasks of literary criticism and, on the other, the context in which architectural criticism must operate. The thing is that, whereas in all civilized countries people are free to put aside a book they do not like and read another, buildings and built environments are not that easy to escape, let alone replace. People in general can choose their places of work, residence, shopping, and recreation only within certain limits, and directly influence the shape and color of at most a small segment of these. Buildings, moreover, even if they are not to everybody's liking, tend to stand for a hundred years of more, with only minor changes to their public appearance. And so, for utterly practical reasons, in environmental planning few things are more important than, indeed, to arrive at a consensus in matters of taste, and to let this consensus converge on qualities of an, if not timeless, at least enduring kind.

If that much is granted, the next thing to consider is how among all the whims of fashion and a designer's idiosyncracies such enduring quality can be spotted in plans before these are worked out in full detail, let alone realized. It is with regard to this question that, once again, the later works of Alexander provide highly interesting material and ideas. Thus in *The Timeless Way of Building*, at the outset of Chapter 15, entitled 'The Reality of Patterns,' the question is raised how one can be sure a pattern somebody has formulated "actually works," whether it will be "a source of life, a generative, self-sustaining pattern." In other words,

How can we distinguish patterns which work, which are deep and worth copying, from those which are simply pipe dreams, mad imaginings ..?

Patterns are defined as instructions of the form:

\[ \text{context} \rightarrow \text{conflicting forces} \rightarrow \text{configuration} \]

That is, as statements with three constituent parts, each of which could be verified separately. Thus one might ask: is the problem a real one? Do such conflicting forces actually occur in a context as indicated, will they not come to a solution of their own without such interference, and will a configuration as proposed actually do the job? That, however, in Alexander's vision will not do. The problem is that, as long as one keeps operating on this strictly verbal level, one never can be sure to have been complete either in describing the problem--all the forces at work in a context as indicated--or in spotting all unintended side-effects a solution as proposed may have on precisely those hidden forces. It is concluded that, as
we have no analytical way of being sure just what the forces are.

*What we need is a way of understanding the forces which cuts through this intellectual difficulty and goes closer to the empirical core.*

... Above all, we need a way of doing it, which is anchored in the empirical reality of what will actually happen, without necessarily requiring complex and extensive experiments which are too expensive to do.

*To do this, we must rely on feelings more than intellect.*

For although the system of forces in a situation is very hard to define analytically, it is possible to tell, in a holistic way, whether the pattern is alive or not.

The fact is that we feel good in the presence of a pattern which resolves its forces.

And we feel ill at ease, uncomfortable, when a pattern leaves its forces unsolved.

Subsequently it is argued that

.. people who come from the same culture do to a remarkable extent agree about the way that different patterns make them feel.

A consensus of 90% or up is not unusual--and it is added we will never attain such high ratings as long as we keep reasoning in terms of more abstract values, like how much space should be reserved to cars, how much priority be given to privacy as opposed to accessibility, and so on.

A remarkable parallel to this is in the following observations by Ruskin in *Praeterita*. Looking back on a trip to northern Italy in 1845, and how he spent the nights in Venice in good English company, Ruskin notes [Vol. 2, § 143]:

Mrs. Jameson was absolutely without knowledge or instinct of painting; and had no sharpness of insight for anything else; but she was candid and industrious, with a pleasant disposition to make the best of all she saw, and to say, compliently, that a picture was good, if anybody had ever said so before. Her peace of mind was restored in a little while, by observing that the three of us [Ruskin and his friends Boxall and Harding], however separate in our reasons for liking a picture, always fastened on the same pictures to like; and that she was safe, therefore, in saying that, for whatever reason might be assigned, other people should like them also.
Two things demand attention here. First, that the three gentlemen agree on what Putnam, Williams, and Murdoch (see Appendix 1) refer to as 'thin' criteria, like what is good, what better, and what best, but not on 'thick' ones in terms of which their quality rankings ought to be accounted for. Second, that they are all Englishmen of approximately the same age and education, and apparently all endowed with a certain sensitivity to paintings—of the kind Mrs. Jameson cannot fake.

The same phenomenon—that in evaluating works of art people tend to disagree on nearly everything except which of two or three samples offered for comparison is greatest—is described in Robert Pirsig's bestseller of 1974, *Zen and the Art of Motorcycle Maintenance*—a work which, in the present context, is all the more interesting because of a profound similarity in spirit with Alexander's aforementioned works of about the same time. Pirsig is aware that such spontaneous agreement depends on culture, intelligence and education, but that, at least among people who share enough of that, the rule holds remarkably well. In this form it is, in Pirsig's book, a cornerstone to a gracefully expounded philosophical point of view which takes quality as the one and only interface between a thinking, feeling subject and the objective world, points out how 'facts' can only be construed out of the raw material offered by quality, and how once again it is quality which leads an inquiring subject to the interesting new data and hypotheses he or she is after.

What Ruskin, Pirsig, and Alexander have in common is that they emphasize not only the possibility of a remarkable consensus on artistic quality, but also the irreducibility of such quality to whatever reasons one may invent to account for it. Artistic quality, in other words, is as objective as it is mysterious. In drawing these conclusions, all three, however, safely remain within the boundaries of one particular culture. Ernst Gombrich, in a lecture of 1973, where he makes a strong case for the truth of certain value judgments and the falsity of others, goes one step further, pointing out how convergence of taste on certain masterpieces transcends boundaries of time and culture. What non-artistic reasons could Protestant Englishmen have for almost immediately recognizing and forever venerating the genius of Michelangelo? No sympathy for Counter-Reformation or the Church of Rome, we may safely assume. Or what could be the non-artistic grounds for the eventual—and irreversible—emergence in educated public opinion of Rubens as a greater painter than van Dyck? Observe how at such points Smith's relativism leaves us in the dark, how none of the non-artistic mechanisms she holds responsible for the endurance of great art provides much of an explanation in this case.

What in regard to methodology of architectural theory the above suggests is that, in order to single out the most empirical among various kinds of value judgments, one need not focus on 'thick' ones in the first place. What counts is, first of all, that judgments have a specific object—a painting, a literary text,
the way somebody reacted in a particular situation, a place to live, a place to work, or, at the most abstract, a pattern in Alexander’s sense—rather than large generalizations regarding what is most important in life. For it is only as regards the former that people can make non-trivial value judgments they are fairly sure of. If subsequently one intends to generalize from these, attention should be paid to (a) the kind of people who make a certain judgment and the circumstances under which they do so, and, (b) the class of people relative to whom, and the range of circumstances relative to which a judgment is pronounced. These, and not the reasons people present for their preferences are the basic data.

At this point, let it be noted how there is nothing incompatible between insisting on enduring quality in future planning and design, and at the same time striving to unravel through historical research the relativity of value judgments to culture, education, character, et cetera. The thing is that, in laying bare what is dependent on culture, one is bound to also discover—as a by-product, so to say—what is not. To hold that there can be no such thing as timeless quality in art or architecture is as one-sided as to suggest that there can be no authentic quality in these but what endures forever. Architectural history and theory should allow for both, and from case to case try to decide what is what, and what lingers somewhere in between the two extremes.
Appendix 4:

Questions Dealt with in 'Der Stil'

Figure 15 (§ 8.3) presents a summary of distribution of attention in *Der Stil* over themes and questions for which it was claimed that they represent what roughly, and with remarkable constancy, architectural theory is about. It is based on an inventory of statements which—in order to make the methodology employed in this study more transparent, and the conclusions arrived at easier to check—will now be presented integrally. The first column corresponds to a coding of questions as listed in Figs. 13 and 14 (§ 4.4). The second contains a code, explained in § 8.1.2, which indicates a place in one of Semper’s works. Numbers followed by an asterix [*] refer to pages in Mallgrave’s and Herrmann’s translations (1989) instead of to the original German texts. The third column mentions a paragraph in this study where the passage indicated in the second and fourth is mentioned or quoted—if it is mentioned at all. The fourth either lists the first and the last few words of that passage, or gives a very brief summary. Unlike what in the next appendix will be done for Ruskin’s works, there is no such listing of fragments that deal with examples (X..), value systems (V..), or special-words-with-special-meanings (W..). At these points the reader is referred to §§ 8.4, 8.5, and 8.7.

**Material issues (Fig. 13)**

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<th>CO</th>
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<td>Renaissance blamed for naked architecture</td>
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<td>FE.I.5</td>
<td>8.9.2</td>
<td>How author was shocked by recent experiments in painted architecture</td>
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<td>FE.II.14-15</td>
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<td>Large white building masses cannot be beautiful either in the north or in the south</td>
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<td>FE.VI.101-02</td>
<td>8.9.2</td>
<td>Five recommendations for current applications of external polychromy</td>
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<td>DS.15</td>
<td>9.7.4</td>
<td>Two ways to bring about harmony and repose among color patches: equal distribution and subordination</td>
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<td><strong>PR.236-37</strong></td>
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<td>How medieval architecture provides insight in classical</td>
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<td>CO.S</td>
<td>PR.237-39</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PR.239n</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FE.VI.101-02</td>
<td></td>
</tr>
</tbody>
</table>

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### Construction:

<table>
<thead>
<tr>
<th>CS.MA</th>
<th>material-application</th>
<th>PR.220</th>
<th>Brick et cet. should be left in its natural color, but painting is perfectly natural for materials that need a protective coating anyway.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SI.156*</td>
<td>&quot;Presently, we deem it... limits of style.&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SI.II.30-37</td>
<td>How hardest stone can nowadays be cut like cheese—and what a loss if done thoughtlessly</td>
</tr>
<tr>
<td></td>
<td>DS.62n</td>
<td>8.7.2</td>
<td>I think that the dressing and the mask... &quot;What is Hecuba to him?&quot;</td>
</tr>
<tr>
<td></td>
<td>DS.XV-XVI</td>
<td>8.9.3</td>
<td>the materialists can be criticized... an additional factor in the artistic appearance.</td>
</tr>
<tr>
<td>CS.MA.G</td>
<td>PR.228</td>
<td></td>
<td>About superiority of painting to mosaics or patterns of multicolored marble.</td>
</tr>
<tr>
<td>CS.MA.M</td>
<td>PR.241</td>
<td></td>
<td>How in times of Homer and Hesiod metal still served &quot;for simple adornment, as it does with savages.&quot;</td>
</tr>
<tr>
<td></td>
<td>ib. metal</td>
<td>DS.141</td>
<td>&quot;Von einem eigenen monumental Stab- und Gussmetallstil kann nicht die Rede sein; das Ideal desselben ist unsichtbare Architektur. Denn je dünner das Metallgespinsst, desto vollkommener in seiner Art.&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DS.142</td>
<td>How some future for monumental applications of iron nonetheless lies in hollow tubing constructions, possibly combined with grids.</td>
</tr>
<tr>
<td>CS.MA.W</td>
<td>DS.140</td>
<td></td>
<td>About characteristics of wood that must be taken into account.</td>
</tr>
<tr>
<td></td>
<td>ib. wood</td>
<td>DS.141</td>
<td>About inherent restrictions of wood.</td>
</tr>
<tr>
<td>CS.MC</td>
<td>material-choice</td>
<td>PR.228</td>
<td>About the banality of exposing costly material for its costliness—as with the Romans</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PR.237</td>
<td>Why marble was painted—or rather, why Greeks chose marble as grounding for paint.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FE.IV.46-51</td>
<td>Why marble was painted—or rather, why Greeks chose marble as grounding for paint.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FE.V.52ff</td>
<td>General considerations regarding choice of materials.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FE.VI.102</td>
<td>Constructive polychromy recommended.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DS.80</td>
<td>Choice of costly material for Greek temples if it was to be painted anyway now explained from value assigned to costliness as such.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DS.139</td>
<td>Proportions less dependent on material employed than on idea to be expressed.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DS.140</td>
<td>Constructions in wood never served as prototype for truly monumental architecture, for which stone remains the true material.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DS.141</td>
<td>Metals even less fit for monumental purposes than wood.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DS.152</td>
<td>About non-monumental character of half-timbered walls.</td>
</tr>
<tr>
<td>CS.W</td>
<td>construction-walls</td>
<td>DS.85</td>
<td>Justification of only seemingly bearing columns on the interior of Pantheon and Roman thermae.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>DS.134</td>
<td>On the virtues of small windows in stone walls.</td>
</tr>
</tbody>
</table>
On polygonal versus horizontally layered walls of huge stones.

Basic rules and considerations as regards the size and scale of masonry as it decreases (or should do so) from basement to top floor, optical versus dynamic effect.

About non-monumental character of half-timber walls.

**Detailing:**

First presentation of 'the four elements' and how since times immemorial they provided the basic vocabulary for architectural detailing.

How various types of tapestry preceded the masonry wall, and how representations of the former still hold the essence of the latter as spatial enclosure.

Tapestry as prototype for Assyrian and Egyptian wall decoration.

Classical polychromy and wall-painting defended as a natural next stage in evolution of 'dressing' principle; how it ends with the Romans.

On dressing of beams

As with floors, on ceilings no obvious contrast of left to right, or top to bottom.

Ceilings may be left undressed; if dressed, organization will be radial or concentric.

On what subject matter is fit for representation on a vault or ceiling.

On relationship of vault to wall in Roman architecture.

Floors, unlike walls, have no obvious contrast of top to bottom, or even of left to right to be taken into account while dressing them; decoration should remain unobtrusive; not too much naturalism or strongly contrasting colors.

How nature sets an example for coloration of floors.

More about floral and other figurative patterns on floors.

Concept of 'dressing' now extended with that of masking, and hence connected to similar phenomena in other arts.

On relationship of vault to wall in Roman architecture.

On late-Gothic rosette windows.

Justification of Roman practice to frame arched openings with pilasters and architrave.

"Die umrahmte Füllung .. hinzudeuten.

Most elaborate decoration should be in 'hanging' decorations at the bottom, in 'standing' ones at the top.

On termination of walls in large-scale masonry [Quadergemäuer].
F  DS.137  9.4  On the tectonic principle in Greek architecture: that nothing should remind of, let alone raise doubts about, potential of construction to exist and to last.

DS.138  9.7.2  How interplay of forces in a construction should be expressed in the same.

F.20  DS.11-12  9.7.2  On symmetry and proportion in wall covers.
2 dimens.  DS.13  9.7.2  On symmetry and proportion, radial and concentric organization in floor covers.

DS.134  9.7.2  On proportioning of windows considered from the point of view of a building's exterior.

DS.166  9.7.2  A tripartite vertical development of walls is recommended; universal applicability of simple set of mathematical proportions (as contained in the five orders) rejected.

F.25  DS.9  9.7.2  How extension in length and width, and absence of a third dimension, are of the essence of covers.
2/3 dimens.

3 dimens.

DS.137  9.7.2  Principle of whole that is repeated in the parts illustrated on pedestals.

DS.166  On the virtues of slightly inward slanting walls—as the Greeks took over from the Egyptians.

F.E  EK (1845)  Relationship inside-outside in Romanesque churches better and clearer than in Gothic ones (see Herrmann, 1984, pp. 124-138).
interior-exterior

F.MP  SI.V.55  9.7.2  Mathematical character as a negative trait of Gothic.
proportion  DS.134  9.7.2  Optical corrections to proportions of windows endorsed.
F.MR  DS.XXI-XXII  8.4.2  Architecture with music and dance classified as non-imitative, rhythm  9.3.1  cosmic art; importance of rhythm to all of these.
F.MT  SI.II.35-36  "It is no doubt gratifying ... pervades the composition like a musical theme."
themes + v

F.O  DS.XXIII  8.4.2  How work of art should appear like a necessity of nature.
organic an.  8.9.3
F.OS  DS.142  9.7.2  How pillars of railway bridges should become animated like organisms.
ib. structure  Two kinds of cosmic association to be derived from stone walls: anorganic (crystalline) for their material being, organic for vertical tripartite division.

DS.166  9.7.2

F.OU  SI.II.33-35  "Just as nature in her variety is very sparse ... determining circumstances."
unity in variety  SI.II.41  9.3.2  How we should study art the way we study nature.

R.H  SI.II.30-31  Because of the awkwardness of most figurative ornament at the Great Exhibition, unadorned functional objects like weapons or wagons as displayed there were more successful as design.
how?
"It is without doubt gratifying ... pervades the composition like a musical theme."

Advocates of naturalist ornament are branded as just another kind of materialists.

On what subject matter and what level of naturalism is appropriate for floors

Observe how Semper is not very specific as to how realistic a mask should be.

Realism of sculpture as on the Parthenon applauded.

Subordination of sculpture to architecture as on Gothic cathedrals not appreciated.

"Monumentalität erreicht ..."

Materialist conception of architecture as "durchgebildete Konstruktion" rejected.

Ceilings considered an appropriate place for a room's richest decoration.

Figurative ornament to be relegated to [constructively] neutral ground—in textile products like in architecture.

On proper places for bands, strings, et cetera, on a construction.

Inseparability of art-form and core-form in Greek architecture pointed out as what makes it so organic.

Figurative ornament (with 'Tendenzsymbolik' even) in Gothic houses erroneously applied to constructive members.

Wherever something hangs on a rod, decoration is to be concentrated on the thing that is hung, not on the rod.

In furniture too decoration is to be concentrated on non-constructive members.

Highest perfection in stone architecture has been achieved in dressed rather than in naked variety.

Historicist architecture rejected.

Gothic revival rejected.

On origin of monumental architecture in festive celebrations; the dressed scaffolding ..

Properties of the dressed material should be acknowledged in the dressing, precisely to make the former more completely forgotten.

If there is a reference to wooden prototypes in stone buildings (e.g. Greek temples), this is to certain functions that those forms have come to symbolize, not to wood as material.

Naturalist ornament at Great Exhibition criticized as childish attempts at art.

Limits of good taste are more easily trespassed with animal than with vegetable forms.

'physiognomic finesse' of classical orders can be emulated in 'Rundbogenstil'.

Theory of dressing and 'Stoffwechsel' provides kind of a justification for detailing that refers to older technique.

Romanesque detailing displays a return to its origin in textile art.
Signification Associative:

- **SA.C** cosmic
  - DS.XXII 8.4.2 On architecture as a cosmogonic art.

Signification Indexical:

- **SLIC** of construction
  - DS.137 9.4 Clue to tectonic principle in Greek architecture is that nothing should remind of, let alone raise doubts about, potential of construction to exist and to last.

- **SL.M** of makers and making
  - SI.II.37 SI.V.55 (153-54*) AS.402-03 8.9.3 8.7.1 On degradation of ornament when it is visibly mechanical. It is marked as a distinction when virtuosity in execution of ornament makes us forget the labor expended on it. On 'style' as indirectly referring to hand that leads a pen, and so on.

- **SL.U** of use
  - SI.143* Always distasteful when work of art betrays its purpose of seducing a buyer—rather than what function(s) it is to perform in its assigned location.

Signification Symbolic:

- **SS**
  - PR.226n 9.3.1 On the importance of religious meaning (or any meaning) to art.
  - FE.V.52ff Theory of dressing and 'Stoffwechsel' provides kind of a justification for detailing that refers to older technique.
  - FE.VI.101 "this ancient symbol of sacredness, the roof .."

- **DS.XXXI - 8.7.2 Futurist art and 'Tendenzsymbolik' rejected.
  - DS.XX 8.4.1 Gothic architecture qualified as "lapidarian transformation of Scholastic philosophy."
  - DS.1 Materialist conception of architecture as "durchgebildete Konstruktion" rejected.
  - DS.62 "I think that the dressing and the mask ... 'What is Hecuba to him?"

- **DS.76** 8.7.2 9.3.1 When it is noted that Egyptian wall becomes carrier of symbols rather than of 'Schmuck,' it is concluded: "Nicht mehr Farbenmusik sondern Farbenretorik wird hier aufgeführt.”

- **DS.134** 9.4 Why reference to structural function of a part in its appearance should be symbolic rather than literal (i.e. indexical): in order not to remind of the material.

- **DS.140** If there is a reference to wooden prototypes in stone buildings (e.g. Greek temples), this is to certain functions that those forms have come to symbolize, not to wood as material.

Style:

- **ST.H** how?
  - PR.225-26 9.3.1 Art in its evolution need not progress from simplicity to riches to superfluity.
  - FE.VI.103n "How unfair ... Until then, one has to make do with the old."
  - SI.143-44* Disintegration of existing types by their eclectic use must be
completed before something more authentically new can arise. In Gothic it was architecture that provided themes to the fine arts--rather than other way around.

"Für die Maschine soll ... Entscheidung zu geben hat." This apparently functionalist credo is illustrated on Egyptian chairs.

In Classical Greece it was architecture that provided themes to the fine arts--rather than other way around.

Evolution of style is not so gradual as it is often assumed. Sometimes it takes leaps.

Darwinian evolution of natural species no model for evolution of architectural style.

Advent of new architectural style will have to wait for new ideas from outside architecture to be expressed.

**Urban Patterns:**

<table>
<thead>
<tr>
<th>U.EP</th>
<th>DS.XXIII</th>
<th>8.4.2 Works of art and artifice are to appear as a necessity of nature, and at the same time as the commonly understood, formal expression of an idea.</th>
</tr>
</thead>
<tbody>
<tr>
<td>presence</td>
<td>AS.404</td>
<td>8.9.3 &quot;Whatever I adorn ... I elevate .. to the rank of a person.&quot;</td>
</tr>
</tbody>
</table>

Example of classical Greece shows how democracy finds its appropriate physical counterpart in urban form.

Gothic cathedrals poorly fit in urban fabric of existing towns.

Urban design, inspired by Egyptian and Assyrian prototypes, began to flourish only late in Greek history.

**Procedural issues (Fig. 14):**

**of Design:**

<table>
<thead>
<tr>
<th>PD.1</th>
<th>DS.19</th>
<th>9.3.2 The principle of making a virtue out of a necessity.</th>
</tr>
</thead>
<tbody>
<tr>
<td>level 1</td>
<td>DS.134</td>
<td>Imagination needs a 'logic of invention' to guide it in design.</td>
</tr>
</tbody>
</table>

Whatever the English may think of it, rationalism and empiricism alone will not do in design.

"Art knows only one master--the need. ... under the sun of freedom."

Durand dealt with as "this chancellor of the exchequer of failed ideas."

Close cooperation between the three fine arts once again emphasized as crucial, now with reference to 'le Jupiter Olympien' by Quatremere de Quincy.

How all the arts should cooperate on architectural 'Gesamtkunstwerk.' How architecture degenerated when its close liaison with sculpture and painting was broken.

Architecture is the loser when wall painting is prepared on boards in the studio.

How presentation of plans affects an incompetent judge.

<table>
<thead>
<tr>
<th>PD.1.F</th>
<th>SI.152*</th>
<th>9.3.1 How all the arts should cooperate on architectural 'Gesamtkunstwerk.' How architecture degenerated when its close liaison with sculpture and painting was broken.</th>
</tr>
</thead>
<tbody>
<tr>
<td>feedback</td>
<td>PR.218</td>
<td>&quot;Art knows only one master--the need. ... under the sun of freedom.&quot;</td>
</tr>
</tbody>
</table>
| PD.1.I | PR.217 | Durand dealt with as "this chancellor of the exchequer of failed ideas."

<table>
<thead>
<tr>
<th>PD.1.L</th>
<th>FE.1.1</th>
<th>Close cooperation between the three fine arts once again emphasized as crucial, now with reference to 'le Jupiter Olympien' by Quatremere de Quincy.</th>
</tr>
</thead>
<tbody>
<tr>
<td>layout</td>
<td>PR.223ff</td>
<td>How all the arts should cooperate on architectural 'Gesamtkunstwerk.' How architecture degenerated when its close liaison with sculpture and painting was broken.</td>
</tr>
<tr>
<td>PD.1.OA</td>
<td>PR.257</td>
<td>Architecture is the loser when wall painting is prepared on boards in the studio.</td>
</tr>
<tr>
<td>optimizing appearance</td>
<td>SI.159*</td>
<td>How presentation of plans affects an incompetent judge.</td>
</tr>
<tr>
<td>PR.223ff</td>
<td>SI.144*</td>
<td>Why industrial arts deserve a more central place in design education than they have done so far.</td>
</tr>
<tr>
<td>9.3.1</td>
<td>SI.147-48*</td>
<td>Problems with separate schools for the applied arts.</td>
</tr>
</tbody>
</table>

345
SI.149-50* 9.7.5 French system of night time study combined with daytime work in the same field endorsed.
SI.160-64* 9.7.5 Competitions and prizes to stimulate young talent in design are not recommended.
SI.160-64* 9.7.5 Design education to be arranged around collections and libraries; classes secondary to studio work.
DS.X-XII 9.7.5 Problem-oriented practical training should be preceded by broad humanist education; classes secondary to studio work.

PD.2.O
organizational

SI.157-59* 9.7.5 On the consequences of English liberalism on architectural decision-making.

PD.2.R
research

PR.220 8.9.1 Greeks to be studied, "not to copy their dead alphabet, but to imbibe ...," et cetera.
SI.I.29 8.8 Model of science that approaches hypothetico-deductive one.
SI.I.30-31 8.8 "Although facts ... are no argument, ..."
SI.II.34-37 8.7.1 Effort to outline the structure of an intended theory of style.
DS.VIII 8.3 Effort to outline objectives of empirical theory of art and to point out what such theory is not.
DS.X-XII 8.5 Endorsement of idealist education, being creative as an end in itself, and direct intuitive thinking.
DS.XIX-XXI 8.7.2 Idealist aesthetics rejected.
DS.XXII
DS.1 8.7.2 Comparative linguistics as a model for the study of art in its evolution.

PD.2.RD

PR.223 Suggestion that if we are successful in pursuing the process of art history as regards polychromy (when did it become a problem?), then "the answer to everything else will follow by itself".

PD.2.RM

SI.II.41 9.3.2 In order to find out why art of otherwise less civilized peoples is often superior to our own, art should be studied the way we study nature.
DS.1 Study of history of style is traditionally inhibited by bias that art should move from noble simplicity to over-elaborate decadence.
DS.2 Emphasis on material aspects of artifice defended on methodological grounds; no bias toward materialist concept of quality.

PD.2.RP

SI.II.41 9.3.2 How we should study art the way we study nature.

PD.3.CU

PR.223ff
SI.149-51* Unity of the three fine arts considered a basic condition for healthy growth of each.

Among the reasons why France still wins the day in its production of applied art are mentioned: traditionalism, spirit of freedom, and restraint in luxuriousness of domestic furnishings.

PD.3.EC
economy

SI.II.30-44 9.3.2 About conditions in industrial society that are unfavorable to a healthy development of applied arts: no time for gradual perfectioning, over-abundance of means, and so on.

DS.XXII - 8.9.4 About conditions in industrial society that are unfavorable to a healthy development of applied arts, such as a lack of time for gradual perfectioning.
Unlike in Egypt, Athens, or Renaissance Italy, present time does not allow a leading role to architecture over the other arts—and a reversal of this situation is not to be expected. See earlier remarks on Greek polychromy in relation to landscape and climate.

Art with organic life as of ancient Greece can only flourish under the sun of freedom. How under influence of Protestantism attention in architecture shifted from religious to secular building tasks. About conditions for healthy growth of the arts in England.

How pre-architectural conditions of nomadic life appear to return in American home building and furnishing. About "abundance of means."

of Evaluation:

Collections important not only to design education, but to education of taste as well. Therefore put them on public display.

Good taste cannot and should not be enforced from above. Aim of the paper is described as: "to advance my reform proposals for the education of taste in England." See also the paper's subtitle. Public taste cannot be improved by doctrinal insistence on a few canons of art. 'Chamber of Horrors' in Marlborough House criticized as well.

Four characteristics of an incompetent judge of architectural design.
Appendix 5: Questions Dealt with in 'The Seven Lamps' and 'The Stones of Venice'

In order to account for the way distribution of attention in The Seven Lamps and The Stones over various issues that typically belong to architectural theory has been summarized in Figure 28 (§ 10.3)—and for some other reasons, such as transparency of our interpretations, as well—this appendix will present the larger inventory of statements as found in these two (as well as some other) works. The first column corresponds to the coding of questions as presented in Figures 13 and 14 (§ 4.4). The last three categories, which refer to value systems (V.), special-words-with-special-meanings (W.), and ranges of examples (X.), are open-ended and accordingly will not be found in Figs. 13 or 14. The second column indicates a place in one of Ruskin's works. For an explanation see § 10.1.2. The third optionally mentions a paragraph in this study where the passage indicated in the second and the fourth is quoted or otherwise mentioned. The fourth either lists the first and last few words of that passage, or gives a very brief summary.

Material issues (Fig. 13):

**Color:**

| CO  | SL.IV.35 | 11.4.5 | "I think the colors .. graceful." |
| CO.C | SL.II.18 | 11.4.5n | "The true colors .. might we not achieve." |
| choice of .. | | | |
| CO.F | MP.II.I.V.9 | 11.4.5n | "We shall see .. is accidental." |
| versus | SL.IV.36 | 11.4.5 | "And the first .. and so leave them." |
| form | SL.IV.36 | 11.4.5 | "In certain places .. interest in form." |
| | SL.IV.38 | 11.4.5 | "Infinite nonsense .. perfection of line." |
| | SL.IV.39 | 11.4.5 | "all cases .. can be invented." |
| | SV1.XXVI.03 | 11.4.3 | "I have repeatedly .. variations of hue." |
| | SV2.V.28 | | On bas-relief with gilded background |
| CO.M | SL.II.14-15 | 11.4.5 | "Evidently, then .. than their marbles" |
| v. material | SL.IV.40 | 11.4.5 | "primarily .. Vatican and Sistine." |
| CO.N | EL.II.2.Add | | "Abstract color ... favorable to the color." |
| naturalism | SL.III.12 | 11.4.5 | "Now, it does not seem .. caused to assume." |
| | SL.IV.35 | 11.4.5 | "If Tintoret .. their servants" |
| | SL.IV.40 | 11.4.5 | "primarily .. Vatican and Sistine." |
| | SV2.VI.42 | 11.4.5n | "We are to remember .. grey and purple." |
| | SV2.VI.44 | 11.4.5n | "Facts are often wanted .. Turkey carpet." |
| | SV3.IV.27 | 11.4.5n | "Only observe, .. for the sake of color." |
"You have, in these two nations .. in humanity."
"You will everyday hear .. safe or not."
"is itself a real thing .. perfect without color."
"we are to consider .. to each."
"the purest [Doge's Palace] .. public buildings."
"is itself a real thing .. perfect without color."
"either to be left .. with their forms."

**Construction:**

"The resemblance in its shafts .. of the bolder Gothic."
"Of the many broad divisions .. front of marble."
On three kinds of deceit
"this is to be remembered .. unarchitectural."
"I suppose .. utterly base."
"so that when we use .. carve it by machinery."
Many positive suggestions
"Generally speaking glass spoils all traceries."
"It is thought .. multiplicable things."
"Nothing in architecture .. the width of this page."
Glass to be kept in the shadow
"Yet it is evident .. not as a support."
"for it is in this license .. for his nourishment."
"No reason can be given .. to His own laws."
"The common iron work .. those of cast iron."
"It is thought .. multiplicable things."
"Nothing in architecture .. the width of this page."
"Iron is, however, fit .. and of stone only"
"that the quaint beauty .. in the highest degree"
"there is a very noble .. and vice versa."
"Thus his truest respect .. and permanently done."
"Now, of the principles .. by many among us."
"that the tenth part .. every town in England."
"Of this feeling .. public."
"there is a very noble .. and vice versa."

Natural materials preferred
Natural materials preferred
"There can be no doubt .. of materials."
"Iron is, however, .. multiplicable things."

"Of the many broad divisions .. front of marble."
"there is a very noble .. and vice versa."
On stringcourses
On useless buttresses
### Detailing:

| D           | EL1/2.Add | 11.4.3 | "I do with a building .. of little consequence."
|            | SV1.II.06 |        | "But their other two virtues .. right and wrong."
|            | SV1.II.06 |        | "Consider first .. of means."
|            | SV1.II.15 |        | "So then there are .. and monstrous."
|            | SV1.II.18 |        | "Our task, therefore .. own performances."
|            | SV2.VI.39 | 11.4.2 | Repeating motifs should be perpetually varied.
|            | SV2.VIII.31|        | "if the reader .. of the building."
| D.C        | SL.II.14-18 | 11.4.1 | On surface deceits
| cladding   |          |        | "Now the principal beauty .. and taper curvatures.
| D.CS       | SV1.XXVI.13 | 11.4.3 | "It is, however, .. of middle size.
| of shafts  | SV1.XXVI.14 | 11.4.3 | "on which decoration .. farther beneath it.
|            | SV1.XXVI.15 | 11.4.3 | On flutings and caryatids.
|            | SV1.XXVI.17-8 | 11.4.3 | "No subject has been .. fresco painter.
| D.CW       | SV1.XXVI.01 | 11.4.3 | "Of the richer modes .. or undulating rods.
| of walls   | SV1.XXVI.07 | 11.4.3 | "Throw any number .. skill and thought."
| D.F        | SV2.VI.99 |        | On spandrils, tympana, and gables
| filling    |          |        | "although .. the noblest .. or animal ornament."
| D.FB       | SV2.XXVI.09-12 |        | On subdividing Gothic windows
| D.FC       | SV2.VI.99 |        | On corners of Ducal Palace
| D.FW       | SV1.XVII.19 |        | On useless pinnacles on top of buttresses
| D.TC       | SV2.VIII.31-42 | 11.4.3 | of piers etc.
| termination of corners |        |        | "It is difficult .. disposition of masses."
| D.TP       | SV1.XV.07 | 11.4.3 | On six conditions of typical beauty
| of pier etc. |          |        | "Observe if it be irregular .. is a good one."
|            |          |        | On variety in Gothic detail
| F          | MP2.III.I.V-X |        | "Abstract color .. favorable to the color."
|            | SV2.VI.112-13 |        | "We are to remember .. grey and purple."
|            | SV2.VI.39 | 11.4.2 | "Facts are often wanted .. Turkey carpet."
|            | SV2.VI.44 | 11.4.5n | "Only observe, .. for the sake of color."
|            | SV3.IV.27 | 11.4.5n | "It is difficult .. disposition of masses."
|            | SV2.VI.94-12 | 11.4.2 | On apparent versus constructive proportion
|            | SV2.VI.27 | 11.4.2 | On apparent versus constructive proportion
|            | SV2.VI.33-37 | 11.4.2 | On symmetry
|            | TP1 |        | "Proportions are as infinite .. of gross mistake."
|            | TP4 |        | On subtle irregularities
|            | SL.IV.25 | 11.4.2 | "There is a like, .. which is unheard."
|            | SL.V.09-17 | 11.4.2 | On subtle irregularities
|            | SL.I.V.10 | 11.3 | "It is true that order, .. of an opera."
|            | SV1.XXI.20 |        | "I believe that .. observing them in music."
|            | SV2.V.04-12 | 11.4.2 | "Redundance was .. vulgar mathematics."
|            | SV2.VI.27 | 11.4.2 | "In the first place .. amuse any one?"
|            | TP1 |        | Repeating motifs should be perpetually varied
|            | MP2.III.I.VI.10 | 11.4.2 | On apparent versus constructive proportion
|            | SL.II.07 | 11.4.2 | "The architect is not bound .. may be concealed."

### Form:

| F          | MP2.III.I.V-X | On apparent versus constructive proportion
|            | SV2.VI.112-13 | On symmetry
|            | SV2.VI.39 | 11.4.2 | "Proportions are as infinite .. of gross mistake."
|            | SV2.VI.44 | 11.4.5n | On subtle irregularities
|            | SV3.IV.27 | 11.4.5n | "There is a like, .. which is unheard."
|            | SV2.VI.33-37 | 11.4.2 | "It is true that order, .. of an opera."
|            | TP1 |        | "I believe that .. observing them in music."
|            | TP4 |        | "Redundance was .. vulgar mathematics."
|            | SL.IV.25 | 11.4.2 | "In the first place .. amuse any one?"
|            | SL.V.09-17 | 11.4.2 | Repeating motifs should be perpetually varied
|            | SL.I.V.10 | 11.3 | On apparent versus constructive proportion
|            | SV1.XXI.20 |        | "The architect is not bound .. may be concealed."
"it is rather strange ... and energetic way;"
"The foundation is to the wall ... above ground."
"we shall never suppose it ... upon the ground."
"it is rather strange ... and energetic way;"
"On four kinds of unity
Repeating motifs should be perpetually varied
On beauty of curves and of gradation in color
Why circles cannot be beautiful
On symmetry
"all that they admired ... at the gallop."
"although ... the noblest ... or animal ornament."
"The nobler the materials ... others more noble."
"Now, of the principles ... by many among us."
"From about these two ... mechanical construction."
Principle of the bounded outline
Circle and square as eminent domains of power
On masses of light and shadow
On shadow in architectural detailing
"Proportions are as infinite ... of gross mistake."
"the first is ... the center dominant."
"This rule of supremacy ... of all good mouldings."
"Evidently there is ... the tower of Pisa."
"One more principle ... seven in the other"
Shadow for the sake of shadow; makes picturesque!
On superimposition

"The nobility of each ... universal law of right"

"The first thing ... at the smallest expense."

"work may be wasted ... to bear exposure."
"Hence the greatness ... a spot of darkness."
(See SV1.XXI for details)
"that the closest imitation ... of the noblest subject."
"it is just as unreasonable ... the outside of it."
"The especial condition ... have been serene."
"the assuredly intended ... they chose to express."
"the medieval system ... by being imperfect."
"devise such a system ... hands of childhood."
"the medieval system ... and only perfect system."
"It is foolish ... of examining."
Description of sculpture at Chartres
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<td>SL.IV.36</td>
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<td>Stems, trunks, and foliage as subject matter</td>
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<td>SV2.VI.99</td>
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<th>SV1.V.1-6</th>
<th>Stringcourses that resembles multi-layered rocks</th>
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<td>of use</td>
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"I have seen .. of fortress towers."
"periods of rest and .. of its work."
"Imagine the difference .. to the other death."
"On how to render clouds, waves, and crystals"
"many associations and .. of the wall itself."
"I have seen in recent efforts .. fortress towers."
On Strength and Beauty
Churches to be more richly decorated than houses

**Signification Indexical:**

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On actual versus apparent construction
On structural deceits and the use of iron
On surface deceits
On operative deceits
Gothic declined when line was substituted for mass
On history of building once it was built
"It is as the protectress .. soldier historians."
"For indeed the greatest .. and of life."
"Don't let us deceive ourselves .. other thoughts."
Delight in awareness of labor spent a low one
On history of its builders and how it was built
"I believe the right question .. will not be living."
"both of these being less .. of our praise."
"Consider first .. of means."
"as if it had been built by strong .. disdain for it."
"Here, therefore, .. it is nugatory."
"There must be a summon .. to his work."

**Signification Symbolic:**

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Churches to be more richly decorated than houses
"It will also follow .. external ornament."
"This right over the house .. of its experience."
"Now as regards the second .. of their language."
"One main cause of it .. Norman barons or monks."
### Style:

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<td>TP4</td>
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<td>&quot;that the very essence of style .. of a new one.&quot;</td>
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Buildings should please by their presence |
"it is rather strange .. and energetic way;"
"It would not be well .. weight of a great wall."

### Procedural issues (Fig. 14):

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"Don't let us deceive ourselves .. other thoughts."
"Of composition and invention .. speak."
"An architect should live .. by a dome."
"And if this be .. of watch and war."
Love of triglyphs a hypocrisy
"God never forgets .. thirteenth century."
"We address ourselves .. it be perpendicular."

### Value Systems:

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</tbody>
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"Of this feeling .. public."
"The church has no need .. but the giving."
Special words:

W. SL.1nt. 10.5.1 "Both arrangements .. brought forward."
W. Beauty MP2.III.III.17 10.5.3 On vital beauty
MP2.III.IV.7-12 10.5.3 On beauty's autonomy and objectivity
MP2.III.IV-X 10.5.3 On formal conditions of typical beauty
MP3.IV.III.12n 10.5.1n Beauty and truth independent
SL.IV.1 10.5.3 "I desire now .. of organic nature."
SV.II.4 10.5.3 ".. in decoration or beauty .."
W. Gothic SL.VI.7 10.7.1n "It is one of the advantages .. altogether unlimited."
SV.VI.2-7 10.7.1 On 'Gothic' and 'Gothicness'
W. Great. MP1.I.II.9 10.5.1 "which conveys to the mind .. received."
W. Ornament SV1.App.17 10.5.3 On ornament being superfluous
SV1.XXI.25-27 10.5.3 "the distance of ornament .. ornament is bad."
W. Pictur SL.IV.11-12 10.5.1
SV1.XIX.7 10.5.1n "To this kind of superimposition .. Swiss chalet."
SV2.VII.1 10.5.1n "The Renaissance palaces .. independent power."
W. Sublime MP1.I.II.III 10.5.1n "Anything which elevates the mind .. of any kind."
SL.III.03 10.5.1 "with what is most sublime in natural things"
W. The. F. MP5.App..n 10.5.3 Theoretic faculty rejected
W. Truth MP3.IV.III.12n 10.5.1n Beauty and truth independent
SL.II.01 10.5.2 "Speaking truth is like .. daily trouble."
SL.II.02 10.5.2 '.. so I would have .. of chivalry."
SL.II.05 10.5.2 "The violations of truth .. quantity of labor."

Examples:

X. Arab SV1.I.49 10.2.1n "I felt .. assured .. Modern European"
X. China SV1.I.49 10.2.1n "I felt .. assured .. Modern European"
X. Glotto SL.IV.13 11.4.3 How Campanile ranks even higher than Doge's Palace
X. Gothic SL.I.14 10.7.1 "There can be no question .. northern spirit only."
SV1.I.49 10.2.1n "I felt .. assured .. Modern European"
SV1.XIII.9 10.7.1 On Gothic roofs
SV2.VI.38 10.7.1 "The variety of the Gothic schools .. at the bottom."
X. Greek SV1.I.49 10.2.1n "I felt .. assured .. Modern European"
X. Mexic. SV1.I.49 10.2.1n "I felt .. assured .. Modern European"
X. Modern SV1.I.49 10.2.1n "I felt .. assured .. Modern European"
Appendix 6:  

Greatness and Truth in Ruskin's earlier and later writings

Ruskin's ideas on Greatness and Truth in art, for as much as they found expression in The Seven Lamps or The Stones of Venice, have been discussed in §§ 10.7.1 and 10.7.2 above. At the same time it has been indicated that these only represent one phase in an ongoing intellectual development. Earlier and later phases in the latter have (for the sake of conciseness) been relegated to this appendix.

Characteristically, a first attempt to define 'Greatness' in art is found not in The Poetry of Architecture with its roots (through the picturesque movement) in associationist philosophy, but in Modern Painters 1, which is much more based on classicist theory of art. In the latter work it is stated:

**MP1.I.II.9** Now I want a definition of art wide enough to include all varieties of aim; I do not say therefore that the art is greatest which gives most pleasure, because perhaps there is some art whose end it is to teach, and not to please. I do not say that the art is greatest which teaches us most, because perhaps there is some art whose end it is to please, and not to teach. I do not say that the art is greatest which imitates best, because perhaps there is some art whose end is to create, and not to imitate. But I say that the art is greatest, which conveys to the mind of the spectator, by any means whatsoever, the greatest number of the greatest ideas, and I call an idea great in proportion as it is received by a higher faculty of the mind, and as it more fully occupies, and in occupying, exercises and exalts, the faculty by which it is received.

Emphasis here, as in play theory of art (see §§ 9.1-3), appears to be on how the mind is activated when confronted with works of art, rather than on specific contents to be received from the latter. The impression is reinforced by a wide definition of 'idea' in the preceding paragraph:

**MP1.I.II.8** The term idea, according to Locke's definition of it, will extend even to the sensual impressions themselves as far as they are "things which the mind occupies itself about in thinking," that is, not as they are felt by the eye only, but as they are received by the mind through the eye.
However, in what follows the relevant ideas are first categorized as five, those of power, imitation, truth, beauty and relation [MP1.I.I.III.1], and then reduced to two: truth and beauty. Ideas of power are defined [MP1.I.I.III.2] as "the simple perception of the mental or bodily powers exerted in the production of any work of art," but it is soon concluded [MP1.I.I.II.2] that these "... cannot be completely viewed as a separate class; not because they are mean or unimportant, but because they are almost always associated with, or dependent upon, some of the higher ideas of truth, beauty, or relation, rendered with decision or velocity." And so, after some interesting observations as to how this kind of quality in a work of art tends to be enjoyed, its further analysis is relegated to the chapters about (ideas of) truth, beauty and relation. Ideas of imitation, defined as 'The perception that the thing produced resembles something else' [MP1.I.I.III.1], are dropped because there is nothing in them to enhance (ideas of) truth, beauty, or relation. All they can possibly contribute to the enjoyment of a work of art, is the lowest kind of pleasure art can offer: the perception that something is not what it seems to be. Ideas of relation do not constitute a clearly bounded category to begin with, and perhaps are best negatively defined as all 'ideas,' expressed in or suggested by a work of art that are not covered by ideas of truth or beauty. A more detailed discussion of these is postponed until the last part of Volume 5, where by the time (1860) it is long since overdue. So for the moment only ideas of truth and beauty remain, and as Ruskin's conception of beauty is basically mimetic—in the sense that the best, if not the only way to achieve it in art is to faithfully render it as observed in nature—truth for the moment is the one that is given most attention. Typically, Ruskin intends to take it in its literal and most original sense: truth is of statements. At the root of the whole idea lies a conception of painting as a kind of language, and more in particular, a kind of poetry:

MP1.I.I.II.2-3 Painting, or art generally, as such, with all its technicalities, difficulties, and particular ends, is nothing but a noble and expressive language, invaluable as the vehicle of thought, but by itself nothing. ... The language is, indeed, more difficult of acquirement in the one case [of painting] than in the other [of writing], and possesses more power of delighting the sense, while it speaks to the intellect, but it is, nevertheless, nothing more than language, and all those excellences which are peculiar to the painter as such, are merely what rhythm, melody, precision and force are in the words of the orator and the poet, necessary to their greatness, but not the test of their greatness. It is not by the mode of representing and saying, but by what is represented and said, that the respective greatness either of the painter or the writer is to be finally determined.

Speaking with strict propriety, therefore, we should call a man a great painter only as he excelled in precision and force in the language
of lines, and a great versifier, as he excelled in precision or force in
the language of words. A great poet would then be a term strictly, and
in precisely the same sense applicable to both, if warranted by the
character of the images or thoughts which each in their respective
languages convey.

This emphasis on poetry as something at the core of all the other arts—which
more than a decade later is repeated almost word for word in Modern Painters
3400, already was implied in the very title of The Poetry of Architecture, although
there its relation to architecture remains more indirect than here to painting.
As it is stated in the introduction to the former, in regard to the question what
'The Science of Architecture' should be like:

PA. Int. It is not merely a science of the rule and compass, it does not
consist only in the observation of just rule, or of fair proportion: it is,
or ought to be, a science of feeling more than of rule, a ministry to the
mind, more than to the eye. If we consider how much less the beauty
and majesty of a building depend upon its pleasing certain prejudices
of the eye, than upon its rousing certain trains of meditation in the mind,
it will show in a moment how many intricate questions of feeling are
involved in the raising of an edifice ...

The place of poetry in this scheme is, first of all, that, as had been observed
before by Alison401, it takes a poetic mind to make all the rich associations
which can be made at the sight of something beautiful or sublime—and, by
the same token, a 'poet' as well to arrange a building in its landscape setting
so as to let these rich chains of association come off. 'Unity of feeling' in
this regard is the leading criterion of quality, as it is assumed that only this
can give real momentum to associative chains of the more strictly aesthetic
kind402. Observe, though, that in this conception there is freedom of association
rather than a particular message buildings in their landscape setting should
convey to an observer. Not so in the passage just quoted from Modern Painters
I: "It is not," we are told, "by the mode of representing and saying, but by
what is represented and said, that the respective greatness either of the painter
or the writer is to be finally determined." The distance Ruskin here has taken
to associationist positions, and (although he may have hardly been aware of
it) to German play theory of art, is as large as could be. Instead he has taken
refuge to ideas that were popular in eighteenth-century classicism. As Beardsley
puts it403:

Despite La Fontaine's reminder that 'Eyes are not ears,' that 'Words and
colors are not alike,' the prevailing theory of painting and music in the
Enlightenment paralleled closely the theory of poetry. Every applicable
principle of Horace and Aristotle was seized upon to make painting a
serious and intellectual art, comparable to tragedy and epic, even when liberated from its subservience to a religious end. The function of painting, the theorists held, is (in the Horatian formula) to please by teaching, or to teach by pleasing.

This perfectly characterizes Ruskin position in Modern Painters I. Dissatisfied with associationist philosophy, which left room for an indefinite range of beauties, he had turned to the ideas of Sir Joshua Reynolds (1723-92) as laid down in three contributions (numbers 76, 79 and 82) to Dr. Johnson's Idler, and in the Discourses on Art delivered by Sir Joshua at the English Royal Academy from 1769 to 1790. Like Reynolds, Ruskin, endorsed a basically mimetic concept of beauty. Now there is a problem inherent in all mimetic theory, which is that if beauty in art should rest on its imitation of something that is not art, this does not explain the beauty of what is thus imitated. If this again should rest on imitation of something else, one is at risk of ending up in infinite regression. If it does not, maybe mimesis is not the key to beauty after all. Reynolds's way-out was that of traditional classicism: true beauty in the things we see, whether art or non-art, rests on their being expressive or representative of a more abstract idea. Art becomes great art only when and where an artist perceives and renders the universal behind the particular, the invariable behind what is bound to change, the idea of a horse—or of whatever—rather than just a horse. This perfectly platonic way-out was unacceptable to Ruskin, who otherwise shared Reynolds's contempt for mere imitation—as exemplified in 'the Dutch school of painting.' Nor did he altogether reject the concept of ideal beauty, but this for him consisted in an awareness of divine immanence in nature, not in mere abstraction of the general behind the particular.

The difference is that the Ruskinian conception is dynamic, and of a creative power which can be sensed but not perceived, whereas Reynolds's is eminently static, rational and conceivable. Artistic rendering of Divine Nature in Ruskin's view hinges on characteristic detail, that is, on something specific for the situation rendered in the work of art, which at the same time tells a lot about all other aspects of the same. Truth in a work of art is a matter of finding this characteristic detail and effectively communicating it to a beholder.

Truth as applied to painting nonetheless remained an uneasy concept. Some difficult and inconclusive chapters [MP1.I.I.IV-V] are devoted to the relation of truth to imitation. High claims are made for the former as opposed to the latter:

**MP1.I.I.V.2** There is a moral as well as material truth,—a truth of impression as well as of form,—of thought as well as of matter; and the truth of impression and thought is a thousand times the more important
of the two.

A few pages later [MP1.I.I.V.6] it is added that "nothing can be beautiful which is not true"—an opinion he would revoke in Modern Painters 3 (1856)\textsuperscript{406}. And when halfway Volume 2, at the end of a long row of chapters that were primarily devoted to these 'Ideas of Truth,' Ruskin looks back on what has been established so far, he is bound to conclude:

MP2.II.VI.II.2-3 And so it is with all truths of the highest order; they are separated from those of average precision by points of extreme delicacy, which none but the cultivated eye can in the least feel, and to express which, all words are absolutely meaningless and useless. Consequently, in all that I have been saying of the truth of artists, I have been able to point out only coarse, broad, and explicable matters; ... All those truths which I have been able to explain and demonstrate in Turner, are such as any artist of ordinary powers of observation ought to be capable of rendering.

The higher, moral kinds of truth as announced in the first chapters of Volume I eventually are not discussed under that name. Instead they are, in Part III (that is, in the second half of Volume 2 (1846)) implicitly subsumed under 'beauty.' Ruskin's original concept of greatness from then on is virtually dead, though not, as indicated\textsuperscript{407}, officially, which has caused confusion among his readers. When after The Stones of Venice work on Modern Painters is resumed, and Volume 3 (Part IV: 'Of Many Things') appears in 1856, ideas that were expounded in the first two volumes are reconsidered in an essayistic rather than strictly systematic way\textsuperscript{408}. And when towards the end of Volume 5 Ruskin finally comes to speak of 'Ideas of Relation' (Parts VIII and IX), the reader is confronted with a similar collection of loose items. In Parts V, VI and VII (Volume 4 and the first half of 5), which deal with many kinds of beauty and how they best be rendered in painting, the 'Ideas of' has disappeared even from the titles of parts and chapters. And for good reason, for what are these 'ideas of' after all? 'Ideas of beauty' is equivalent to perception of beauty. Ideas of truth (to further complicate their distinction from ideas of imitation) turn out to stand for accurate perceptions of what is truthfully stated in a picture, rather than for an awareness of its truth. An emphasis on characteristic detail as a basic condition of poetic results meanwhile remains, in spite of this fading faith in truth\textsuperscript{409}. 

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Notes


4. Op.cit., p. 14. In support of this position, Kaplan (964) is quoted saying: "A theory is a way of making sense of a disturbing situation so as to allow us most effectively to bring to bear our repertoire of habits, and even more importantly to modify or discard them altogether, replacing them by new ones as the situation demands." It should be noted, though, that this is a more pragmatic way of putting it than Lang himself does—and, as a result, easier to reconcile with the ideas propounded here.


9. See Appendix 2 for details.

10. To state it in terms of the list of themes and questions in architectural theory to be discussed in § 4.4 (Fig. 13), meaning of a conventional, symbolic kind (SS) indeed is language-like, indexical (SI) and associative meaning (SA) are not, nor is likeness (L).


15. "Il s'agira donc ici des textes, dits de théorie, qui, dans le cadre d'un champ disciplinaire propre, s'assignent de déterminer les modalités selon lesquelles concevoir édifices ou villes à venir." [Op.cit., p. 9]


17. As it is explained on p. 31: "Perception, therefore, is anything but a passive reception of impressions. We may change the phenomena by changing our attitude. Brunswik [author of *Wahrnehmung und Gegenstandswelt*, Vienna, 1934, and other works on psychology of perception] used the word intention instead of attitude, to underline the active character of the act of perceiving."


21. It so happened that, wholly independently from Mr. Tzonis, I worked on this in my masters thesis (1975), and arrived at some sort of proof within a formalized system for the non-transitivity of the means-ends relationship.

23. We shall recur to the distinction between theory and rhetorics in § 4.3.1 below.


25. Thus Peter Collins in Changing Ideals in Modern Architecture (1965) felt it sufficed to say [p. 213]: "There is no need to elaborate here on the general theories expounded by Viollet-le-Duc, since a comprehensive study of his doctrine has already been admirably written by John Summerson, and published in the series of essays entitled Heavenly Mansions." As though an essay of about 6,000 words could ever be comprehensive!


27. See Appendix 2.

28. For The Netherlands one may add to this list Tzonis & Lefaivre, Theorieën van het Architektonies Ontwerpen, Nijmegen, 1983: SUN, an anthology of small fragments of texts by 103 different authors, all from the period 1135-1810. N.L. Prak, Geschiedenis van het Ontwerponderwijs, de Bilt, 1979: Cantecleer, indirectly deals with the history of architectural theory as well.


43. See Traité de l’Argumentation, la Nouvelle Rhétorique (1958/76) or some of his other books on rhetorics, argumentation, and philosophy of law, some of which have been translated into English.

44. By John Summerson in 'Viollet-le-Duc and the Rational Point of View,' a lecture of 1947, included in Heavenly Mansions (1949). A closer look at Viollet-le-Duc's style of reasoning also points to a structural similarity between rhetorics and Cartesian rationalism, which--be it for somewhat different reasons--likewise prefers to move from well established facts to less established ones, rather than formulate hypotheses and look for evidence in support of these.


46. The other reasons were disappointment with the theoretical substance and originality of this work, and an increasing resentment against the author's style of reasoning. Considering the way he has been hailed as the greatest architectural theorist since Alberti (Summerson, 1949) and the reputation he still in many places (though not so much in France itself) enjoys as the spiritual father of modern architecture, the great champion and inventor of visible applications of iron, and so on, even this lack of admiration may look like a position that deserves further elucidation, but I was afraid this would unduly shift attention from what this study is actually about to side issues.

47. I counted the following: Furness's Clearing House (91), Butterfield's All Saints (93), three works by H. H. Richardson and one of his followers (73, 102, 147), Adler & Sullivan's Auditorium (104), and two early works by F. L. Wright (232, 235). My attention to this situation was drawn by Mark Jarzombek in a paper he contributed to the aforementioned anthology Restructuring Architectural Theory, M. Diani & C. Ingraham (ed.), 1989, p. 90.

48. Op.cit., 1965, p. 102n, where to the conclusion that in architectural treatises "Usually ... the technical dimension is treated in isolation" it is added: "In some cases it has been given prime importance, especially by Semper who derived the form (style) from the technical methods of production." That in Semper's conception of style this form usually refers to an older technique as well, or even in the first place, is completely ignored.


52. There has been some confusion as to whether it was Hamburg or Altona, the place where he grew up, nowadays a suburb of Hamburg, but at the time a small town of its own. Latest accounts have it that he was born in Hamburg and subsequently baptized in Altona. The year of birth in an obituary by Pecht, added to volume II of the 1878/79 edition of Der Stil, is 1804, but as everybody else holds on to 1803, I suppose it is 1803.
53. See Gottfried Semper, *The Four Elements of Architecture and Other Writings*, translated by Harry F. Mallgrave and Wolfgang Herrmann, with an introduction by Harry F. Mallgrave and a preface by Joseph Rykwert, 1989, Cambridge: Cambridge University Press. In the introduction Mallgrave (p. 3n) points to a biographical sketch that in 1913 Hans Semper wrote for the *Schweizerisches Künstler-Lexikon* (Kraus reprint 1967).

54. For details see his forthcoming book, ...

55. I owe this information to Mallgrave as well.

56. Material for this study was collected on a tour of Italy, Palestine, and upper Egypt he made between 1815 and 1821.

57. Once again, I owe this information to Mallgrave.


59. The only executed design before Dresden is a garden building in a village near Altona for C.H. Donner, designed by Semper in 1834. It consisted of a greenhouse, an orangery, and a gallery for Mr. Donner’s sculpture collection, and was detailed (and painted!) mostly in Pompeian style.

60. Wolfgang Herrmann in *Gottfried Semper: In Search of Architecture*, 1984, Cambridge, MA: MIT Press, p. 158, relates how Leo von Klenze was upset about a sneer in the 'Preliminary Remarks' at those who "pin their hope on a commission of a Valhalla à la Parthenon, a basilica à la Monreale, a boudoir à la Pompeii, a palace à la Pitti, a Byzantine church, or even a bazaar in Turkish taste," which he felt were directed at him. This resulted in a correspondence between the two men, in which Klenze assured Semper he was as painfully aware of the shortcomings of current architectural eclecticism as his younger colleague, but that perfection in architecture could not be achieved by the work of individual artists; that it took centuries, and that so long "one must admit, though with grief and anger, that what is must be!" To which he added that "in architecture there can be only one thing worse: trying to produce a new architecture out of abstraction and theory." These were positions that, in almost identical words, Semper before long would come to defend himself. Other instances are the oft quoted phrase "Let the material speak for itself; let it step forth undisguised in the shape and proportions found most suitable by experience and science. Brick should appear as brick, wood as wood, iron as iron, each according to its own statical laws. This is the true simplicity on which we can let our fondness for the harmless embroidery of decoration run free." [translation Mallgrave, op.cit., 1989, p. 48]. Even if, as suggested by Herrmann [op.cit., 1984, p. 174], 'iron' in this context must have referred to decorative rather than constructive iron (the latter being largely unknown in continental Europe in 1834), this is completely at variance with the general tenor of Semper's later publications.

61. A two page summary is included in *Gottfried Semper: In Search of Architecture*, 1984, pp. 303-4.


64. For Semper's influence on Sitte see Collins & Collins, *Camillo Sitte: The Birth of Modern City Planning*, New York, 1986: Rizzoli, p. 27, p. 56 et passim. Sitte's first project in the field of urban design appears to have been an exhibition of Semper's works in the same field. An article by Sitte of 1885 on Semper's ideas in urban design likewise preceded *Die Städtebau nach seinen künstlerischen Grundsätzen* (1889) by four years.

65. As we shall see (§ 8.7.1), these ideas, on the other hand, were still endorsed in *Science, Industry, and Art* (1852).

66. For an opposite point of view see Heinz Quitsch, *Die ästhetischen Anschauungen Gottfried Sempers*, 1962, Berlin: Akademie Verlag.

67. Paul Emile Botta (1802-70), who at the time was the French consul at Mosul, and the Englishman Austin Henry Layard (1817-94) both were in search of Niniveh, but by mistake the former unearthed Khorsabad, the latter palace remains at Kuyukik, Ashur, and Nimrud instead. Botta published his findings in five volumes entitled *Monuments de Ninive* (1846-50), Layard in a four-volume series *The Monuments of Niniveh* (1849).

68. Although he denies that this was the case in all the most primitive societies, Semper does subscribe to the notion of architecture as the leading visual art in classical Greece and in Gothic Europe.

69. In § 68 of *Der Stil* it is pointed out as one of the reasons why curtains, baldachins, and other removable ceremonial objects generally do not fit in well in a Gothic interior, whereas in churches of a more classical variety they bring in the absolute measure of scale that these buildings themselves have not. In an unpublished comment (see Herrmann, op.cit., 1984, p. 138) on Viollet-le-Duc's aforementioned theory of Gothic as working with an absolute unit of scale Semper notes: "Good for houses but bad for temples. This makes the difference between the grand and the great. The grand has no scale. Nature works as the Greeks did--it works without scale."


71. At least one of Semper's designs 'in the Gothic style' was actually realized: a fountain in Dresden to commemorate the city's being spared from a cholera epidemic in 1843.

72. Note, however, how in *Science, Industry, and Art* (1852) the superiority of Gothic at least to earlier medieval architecture is acknowledged in the statement [SI.III, p. 146] that "The Western basilica, achieving its last and highest expression in the Gothic cathedral, was a second edition of the Egyptian pilgrimage temple."

73. Van Zanten, op.cit., 1987, pp. 50-54 and 164.

74. Most emphatically so at the very end of the section on 'stereotomy,' where in so many words [§ 174, p. 457] Renaissance art is stated to be superior to anything that came before, including the art of classical Greece.

75. For an opposite point of view see Pevsner (1972) as reviewed in Chapter 13.

76. Herrmann [op.cit., 1984, p. 129] in the same vein (but without drawing more general conclusions) mentions how, as opposed to Carl Schnase, who thought the rules of proportion employed by Gothic cathedral builders had a musical basis, "Semper thought it more probable, and in any case easier to prove, that the Gothic builders had applied optical laws."

77. See DS.XXI-XXII as quoted in § 9.3 below.
78. The page numbering in this and all the following quotes from this work refer to the German reprint of 1966 (H.W. Wingler, ed., Neue Bauhausbücher).

79. See for instance his comments on French art and architecture a little later in the same essay (pp. 149-51 in Mallgrave's translation of 1989). Having concluded that France still wins the day in the field of art, Semper gives four reasons to explain why this should be so. One of these is their traditionalism in clinging to old forms, as a result of which their Gobelin carpets—though way inferior to the Algerian ones that hung right next to them—were still far better than those of other industrialized countries.

80. Such was not yet the case in the Preliminary Remarks of 1834. See § 9.3 below for a more detailed account of how Semper's aesthetic thought evolved in time.


82. As Mallgrave pointed out to me, there appears to be among the letters which Semper wrote in his student years at least one that is fiercely antisemitic.

83. See the Prolegomena, DS.X.

84. See on this point for instance Hanno W. Kruft, Geschichte der Architekturtheorie, 1984, Munich: Beck, p. 360.

85. See § 9.7.5 below for a more detailed account.

86. As indicated by Michael W. Brooks in John Ruskin and Victorian Architecture, 1987, New Brunswick/London: Rutgers Univ. Press, p. 8, the exact same distinction was made in Loudon's Encyclopedia of Cottage, Farm and Villa Architecture of 1833.

87. The 'Discourses' must have appeared at least a few months earlier, though, as an illustration that accompanies the sixth one is taken over in 'Der Stil' [§ 163, p. 340n]—where Semper correctly mentions his source. For more on possible interrelationships between the two works see Robin Middleton's contribution to Gottfried Semper und die Mitte des 19. Jahrhunderts, 1976.

88. Thus Hegel in his lectures on aesthetics (Werke 13, Suhrkamp Taschenbuch Wissenschaft, pp. 394 ff.) defines 'symbol' as "an external existence that is immediately available or given for observation, but should not be understood the way it directly presents itself, but in a wider, more general sense." This is explained as follows. With many signs the relationship to the signified is a merely conventional and otherwise arbitrary one. This holds for flags like it does for most words in a language. These are no symbols in the true sense of the word, or at least not in art. "In the sense of such indifference of meaning to the way it is signified we should not, therefore, take the symbol in regard to art. ... [The symbol is] no mere indifferent sign, but a sign which in its outward appearance at once contains the content of what image it evokes." Thus a lion is a true symbol of pride, a fox of cunning, a circle of eternity, a triangle of the divine trinity, and so on.

Observe that Hegel is not mentioned here in order to suggest that Semper was among his ardent followers. Instead, everything suggests he thoroughly disliked the former's style of reasoning, and wished to maintain a certain distance between his own works and those of Hegel and his school. But, for one thing, they shared the German language, where Hegelian conceptions had acquired great currency, and, for another, Semper himself never made it altogether clear how he wished the word 'symbol' to be understood. A lecture he delivered in London in 1854, included in Kleine Schriften [pp. 292-303] under the title 'Ueber architekto-
nische Symbole,' contains little which is not also in Der Stil. The only difference is that at that point (London, 1854) Semper had no inhibitions against giving an honorable place to symbols taken from nature—the ones that were central to Bötticher’s interpretation of Greek art, of which we shall come to speak in § 9.4.

89. DS.76, p. 390.
99. See, for instance Schleudergeschosse, p. 5, and Kleine Schriften, pp. 323 and 421.
100. For a fairly reasonable account of this state of affairs, see Ettinger, op. cit., 1937, Chapter IV (pp. 49-78). The polychromy of the early nineteenth century, he notes, even though it started with archeological discoveries that nobody at the time was actually prepared for, soon took the character of a rebellion against ideals and ideas that were at the heart of traditional classicism. The latter had started in the mid-eighteenth century as a reaction against Baroque exuberance, exemplified in, among other things, internal and external coloration of buildings. Therefore, the presumed whiteness of Greek temples was not just a matter of inadequate archaeological knowledge. It likewise embodied an ethical ideal, for ".. gerade im Sieg der Form liegt der Sieg des Ethos und der reinen Menschlichkeit." [op. cit., p. 51]. And conversely: "Erkannte man die totale Benahmung an, so war der Klassizismus Winckelmannscher Schweize tot." [op. cit., p. 54]. Positively, Semper's enthusiasm for painted architecture was inspired by the ideal of the 'Gesamtkunstwerk.' On a practical level, however, the answer was not a return to eighteenth-century Baroque, but to a Renaissance vocabulary of forms—which happened to be once more unpainted, at least on a building's exterior. Theory followed, be it with a certain time lag: "Erst die Ausführungen des 'Stil' erklären, dass mit der Renaissance, der Semper sich in seinen Bauten bediente, notwendig die Farblosigkeit verbunden war." [op. cit., p. 69]. In the same work, however, polychromy stood at the heart of an attempt to really understand Greek architecture in both its relation to earlier oriental art and its unique greatness [op. cit., p. 55]. And so the dichotomy Ettinger observes in Semper's work is not just one between theory and practice, but—at least in Der Stil—between different lines of theoretical reflection as well.
102. Until at least the late 1960s the conception of Semper as a materialist has often been echoed by theorists who had no Hegelian axe to grind, but simply did not care to check it. Even so, Hegelianism in that case was the unknown indirect force behind statements
of that purport.


104. Op.cit., 1983, pp. 68-70. Continuity in this account of the matter was emphasized by Hans Semper, Prinzhorn, Ettlinger, Quitzsch, Van Zanten, and von Buttlar (who wrote an introduction to the 1977 reprint of Der Stil, (Mittenwald: Mäander), discontinuity by Rudolf Zeitler in his contribution to the Semper symposium at the ETH Zürich in 1974 [op.cit., 1976, p. 15]. An impression of discontinuity in Mallgrave's view is raised by (a) the large time span that separates the Preliminary Remarks (1834) from The Four Elements (1851), (b) the break between the first half (§§ 1-4) of the latter publication and the second (§ 5), and (c) the absence of polychrome projects in Semper's architectural production of the years 1835-49. Observe that most of this evidence is contextual, and note that Ettlinger, who emphasizes discontinuity as much as continuity between the Preliminary Remarks and Semper's later works, does not altogether belong in the first category.


106. In a footnote reference is made to Kant, Hegel, Schlegel, and Schelling.

107. DS.79, p. 419.


109. See Chapter 13 for details.

110. Quoted from Excursus 2, p. 37, to Tektonik der Hellenen.

111. See earlier note in § 8.7.2 to the same quote inside this quote.

112. As introduced in § 10 of the Critique of Judgment (1870)--see § 9.2.2 below.


115. The German text uses the Latin 'Symbolum,' apparently to point to the literal meaning of the Greek 'symbolon' as 'what has been thrown together.'

116. Roughly the situation appears to be that as a teenager Semper must have read Schiller's dramas, along with those by Goethe, Shakespeare, and so on; that as a student he had little interest in reading, and in his subsequent years as a professor and practicing architect in Dresden little time. As for his years in London, there happens to be a list made for the customs of books (his library) sent over from Dresden in 1850. This contains few philosophical titles, as opposed to nearly all of the classical writers and dramatists.


118. For a different point of view see Barbara Herrnstein Smith, Contingencies of Value, 1988, pp. 66-67, as reviewed in Appendix 3.

119. These and all of the following quotes from Critique of Judgment are taken from a translation by J. H. Bernard, New York, 1972: Hafner Publishing Company.
120. It is only hinted at in the next paragraph (§ 44), where a distinction is made, first between 'mechanical' and 'aesthetic' art (the former defined as 'art which is adequate to the cognition of a possible object), and then within the latter between art that, while addressing the senses, aims at pleasure only, and that which, speaking to the cognitive faculties, aspires at beauty. Among the former, that is, as samples of pleasure-oriented art, are mentioned 'games which bring with them no further interest than that of making the time pass imperceptibly', telling stories in an entertaining way, and background music at a party. By what criterion? Are these directed at the senses only? Are the cognitive faculties fundamentally less involved in these than in serious art? At this point Kant leaves us in the dark.

121. Other statements about 'Schein' as the proper domain of the aesthetic experience are to be found in the letters 9, § 7, and 10, § 3.

122. In the German original the sentence reads: "Darin also besteht das eigentliche Kunstgeheimnis des Meisters, dass er den Stoff durch die Form vertilgt;.." 'Stoff' may stand for subject matter, but also for the material a work of art is made of—and I cannot think of an English word that covers precisely this.

123. Having observed that man is only serious with what is pleasant, good, or perfect, but plays with beauty, it is concluded [15.7]: "Actually we should not think here of the games that go on in real life, and in general are directed at utterly material objects only. But in real life we would likewise look in vain for the kind of beauty that is here at stake. The actually available beauty deserves the actually available play instinct. Through the ideal of beauty that is posed by reason, though, an ideal for the play instinct has been raised as well, which man should have in mind in all the games he plays." It is doubtful, to say the least, whether this recourse to 'ideal beauty' or 'ideal of beauty' brings us any closer to an answer. Both the nature of this ideal and its conception by the intellect remain wholly unclear. What is called for is a criterion, not itself couched in terms of play, to tell the difference between more and less artistic play. To this end 'beauty' is, in the same 15th letter, defined as 'lebende Gestalt'—to indicate how in play 'life' as the object of 'sinnliche Trieb,' and 'Gestalt' as that of 'Formtrieb' find their unification—but it is immediately added [15.4] that eventually beauty remains inexplicable. In the next letter [16] a distinction is made between 'energetic' and 'melting' [schmelzende] beauty. The former is the one that appeals to a person in an upright mood, while a despondent soul will be more pleased by the latter [16.3]. A unification of both types in 'ideal beauty' is stated as a possibility [16.5], but once again this notion is too vague to be of much help.

124. See for a discussion of these projects David Van Zanten, 'Architectural Polychromy: Life in Architecture,' in Robin D. Middleton (ed.), The Beaux-Arts and Nineteenth Century French Architecture, Cambridge, MA, 1982, pp. 175-215. As Mallgrave pointed out to me, Semper by that time had not met Labrouste personally, but must have known about him and his works. He did meet Vaudoyer in Rome, and so more direct contacts with that circle certainly existed.


126. KS, p. 231.

128. In the beginning, immediately following the preface (p. 50 in Mallgrave's 1989 translation).

129. See remarks on this phrase in § 8.7.2 above.

130. The sculptor, archeologist, and 'sécretaire perpétuel' (1816-39) of the Ecole des Beaux-Arts, Quatremère de Quincy (1755-1849), whom Semper always held in great esteem and frequently referred to in his writings, as early as 1785, in a study entitled *De l'Architecture Égyptienne, considérée dans son origine, ses principes et son goût, et comparée sous les mêmes rapports à l'Architecture Grecque*, had noted [p.242]: "In fact it would betray considerable ignorance of the essence of architecture, and of most of the means it has at its disposal to please us, to deprive it of this pleasant fiction, this ingenious mask, which connects it to the other arts, allows it to appear on their stage, and provides it with one more opportunity to rival with them." [En effet, ce serait bien peu connaître l'essence de l'Architecture, et la plus grande partie des moyens qu'elle a de nous plaire, que de lui enlever cette agréable fiction, ce masque ingénieux, qui, l'associant aux autres arts, lui permet de paroître sur leur théâtre, et lui fournir une occasion de plus de rivaliser avec eux.] For a summary of Quatremère de Quincy's ideas in relation to Semper's see Mallgrave's dissertation [op.cit., 1983, pp. 26-36].

131. The question is from Shakespeare's Hamlet, Act II, Scene II. A group of actors has been hired to cheer up Hamlet in his presumed madness. After the performance, in which their leader bemoaned the fate of Hecuba, queen of Troy, and did so with such passion that tears were flowing from his cheeks, Hamlet wonders: "What was Hecuba to him, or he to Hecuba, that he should weep for her?"

132. It is stated ('Der Stil,' § 19, p. 73n in the 1878 edition): "The seam [Naht] is an emergency relief [Notbehelf] that was invented to connect pieces of a homogeneous kind, namely surfaces, into a whole, and that, originally applied on dresses and coverings, by ancient entanglement of concepts and even in everyday language, has become the general analogon and symbol of all joining of originally separate surfaces into a tight connection. In the seam an important first axiom of the practice of art appears in its most simple, original, and at once understandable expression—namely the law to make a virtue out of necessity, which teaches us not to want to let that which, because of insufficiencies of the material, and of the means we dispose of to get the better of it, by its very nature is patchwork and must be so, appear as anything else, but rather, by an intentional advancement of its joining and entanglement toward a common end, characterize it not as something that is one and undivided, but so much the more strikingly as something unanimous and unified."

133. Op.cit., 1984, pp. 139-152. In a footnote reference is made to Lützow, Redtenbacher, Gurlitt, Prinzhorn, Tieze, Ettlinger, Stockmeyer, Quitzsch, Bauer, and Eggert as authors who all were of a different opinion, that is, who thought there was a real issue involved in Semper's animosity against Bötticher. Eva Börsch-Supan is not mentioned on this list (although I think she belongs there), but instead praised as one of the best sources on Bötticher. For details see Chapter 13.

134. DS.77, p. 408.


136. DS.1, p. 2.

137. DS.171, p. 389.
138. This is a reason presented in *The Four Elements of Architecture* (1851). In *Der Stil* I have not found it so explicitly.

139. Or at least that is how I read DS.171, pp. 191-92.

140. DS.79, p.418-19.

141. For some reason this is both Herrmann's [op. cit., 1984, pp. 142-43], and Mallgrave's interpretation [op. cit., 1989, pp. 38-39]. The importance of these Persian prototypes, however, is further played down in Volume 2 [DS.169, pp. 480-81]. What Semper does derive from hollow metal prototypes are marble columns from the Mycenaean era [DS.78, pp. 410-12], that is, much older ones than those at stake here.

142. DS.172, pp. 420-22.

143. DS.137, pp. 224-35. Reference to this is made in DS.170, p. 383.

144. DS.70, p. 40. The issue recurs in the chapter on stereotomy, DS.170-73.

145. DS.170, p. 384n.

146. DS.171, p. 390.


148. DS.77, pp. 408-10, DS.170, pp. 382-87.

149. DS.77, p. 410.

150. Thus Corinthian capitals are considered as old as the oldest Doric counterparts [DS.79, p. 419]. Like the Ionic they already occur on Assyrian reliefs [DS.169, p. 381].


152. The words 'Sinnbild' and 'Sinnbildlich' for good reason are mostly translated as 'symbol/symbolic,' but I would suggest in this case 'image' fits better.

153. Where they knew it from, the author does not tell us, but as perfect round vaults have been preserved from the Mycenaean and Minoan age, the thesis as such is quite plausible indeed.

154. As it is stated in DS.78 [pp. 414-15]: "That both conceptions [that is, the Assyrian and Egyptian ones of the relationship of ornament to construction] not only have their justification, but their deep symbolic sense as well, which originated in contrasts between the cultural ideas [Kulturideen] of both lands and helps express them, is beyond doubt, but not to be elaborated on at this point .."

155. Pp. 8-9 in the 1862 edition of the text of 1844--which at this point appears to have remained unchanged.

156. DS.78, p. 415.


That Herrmann (op.cit., 1984, p. 139n) mentions Börsch-Supan by name as one of the best sources on Bötticher, makes it all the more surprising that he so consistently plays down the differences in aesthetic conception between the two men.

159. See, for instance, the following section from Volume 1 of Tektonik der Hellenen [pp. 6-7]: "Körperform, ganz abstrakt betrachtet, kann weder schön noch unschön sein. Das Kriterium von körperlicher Form gibt die Analogie mit dem Begriffe, der Wesenheit, der Funktion des Körpers. Es ist jedesmal die Form welche dem innern Begriffe desselben am folgerechtesten und innigsten entspricht, und seine Wesenheit in der äussern Erscheinung ethisch (geistig sittig) am wahrsten und schlagendsten darstellt, die schönste. Wenn daher von Ausbildung einer Form die Rede ist, so kann das nur soviel heissen als: ihr Schema technisch plastisch für ihren inliegenden Begriff entwickeln."

160. Page numbering refers to the original French edition of 1863.


163. DS. XXI-XXII, see § 9.3.1 above.

164. Codes between brackets refer to the lists of themes and questions rendered in Figs. 13 and 14.

165. DS.139-143, that is, the beginning of Chapter 8.


168. DS.165, p. 354.


170. The question whether painting and sculpture have their origin in the applied arts, or rather in man's need to express himself symbolically or figuratively, irrespective of making useful things, though slightly peripheral to the basic subject matter of Der Stil, has occasioned reactions from its commentators since the late-nineteenth century. Thus Hans Prinzhorn (1886-1933) in his dissertation Gottfried Semper's Aesthetische Grundanschauungen (Stuttgart, 1909), notes [pp. 12-14] how Semper apparently could not decide what came first, what was more fundamental to explain the origin of art: man's need for clothing and shelter, or a play instinct manifesting itself in man's drive to decorate himself and his belongings. Both in the Preliminary Remarks of 1834 and in On Architectural Styles (1869) choice is made for the latter--the one that Prinzhorn too considers the most plausible. It is only in Der Stil and some of the preceding studies of the 1850s that, extrapolating his theory of dressing in architecture to the origin of the fine arts, Semper occasionally appears to endorse the former. So much, however, is sure that adornment [Schmuck] in Semper's view comes first, representation (figurative or symbolic) later; that, to borrow one of Gombrich's favorite expressions, 'making comes before matching.'

171. See, for instance, Gombrich, op.cit., 1979, p. 51, who badly misses this empirical--in the sense of behavioral--element in Der Stil.
172. See Rykwert's contribution to the Semper symposium at the ETH-Zürich in 1974 [op.cit., 1976, p. 69]. Fechner's ideas eventually were laid down in *Elemente der Psychophysik* (1860) and *Vorschule der Ästhetik* (1876), but partial publications of them had begun to appear from 1850 onwards.

173. As the first German building in a French neo-Renaissance style Pevsner in *An Outline of European Architecture* points to von Klenze's Leuchtenberg palace in Munich (1816). Other Renaissance buildings by the same architect in the same city are the Pinakothek, Munich's famous museum (1826-36) and an extension to the Royal Palace (1826-31). In the same period von Gärtner was responsible for the design of the Ludwigskirche (1829-44) and the State Library (1831-42), likewise in Munich. The church, however, was in what is called the 'Rundbogenstil,' a mixture of German Romanesque and Italian early-Renaissance, and thus fits in well with the teachings of Friedrich Schinkel (1781-1841). Gärtner's library is more strictly Renaissance.


176. See Ettliger, op.cit., 1937, p. 43n.

177. The catalogue of the Semper exhibition in Dresden of 1979 shows four different plans for the same church. The first one (1842) was completely Gothic and largely based on the same floor plan as the old church, the second the one he submitted as his entry to the competition, the fourth the aforementioned Gothic variant on the same layout, and the third something in between: half Romanesque, half Gothic—a kind of compromise that obviously he did not like, for he discarded it himself.


181. It is an attitude which is not always understood, let alone respected by twentieth-century critics of nineteenth-century architecture, but which manifested itself in many places at the time. The case of the Foreign Office competition in London, as ridiculed by Pevsner and many after him, may not be a case in point, as there the eventual winner, Gilbert Scott, indeed showed more greed than integrity. If, on the other hand, one thinks of the two plans that in 1875 Cuypers submitted for the Rijksmuseum in Amsterdam, one a bit more Gothic, the other more in a French Renaissance style (see Manfred Bock, *Anfänge einer neuen Architektur: Berlage's Beitrag zur architektonischen Kultur der Niederlande im ausgehenden 19. Jahrhundert*, 1983, The Hague/Wiesbaden, pp.249-51), the situation seems comparable to Semper's two plans for the Nicholas church in Hamburg.


183. Ibidem, pp. 41-44.


188. Grundlagen und Entwicklung der Architektur, 1908, Berlin, p. 87.


190. Singelenberg suggests the same when he notes [op.cit., 1971, p. 12] that Der Stil was a book "which brought about much influence to bear on Berlage, and in general on all architects who spoke and read German."

191. As it is somewhat disapprovingly (measured by the standards of how 'rational' this architecture is) described by Manfred Bock, op.cit, 1983, p. 269.

192. For a more detailed description of this and other buildings by Cuypers in Amsterdam see Guido Hoogewoud, Janjaap Kuyt, and Aart Oxenaar, P.J.H. Cuypers en Amsterdam: Gebouwen en Ontwerpen 1860-1898, 1985, The Hague: Staatsuitgeverij, pp. 31-34 and pp. 87-96. In 1989 Mr. Oxenaar informed me a monograph on the Central Railway Station alone was on its way, but for what I know this has not, or not yet materialized. Most likely we will have to wait for Oxenaar's dissertation.

193. C. Eastlake in 1872 wrote the first History of the Gothic Revival.


199. A notable exception is how in Modern Painters 1 and 2 Ruskin deals with associationist philosophers like Burke and Alison, talking contemptuously about the latter in particular, but taking over a whole range of their ideas. For details see Appendix 6. Other exceptions (as pointed out to me by Prof. Elisabeth Helsinger) are the art critic William Hazlitt (1778-1830) and, in his later works, a number of political economists.

200. Robert Willis (1800-1875), author of Remarks on the Architecture of the Middle Ages, especially of Italy (1835) and 'On the Construction of Vaults in the Middle Ages,' included in volume I (1842) of The Ecclesiologist. For details see Pevsner, op.cit., 1972, pp. 52-61.

201. Lord Charles Lindsay (1812-80), author of History of Christian Art (1847), the first book in English to deal with early Italian art (e.g. Fra Angelico). Ruskin reviewed it for the Quarterly. In Praeitura[§ 104] he mentions how in the winter of 1844-45, while preparing for a trip to Italy he was to make that summer, he must have read Lindsay's introduction to this work—which opened his eyes to many things he had failed to see on previous trips.


204. Nick Shrimpton, "Rust and Dust": Ruskin's pivotal work,' in Robert Hewison (ed.), op.cit., 1981 (note 18), pp. 51-52. The genre, according to this source, was initiated in 1771 by Goethe's play *Götz von Berlichingen*, which is why Carlyle in 1838 introduced the name 'Götzism.' Major works in this vein in England are Cobbett's *History of the Protestant Reformation*, Southey's *Colloques on the Progress and Prospects of Society*, and Carlyle's *Past and Present*—all of which Ruskin had read in the early 1840s. In France a major work in this category was Victor Hugo's *Notre Dame de Paris* (1831), which by the way may have been the only one, prior to *The Stones of Venice* where architecture held such an important place.


210. SVII.49: "I felt ... assured that this law [of right and wrong in architecture] must be universal if it were conclusive; that it must enable us to reject all foolish and base work, and to accept all noble and wise work, without reference to style or national feeling; that it must sanction the design of all truly great nations and times, Gothic or Greek or Arab; that it must cast off and reprove the design of all foolish nations and times, Chinese or Mexican, or Modern European."


213. For details see Chapter 13 below.


215. As Mrs. Helsinger was so friendly to point out to me. For details see Stephen Finley, *Nature's Covenant: Figures of Landscape in Ruskin*.

216. A clear statement of this belief is in *Modern Painters* 5 (1860), most emphatically in 'The Dark Mirror' [MP5.IX.1] as well as in its concluding chapter, 'Peace' [MP5.IX.XII].

218. Thus it is suggested [§ 11] that "waste of actual workmanship is always painful, so soon as it is apparent," and that [§ 14] "work may be wasted by being too good for its material, or too fine to bear exposure".

219. SL.1.3: "Of this feeling [the one that accompanies acts of sacrifice], then, there are two distinct forms: the first, the wish to exercise self-denial for the sake of self-discipline merely ... and the second, the desire to honor or please some one else by the costliness of the sacrifice. The practice is, in the first case, either private or public; but most frequently, and perhaps most properly, private; while, in the latter case, the act is commonly, and with greatest advantage, public."


221. Shaftesbury's main work is Characteristics of Men, Manners, Opinions, Times (1711/1714). For a summary of his ideas and contributions to aesthetics see Beardsley, op.cit. 1966, pp. 178-182.


223. This was an obsession of the painter/writer William Hogarth (1697-1764) in the first place, and has been worked out in his Analysis of Beauty, Written with a View of Fixing the Fluctuating Ideas of Taste (1753). Alison takes it over, as he analyses the beauty of forms, both two- and three-dimensional, almost exclusively in terms of beauty of their outlines.


225. See Appendix 6 of this study.

226. See §§ 10.7.3, 10.7.4, 11.1, and 11.3 below.

227. Unfortunately, time did not allow to find out more about that.


230. Burke's main work in this field is A Philosophical Enquiry into the Origin of Our Ideas of the Sublime and Beautiful, 1757.

231. Most notably the aforementioned Essays on the Nature and Principles of Taste, which first appeared in 1790, and then, in an expanded edition, in 1811. It is this second edition which became some sort of a classic textbook of associationist philosophy during much of the nineteenth century.

232. As indicated by Helsinger [op.cit., 1982, p. 116] the distinction between the beautiful, the picturesque, and the sublime can also, and quite illuminatingly, be described in terms of unity and variety—an approach that was first explored by Francis Hutcheson. See § 11.3 below for details.

233. It is argued [MP1.I.II.III] that "Anything which elevates the mind is sublime," and that "... elevation of mind is produced by the contemplation of greatness of any kind; ..." This indeed may correspond to the word's most literal meaning, but hardly to what in this context had become the established one. Another reason presented by Ruskin is that he cannot agree to Burke's theory of the sublime as connected with self-preservation, but that is hardly more convincing, since one cannot generalize from Burke's interpretation of it to
the sublime at large. So what is the problem? As Beardsley (Op.cit., 1966, p.197) notes, "... in the 18th century the term 'sublime' grew more and more into a catch-all for elements in Art that the Cartesian aesthetic had suppressed or had not accounted for."--and that may very well have been what irritated Ruskin in the first place.

234. Thus it is stated in Volume 1 [SV1.XIX.7]: "To this kind of superimposition [of 'weight on lightness'] we owe the most picturesque street effects throughout the world, and the most graceful, as well as the most grotesque, buildings, from the many-shafted fantasy of the Alhambra... to the four-legged stolidity of the Swiss chalet..." Or in Volume 2 [SV2.VII.1]: "The Renaissance palaces are not more picturesque in themselves than the club-houses of Pall Mall; but the Gothic palaces are picturesque in themselves, and wield over us an independent power."

235. See MP3.IV.III.12n.

236. Ruskin's first contacts with Millais, Hunt, and Rossetti date from the summer of 1851, when Ruskin had just finished the first volume of *The Stones* and was working on the second and third.

237. Throughout *The Seven Lamps* and *Stones of Venice* frequent reference is made to Willis's *Remarks on the Architecture of the Middle Ages, especially of Italy* (1835). As a justification for not exploring all the details of Gothic vault construction Ruskin refers [SV1.XIII.2] to Willis's book as mentioned, saying that to this he has little to add. In his aesthetic appreciation of Italian Gothic, on the other hand, Willis represents an opposite, and more conventional point of view, considering northern Gothic in almost every way superior to what goes by that name in Italy. For an account of Willis's place in nineteenth-century architectural theory see Pevsner's *Some Architectural Writers of the Nineteenth Century*, Oxford, 1972: Oxford Univ. Press, pp. 52-61.

238. These two words, ornament and decoration, indeed appear to be interchangeable, in Ruskin's work as in those of most of his contemporaries.

239. As it is stated in the introduction to Alison's 'Essays' [pp. XV-XVI]: "If the fine arts are, in reality, arts of imitation, their principles are to be sought for in the subject that they imitate; and it is ever to be remembered, 'that music, architecture, and painting, as well as poetry and oratory, are to deduce their laws and rules from the general sense and taste of mankind, and not from the principles of these arts themselves: in other words, that the taste is not to conform to the art, but the art to the taste.'" The quote inside this quote is from Mr. Addison—who in the early-eighteenth century wrote in the same vein as Alison toward the end of it.

240. See MP2.III.IV.7-12.


242. All translations of the 'Ten Books' in this chapter are taken from the Leoni Edition of 1755, partly because that is the one which, in a Dover Books edition, was most readily available to me, and partly because I presume it is the one Ruskin must have consulted—if any.


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245. It is possible—although, of course, such remains biographical speculation—that in this Ruskin fell victim to his very success as an art critic. The position of power and influence he attained after publication of The Seven Lamps may have put a pressure on him to use his powers to the advancement of some morally good cause, while at the same time it enfeebled his self-criticism as more strictly an art critic.

246. This is the phrase we encounter in the 'Lamp of Memory,' when it is stated [SL. VI.7]: "It is one of the advantages of Gothic architecture, I use the word Gothic in the most extended sense as broadly opposed to classical,—that it admits of a richness of record altogether unlimited."

247. I owe this information to Prof. Manfred Bock. Giorgio Vasari lived from 1511 until 1574, and published his Vite (lives of contemporary or slightly older Italian painters) in 1550, with a revised edition in 1568. For the English adjective 'Gothic' Webster's Collegiate Dictionary lists 1611 as the first year of registered usage, for 'Gothic arch' 1739.

248. Observe, though, how later in the same chapter [SV2. VI.81-84] it is pointed out they should be steep.


250. Especially in 'Grotesque Renaissance' [SV3. III], e.g.: § 33 ff.


253. Collins, op. cit., 1965, p. 174, mentions Germain Boffrand, who in his Book on Architecture (1745) extracted a whole theory of architecture from Horace's Ars Poetica, J.F. Blondel, who in his lectures of the 1750s defended a similar point of view, and Quatremère de Quincy who in his prize-winning essay on Egyptian architecture of 1785 contended that the invention of architecture should be compared with the invention of language, in the sense that neither could be attributed to a single person, but both were the attributes of mankind.


255. For a different interpretation that had a certain currency already at the time in France, see § 9.6 of this study.

256. As Mallgrave pointed out to me, in buildings realized according to Semper's directions and designs much of the decoration is loaded with such content.

257. Paradoxically (considering what was stated above about his moving in a direction opposite to Semper's), it is in this presentation that Ruskin gets as close to a play concept of art as ever he will.


260. Thus in the Preface of De Re Aedificatoria it is stated: "... We consider that an edifice is a kind of body consisting, like all other bodies, of design and of matter..." The comparison recurs in Book VI, Chapter III, where it is given a functionalist bend, Chapter V of the same
book, where it serves as a criterion of completeness and harmony in composition, and Book IX, Chapter V, where it is inferred that the number of columns in a facade should be even: "For, from the imitation of nature, they [the Ancients] never made the ribs of their structure, that is to say, the columns, angles and the like, in uneven numbers, as you shall not find any animal that stands or moves upon an odd number of feet." On the other hand, "they made their apertures always in uneven numbers, as nature herself has done in some instances, for tho' in animals she has placed an ear, an eye, and a nostril on each side, yet the great aperture, the mouth, she has set singly in the middle." Strict symmetry is another demand which, in Chapter VII of the same book, is derived from this analogy.

261. Maybe it was considered embarrassing, in a study that at times speaks so contemptuously of Renaissance architecture, to take recourse to a Renaissance theorist. Even so, it remains surprising that a theoretical connection with Alberti is hardly mentioned in recent Ruskin studies. John Unrue, prior to his Looking at Architecture with Ruskin (1978) completed a dissertation on Ruskin's position towards Renaissance architecture, which I have not yet managed to lay hands on, but which, for what I know, does not probe into his dealings with Renaissance theory. Ruskin's own silence at this point may be one reason for the silence of his commentators. Interpretations of Alberti's book, which until recently rather exclusively focused on mathematical proportions, at the expense of more empirical aspects of his approach, or on zoomorphic conceptions, most likely are another. By far the most well-known and widely read of these mathematically minded Alberti studies is still Wittkower's Architectural Principles in the Age of Humanism (London, 1949). For a revised vision see Kruft [op.cit., 1985, pp. 44-54], who mentions as his sources a dissertation by Hellmut Lorenz, Studien zum architektonischen und architekturtheoretischen Werk L. B. Alberti's, Vienna, 1971, and an article by Heinrich Klotz in the Zeitschrift für Kunstgeschichte 32, 1969, pp. 93-103, entitled 'L. B. Alberti's 'De re aedificatoria' in Theorie und Praxis.'

262. In the aforementioned Essays on the Nature and Principles of Taste (1790/1811), Essay II, Chapter IV, Section 1, Part I.

263. Thus Alberti, op.cit., Book IX, Chapter 8, notes as an error "to apply the ornaments ... peculiar to private edifices to one of a public nature: especially if such ornaments are anything petty, or not durable, as, for instance, to dish up a public structure with slight or pultry painting; for everything used about a public edifice ought, if possible, to be eternal."


265. The same had been observed by Pugin in his True Principles of 1841. Indeed it is not impossible that, directly or more indirectly, Ruskin found inspiration there.

266. The lecture, entitled 'The Study of Architecture,' at one point deals with a new bridge over the Thames at Blackfriars. In an attempt to point out what is wrong with the latter, the author notes: "It is not a building's being of iron, or of glass, or thrown into new forms, demanded by new purposes, which need hinder its being beautiful." Some animation and dramatization of the actual construction, he suggests, could have been achieved in iron as in any other material: "As a Greek put human life into his pillars and produced the caryatid; and an Egyptian lotos life into his pillars, and produced the lily capital: so here either of them would have put some gigantic or some angelic life into those colossal sockets. He would perhaps have put vast winged statues of bronze, folding their wings, and grasping the iron rails with their hands; or monstrous eagles, or serpents holding with claw or coil .."
267. See MP2.III.I.VIII.2.

268. On this point Ruskin makes no secret of his indebtedness to Robert Willis, to whom reference is made in § 21 of the same chapter. See also § 10.7.2 above.

269. It was this same 'Tour de Beurre' which served as a model to Cass Gilbert's Woolworth Building of 1913 in New York. American architects, even in the early-twentieth century, must have studied Ruskin carefully.

270. "Another point to be remarked in the ancient masonry is the smallness of the stones employed: now, independently of this being the strongest mode of construction, it adds considerably to the effect of the building by increasing its apparent scale. Large stones destroy proportion." [op.cit., p. 17].


272. On this Ruskin is most explicit in Modern Painters 3 (1856). First he makes fun of it in a footnote to chapter XII, 'Of the Pathetic Fallacy,' and then deals with it in an appendix, entitled 'German Philosophy.' It is argued that for people with more important things on their minds study of German philosophy must be considered a waste of time. As the author himself happens to be among those busy ones, he is ready to admit, though, that he never became an expert in the field thus denised.

273. For which, in § 16, reference is made to 'Mr. Roberts's work on Egypt.'

274. See Alison, Op.cit. (1790/1811), Essay I, Chapter I, Section II.

275. See MP1.II.I.V.9.


277. This work, for which he had done the research with the Frenchman Goury, who died in 1834, was published in installments from 1836 till 1845 under the title Plans, Elevations, Sections, and Details of the Alhambra.

278. Summerson in Heavenly Mansions presumes most of this colored brickwork must have been Butterfield's invention rather than Ruskin's. Paul Thompson in William Butterfield (1971) suggests that, although construction of All Saints was about to start at the time of publication of The Seven Lamps, the church was not completed until 1859, and that most likely much of the detailing, such as the colored brickwork, was worked out later, in tune with the latest fashion. This view is taken over by Brooks [op.cit., 1987].

279. As it is stated in the 'Lamp of Truth' [SL.II.18]: "The true colors of architecture are those of natural stone, and I would fain see these taken advantage of to the full. Every variety of hue, from pale yellow to purple, passing through orange, red, and brown, is entirely at our command; nearly every kind of green and grey is also attainable: and with these, and pure white, what harmonies might we not achieve?..." Or, in the 'Lamp of Beauty' [SL.IV.35]: "...the colors of architecture should be those of natural stones; partly because more durable, but also because more perfect and graceful."
280. Thus it is stated in 'The Nature of Gothic' [SV2.VI.42]: "We are to remember ... that the arrangement of colors and lines is an art analogous to the composition of music, and entirely independent of the representation of facts. Good coloring does not necessarily convey the image of anything but itself. It consists in certain proportions and arrangements of rays of light, but not in likenesses to anything. A few touches of certain greys and purples laid by a master's hand on white paper, will be good coloring; as more touches are added beside them, we may find out that they were intended to represent a dove's neck, and we may praise, as the drawing advances, the perfect imitation of the dove's neck. But the good coloring does not consist in that imitation, but in the abstract qualities and relations of the grey and purple." And a few pages ahead [SV2.VI.44]: "Facts are often wanted without art, as in a geological diagram; and art often without facts, as in a Turkey carpet." Or, in the concluding chapter of The Stones [SV3.IV.27]: "Only observe, in this matter, that a greater degree of realization is often allowed, for the sake of color, than would be right without it. For there is not any distinction between the artists of the inferior and the nobler schools more definite than this: that the first color for the sake of realization, and the second realize for the sake of color."

281. Compare, for instance, Ruskin's position with the following theses from Owen Jones's Grammar of Ornament of 1855: 14. "Colour is used in the development of form, and to distinguish objects or parts of objects one from another;" 29. "When ornaments in a colour are on a ground of a contrasting colour, the ornament should be separated from the ground by an edging of lighter colour; as a red flower on a green ground should have an edging of lighter red;" 30. "When ornaments in a colour are on a gold ground, the ornaments should be separated from the ground by an edging of a darker colour," and so on.

282. Thus Andrew Jackson Downing in his last work, The Architecture of Country Houses (1850), follows Ruskin in recommending the colors of natural materials, and "... to avoid all those colors that nature avoids." For the effects of light and shade he suggests to keep walls in somewhat lighter tones--which remains in tune with Ruskin's ideas. Where Downing takes a different course is in holding that, to prevent monotony, porches, windows, mouldings, blinds, brackets, and so on, should be given a color different from these walls.

283. Semper has a more definite idea about it when he states [DS1.85, p. 477] that, while Gothic in general was very polychrome, the exterior of churches mostly was kept in the colors of natural stone, with the exception of entrance portals "... und einige ausgezeichnete Teile, sowie des Daches."

284. To Willis special reference is made in this context [SV1.XXVI.2].

285. For what I know. Ruskin at this point leaves me in the dark, when he notes [SV2.VIII.133] that it is impossible to determine "How much the stone facing of the facade, the parapets, and the shafts and niches of the angles, retain of their original masonry."


287. As it is stated in the 'Lamp of Power' [SL.III.23]: "Of composition and invention much has been written, it seems to me vainly, for men cannot be taught to compose or to invent, of these, the highest elements of Power in architecture, I do not, therefore, speak."
288. Alison and his Essays are mentioned repeatedly in Modern Painters 2.

289. See, for instance, the Edinburgh Lectures of 1853, or The Two Paths of 1857-59.

290. See, for instance, R. Dixon & S. Muthesius, Victorian Architecture, London, 1978: Thames & Hudson, pp. 106-08. These authors, by the way, do not particularly blame Ruskin for it.


292. Garrigan (1973), following Wilenski (1933), plays down Ruskin's part in it, arguing that for a man with so many other things on his mind he must have been physically impossible to spend much time on this project. Brooks (1987) holds his involvement may nonetheless have been considerable.

293. For an extensive and well illustrated account, see Brooks, op.cit., 1987.


295. For this latter vision see Vincent Scully, American Architecture and Urbanism, 1969, p. 95. As Ruskin's name does not occur even once in the index to this otherwise admirable book, it is to be doubted, though, if Scully at this point is a reliable source. For a more Ruskin oriented view see O'Gorman, The Architecture of Frank Furness, Philadelphia, 1972.

296. Rosenberg [op.cit., 1961, pp. 71 ff.] considers Ruskin's influence on Wright the most important that he had on any architect: ". . . he influenced a disciple who has shaped contemporary architecture according to the cardinal principle on which Ruskin based his esthetics: the dependence of all vital and beautiful design on Organic Form. Ruskin is Frank Lloyd Wright's link to the Romantic tradition; Wright has made Ruskin important to an understanding of the architecture of today." To which in a footnote it is added that as a boy Wright was given a copy of The Seven Lamps, which apparently was the only book on architecture he read before his formal training. Ottesen-Garrigan [op.cit., 1973], following the same line of biographic research, arrived at different conclusions: Wright, as a boy, read Viollet-le-Duc's Discourses on Architecture too, and these, eventually, were a more decisive influence than Ruskin's works.

297. M. G. Van Rensselaer, who in 1888 wrote the first Richardson biography, does not mention Ruskin at all. Likewise his name, as indicated (note 34), is missing from the index to Vincent Scully's American Architecture and Urbanism (1969). Henry Russell Hitchcock is sometimes mentioned as an exception, as one who was aware there must have been a connection between Ruskin on the one hand, and Richardson and Sullivan on the other. If that is the case, it must have been quite recent, though. For even though in the 1965 edition of The Architecture of H.H. Richardson and his Times Ruskin is mentioned eight times, it is never as a major influence on either of the two men. He is named as a popularizer of Italianate embellishments to Gothic [pp. 7-8], as an English writer [p. 56], and as a tourist to Venice [p. 246]. The few occasions where a more specific statement on Ruskin is made betray little sympathy for, or understanding of his works. Thus on p. 248 it is noted that ". . . the study of old buildings, however brief, made him [Richardson] realize how rare extreme elaboration was in medieval work. Ruskin's influential criticism, which emphasized in architecture the applied arts of carving and polychromy, was obviously based on an erroneous premise." And, as if that is not enough, on page 301 'Morris, the socialist' is opposed to 'Ruskin, the fascist.' For a more recent assessment of Ruskin's influence on Richardson see Weingarden (next note).

299. Circumstances which have occasioned Alexander's studies in architectural theory—not just Community & Privacy (1963) and Notes on the Synthesis of Form (1964), but all of them, including a few unpublished ones, up to 1982—have been excellently described in Stephen Grabow's Christopher Alexander: The Search for a New Paradigm in Architecture (1983). For the present study that work has served as the main source of information as regards this context.


301. See note 299 above.

302. In a footnote reference is made to Summerson's 'The Case for a Theory of Modern Architecture,' Royal Institute of British Architects Journal 64:307-11 (June 1957)—as reviewed in § 2.4 above.

303. More fundamental reasons why I hold value enhancement rather than conflict reduction to be what architecture and urban planning and design should be about, have been expounded in my masters thesis of 1975.


306. See Geronaitis, Roula M. (1985) German Architects in Nineteenth Century Chicago, diss. Univ. of Illinois, Urbana

307. Mallgrave's (and Herrmann's?) aforementioned anthology of 1989, The Four Elements of Architecture and Other Writings, appears to be just the beginning. Right now Michael Robinson is preparing a translation of Der Stil for the Getty Center's Texts & Documents Series, and according to Mallgrave (who has a coordinating role in this project) is halfway done.

308. In fact all Pevson has to say about it [op.cit., 1972, p. 253] is the following: "Semper had read his Schiller and Schinkel, and his system is one of rather involved idealism. He had also read Kant, and the result of that is a literary style which can be terrible." The latter is illustrated by a small quotation which indeed sounds awful, especially when out of context. Two other places where Schiller is brought up in relation to Semper are Klaus Eggert's contribution to the Semper symposium at the ETH Zürich in 1974 [op.cit., 1976, pp. 124-25], where Schiller's influence is mentioned in one breath with Schelling's, and Mallgrave's introduction to his Semper translations [op.cit., 1989, p. 35], where he is identified as the genius behind a crucial passage in the Prolegomena, but without anything further being inferred from that.
309. Rykwert [op.cit., 1976, p.79n] quotes Lionelli Venturi, who in his *History of Art Criticism* (1964, p. 231) contends: "Repulsive as it is, such a materialistic conception of art as Semper's has had its use: it has recalled the attention of the historian to the way in which the spirit is realized in matter, to the way in which material has been sensitized by art." Or one might think of Norberg-Schulz, who in *Intentions in Architecture* (1965, p. 102n) states that, although "Vitruvius already distinguished the technical aspect as a separate category ... the technical dimension is [usually] treated in isolation. In some cases it has been given primary importance, especially by Semper who derived the form (style) from the technical methods of production ..."

310. Alois Riegl (1858-1905) was keeper of the textile department at the Oesterreichische Museum für Kunst und Industrie, and in charge of one of the world's greatest collections of oriental rugs. Thus, Gombrich notes, Semper's shadow must have been over him all the time, first as the architect of the building the museum was housed in, and second as a driving force behind the whole idea of creating such a collection and putting it on display. In his own works Riegl approached the issue of stylistic development from a more strictly art historical angle than Semper had done, and, with his emphasis on 'Kunstwollen,' from a more Hegelian bias.

311. See his *Victorian Architecture in England*, 1970, especially the introductory chapter. Summerson himself quite frankly sides with those who cannot see Victorian architecture but as a failure. He blames it on the Victorians, though.

312. For what I understand from Mallgrave's dissertation [op.cit., 1983, p. IX], this archive has been created not too long ago, and it was Martin Fröhlich who sorted out the drawings, while Wolfgang Herrmann took care of manuscripts. Fröhlich's work resulted in *Gotfried Semper: Zeichnerischer Nachlass an der ETH Zürich* (1974, Basel/Stuttgart), Herrmann's in *Gotfried Semper im Exil* (1978, Basel/Stuttgart) and *Gotfried Semper: Theoretischer Nachlass an der ETH Zürich: Katalog und Kommentare* (1981, Basel/Boston/Stuttgart). The aforementioned *Gotfried Semper: In Search of Architecture* (1984, MIT Press) by the same author mainly consists of large sections from these two earlier publications, translated by the author himself.


314. As I was told, the Frenchness of the *Preliminary Remarks* will be duly emphasized in Mallgrave's forthcoming book. Although these French sources may still have had a certain impact on *Der Stil*, a new interpretation and evaluation of the latter will center on a concept of theatricality, and hence on the remarkable similarity between Wagner's artistic theories and Semper's. And so, even though I could not, as yet, convince him of a Schillerian play concept of art as basic to *Der Stil*, it seems that, independently, we yet are heading in more or less the same direction.

315. See however Mallgrave's recent findings on this point, as mentioned in § 8.1.1.


317. "Darin also besteht das eigentliche Kunstgeheimnis des Meisters, dass er den Stoff durch die Form vertilgt." [Briefe, 22.5].


320. Older Semper studies are Gottfried Semper (1880), a biography by his son Hans, Gottfried Semper in seiner Bedeutung als Architekt (1880) by C. Lipsius, and a posthumous edition of designs by his hand, Bauten, Entwüfe und Skizzen (1881). Neither of these, for what I know, counts as a dissertation, though.


326. See Roger B. Stein, John Ruskin and Aesthetic Thought in America, 1840-1900, Harvard Univ. Press, Cambridge, MA, 1967, especially chapter IV (pp. 78-100).


328. Kerr's vision was laid down in a lecture read at the Architectural Exhibition of that year, entitled 'The Battle of the Styles.'


330. See note 325 above.


332. When Unrani's references have been checked, two exceptions remain. One is a description of mosaics on St. Mark's [SV2.1V.69], from which Ruskin does not infer more general conclusions, the other a set of rules in the fifth appendix to The Two Paths, which pretend to be about architecture, but do not refer to any building in particular, and basically are out of context.


335. In fact, Sprague's dissertation gives little evidence of familiarity with Ruskin's writings, nor with Roger Stein's aforementioned book—which appeared not long before the date we may assume Sprague completed his manuscript.

336. 'French and English Sources of Sullivan's Ornament and Doctrines,' in Prairie School Review 2 (fourth quarter 1974), pp. 6-17.


345. At this point reference is made to *The Sovereignty of Good* by Iris Murdoch (London, 1970: Routledge & Kegan Paul). That book consists of three lectures, the most interesting of which (and the one actually referred to) is the first, entitled 'The Idea of Perfection,' published before in the *Yale Review*, 1964.


349. Ian Hacking (who, as reviewed in § 3.1, endorses scientific realism, at least as regards theoretical entities, and whose views at this point do not altogether square with Putnam's) objects that, as opposed to Kant's *transcendental idealism*, Putnam's position is better qualified as *transcendental nominalism*. Putnam, he holds, continues a line of thought initiated by Charles Peirce, who thought of truth as what the scientific community must come to agree on in the long run. Otherwise Hacking states as his opinion that this whole problem of the true nature of truth is not something scientists ought to be profoundly concerned about. More typically it is an issue for philosophers of language—whose work Hacking does not consider particularly relevant to science. As Putnam's primary concern in the aforementioned works is not language but the foundations of ethics (to which end indeed the use of certain linguistic expressions is chosen as a major entry) this allegation may not be altogether fair, but so much is true that science is not what Putnam's reflections are directed at in the first place.

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356. The remark stands not alone. Thus in regard to Giedion's style of mixing history, theory, and criticism it is noted [op. cit., p. 152]: "... we are not accusing Giedion of a mistake. When he brought out the final version of his book, his position became legitimate, as is shown by its cultural productivity. If, today, his historical forcing does not satisfy us any more, ... this is because the discovery of an unstable dialectic in history, of a continual mutual presence of positive and negative, of an unresolvable multiplicity of meanings and directions matches the need to make its meanings operative."


362. Op. cit., pp. 154, 236. See also p. 174: "One looks for what has been lost, and the need for more and more complex reflex actions in order to discover the meaning of events and things, derives from the discovery that we are among signs, conventions, myths, that offer us artificial processes as natural, that manifest themselves as innocent images or rites just where they are least disinterested, and that carefully hide their meanings." Or p. 185: "Architecture ... is always against nature; its history is the story of the subjection of nature to the constructive activity of the ruling classes."


364. Op. cit., pp. 4 or 153--see earlier quote under 'B.' As a scholar who defends an opposite point of view is mentioned the Italian Brandi, about whom it is noted that he "seems to state the supremacy of the work over any deformation caused by its being in history," while "in reality the supremacy only expresses the critic's personal ideology." It would seem, though, that this last conclusion likewise applies to what is stated in the very next sentence: "For those who do not share this kind of metaphysically flavored principia, the artistic object cannot be considered a thing, but rather a message in fieri or, if you prefer, the very (open) system of endless messages mentioned by Brandi." [op. cit., p. 178].

365. Barthes in this connection is quoted [op. cit., p. 185] as saying in *Essais critiques* (1963): "The purpose of every structuralist activity, whether reflexive or poetic, is the reconstruction of an 'object' in such a way as to show the working rules (the 'functions') of this object. The structure is then simply a semblance of the object, but an orientated and interested semblance, because the imitated object makes visible something that was not so before ... The structural man takes reality, disassembles it and reassembles it; apparently not very much (...). But from another point of view this is of little importance, because between
the two objects or the two phases of the structuralist activity something new is produced, and this something is nothing less than the general intelligibility; .."


367. See, for instance, p. 3: ".. more and more one is invited to answer the tragic question of the historical permissibility of the Modern Movement's continuity with tradition." Or p. 30: "In founding anti-history and presenting their work as not so much anti-historical, but rather as above the very concept of historicity, the avant-gardes perform the only historically legitimate act of the time." Or p. 235: "In other words, criticism, by pushing away the temptation to become an explanatory note, a literary translation, a disinterested analysis or the depositary of prophetic perspectives, takes on the role of litmus paper checking architecture's historical validity."


370. The postmodern experiments of Philip Johnson are mentioned in half a dozen places or more throughout the book, but on the whole its author has nothing good to say about them. See, for instance, p. 52: "Italian neo-Liberty goes hand-in-hand with the anti-Mies revolt of Philip Johnson, with the score of American eclectics [sic], and with the many other naive, or shrewd, false salvages, devoid of the morality of the young Italians." The works of Borromini, on the other hand, turn up time and again as almost paradigmatic of a creative use of history: "It has been mentioned, and rightly so, that from a contemporary standpoint, the Borrominian pastiches destroy rather than reinforce the historical value of the ancient 'things' inserted in the new contexts. But if we refer to the value that those scattered quotations might have had in the middle of the seventeenth century, we will realise that Borromini's work introduces, in the Classicist world, a genuine experience of history."


373. Op.cit., p. 231, where it is added that "The somewhat hidden and perhaps not completely conscious objective of Kahn, Rudolph and, even, the later work of Wright, was to establish, through planning, the values of the past: to weed out from the shapeless heap of pure 'signs' still called 'history' everything that is not, somehow, related to the hic et nunc of every single work, and to include in it, as values, those other 'signs' that can, somehow, justify its existence."


381. Op. cit., p. 173. See also p. 228: "The language of architecture is formed, defined and left behind in history, together with the very idea of architecture. In this sense the establishment of a 'general grammar' of architecture is a utopia."


388. In § 22 of the Critique of Judgment Kant with remarkable candor raises the question whether the aesthetic common sense [Gemeinsinn] to which statements of the form "This is beautiful" implicitly refer is an original and natural faculty of the human mind or something to be acquired, something artificial [künstlich] which a higher rational principle imposes upon us as an idealization that should be instrumental in bringing about consensus in matters of taste. Kant hastens to add this is a question he feels unable to answer and little inclined to further explore.

389. Smith's argumentation at this point is odd. It is stated [p. 94] that "no value judgment can have truth-value in the usual sense," but to this it is immediately added that "The usual sense ... is no longer all that usual." The traditional concept of truth as some sort of correspondence between a statement and a state of affairs, the author notes, has turned out to be untenable. Various efforts to come up with something better, on the other hand, all have been inconclusive, and in the meantime the old one keeps dominating theoretical discourse—which for the moment makes the whole concept of truth unworkable. As if there were no way to hook on to one of those more recent efforts to make sense of 'truth' ...


391. Thus she notes [p. 64] that Hume's aforementioned essay (which by then she has just turned inside out to show ill-founded it is) "... is, to my mind, more interesting and theoretically richer than any other text in the axiological tradition, not excepting Kant's Critique of Judgment—though this, of course, is a matter of taste." Which, of course, I would say, it is not, as reducing an evaluation of the theoretical riches of a text to a mere matter of taste runs counter to everything the present study stands for.


394. In Of the Standard of Taste.

395. As pointed out by Peter Collins (op. cit., 1965, p. 87) it was only in the early nineteenth century that the Parthenon attained the canonical status in architectural theory is has held ever since. When in The True Principles of Pointed or Christian Architecture (1841) Pugin speaks contemptuously of Greek temple architecture as just an imitation in stone of a primitive wooden structure, without in any way acknowledging the greatness of, for instance, the Parthenon, he is a late exception to the rule. Ruskin, some ten years later, even though questioning the alleged perfection of the classicist vocabulary in general, and even the sincerity of Englishmen who say they love triglyphs [SV1.II.12], at least counts Phidias among the three
greatest artists of all times and holds the Parthenon in high esteem (see § 10.2.1).


399. In an expanded form the lecture, entitled 'Art History and the Social Sciences,' was included in Gombrich, Ernst H., Ideals and Idols: Essays on Values in History and in Art, Oxford, 1979: Phaidon. See in particular pp. 143-147.

400. MP3.IV.1.15: "... infinite confusion has been introduced ... by the careless and illogical custom of opposing painting to poetry, instead of regarding poetry as consisting in a noble use, whether of colors or words. Painting is properly to be opposed to speaking or to writing, but not to poetry. Both painting and speaking are methods of expression. Poetry is the employment of either for the noblest purposes."

401. Alison, Op.cit. (1811), Essay I, Chapter I, Section III. In these pages it is pointed out what influence familiarity with poetry has on an observer's receptiveness to beauty and sublimity.

402. Alison, Op.cit. (1811), Essay I, Chapter II. Aesthetic experience--or, as Alison calls it, 'emotions of taste,' that is, of beauty or sublimity--differ from other kinds of experience (1) in that it occurs on two levels: the immediate perception of an object must be accompanied by a chain of associations set in motion by this, otherwise there will be no such emotion; (2) the chain must be of a peculiar kind: all associations that constitute its links must be with things that have an emotional value, similar to the one that clings to the original object of observation. From this it is inferred that, if the original object has no strong unity of feeling, its chances of arousing strong emotions of beauty or sublimity are slim. And, further, that art can strengthen this unity, both in nature itself (as in the art of gardening) and, even more, in paintings, poems, and the like.


404. Thus regarding Alison's Essays on the Nature and Principles of Taste (1790, 1811) Beardsley [op. cit., 1966 (note 4), pp. 204-5] notes that "it represents an abandonment of the persistent attempt to discover a neat formula for the perceptual conditions of beauty, and opens up the possibility of an indefinite range of beauties ... Discouragement over the possibility of finding a successful formula of objective beauty had turned into despair. Alison felt the attempt was 'altogether impossible.'"

405. In MP1.II.I.3 Ruskın tries to demonstrate that "particular truths are more important than general ones," and concludes: "... truths are important just in proportion as they are characteristic, and are valuable, primarily, as they separate the species from all other created things, secondarily, as they separate the individuals of that species from one another ..." In the next chapter [II.I.4], devoted to proving that "rare truths are more important than frequent ones" the conclusion is: "All really great pictures, therefore, exhibit the general habits of nature, manifested in some peculiar, rare, and beautiful way."
406. In a footnote to the chapter 'Greatness of Style' [MP3.IV.III.12] it is noted (a) that truth and beauty are entirely distinct, as truth is of statements and beauty of objects; (b) that paintings may still be untrue inasmuch as they state that what is in them resembles something in the world outside, and such is not the case; (c) that as a result it is quite possible in painting to sacrifice truth to beauty, but that it is ignoble to do so. This once again exemplifies the disillusioned moralism of Ruskin's art criticism after The Stones of Venice.

407. See the concluding chapter of The Stones [SV3.IV.20-21], as quoted in § 10.5.1 of this study. For painting see MP3.IV.III.24.

408. ".. the subject may", Ruskin informs his readers at the outset [MP3.IV.I.2], ".. be more usefully treated by pursuing the different questions which rise out of it just as they occur to us, without too great scrupulosity in marking connections, or insisting on sequences." System makers are compared to the old women of Pomona, ".. who tie cherries upon sticks, for the more convenient portableness of the same."

409. See MP3.IV.I: 'On the Received Opinions touching the Grand Style.'
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A theory of architecture has always been, and most likely always will be, an elusive thing. Architectural theory as an intellectual tradition, on the other hand, is not. It can be described in terms of its basic objectives, the kinds of question it deals with, and the sources of information it draws on while answering these questions, all of which are fairly constant and can be formalized into a model which describes the structure of architectural theory in considerable detail. A model of this kind has been expounded in the first part of this study. In the second it has by way of three case studies been applied to a number of texts. Thus I have tried to demonstrate how this model can be a powerful tool in analyzing and describing what contributions to architectural theory as a whole are made in a certain range of texts. As a next stage (which in the present study has only incidentally been explored) the same model can be used in direct study of buildings. If both this and the aforementioned study of texts is uniformly practiced on a sufficiently large scale, such will result in a data base system of architectural theory which may greatly facilitate and deepen further study of both. By providing a history of problems involved in actual decision-making and design, it will, moreover, help predict what impact plans, once realized, will have on their environment and on those who are to use the latter. This being the case, there was, in specifying the aforementioned model, no reason not to take recourse to systems design methods as used in wholly different types of data processing, such as financial systems.

The resulting approach to architectural theory is profoundly at odds with the current situation in that field. For whereas theorists who hold on to the idea of a systematic body of knowledge on which to lean in architectural decision-making and design generally favor an ahistorical approach, the opposite point of view, which focuses on historical reflection without much effort to create a systematic body of architectural knowledge, has gained momentum over the past decades, and in between these two extremes there appears to be little room for an approach which is historical and systematic (in the sense of problem-oriented) at the same time.

Seen in the light of history, there is nothing self-evident about this situation. Architectural history as a special branch of history of art, which in turn is part of cultural history, is a fairly recent phenomenon, reaching back no further than the mid-eighteenth century. Architectural theory as a design-oriented discipline is much older. History in the works of Alberti and those who followed in the classicist tradition always remained subservient to finding canons of artistic excellence--and even after the aforementioned emancipation of art history studies in this field for a long time had either a stylistic axe to grind or served preservation- and restoration-related ends. Accordingly, there is no reason either to presume the present situation will prevail forever.
Working against this background, each of the three case studies has been an effort to show how a model and a method of research based on that model, both as expounded in the earlier chapters, can be instrumental in specifying what a theoretical system as contained in a certain range of texts is about, what kind of data its conclusions are based on, how its argumentation is structured, what is the actual scope of major concepts as introduced in the same texts, and what apparent contradictions can be identified. In the first two of them, which deal with Der Stil by Gottfried Semper, and The Seven Lamps of Architecture plus The Stones of Venice by John Ruskin, it subsequently has been shown how some of these apparent contradictions can be bridged by introduction of a hypothetical implied concept to which all or most of what is in these texts refers as specification or illustration. In Semper's case a play concept of art as formulated in the late-eighteenth century by Kant and Schiller turned out to do remarkably well in that capacity. In Ruskin's case a concept of living-walls-that-are-made-to-last, and, if only for The Seven Lamps, a concept of Greatness as reflected in the very structure of that work, yield results which may be less spectacular, but, as I hope, nonetheless illuminating. In the third case study, which is about Community and Privacy by Serge Chermayeff and Christopher Alexander, and Notes on the Synthesis of Form by Alexander alone, the conclusion has been that apparent contradictions as identified are quite real, after all, and that if they are bridged at all, it is in Alexander's later works. As a result, no attempt at bridging them by way of a hypothetical concept has been made in this study.

If finally the outcome of these case studies is compared to other readings of the same texts, a striking feature is that interpretations based on incomplete reading combined with contextual evidence by far outnumber truly interesting interpretations based on accurate, complete, and imaginative reading of those very texts in the first place. And so, even though it may be contended that architectural theory is a small field, which, throughout the ages, counts no more than a few dozen profoundly original texts, the surprising fact is that even most of these have been studied neither very deeply nor systematically for what contributions they make to architectural theory as a whole.
Samenvatting

Een architectuurtheorie is vanouds een ongrijpbaar iets. Architectuurtheorie als een intellectuele traditie daarentegen laat zich omschrijven in termen van fundamentele doelstellingen, het soort vragen waar zij zich mee bezighoudt en bronnen van informatie waar zij bij de beantwoording van deze vragen op teruggrijpt. Dat alles is redelijk constant en laat zich formaliseren in een model dat de structuur van de architectuurtheorie gedetailleerd beschrijft. Zo'n model wordt gepresenteerd in het eerste deel van deze studie. In het daarop volgende gedeelte wordt het, via drie case studies, toegepast op een aantal teksten. Op die manier is gepoogd te laten zien hoe dit model een krachtig hulpmiddel kan zijn bij het analyseren en beschrijven van wat in zulke teksten aan bijdrage geleverd wordt aan de architectuurtheorie in zijn totaliteit. In een volgend stadium kan hetzelfde model rechtstreeks in de studie van gebouwen worden toegepast, maar in deze studie is dat aspect vooral nog slechts incidenteel verkend. Indien zowel dit laatste als de eerdergenoemde studie van teksten op uniforme wijze en op enige schaal in praktijk wordt gebracht, dan ligt er een mogelijkheid om dit te doen uitmonden in een architectuurtheoretische database die verdere studie opnieuw belangrijk zal vergemakkelijken en versnellen. Door voor problemen die zich in de bouwkundige besluitvorming en ontwerppraktijk veelvuldig voordoen een beknoptheid geschiedenis beschikbaar te stellen, kan bovendien zo'n systeem een significante bijdrage leveren aan het voorspellen van de effecten die plannen, indien uitgevoerd, zullen hebben op een gebouwde omgeving en haar bewoners en gebruikers. Dit zo zijnde, lag het voor de hand om voor de specificatie van het bovengenoemde model gebruik te maken van methoden van systeemanalyse en -ontwerp zoals op grote schaal toegepast in andere soorten gegevensverwerking--financieel, logistiek, en wat dies meer zij.

De uit het bovenstaande resulterende benadering van architectuurtheorie staat haaks op wat in dat vakgebied momenteel gangbaar is. Enerzijds zijn daar degenen die vasthouden aan het idee van een systematisch kenniscomplex waarop in ontwerp en besluitvorming een beroep gedaan kan worden--en die over het algemeen een a-historische benadering voorstaan. Omgekeerd heeft het uitgangspunt dat men zich beter maar kan richten op historische reflectie, zonder zich al teveel inspanning te getroosten om tot zo'n systematisch kenniscomplex te komen de afgelopen decennia belangrijk aan aanhang gewonnen. Voor een benadering die zowel historisch wil zijn als systematisch in de zin van probleemgericht, lijkt tussen deze beide uitersten weinig ruimte te bestaan.

Historisch gezien heeft deze situatie niets vanzelfsprekends. Architectuurgeschiedenis als een tak van kunstgeschiedenis, welke op zijn
beurt deel uitmaakt van de cultuurgeschiedenis, is een vrij recent fenomeen. Veel verder dan het midden van de achttiende eeuw gaat het niet terug. Architectuurtheorie als een ontwerpgerichte discipline is veel ouder. Geschiedenis in de geschriften van Alberti en wie na hem kwamen in de classicistische traditie bleef steeds ondergeschikt aan het vinden van stelregels voor artistieke kwaliteit. En zelfs nadat de zojuist genoemde emancipatie van de kunstgeschiedenis zijn beslag gekregen had, waren de meeste architectuurhistorische studies er (op zijn minst mede) op gericht om ofwel een stylistische voorkeur theoretisch te onderbouwen, of richting te geven aan behoud en restauratie van monumenten. Dit zo zijnde is er omgekeerd geen dwingende reden om er vanuit te gaan dat de zojuist geschetste situatie eeuwig zal voortduren.

Tegen deze achtergrond moet elk van de drie genoemde case studies meer in het bijzonder worden gezien als poging om aan te geven hoe een model en een daarop gebaseerde methode van onderzoek, beide als uiteengezet in de eerdere hoofdstukken, van nut kunnen zijn bij het specificeren van waar een theoretisch systeem zoals vervat in een aantal teksten over gaat, op welk soort gegevens de conclusies van zo'n systeem zijn gebaseerd, hoe de argumentatie is gestructureerd, wat de werkelijke draagwijdte is van als belangrijk naar voren geschoven begrippen, en wat de indruk wekt van een zekere tegenstrijdigheid. In de eerste twee, die zijn gewijd aan Semper's Der Stil respectievelijk Ruskin's The Seven Lamps of Architecture en The Stones of Venice, kon vervolgens worden aangetoond hoe tenminste enkele van deze schijnbare tegenstrijdigheden overbrugbaar zijn, en wel door bij wijze van hypothese een geimpliceerd concept in te voeren waartoe alles of het meeste van wat men in deze teksten tegenkomt zich verhoudt als specificatie of illustratie. In het geval van Der Stil bleek een spelconcept van kunst, zoals in de laat-achttiende eeuw geformuleerd door Kant en Schiller, in die hoedanigheid opmerkelijk goed te voldoen. Op de genoemde werken van Ruskin werpt een concept van levende-muren-die-zijn-gemaakt-o-income-houden een wellicht minder spectaculair maar niettemin verhelderend licht. Bovendien kan in The Seven Lamps een overkoepelend concept van 'Greatness' worden onderkend, dat daarin niet zozeer wordt uiteengezet als wel weerspiegeld ligt in de structuur van het werk. In de derde case study, welke handelt over Community & Privacy van Serge Chermayeff en Christopher Alexander, alsmede Notes on the Synthesis of Form van Alexander alleen, is de uiteindelijke conclusie dat onderkende contradicities niet zozeer schijnbaar zijn als levensrecht, en dat, voor zover zij worden overbrugd, dit gebeurt in Alexander's latere werken--die hier niet aan de orde zijn. Bijgevolg is daar geen verdere poging ondernomen om ze via een hypothetisch concept te overbruggen.

Wanneer uiteindelijk de uitkomsten van deze case studies worden vergeleken met andere lezingen van dezelfde teksten, dan valt allereerst op hoe interprestaties gebaseerd op onvolledige lezing aangevuld met contextuele gegevens verre
in de meerderheid zijn ten opzichte van werkelijk interessante interpretaties, gebaseerd op nauwkeurige, volledige en fantasievolle lezing van allereerst die teksten. En zo wordt men geconfronteerd met het gegeven dat, ofschoon met enig recht beweerd zou kunnen worden dat de architectuurtheorie een klein vakgebied is, waaruit in de loop der eeuwen hooguit een paar dozijn fundamenteel originele teksten naar voren zijn gekomen, zelfs van die paar originele de meeste niet bijzonder diepgaand of systematisch zijn bestudeerd ten aanzien van de bijdrage die daarin wordt geleverd aan de architectuurtheorie in zijn geheel.
Curriculum Vitae

Cornelis J. Baljon was born in 1949 and completed high school at the Praedinius Gymnasium in Groningen, The Netherlands, in 1967. He studied architecture and urban design in Delft, as well as some philosophy in Groningen from 1968 until 1975. In that year he obtained his master's degree in urban design at Delft Technical University on a thesis about the uses of stating goals in urban planning and the use of formal logic in planning theory. After eighteen months of service as a soldier and sergeant in Her Majesty's Dutch Army (1975-77) he worked as an urban designer for two private consulting agencies until the end of 1982. Having completed a six-months training as a systems analyst, he subsequently worked for six years in that field, taking care of and restructuring financial systems. In the fall of 1989 he moved to Chicago, where he completed this dissertation.