Vitruvius, Memory and Imagination:
On the Production of Archaeological Knowledge and
the Construction of Classical Monuments

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ABSTRACT

As the "Revolution" threatened Rome during the final decades of the Republic, the many landscapes of the city -- built, intellectual, social and natural -- became inextricably linked within a confused cultural matrix. Vitruvius was not simply observing a set of places; he was living within spaces that, while having lost many of their explicit meanings over time, contained within them implicit, albeit unclear, cultural codes for him to ponder. Vitruvius in fact was not describing Roman architecture as it was; he was describing it as he wished it to be. There are a host of reasons to question the physical exactitude of his examples and subsequent models: The vantage point of a single individual living within a specific place at a particular moment in time was, and continues to be, limited at best. There are geographical and architectural inaccuracies that leave the reader wondering if Vitruvius actually saw much of what was inserted within the treatise. And Vitruvius would have generalized in order to arrive at the broad sets of tenets contained in the books.

The "looseness" characterizing the tenets of Vitruvius is precisely what has enabled imaginative interpretations over the centuries. By including drawings within translations, the classical imagination has become fused with memories of what monuments should look like. Linked to this, translated versions of Vitruvius' treatise can be usurped in order to connect ruins more closely to Roman architectural ideals than they may have been in the first place. The translation and annotation project of Jean Gardet and Dominique Bertin in the 1550s is an example of how the treatise of Vitruvius was attached, inextricably, to the antiquities of southern France. The habit of turning to the De Architectura in order to produce a body of archaeological knowledge and in turn to provide "proof" for the architectural reconstruction of classical monuments has persisted. In the end, the monument can serve as confirmation for the translated text, and the text re-confirms the monument. In Orange, the use of the treatise by architects has been retraced to show that the reconstructed theater does not correspond, in its rebuilt state, to that which would have stood in its place.

Eventually, the habit of turning to Vitruvius was adapted to such an extent that it practically became invisible, with architects and archaeologists turning to it with little thought as to its
contextual validity. This is probably why we see so few explicit references to its use in the literature documenting the re-building of monuments; it is only by retracing field notes that the extent to which it was used, even relatively lately, can be assessed. At the same time, classical archaeology has -- and continues to -- direct its attention to déblayage, remaniements, consolidations and in time, la sauvegarde. The present-day impetus for these activities is closely connected to history, heritage and ultimately, the notion of patrimoine.

The difficulty today is that the more we re-build, whether it be for basic cultural consumption or within grander state agendas, the recourse to producing related bodies of knowledge to justify architectural plans has the potential to increase significantly. The understanding of classical architecture within the context of history and heritage must be met by a corresponding comprehension of its temporal, formal and social nature; Vitruvius' words, as I have stressed, do not necessarily depict a material architecture. Vitruvius' architect lived within an urban setting that was highly dynamic and not necessarily readily interpreted. And while Republican spaces derived from a need for function, efficiency, beauty and representation, they were not necessarily or completely redesigned each time they were re-used; they were often modified to suit. Notions related to specific and ideal spaces were most probably stored within the minds of the multifaceted designers to be shaped according to particular sets of pre-existing cultural and built conditions as well as geographical settings. And to these, the craftspeople would have added personal interpretations. Today the problems arise when architects and archaeologists, eager to convince themselves and others of their theoretic, forget that we simply do not know what memories resided in the mind of Roman architects.
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PREFACE

Epistemology, Hermeneutics and Historiography are three words I do not use in this dissertation. The three theoretical notions, however, are fundamental to the way I read, interpret and assemble the materials in my discussion. How knowledge is produced, transmitted and in turn reinterpreted is at the forefront of my thoughts. And this relates particularly to the way Vitruvius, the De Architectura Libri Decem and their related bodies of knowledge are referenced, co-opted and reaffirmed as “authority”. Directly linked to this is classical-archaeology-as-discipline. Its praxis, “scientification” and generally unquestioned authoritative nature are part of a long-standing set of notions rooted in pre-Renaissance Rome. I am thus preoccupied by the relationship between the two -- Vitruvius and classical archaeology -- in that each confirms the “reality” of the other. The ready appropriation of this relationship within various agendas of building or monument reconstruction is what motivates this preoccupation.

Memory is a term I use throughout this dissertation. I use it while recognizing that there are differing views and ways of defining the term, especially when referring to “collective memory” and “cultural memory”. As I will discuss in Chapter 1, when I refer to collective memory I am talking about what might best understood as “passed down histories”; the collective memory, to me, is one which is generally accepted by the collective, yet not necessarily textually documented or organized along a rational, temporal continuum. And when I refer to “history”, I am talking about the organization and re-organization of past events, as rationalized, generally along a temporal continuum, and usually presented as the “official” version of some social or cultural entity such as a state or other collective. History

2 How meaning is interpreted, or the study of the way meaning is interpreted, is how I define Hermeneutics. Looking at meaning critically, neutrally and with as little conscious bias as possible is my preoccupation as well as my rather idealistic goal.
3 Here Historiography is interpreted as the study of the development of “historical” research and writing. I take it on the one hand to include the way Vitruvius assessed and chronicled histories, and in turn the way through which we assess and textually reinterpret Vitruvius, the De Architectura and the histories through which they have survived. For a relevant study that discusses “history” and “historiography”, especially as assembled by historians like Manfredo Tafuri, see Panayotis Tournikiotis The Historiography of Modern Architecture (MIT, 1999).
can also be generally accepted by the collective (although not always) and by virtue of its
textualization or formalization through mechanisms such as propaganda or related monument
building, it re-presents the past and thus attempts to re-align the collective memory. When I
refer to "memory", I realize that the term is somewhat contentious and that its definition is
one which is shifting.

Connected to the above idea of appropriation is the use of the gaps that exist between textual
descriptions and visual depictions. The inclusion of photographs of reconstructed Republican
monuments in Chapter 2 may at first glance appear problematic; I include these for general
reference only and they should be read as such. Similarly, my choice of translation versions
can also be seen as problematic because I turn to a translation which is profusely illustrated.
I had initially selected the edition prepared by Frank Granger simply because I found it easier
to read. Later, in comparing English, Italian and French versions, I came to realize that there
is no perfect rendition and that the Granger text is perhaps even less idyllic than others. This
was especially apparent when I was writing about the theoretic contained within the treatise
and comparing different interpretations of specific terms. At the same time I was critically
reviewing the translation by Ingrid Rowland, and while its illustrations can be difficult to
accept, I have found the rendition to be the most candid in terms of its identification of
emendations and transformations. I turn to it for most of my English quotations. Rowland,
however, does not include the Latin text. For my Latin quotations, I use the Latin-French
Budé edition, which to me is the most accurate and comprehensive of all.

The present research is borne out of an interdisciplinary program in architecture, classical
archaeology and geography; it has been written for a corresponding readership. Chapters 1
and 2 outline the problematic and situate the treatise of Vitruvius in its widest context;
Chapters 3 and 4 develop the main dissertation arguments. It is coincidental that as I moved
through space to carry out my research, I was pulled in different disciplinary directions. In
Paris and elsewhere in France, I was persistently reminded of l'archéologie scientifique.
Similarly, in London the advice was towards the "accuracy" of philology, the "scientific"

4 I will have a great deal more to say about translations at the end of Chapter 2.
study of texts. And in Rome, a sort of architectural determinism seemed prevalent -- *the architecture will tell you the story*. Luckily in Vancouver I was allowed to wander across disciplinary boundaries and in many ways it was geography that facilitated the process.

In terms of my thoughts on classical archaeology, I write from the perspective of a decade of fieldwork and turn to the work of Bruno Latour for my critique of archaeological practice. While I write this dissertation with the archaeologist in mind, it is not necessarily intended as a critique of the historical “method”; it is a critique of the interpretation of Vitruvius’ words within archaeological practice. I owe a great deal to my archaeological mentors and my criticism -- which will become especially apparent in my second Interlude -- has nothing to do with them; it has to do with the systematic replication of research and reporting *modi* that reside in the collective disciplinary memories of architecture and archaeology.
INTRODUCTION

Over the centuries, scholars have turned to the writings of Marcus Vitruvius Pollio in attempts to understand the monuments and sites of the classical world. His *De Architectura Libri Decem* continues to be reinterpreted and probed in what seems to be an ongoing search for a deeper understanding of the design methods and architectural thought of Antiquity. Interpretations of the treatise, be it through philological study, architectural reconstruction, archaeological technique, or within theoretical models of classical landscapes, has been fundamental to architectural research, especially since Leon Battista Alberti (1404-1472) took interest in it in the fifteenth century. More recently, the referencing of the text within the development of computational modeling to reconstruct monuments can be seen as an extension of this habit. On the one hand, a tradition -- an albeit invented one, to use Eric Hobsbawm’s (1983) term -- of looking to Vitruvius for guidance has evolved, while on the other hand, a “canonized” Vitruvius-related body of knowledge has established itself as arbiter of “authentic” Roman architecture. The transcribed, translated and transformed

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text of Vitruvius bears enormous cultural weight and a close reading of the resulting canon is long overdue.

Architectural and archaeological researchers typically turn to the *De Architectura* and compare its passages to what is observed in the field and to look for confirmation of imagined or anticipated spaces in constructing -- hypothetically or physically -- corresponding architectures. There are important implications to the latter: At the epistemological base of architectural history and theory, the text's use -- and perhaps its manipulation within a deeper transformative process of co-opting it as "truthful" -- is fundamental. As less-than-robust theoretical reconstructions are added to the literature, the resulting research corpus becomes increasingly blurred and less reliable. And in the rush to re-build monuments, turning to Vitruvius to buttress theoretical models can be seen by some as a viable alternative. The problem of course is that if Vitruvius-based theories are accepted in planning architectural rebuilding programs, there is the very real possibility that a new, *invented* set of classical forms will emerge. Closely related to this is also the possibility that the reconstructed monuments can be appropriated within agendas that seek to rewrite or realign -- overtly and covertly -- historical narratives.

Henri Lefebvre (1991) signals one of the associated risks, noting that the nations that support research leading to reconstructions "are liable to discover how such spaces may be pressed into the service of cultural consumption, of 'culture itself', and of the tourism and the leisure industries with their almost limitless prospects..." (360). His words are echoed in the actions of public and private bodies as they usurp monuments within popular reconstruction campaigns. In Greece, for example, the state (through its tourism department) has decided to rebuild some twenty-five classical theaters, not to mention sections of the Parthenon. In appeasing critics and in the spirit of "accuracy", the ratio of archaeological evidence to Vitruvius-based imagery within individual rebuilding programs remains to be seen. And

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2 Lefebvre goes on: "... [and w]here destruction has not been complete, 'renovation' becomes the order of the day, or imitation, or replication..." (360).
3 "Culture Minister Stavros Benos recently announced an ambitious decade-long program to spend $104 million to restore 25 ancient Greek and Roman theaters..." (Associated Press, Vancouver Sun, November 2, 1996, H7).
what agencies will align themselves with the Greek tourism body will also be significant. In France, there are similar state sanctioned programs directly aimed at the *remaniements*, *consolidations* and the *mise-en-valeur* of dozens of classical monuments. Thus as the push to re-build accelerates -- and it is -- the result may very well be a set of new spaces that have little to do with the intentions for which they were originally designed.

At the same time, recent changes in national and international interaction suggest that we need to more clearly identify and understand the psychological and emotional ways that monuments operate; "heritage" and "identity" issues, for instance, as connected to monuments, need to be debated and more clearly defined by collectives and perhaps less-so by individual, state or corporate entities. As Brian Osborne (1998) highlights, "[n]ational-states have long made use of many devices and agencies to create an emotional bonding with particular histories and geographies. These have become transmuted into an 'awareness of belonging' and, in some cases, the politics of fantasy. The imaginative use of symbols and myths have become the stuff of history, tradition, and heritage. It is in this context that the concepts of social memory, monuments, commemorations, and performances become significant: that is, the marking of time, the figuring of the landscape, and the ritualization of remembering" (432).\(^5\) Indeed, public and private institutions have developed sophisticated means by which emotive links are created between individuals, the collective, and their memories, especially as rooted in historical, geographical, architectural imaginations. Many of these links of course, can operate as nodes -- memory nodes -- that can trigger certain reactions. Whether intentional or not, monuments embody specific messages that in turn re-write and re-direct memories. And this is especially relevant when it comes to classical monuments and, as I shall highlight, Vitruvius-as-disciplining-vehicle. The cultural burden classical monuments bear is readily adaptable to a variety of agendas, making the sponsoring of their reconstruction a viable alternative in the realignment of histories. An awareness of the processes through which classical monuments are co-opted in order to script collective memories is thus also overdue.

\(^5\) On "awareness of belonging", Osborne is quoting G. Simmel.
Much of the study of the Vitruvius corpus has been undertaken by classical historians. This makes sense: From etymological and philological viewpoints, the text is directly linked to the study of classical history in general and the Latin language in particular. And as the only comprehensive text dealing with classical architectural description and to some extent, theory, classical archaeologists refer to it accordingly. It is a classical treatise dealing with the built, natural and social/cultural realms of a particular time. It serves as a referential tool from which the historian obtains clues in attempts to more clearly understand classical landscapes. And paradoxically, while architects treat the treatise more pragmatically, they also look at it in reverential terms. Indeed, some architectural educators call for a renewed focus on Vitruvius in teaching architecture (Brady, 1996; Heath, 1989) and at the same time some university architecture departments like the University of Notre Dame’s, are based almost completely on the classical notions derived out of the De Architectura.6

As the oldest chronicle from which insight into classical architecture can be gained -- aside from the architecture itself -- the De Architectura holds a certain explicating power. It would be difficult, for example, to understand urban planning, proportioning or any other landscape-governing tenets -- in a classical sense -- without Vitruvius. The text is a repertoire of technical details and theoretical clues bound within didactic and descriptive frameworks that evoke certain imagery. Its descriptive qualities convey a feel for spaces that would otherwise be difficult to conceptualize. It may in fact be due to a combination of these descriptive

6 The University of Notre Dame’s School of Architecture “emphasizes...the design of contemporary buildings in a classical manner following the precedents of Vitruvius...” (University of Notre Dame, School of Architecture, Prospectus, 2001). Thomas Gordon Smith (1995-96) of the same university records his views on classical archaeology and Vitruvius: “I believe that it is natural for a true classical architect to be involved with archaeology. The obvious place to turn to is antiquity. While engaged in a project to provide illustrations for a new edition of Vitruvius I learned that Hellenistic and Roman sites along the Turkish coast and foothills offer a gold mine of ancient intellectual property...” (44). Clearly Smith sees Vitruvius and classical archaeology as key in understanding related architecture. While I do not intend within this dissertation to look for meaning in Smith’s designs, the example illustrates the extent to which the treatise has become inextricably linked within interpretive webs; for a detailed account of Thomas Gordon Smith’s thoughts on classical architecture, see his Classical Architecture – Rule and Invention (Layton: Gibbs M. Smith Inc. Peregrine Books, 1988). Along similar lines, the students at the New York Academy of Arts are encouraged to use models of Antiquity in their work; see Pierce Rice “Drawing From the Antique - A Folio of Drawings by faculty and Students of the New York Academy of Art” in The Classicist, issue 2, 1995-96, pp. 90-93.
qualities, the archaeological focus on understanding voided spaces, and the intrinsically imaginative facets of the architectural design process, that the gaps within classical landscapes are so readily filled-in with Vitruvius.

Thus the disciplines of archaeology and architecture have over time turned to the treatise to interpret classical landscapes. At a most basic level, the ultimate aim of each is to understand what no longer exits or to "see" what remains buried beneath the ground. Within the approach of each, however, there is the possibility, and indeed the probability, of usurping the text to confirm and buttress an imaginary set of classical architectures. Because no illustrative material accompanies the treatise as transmitted to us, the reader, whether archaeologist or architect, is forced to imagine a personal view of Vitruvius' spaces. Exacerbating this reality is the fact that each reader carries a personal memory of "the classical" and may very well combine this personal view with imaginative textual interpretations of the De Architectura. The difficulty in accepting Vitruvius-based interpretations of ruinous monuments lies in the fact that what was imagined by the initial builder does not necessarily correspond to what is imagined by the reconstruction "expert". This is why a reconsideration for the way the treatise of Vitruvius is adapted and adopted needs to be re-instigated. And the problem is not one solely involving "history"; it is one inextricably linked to "geography". The geography of Vitruvius, in terms of descriptions, travels, spatial assertions and interpretations, constitute, to borrow Edward Soja's (1989) postmodern wording, the "making of geography". The production of space is obviously central to both archaeology and architecture. Important is that it is not a process that is uniquely active in the present; how space was produced in Vitruvius' day is just as important as how classical space is re-produced today. And the two are inextricable when it comes to the reconstruction of classical monuments; while the whole is related to original meaning and intent, it is also closely linked to present-day interpretation and intent.

Indeed, whether we can produce the same spaces today as Vitruvius would have is questionable.
A paradoxical attitude to Vitruvius is evident in current scholarship. While some researchers formulate hypothetical (and sometimes physical) remaniements, others highlight the difficulties in accepting Vitruvius a priori. This is most probably linked to the “general” nature of the text. Varene (2001), for instance, goes back to Vitruvius in determining the module dimensions at the petit temple de Glanum (16). Yet Gros (1994a, b, c; 1996b) underlines the problems in attempting Vitruvius’ step by step method of constructing public buildings. Sear (1994, 1996 personal communications) points out that because no two sites have the same characteristics, there are difficulties in accepting Vitruvius’ specific design tenets. And Geertman and De Jong (1989) note that passages in the De Architectura are “often [taken] out of context” when reconstructing spaces. Even Alberti in the fifteenth century and Claude Perrault (1613-88) in the seventeenth century, to cite just two of the most dominant Vitruvius interpreters, recorded some of the gaps between the text’s rhetoric and the built realities that they observed. Notwithstanding the fact that most of the classical architecture the latter two were observing was non-existent during the drafting of Vitruvius’ tome, there are a host of reasons to question the text.

Theorists are forced to attempt to retrace the steps of the original designers of classical architecture and this may be the reason why many interpretations have an air of imaginativeness about them. Related to this and because of the “general” nature of the tenets in the treatise, I think it is possible for interpreters to fit the descriptions to specific site realities. In other words, just as Vitruvius generalized his examples and images, I think it is possible to reconstitute monuments and link them to corresponding sites, using Vitruvius’ generalizations. The problem lies in the way the lines of the treatise are read, interpreted, modified, and made to correspond to field realities and personal notions of the classical to in turn fit within wider agendas.

1.2 RESEARCH SPECIFICS

What I aim to show in this dissertation is that the De Architectura has been and continues to be usurped by the disciplines of archaeology and architecture in order to perpetually
reconstruct classical landscapes. I highlight that within the Vitruvius corpus lies authoritative modes of knowledge-production that legitimize the production of architectural and archaeological knowledge. I underscore that the initial drafting and subsequent interpretations of the De Architectura and its later expositions, explications and canonization have been co-opted in the creation of “new” classical imaginations. And finally, I site the underlying impetus for the sustenance of these processes in France; while I begin in Republican Rome, I ultimately follow the movement of the De Architectura to present-day France and consider the persistent penchant of classical landscape reconstruction and the use of Vitruvius within this process.

Chapter 2’s primary goal is to bring together the disparate literature in order to discern the general histories and theories contained in Vitruvius’ treatise, and perhaps more importantly, render context to the subsequent interpretations of the same text. The canonical web is intricate and the best way I have found to begin deciphering it has been to revisit -- temporally and spatially -- the landscapes that Vitruvius would have been living and writing in. An initial section thus locates the day-to-day lifeworld of Vitruvius and sites his text accordingly.

In Chapter 3, I schematically trace the trajectory of Vitruvius’ treatise from Rome to France and connect the use of Vitruvius to the early moments of the discipline of archaeology. The translation of Jean Gardet and Dominique Bertin is used to outline some ways through which the treatise was usurped in the quest to make the French landscape classical, and in some ways, the classical landscape French. Chapter 4 looks at the impetus for reconstructing classical monuments in France. I retrace the main cultural moments that led to the restitution practices of the nineteenth and twentieth centuries; in other words, I look at “habits of acceptance”. The effects of the canon are clear in nineteenth century France and its role as “proof” within the production of archaeological knowledge is what I emphasize; I use the theatre at Orange, a UNESCO World Heritage Site, to make the point. In Chapter 5, I explore the notions of monuments and memory in France before concluding with some thoughts on the use of the De Architectura.
The two Interludes I include are “interludes” in the sense that they break from the narrative, reinforce specific points, contextualize particular notions, and reorient the discussion. In Interlude I, I use the monuments of Orange, France as examples of the way memory operates in a Roman architectural and cultural context. In Interlude II I take a close look at the way classical archaeology operates (persistently) within scientific and art historical modes and in turn perpetuate authoritative interpretations of classical texts, sites and finds.

Linked to my discussion of Vitruvius and monuments is the notion of “memory”.

The term can be problematic in these memory-obsessed times and, while I will have a great deal more to say about it below, there are a few things that require clarification. I refer to different memories: Vitruvius’ architectural memory and the collective memory of the builders of his day, the architectural memory of the interpreters of Vitruvius’ text as changing in time -- late antiquity, Middle Ages, Renaissance -- and the classical memory of today’s reader, both individual and collective. When I refer to “collective memory” I am talking about what might best understood as “passed down histories”; the collective memory, to me, is one which is generally accepted by the collective, yet not necessarily textually documented or organized along a rational, temporal continuum. When I refer to “history”, I am talking about the organization and re-organization of past events, as rationalized, generally along a temporal continuum, and usually presented as the “official” version of some social or cultural entity such as a state or other collective. History can also be generally accepted by the collective (although not always) and by virtue of its textualization or formalization through mechanisms such as propaganda or related monument building, it re-presents the past and thus attempts to re-align the collective memory. When I refer to “memory”, I realize that the term is somewhat contentious and that its “definition” is one which is shifting.

From Cicero’s writings on rhetorical memory techniques and Frances Yates’ (1966) “rediscovery” of classical mnemotechniques, to the nineteenth century ideas of John Ruskin (1849) and the early twentieth century writings of Alois Reigl (1926), there has been a certain tendency to connect memory to architecture. This has continued during the past century,

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especially as the work of Walter Benjamin (1998, 2000), Christine Boyer (1994), Pierre Nora (1996) and Aldo Rossi (1966) has become popularized. My use of the word is limited to “what is remembered” by individuals and collectives and I have tried to maintain “history” and “memory” as separate entities. In Chapter 2 and my first Interlude I will discuss some of the ways thoughts are registered and remembered and in Chapter 5, I will return to the notion of memory as I look for the meaning of classical landscape production in France.
CHAPTER 2 - Vitruvius

"Thus I assert emphatically my opinion that the old principles... should be called back into service..."

Vitruvius, De Architectura Libri Decem, [C], I. 4. 9

“But this is indeed the moment for us to pass on to the wonders of our own city, to review the resources derived from the experiences of 800 years, and to show that here too in our buildings we have vanquished the world...”

Pliny, Naturalis Historia, XXXVI, 24. 103

INTRODUCTION

What was it about the architecture of early Rome that had Vitruvius calling for a return to the old ways and Pliny registering such intense pride for the past? The feeling certainly had a lot to do with their personal views, but it was also related to the perpetual rebuilding campaigns of Republican leaders. The Urbs had been in constant social and political flux and the dozens of consecutive large-scale architectural projects that marked the late Republic reflected the mood.9 On the one hand the schemes encouraged the abandonment or destruction of previously coveted monuments, while on the other they included new forms, types and methods that were not clearly understood. Urban Rome had become multifarious, with an assortment of cultural signifiers imported from the provinces and beyond, reflected in places, sacred and profane, and spaces, public and private, whose original intent and physicality had become obscured and ambiguous. There was a sense of loss as the late Republican city gradually fragmented into “disjointed, episodic, and incomplete” spaces (Favro, 1996, 78). In short, the Rome of Vitruvius was made up of confused landscapes and looking to the familiar structure of the past would have been one way of coping with the disarray.10

9 I will describe some of these large-scale projects in the pages to follow.
10 Here landscape is not considered solely as the physically built or naturally occurring topography that is observable; “landscape” in this research context is social, built, and geographic, characterizing what constitute the features of particular periods as manifested through culture over time and space. The landscapes of Vitruvius are all of these, as observed by him, complete with his notions of antiquitus, history
The disorder had been in the making for centuries. Power and domination, as manifested through war, settling in the provinces, and civic rule, were constantly forcing boundaries to be redrawn and to some extent, histories to be rewritten. In addition to their policies of expansion, leaders had sought to shape collective behaviors, and eventually cultural histories, through the radical altering of landscapes. One way this was attempted was through public works programs, where monumental architecture, cadastral delimitation and urban renewal schemas were organized and designed to fit state, institutional and personal agendas. Boëthius (1939) reminds us that around Vitruvius “was beginning all the enormous reconstruction of the monumental and technical equipment of Rome…” (114). Indeed, surrounding Vitruvius were rapidly changing institutions that seem to have focused on the manipulation of the masses through complex architectural and iconographic programs. The difficulty, however, is that because the changes were so dynamic, it was difficult for both individuals and the collective to register meanings associated with specific monuments, let alone remember them once removed.

Vitruvius, of course, was a member of the same collective. The adopting of relatively new architectural methods, materials and purposes would have been a concern for him, but the rapid disappearance of monuments must have been alarming. The extent to which he was aware of the attempts at re-writing histories remains unclear and what he knew about old

and architecture (V, preface. 1). And they are also as perceived through today’s layered lens of history, archaeology and architecture. Denis Cosgrove, in his Social Formation and Symbolic Landscape (London: Croom Helm, 1984), as well as his Palladian Landscapes (London: Cambridge, 1993), highlights that landscapes “can be both medium and outcome of cultural processes and so in a very real sense play an integral role in … human history” (5). In other words, landscape, as Dianne Harris (1999) points out, “is both the product of cultural forces and a powerful agent in the production of culture” (435). The present research considers landscape with the latter views in mind.

While some studies such as Tenney Frank’s Roman Buildings of the Republic (Rome: American Academy, 1924), L. Crema’s L’architettura romana nell’età della Republica (Berlin: Aufstieg und Niedergang der Römischen Welt, 1973) and Filippo Coarelli’s Roma repubblicana dal 270 A.C. all’et auguesta (Rome: Quasar, 1987) and Guide archéologique de Rome (Paris: Hachette, 1998) cover principle Republican monuments, including those within the Forum, Palatine and Lower Campus Martius as well as other Republican projects such as aqueducts, roadways and bridges, their focus on monumental architecture negates the vernacular and for the most part leaves out the social and quotidian implications to everyday building. Eva Margareta Steinby’s well-edited six-volume Lexicon Topographicum Urbis Romae (Rome: Edizioni Quasar, 1993, 95, 96, 98, 00), while comprehensive, is at times lacking in terms of the vernacular. This is not to say that there is absolutely no material on the day-to-day life of Romans; John Stambaugh, in his The Ancient Roman City (London: John Hopkins, 1988) for example, renders a rich portrait of life in Roman urban settings.
monuments, partially standing or completely obliterated, is also uncertain. He was, however, clearly sensitive to the notion of the past, quite often alluding to memoria and memoratur -- memory and remembering, as well as being familiar with the art of Rhetoric, one of its most important tenets being “memory”. More significant perhaps, is that he was preoccupied with the implications of architecture upon future remembrance; when he wrote that the emperor’s monuments “would be handed down to future generations” ([C], I. preface, 3), he was conscious of the connections that posterity, legacy and meaning had to monuments.

Along with his awareness of the “memorial” qualities of architecture, Vitruvius was also preoccupied with the state of building practices; his call for a new way of looking at the profession suggests that important changes in building were taking place. While some of these can be extracted from his text, they remain elusive, partly because of the lack of clarity in the treatise and mostly due to the fact that the successive construction campaigns were destructive in nature. We have in fact very little from which to develop a portrait of Vitruvius’ day-to-day architectural experience and in spite of having a seemingly well documented corpus on Roman building, what Vitruvius would have observed -- and lived -- remains difficult to present. Frank (1924) and Ward-Perkins (1968) highlight some of the problems in terms of archaeological lacunae; there are, for instance, very few traces of the vernacular of the late first century B.C.. And as Hinard (1998) confirms, there is still no comprehensive compendium of standing monuments for the last few hundred years of the Republic. Thus, one of the main problems in reading the De Architectura is due to the lack of a clear portrait of the author’s surroundings.

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13 I will return to the notion of memory in a detailed section below.
This chapter's objective is certainly not to produce a catalogue of late Republican architecture. Vitruvius' day-to-day was not filled with some sort of pure "late Republican architecture"; his day-to-day was cumulative and mixed. The combination of abandoned, ruined, used and "under construction" buildings and monuments would have been at once stimulating and puzzling; the city would have been filled with what would have been, to Vitruvius, hints of what things might have been like in the Republic's past. This is key: Along with Vitruvius' notions of what architecture should be, the remnants would have informed his architectural views and of course, his architectural writings; the *De Architectura* was written within specific temporal and spatial contexts and it is simply not possible to begin interpreting it without considering its contexts. Indeed, this is where many readers of the treatise make a major mistake: Rome and the provinces constitute *milieux* sited onto sedimented landscapes -- human, political, built and so on -- that can be interpreted as primary documents. My initial purpose in this chapter is to consider these as I briefly review the set of key events, influences and innovations that shaped Vitruvius' Rome, all-the-while identifying at least some of the most probable monuments that stood in his day.

The second purpose of this chapter is to analyze the *De Architectura*, through its close reading, with the aim of pinpointing the motivation and rationale for the ideals and models making up Vitruvius' *Architectura*. My reading of the treatise of course includes the associated corpus of Vitruvius literature. I assess the extent to which Vitruvius on the one hand "theorized" architecture, while on the other, imagined and produced his own classical knowledge. While references and articles related to the themes of his treatise appear at regular intervals, critical analyses taking the whole of the *De Architectura* into consideration are lacking, especially in the English language. The temporal aspects of Vitruvius'
prescriptions, rules and tenets, for instance, are fundamental to present-day interpretations of
the book, classical architecture, and in turn to the ongoing production of classical landscapes.

Three broad sections follow: Blurred Landscapes, retraces the influences of Vitruvius’ built
and intellectual surroundings, underscoring cultural dynamism leading to the first century
B.C. and highlighting intellectual and architectural heterogeneity, especially within the final
years of the Republic. The De Architectura Libri Decem looks at the treatise in detail,
assessing its contents and prescribed architectural principles, as well as the built landscapes --
real or imaginary -- portrayed within it. And Transcriptions, Translations and
Transformations discusses the extent to which the treatise has been copied through time. It
loosely retraces -- because it can only be loosely done -- the trajectory of the De Architectura
as it made its way from Republican Rome to today’s disciplinary confines. I especially
critique the way translators have and continue to turn to visual representations in a process
that can only further alter the way the treatise is read.

2.1 BLURRED LANDSCAPES

BUILDING COLLECTIVE MEMORIES

If one expression had to be singled out to describe Roman culture leading to the first century
B.C. it would be “dynamic assertion”. The conquering of the indigenous population by the
Etruscans during the seventh century B.C. had begun a process of expansion that would last
well into, and well beyond, Vitruvius’ lifetime. Gros (1978) outlines some of the associated
changes as represented by a succession of architectural transformations. The latter were in

(Darmstadt, 1964) and B. Wesenberg’s Beiträge zur Rekonstruktion griechischer Architektur nach
literarischen (Berlin, 1983). In Italy, other important work has been instigated, including the
comprehensive listing of De Architectura editions in Luigi Vagnetti’s “2000 Anni di Vitruvio” in Studi e
Documenti di Architettura, number 8, September, 1978, pp. 185-95 and the translations of Antonio Corso
Recent international colloquia include the Vitruv-Kolloquium (Darmstadt: Technische Hochschule, 1982
[1984]), the Monus Non Igratum International Symposium on Vitruvius’ De Architectura and the
Hellenistic and Republican Architecture (Leiden: Babesch, 1987 [1989]) and the Colloque international
organisé par l’École française de Rome, l’Institut de recherche sur l’architecture antique du CNRS et la
Scuola normale superior de Pise (Rome: École française de Rome, 1993 [1994]).
fact the result of a series of cultural waves — uneven waves primarily influenced by the Greeks — that would eventually be identified (albeit perhaps unconsciously) by Vitruvius. The changes did not necessarily take place at specific moments; they were gradual, shifting geographically, intellectually and temporally. And as I alluded to in my introduction, the changes did not a priori translate into the complete abandonment of the past; Vitruvius' architectural observations would be comprised of relatively new constructions reflecting sets of adapted cultural traits, and much older customs apparent in more archaic monuments or their remains. Within the matrix making up Vitruvius’ day-to-day then, were remnants dating beyond the mid-seventh century B.C. when the Etruscans had sacked the city.16

Aside from the subjugation of early Roman society, one of the major impacts of Etruscan rule had been the establishment of landscape altering strategies: First, new institutions (political, for example) were imposed upon the loosely organized populace (Brown, 1971, 12-14; Wellard, 1973). Then, the surrounding region was reorganized by politically and militarily amalgamating the villages sited on the many hills that would eventually constitute Rome. And finally, massive public works programs were instigated, such as the draining of the area that would eventually become the Forum Romanum (Shadwell, 1883, 56-58; Ogilvie, 1976, 31; Sear, 1989, 12). Through earlier trade with the colonial Greeks of Magna Graecia, the Etruscans had adapted a variety of Hellenic cultural elements to their needs (Barrow, 1949; Lomas, 1993, 6).17 This in fact is how a Greco-monumental footprint came to guide the early plan of Rome: Large-scale housing complexes, city walls, and especially temples -- temples that mirrored Greek principles -- were installed as part of the urban schema (Boëthius, 1970,

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16. Prior to Etruscan rule the city was made up of relatively unorganized settlements. According to Roman lore, Rome had been founded in 753 B.C. Among others, Plutarch (46-120 A.D.) in his Life of Romulus (edited by John Dryden, London, 1927-28) relates the story of the founding of the city and attributes it directly to Romulus (I, 36). For a detailed recounting of the legend, see Carl Grimberg’s La Grèce et les origines de la puissance romaine (Limbourg: Marabout Université, 1973), pp. 280-84. And for discussions on the legend’s significance, see Joseph Rykwert’s The Idea of a Town – The Anthropology of Urban Form in Rome, Italy and the Ancient World. (London: Faber and Faber, 1976) and R. M. Ogilvie’s Early Rome and the Etruscans (Great Britain: Harvester Press, 1976), pp. 33-35.

17. Greek colonies had been established in southern Italy and in Eastern Sicily as early as 750 B.C., with the first probably at Cumae on the bay of Naples. Etruria and Greece were by far the most important settlers of Italy during the seventh and eighth centuries B.C.
91; Claridge, 1998; Marucchi, 1933, 6).\(^{18}\) The largest (and last) monument built by the Etruscans in Rome, the Temple of Jupiter Optimus Maximus Capitolinus (dedicated in 509 B.C.), characterizes the extent to which the Etruscans dominated (Drummond, 1993, 86; Sear, 1989; Tadgell, 1998, 118).\(^{19}\) Several hundred years later and in spite of extensive renovations undertaken in 83 B.C. (Pliny, *Naturalis Historia*, XXXVI, 45) and a further refit in 42 B.C. (Dudley, 1967, 81), Vitruvius would have still been able to experience the temple’s presence upon the Capitoline. The notion of power transcended its massing: dwarfed by an imposing, Parthenon-like scale (it measured some 62.25 x 53.30 meters in plan), Vitruvius would have been able to recognize its triple *cellas* and eighteen stone columns as derived from Greco-Etruscan design and it is quite possible that he realized it was modeled after the Etrurian temple at Veii.\(^{20}\)

It is unfortunate that a better glimpse cannot be realized for most other Etruscan spaces. Social institutions remain enigmatic and traces of quotidian architecture are, for the most part, non-existent; housing complexes, for example, were razed and forgotten during the middle and late Republic. This is not to say that the Republican patricians immediately

\(^{18}\) There have been a variety of interpretations and attempts to clarify *meaning* in Greek temple architecture. Indra Kagis McEwen’s *Socrates’ Ancestor – An Essay on Architectural Meanings* (Cambridge: MIT, 1993), for instance, develops the idea that the loom is represented in the temple. The idea is based partly on the double premise that the loom and the house “must have shared something of the same identity” and that “only householders (by definition, loom owners) could be citizens of the *polis*” (110). Thus, to McEwen, “[t]he Greeks, when they built the temples without which the *polis* could not come to be, were setting up looms” (111). While the loom did play a central role in the Greek household, it is difficult to accept McEwen’s argument; making the leap from the loom’s somewhat fragile and at times overly complex wooden frame to the massing of imposing stone and marble structures is at best, challenging. On the other hand, George Hersey, in his *The Lost Meaning of Classical Architecture: Speculation on Ornament from Vitruvius to Venturi* (Cambridge: MIT, 1988) proposes a somewhat more realistic interpretation: He sees Greek temple columniation as sets that “resemble files of gigantic warriors marching ashore, armed and menacing, bearing aloft their weapons and supplies” (59). While he is here referring to a temple at the Greek colony of Paestum, the inference is that the majority of temples were built with this ideal in mind. He offers no conclusive proof for the theory, however. Yet when we consider that such imposing monuments were erected throughout the Greek world–and hence Italy during Rome’s early years, it is not difficult to accept that invaders like the Etruscans and eventually the Romans, would want to adopt the model. However, the original intent of Greek temple architecture is not necessarily the issue here; it is the adapting of perceived intentions to fulfill other agendas. For a formal dissertation on meaning in classical architecture, see Alexander Tzonis and Liane Lefaivre *Classical Architecture – The Poetics of Order* (Cambridge: MIT, 1990).

\(^{19}\) Traces of the temple’s podium remain, situated beneath the Museo Nuovo wing of the Capitoline Museum.

\(^{20}\) So close was this temple’s design to his own Book III’s “triple temple” that Robertson (1929) is of the opinion that it served as Vitruvius’ prototype (200).
discarded all Etruscans spaces; it is more likely that through successive reorganizations, needs changed and their corresponding footprints gradually disappeared. By the time the Republican patricians replaced the last Etruscan King in 507 B.C., this first wave of Greek influence -- via the Etruscans -- had defined early Roman society and especially its urban template (with the imposition of monuments and the siting of walls and the Forum), all-the-while delineating new trading patterns and establishing quasi-autocratic, aggressive and expansionist policies.

As the early Republicans moved away from Rome to annex other peoples, a second wave of Greek influence moved in the opposite direction towards Rome. The trend reflected a policy of assertion and conquering that soon had Rome extending its reach all the way up to the Po Valley (Hibbert, 1985, 9-15). In Rome, close relationships between state and religion were manifested through the control of sacred and state spaces that became contained within well-planned zones -- zones that sharply contrasted the cramped housing areas emplaced in compact and comparatively unplanned sites (Crawford, 1989, 17-18).

At the same time, Republican leaders began to conceptualize sites of representation that specifically aimed at displaying power. Interestingly, it was a model originally imported by the Etruscans -- the forum -- that was appropriated to echo their ambitions: Forums became monument foci; the Forum Romanum was formally emplaced and organized within the urban plan, with the Pontifex Maximus' official residence and places of business and veneration

21 Tarquinius Superbus was deposed in 507-510 B.C..
22 Rome not only came into contact with Hellenic influences through war and conquering; trade had been established as early as 509 B.C., when a commercial treaty with Carthage was organized. Similar alliances served commercial and defensive purposes, as, for example, with the Latin League and the Hernici on the eastern frontier during the fourth century B.C..
23 For a discussion of institutional control over religion (with priests), government (with senators), laws (with magistrates), and the lower classes (with bounded cultural traditions), see Ross Holloway's The Archaeology of Early Rome and Latium (London: Routledge, 1994).
sited within its vicinity (Frank, 1924). Other forums were planned that, in contrast, tended
to focus inwardly. The rest of the city, at least until the third century B.C., remained
unplanned and at best only loosely organized. The forum “type” would be long lasting and
centuries later Vitruvius would discuss it in relative detail (V, I, 1-10). In spite of the
emphasis on large-scale public places, “until the end of the third century B.C. Rome...[would
look] tawdry, with patched temples and winding, unpaved streets” (MacKendrick, 1983, 71)
and very little urban planning would be considered beyond immediate monument sites.

Contrasting sharply with the disarrayed city was the annexation of much of the
Mediterranean region (Kostof, 1985, 192; Stierlin and Picard, 1965, 8). The expansion was
relatively aggressive with thousands of settlers installed regardless of protests by neighboring
communities. Rome negotiated agreements with those willing and imposed alliance treaties
on those less accepting. This involved close contact with earlier settled Greeks and the result
was a third Hellenic cultural wave that continued throughout the third century B.C.; the Greek
colony Taranto, for instance, was conquered in 272 B.C..

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25 Within the Forum Romanum, the Temple of Saturn -- the first temple of the Republic -- was erected
between 501 and 493 B.C., the Temple of Castor and Pollux was completed in 484 B.C., and the Temple of
Concord was dedicated in 366 B.C.. Initially erected to appease the gods, they came to command, as
Brown, in his Roman Architecture (New York: George Brazilier, 1971), eloquently put it: “duty, discipline
and decorum” (14). They would serve as models for the dozens to follow and for Vitruvius to later
scrutinize; it should be of no surprise that he would devote two Books to the type (III, IV).

26 While it is difficult to identify the forum as a “type”, it certainly had tenets and corresponding meanings
that were specific to it. Russell (1968), in his “The Origins and Development of Republican Forums” in
Phoenix, volume 22, number 4, pp. 304-36, highlights “axiality, symmetry and frontalite” as general
features (336). Considering its “drawing” qualities, however, nodality should be added: A corresponding
land use strategy emerged within the forum’s surroundings as people and activities were drawn towards it.
Vitruvius later considered the forum as key to the urban plan, citing for example that its size should be
relative to population and that it be designed with a variety of purposes in mind (V, I.3). Interestingly, as
the multi-purposed forum became central to the city, individual monuments became central to the forums.
In a sense, as religion and state ruled Rome and the territories, so too did temples and temple construction
sites dominate the forums.

27 The League of Latin cities tried to stop Rome’s expansion but was overpowered in 338 B.C..

28 Because of the destruction-reconstruction cycle, the archaeological record of the Republican city has
been poorly preserved. In a sense then, it is fortunate that Rome did establish colonies: From the colonial
centers we get a better sense of landscape production. It is significant, however, that Roman leaders did not
perceive their colonies in the same way as they saw Rome; Rome was at the center of a world empire while
the provinces were mere extensions. Thus, while elements such as the grid-plan are not applicable to Rome
itself, they certainly reveal a great deal in terms of its strategies of domination. This may have something
One of the key instruments of territorial expansion was the grid-plan. Borrowed from Greek orthogonal planning and adapted primarily for military purposes, the grid-plan was implanted onto urban sites, often regardless of topographic or cultural realities (Crawford, 1989, 22; Dudley, 1967, 13; Wilson, 1989, 363). Traveling during his military career, Vitruvius might have experienced the impact of the organizing tenet. The traces of the finitor, mensor, agrimensor and gromaticus, all land surveyors, either civil or military, would have certainly remained for him to observe -- street blocks, land-surveying signposts and land-allotment markers had all been part of the strategy -- and he clearly had the grid-plan in mind when discussing street layouts in Book I (IV).

Another reason for the successful expansion was Rome's way of accepting indigenous culture all-the-while imposing its own cultural checks (Castagnoli, 1972; Ward-Perkins, 1968, 19). This is clear from the slight modifications to the colonial outpost urban plans: Cosa (273 B.C.) and Paestum (273 B.C.) for instance, retained within their walls a host of pre-colonial features amalgamated to the Roman plan. At Cosa, a grid was inscribed with correspondingly sited state and religious buildings, all accommodating indigenous crafts and customs within their design and construction (Brown, 1950, 1960; Salmon, 1970, 29-32; Wheeler, 1968, 34). And at Paestum, a former Greek colony (Poseidonia), the Romans rearranged part of the town plan to their standard all-the-while maintaining existing monuments (Griffiths Pedley, 1990; Theodorescu, 1989, 114) (figure 2.1). Rome systematically gained dominion over Sicily (264 B.C.), Sardinia and Corsica (238 B.C.), eventually Carthage (202 B.C.) and even smaller settlements like Ampourias, a Greek
to do with an idyllic tabula rasa approach whereby at least one sector of a conquered city would be reordered.


30 The Romans would have encountered the temple to Hera at Paestum. In this regard, George Hersey has already been alluded to: In his The Lost Meaning of Classical Architecture – Speculation on Ornament from Vitruvius to Venturi (Cambridge: MIT, 1988) and “Vitruvius and the Origins of the Orders: Sacrifice and Taboo in Greek Architectural Myth” in Perspecta, number 23, pp. 66-77, he underlines the very real possibility that the Greek temple -- he refers directly to the temple to Hera -- would have conjured up the image of marching armies on the shores. That said, it should not be entirely surprising that the Romans would emulate the type either way.
outpost on the Iberian coast, were settled (Mierse, 1994). Certainly as Claridge (1998) points out, “[t]he eastern Mediterranean was collapsing apace” (7). While this was happening, however, innovations were moving in space.31

Physical and correspondingly psychological domination through the imposition of regulations and direct rule was tested throughout the provincial centers (Potter, 1990, 70).32 At the same time, through appropriation, assimilation and adaptation, new ideas flowed towards Rome; the expansionist experience enabled a set of important innovations (Coulon, 31 As we shall see, it is difficult to ponder a retired military officer and perhaps traveling architectus such as Vitruvius later overlooking what would have been a great many “unordinary” design features, crafts, techniques, materials and forms appearing in Rome.

32 Rome’s reign over most of Italy during the early second century B.C. facilitated a new kind of control using land tenure: Peasant land was “expropriated” by large landowners who could afford to “purchase” them during difficult periods or while farmers served their time in the military; peasant farmers were increasingly forced to rely on the ager publicus, or public lands. Land ownership and control thus fell to the rich and the state. For a discussion, see Michael Crawford (1989) “Early Rome and Italy”, in John Boardman, Jasper Griffin and Oswyn Murray (editors) The Roman World (Oxford: Oxford University Press, 1989).
1990, 1): 33 *Opus caementicium*, or concrete, for example, rendered possible a new set of specialized building types 34 such as the monumental arch, *porticus, basilica*, amphitheater, theatre (in wood and stone) and atrium-peristyle house. 35 The adaptive use of concrete was a key innovation and prime enabler in the development of new building types. It was popularized throughout the Republic, facilitating the development of the *basilica* and *porticus*, for example, and the design of complexes such as the Palatine (204-191 B.C.) and the Porticus Aemilia (c.193-174 B.C.) with its concrete roof. The arch continued to be adapted during this period; Vitruvius would later include a short reference to it in his digression on building foundations and substructures (VI, 8. 3-4). A further set of innovations was the use of specialist labor in conjunction with the semi-circular vault; the combination was utilized at Palestrina to render a less-than-hospitable sloping terrain into a majestic complex of terraces and retaining walls that still attest to its impact. At Rome, then, the first monuments on the Largo Argentina were enabled through innovations borne out of contacts in the provinces (figure 2.2). First *opus caementicium* and the arch, and eventually, specialized labor and reusable formwork.

The temples dedicated to Feronia (early third century B.C.), Juturnia (241 B.C.), the *Lares Permarini*, or household deities (early second century B.C.), and Fortuna Huiusce Diei (101 B.C.) incorporated the new innovations within their designs. By the late third century B.C., a complex array of monuments physically controlled and psychologically held the populace in Rome.

33 Among many others, see Jean-Pierre Adam *Roman Building – Materials and Techniques*, translated by Anthony Mathews (London: B.T. Batsford Limited, 1994a) for a full discussion on arches, vaults and *opus caementicium*.


35 For a discussion of Vitruvius' description of the Greek house see especially F. Mayence “Vitruve et la maison grecque” in *Mélanges Charles Moller*, volume 1, issue 4, 1914, pp. 31-36.
and in the provinces, all within a codified ideology involving subjugation, order and duty.\(^{36}\)

Closely related to the three were military campaigns that took place with increasing frequency.\(^ {37}\) The apparition of victory-temples corresponded with the campaigns, with some forty added to the *Urbs* during the third century B.C.; the message gradually shifted from Rome-as-center-of-empire to General-as-ruler-of-empire.

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\(^{36}\) For a detailed résumé of building projects and their costs during the Republic, see Tenney Frank *An Economic Survey of Ancient Rome – Volume 1 – Rome and Italy of the Republic* (Baltimore: Johns Hopkins Press, 1933).

From the fall of Syracuse in 212 B.C. and especially after the second Punic War (218–202 B.C.) a fourth wave of Hellenic influence swelled over the city. War had necessitated manufacturing; trade had enhanced it. Spaces of commerce emerged as specialized traders, moneylenders and craftspeople engaged in new economic activities. In 210 B.C. an ambitious urban infrastructure program, including aqueducts and roadways, was undertaken. By then palaces were visible within the few planned areas; shanties on the other hand, were rendered invisible, relegated to areas away from the monumental (forum) nodes. So luxurious were the palaces that, according to Pliny, laws had to be changed -- or ignored -- to accommodate their construction (Naturalis Historia, XXXVI, II. 5). To Lafon (1989) and Rawson (1985) the design fantasies of this time place grand villas among the most important developments in Republican architecture (188-90; 185). Traces of this palace tradition were there for Vitruvius to later inspect, although perhaps because of his distaste for all-things-ostentatious, he gave very little attention to the villa.

The economic benefits of trade translated into renewed institutional activity and forum building increased in frequency and complexity as Rome became a veritable worksite. Consider a quotation from Livy (59 B.C.-A.D. 17) who recounts some of the frenzied building activity of 179 B.C.:

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38 For a rendering of Rome’s wars between the first Punic War and the destruction of Corinth, see Polybius’ History (214-122 B.C.), translated by W. R. Patin (Cambridge).
39 For a general discussion of the military and political events of the late to middle Republic, see Jean-Michel David’s La République romaine de la deuxième guerre punique à la bataille d’Actium (Paris: Éditions du Seuil), 2000.
40 For an example of the type of study undertaken regarding technical aspects of the De Architectura and urban features such as aqueducts, see A. Trevor Hodge (1996) “In Vitrivium Pompeianum: Urban Water Distribution reappraised”, in American Journal of Archaeology, number 100, pp. 261-76.
41 While Vitruvius did not discuss the villa in detail, he did describe some of its construction features, providing, for example, instructions on the design and proportion of rooms (VI, 3). He also discussed structural woodwork in IV, 2,1; for a detailed analysis on wood use in large houses, see Roger B. Ulrich (1996) “Contignatio, Vitruvius, and the Campanian Builder”, in the American Journal of Archaeology, Volume 100, pp. 137-51. To Métraux (1992), it is possible that the omission of a detailed treatment of the villa may have been due to serious social implications; Vitruvius may have understood that while it might have been important to have showcase homes in the city, such villas would have been considered as ostentatious in the countryside (326).
42 The villa lacunae in the De Architectura will be discussed below.
43 Two of the large projects underway include the temple of Magna Mater (dedicated in 191 B.C. and extensively renovated in 111 B.C.), and the area of the Circus Flaminius (221 B.C.). A group of basilicas, including the Basilica Porcia (184 B.C.), the Basilica Aemilia (179 B.C.) and the Basilica Sempronia (170 B.C.) were also emplaced in close proximity to the Forum Romanum.
From the monies raised and divided between them, Lepidus built a theatre with a proscaenium by the Temple of Apollo, restored the Temple of Jupiter on the Capitol, and had the columns surrounding it scoured and painted white... M. Fulvius carried out still more works, and of greater utility — a harbor and bridge piles in the Tiber, a basilica behind the new shops, and a fish market surrounded by shops which he sold to private owners...

quoted from Dudley, 1967, [XL, 51.2-8]

The new docking and market facilities Livy describes bring up an interesting point: Not only were they built to support trade (of tufa, wood and salt, among other products) but they also showcased the new technologies of the time.44 By then, travertine had replaced tufa as material of choice (Adam, 1994a, b)45 and the use of marble was being tested. In terms of architectonics, the problem was no longer one of monolithic structures, it was one of bringing together a host of smaller structural members such as arches to work in concert within larger assemblies (Gros, 1978, 14). As nearby peoples were convinced to join Rome, their own Greek influence reinforced Rome’s penchant for the Hellenic; Pompeii, for example, with its Etruscan Temple of Apollo, became an ally to Rome during the second century B.C. (figure 2.3). The refinement of innovations enabled Roman engineers to undertake more elaborate building programs focusing on scale, structure and use; status and dominance would now be displayed through technology. Concrete, travertine and a host of forms such as the arch had been well developed prior to Vitruvius’ career,46 he would register in his day-to-day observations the ensemble of these as packed within the forum sites.

44 Vitruvius would later devote a chapter to harbors, breakwaters and shipyards (V, 12).
45 The merits of brick types are provided in Vitruvius’ Book II (8).
Upon Corinth’s fall in 146 B.C., direct Greek influence intensified in yet another Hellenic wave (Baratte and Metzger, 1994, 476). Rome took on the use of marble, and the Orders as related ideas were imported directly from Greece (Sear, 1989, 19). Strabo (64-63 B.C.- c. A.D. 25) renders a partial portrait of what had taken place at Corinth:

And when these [Romans] were removing the ruins and at the same time digging the open graves, they found numbers of terra-cotta reliefs, and also many bronze vessels. And since they admired the workmanship they left no grave unransacked; so that, well supplied with such things and disposing of them at a high price, they filled Rome...

_The Geography, VIII, 6.23_

The material movement highlighted by Strabo underscores the extent to which Hellenic objects were transformed into trophies and ultimately venerated. We can readily trace some of the cultural changes within construction practices: Wood and terracotta were replaced by stone and marble. Entire buildings were devoted to the housing of Greek art: The Porticus
Metelli (146 B.C.) for instance, was designed specifically to display “artistic loot” (Ward-Perkins, 1979, 12) and private luxurious homes continued to reflect Greco influence; palaces “were architectural conceits...” that incorporated the latest technologies and styles (Ward-Perkins, 1979, 14). The same went for temples: The temple of Jupiter Stator and Juno (146 B.C.) relied heavily on Hellenic features and especially on Greek marble. Vitruvius would later write that the Greek architect Hermodorus of Salamis had been hired for the latter temple’s design and he would use it as his example for the *peripteros*, or peripteral temple in his Book III (2). So intent was the temple’s sponsor on the Greek theme that he provided for the installation of Greek objects within the design (Frank, 1933, 286). In this way the building was not only an homage to a deity (Juno) and a sponsor (Q. Caecilius Metellus), but it also became a receptacle for venerated (Greek) goods.

Similarly, the Temple of Hercules, also known as the Temple of Vesta, would later elucidate for Vitruvius, albeit perhaps subconsciously, the extent to which Greek thought had become integrated within Roman life (figure 2.4). Located in the Forum Boarium, the builder had imported Greek workers to construct it within a circular plan akin to a Greek *tholos*. It had a Hellenic-looking stepped arrangement surrounding its base, a set of Corinthian capitals with a likeness to those of the Olympieion at Athens and Pentalic marble serving as *revêtement* (Ward-Perkins, 1979). A casual gaze would have transported Vitruvius to Athens -- or at least towards an imagined Athens.

By the end of the second century B.C., Rome had refined its ability to assimilate, change, innovate and transform what had begun as Etruscan, colonial Greco and then Greek institutions and

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47 The Casa dei Grifi is a good example of such a home.Built as a large compound between 80 and 60 B.C., it had an intricate decor complete with marble-like stucco panels that would have necessitated the best crafts and trades people of the region.

48 The temple is also known as the Temple of Hercules Victor.
corresponding building ideas in order to shape its landscapes, provincial or otherwise, into ensembles that fulfilled specific ideals of power. And yet surprisingly, urban planning beyond the confines of the monumental sites remained rudimentary (Dudley, 1967, 13). The consecutive set of Hellenic waves and reconstruction periods left a topography that, while recalling Greek ideals, rendered a disparate panorama. Crowded urban dwellers were confronted with a medley of buildings and sites in varying states of cohesion; in spite of new

49 The success, however, was not without repercussions in the countryside. Deforestation and soil mining had rendered large tracts of land unsuitable for long-cultivated crops such as cereal and urban building programs had required so much timber that the slopes around Rome were eroding. Pastoral, ranching and vineyard activity intensified while small-scale farming was virtually abandoned. Private land was lost to debt and military obligation and the whole resulted in increased urban migration. By the beginning of the first century B.C., shanties and insulae, relatively poor quality apartments, appeared in the spaces between the places of the late Republic. The effect upon urban life was profound -- a period of "bouleversements considérables" as Xavier Lafon writes in "Vitrave et les villas 'de son temps'" in Munus Non Ingratum -- Proceedings of the International Symposium on Vitruvius' De Architectura and the Hellenistic and Republican Architecture (Leiden: Stichting Bulletin Antieken Beschaving, 1988), pp. 188-93.
techniques, building types and design ideas, apartments were crowded and it would have been a challenge to navigate the crowded and scaffold-covered streets.\textsuperscript{50}

While the influence expressed in the urban and rural landscapes was mostly from Greece, its life spanned hundreds of years and its meanings would therefore not necessarily have been obvious. Even a hundred years before Vitruvius’ lifetime, centuries of conquering and warring had left muddled and quasi-abandoned rural settings. Some monuments blended into a matrix that became part of the present instead of being reminders of the past; others began to remind Romans of what it was they were supposed to remember. And while Republican Romans had a general awareness of the past, it was mired in displaced legends and dislodged within the rapid-changing propaganda schemes. Some footprints of the first five hundred years of the Republic would have been apparent to Vitruvius; clear images of its architecture, however, would have at best been difficult for him to differentiate or reconstitute. Nevertheless, as “visual imagery”, to use Paul Zanker’s (1990) words, was about to become increasingly sophisticated, a new mode within which histories would be constantly revised through the use of monuments was about to be borne.

\textbf{SCRIPTING HISTORIES}

If a definitive urban template had been imposed upon the Roman topography during the first five hundred years of the Republic, a process of frequent and perpetual reconstruction projects would attempt to script the histories of the final century. And if waves of Hellenic influence had shaped those same first five centuries, it would be quakes of Roman ego that would determine the last hundred years. While physical and psychological domination would continue, rulers would become obsessed with public perception. The use of architecture to enhance one’s image had been tried by early leaders; later rulers would master

\textsuperscript{50} Vitruvius wrote about “high-rise” apartment blocks, noting that “the Roman people had excellent dwellings without legal obstacle” ([C], II, 8.17). The comment may have been inserted to appeal to his readers rather than the occupants of the dwellings. Vitruvius was living on a pension provided by Augustus’ sister and he would have been aware of the implications of openly critiquing those in power. The comment illustrates the fact that his writings have to be interpreted with caution.
it. In this regard, Sulla (138–78 B.C.), Pompey (106–48 B.C.), Caesar (102–44 B.C.) and eventually Augustus (63 B.C.–14 A.D.) erected the stageset that Vitruvius would ultimately gaze upon. He undoubtedly viewed and possibly inspected some of the important monuments of the first centuries of the Republic (especially those enhanced after the fall of Corinth), and he probably participated in many of the public fêtes -- sacred and profane -- as well as the popular recitals. As architectus, he would have been especially interested in the renovated spaces of the Palatine and Capitoline as undertaken by Sulla.

Sulla's building program was unprecedented, as reflected in his leadership style. Restoring senatorial government, he was acutely aware of the prestige, status, notoriety and of course, votes that could be garnered through building campaigns. He was astute at drafting texts using architectural vocabularies: His military escapades in Greece (92–85 B.C.) coincided with large projects at Praeneste (the temple of Fortuna Primigenia) and Terracina (the temple of Jupiter Anxur), as well as the massive renovation of the temple of Jupiter Optimus Maximus in 83 B.C.. His motives seem certain: First, to attain personal prestige and power on a scale that reached beyond Rome and extended all the way to Athens; and second, to begin editing recent histories through architecture. While the Etruscans and early Republicans had manifested power through their monuments and siting arrangements, Sulla was learning to use specific building types to convey his messages. He reworked the Forum Romanum, for example, altering its orientation and re-building specific institutionally-linked spaces, erecting a new Curia and tabularium, the archival building, and enlarging the pomerium -- the sacred urban border (Hibbert, 1985, 20). He also sponsored a new set of temples, including two dedicated to Hercules (MacKendrick, 1983, 141). The emphasis was on vast renovation programs to convey ultimate authority. Sulla looked to the Greeks for his guiding principles and later, through Vitruvius’ eyes, the scale of his program would have been among the most revolutionary of the time.

52 Catullus (87–54 B.C.) completed the work in 69 B.C..
53 Here I am referring to the Temple of Hercules Custos at the Circus Maximus and the temple to Hercules Sullanus on the Esquiline.
Similarly, Pompey’s rule translated into aggressive conquering and urban rebuilding strategies. He continued with expansionist policies, founding centers such as Lugdunum Convenarum in 72 B.C., and building, with projects initiated throughout central Italy (Torelli, 1995, 191-199). He and his family sponsored an assortment of temples in Rome, including an additional one dedicated to Hercules near the Circus Maximus; Vitruvius used the latter as an example for his “areostyle” temple in his Book III (2). Pompey too exploited the opportunity to revise histories, turning his attention to the Campus Martius, the open floodplain to the north of the urban area outside the Servian Wall (Strabo, The Geography, V, 3.8). There he set out to build commemorative monuments dedicated to his personally perceived grandeur, choosing to develop an entirely new district and sponsoring innovative projects such as the city’s first theatrum lapideum, or stone theatre; typical of Pompey’s manipulative ways, the theatre of Pompey cleverly included a small temple to Venus Victoria at the top of the cavea to appease his anti-theater critics (Pliny, Naturalis Historia, XXXVI, 24, 115). Like Sulla, Pompey was a master at self-promotion and propaganda, shaping the Campus Martius into an expansive memory-space with victory-temples complete with commemorative inscriptions and family-linked deities serving as reminders of “past” leadership greatness. By Sulla’s and Pompey’s time then, the emphasis was clearly on the leader and no longer on Rome per se.

Pompey built himself a house on the Campus Martius, complete with gardens linked to the theatre grounds. The complex was based on the Greek house, especially in terms of its links to public

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54 This specific design feature did not form part of Vitruvius’ Latin theater design description; I will return to the Latin theater in a later chapter.
55 I will discuss, in my first Interlude, an example of how memory devices, as contained within planning and architecture, would have operated to direct the behaviour of the populace.
56 Initially made of wood, theatres incorporated “experimental” features. Pompey installed the temple to Venus Victoria with the dual purpose of appeasing critics—those opposed to permanent theatres in Rome—and increasing his own popularity. The theatre’s presence signified the importance of Greek-influenced poetry and comedy, not to mention the ruler’s willingness to sponsor architecturally innovative structures. Within the theatre of Pompey, Vitruvius would later have been able to examine the “new” vaulting techniques that incorporated opus incertum, the inserting or filling-in of the spaces created by the arch supports. Here, the incertum was novel, installed as opus reticulatum, where the pyramid-shaped moellons were placed with their pointed ends towards the inner walls. For a discussion on masonry techniques, see Jean-Pierre Adam La Construction Romaine - Matériaux et Techniques (Paris: Éditions Picard, 1989). For a discussion on theatres, see Jean-Baptiste Ache Éléments d’une Histoire de l’Art de Bâtir (Paris: Éditions du Moniteur des Travaux Publics, 1970), page 91, Edmond Frézouls “Aspects de l’histoire architecturale du théâtre romain” in Aufstieg Und Niedergang Der Römischen Welt-Geschichte Und Kultur Roms Im Spiegel
Pompey’s palatial residence instigated emphasis on grandiose and “personally” sponsored public building projects; by then, élites “made no clear distinction between public functions and private rank, or between public finances and personal wealth” and they correspondingly turned to questionable public/private funding arrangements to finance their projects (Veyne, 1997, 95).

One such space was Julius Caesar’s Forum Julium (46 B.C.) (Tadgell, 1998, 190). He too had felt that architectural patronage could translate into opportunities to realign public perception (Hibbert, 1985, 29). He sponsored the Circus Maximus expansion with, according to Pliny, “nearly three acres of buildings and seats for 250,000” (Naturalis Historia, XXXVI, 24, 103). He paid for a stadium, complete with a temporary theatre and a naumachia, or artificial lake, accommodating hundreds of sailors for mock battles. He restored a set of monuments within the Forum Romanum, redesigning the Curia and other buildings and replacing the wooden enclosure of the centuriata and the tiburta -- the assemblies -- with a marble structure. The Regia was also renovated, in marble. By Caesar’s time the private sponsoring of architectural projects signified support and caretaking of public institutions. In this light, Caesar planned public libraries, the theatre below the Capitoline and the temple of Mars. The temple of Saturn was rebuilt and the temple of Apollo was renovated (McKay, 1985, 82). These are spaces that Vitruvius would have later been able to study. Like Sulla, Caesar seems to have had some planning foresight, purchasing land in the center of the city to provide opportunity for the eventual extension of the Forum Romanum. And beyond his ambitious projects, he convinced powerful families to sponsor the renovation of older temples; by providing monies for the renovations, it was possible to attach, or re-attach in the case of temples originally installed by family ancestors, the name of the sponsor with that of temple deities. In this way, the notion of patrimonium, a family’s right -- and obligation --

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57 This arrangement may have influenced Vitruvius in his brief discussion of house siting in Book VI, although the connection is not certain.
to maintain heritage (Chastel, 1993, 405) would be used to remind the plebs of who was in control.  

During the final decades of the Republic, Rome experienced major conflicts: War abroad and civil unrest at home weakened the Republic; the populace was in constant fear of losing its property, the empire was being repeatedly threatened, and the leadership was undergoing constant change (Goodman, 1997, 8). Certainly foreign expansion and influence continued, with temples still erected as far away as Philae (Bailey, 1990, 127) and colonies such as Arausio, founded at around 36 B.C. The chaos partly ended in 30 B.C. with the rise of Octavian who aimed at stabilizing the Roman domain by restoring its institutions, in the “hope to reunite the Romans through an ideological program of legitimacy, constitutionalism, and Romanism” (Reinhold, 1978, 10). In other words, he wanted to return to the Republic of his ancestors: the old ways (Charlesworth, 1939). By 27 B.C. when the name Augustus was given to him, he was completely reconstructing Roman landscapes according to his own version -- or vision -- of the old Republic.

Just as Sulla’s relatively short dictatorship (84-80 B.C.) had focused on erasing the past, so too did Augustus’ as he razed urban areas to site his monuments: The Senate House, for example, which had been refurbished by Caesar some fifty years earlier, was wiped away. Some 127 key monuments were either built or extensively remodeled between the death of Caesar in 44 B.C. and that of Augustus’ in A.D. 14 (McKay, 1985, 18). Augustus reconstructed at least 82 temples throughout the Empire (Platner, 1904, 53; Augustus, Res

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58 The notion of patrimonium will be discussed further in Chapter 5.
60 That Augustus turned to monuments as tools for re-writing histories is clear. Among other documents, he left at his death, the Res Gestae posthumously described his “achievements”; for an analysis, see P. A. Brunt and J. M. Moore Res Gestae Divi Augusti – The Achievements of the Divine Augustus (Oxford: Oxford University Press, 1967). For a brilliant analysis, see Paul Zanker The Power of Images in the Age of Augustus (Michigan, 1988). By his time, the will to amplify unchallenged power and confirm this power through built language was common. Ramsay MacMullen “Roman Imperial Building in the Provinces” in Harvard Studies in Classical Philology (Volume 64, Issue 40, 1959), Andrew Wallace-Hadrill’s Augustan Rome (Bristol: Bristol Classical Press, 1933) and Kurt A. Raaflaub and Mark Tohner (editors) Between Republic and Empire – Interpretations of Augustus and His Principate (Berkeley: University of California Press, 1990) discuss the motives of Augustus and to some extent, later Imperial leaders.
Gestae 19-21), meaning that they were probably standing, although not necessarily in use, during Vitruvius’ time. As I will outline in my first Interlude, Rome -- and the provincial cities -- were involved in a process within which each ruler focused on visual propaganda to provide an instructive text of power (Charlesworth, 1939, 108; Favro, 1996, 107; Güven, 1998, 30-31). Augustus was a master at this, realizing that he could maintain power by monopolizing architectural displays. The new monuments, complete with distinct ornamentation, would in fact function as mnemonic devices that etched notions of loyalty and power onto the collective imagination (Zanker, 1988). Within Vitruvius’ professional lifetime then, memorials were no longer devices aimed solely at nation building or commemoration; instead of being simple reminders of duty and devotion to Rome, they were “instructors” of duty and devotion to the leader. The imagery created by the array of monuments and associated “art” was prescribing a certain behavior for the Roman populace (Sauron, 1998).

Vitruvius would have consciously studied and unconsciously taken in the divergent influences within this set of forms. Institutions were based on Greek models and in turn manifested in a Greco-Roman architecture. The Temple of Portunus (c.150 B.C.) in the vicinity of the Forum Boarium, for example, had Greek details (extensive marble), was built with Roman construction materials and techniques (concrete with travertine), and was organized within an Italian-colonial plan (small and circular) (Wilson, 1989, 361) (figure 2.5). The visual array of Vitruvius would have included different influences and the palette of building types would have appeared heterogeneous, each with its own set of uses and meanings. In addition to temple-monuments, there were basilicas, amphitheatres, monumental arches, bridges and eventually theatres that were conceived with similarly blurred motives. The whole may have been very confusing for an architectus striving for order.


62 The Pons Mulvius (109 B.C.) and the Pons Fabricius (62 B.C.), for example, were bridges that incorporated the latest technology.
Of course, the vernacular of Vitruvius was not strictly made up of public spaces: Everyday places, albeit laconic to us in terms of archaeological evidence, filled the gaps between the monumental centers.\(^{63}\) They seem to have been of less importance to the planners of the time and perhaps for this reason Vitruvius scarcely focused on them. Dedicating his writings to the Emperor, Vitruvius may have wanted to avoid focusing on architecture that reflected anything less than grandeur. "The crushing anonymity, loneliness and unsightliness of the high-rise apartments" (McKay, 1985, 28) would have served as a reminder to the old architect that Rome -- and its architecture -- was in need of rethinking.\(^{64}\)

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\(^{63}\) The remains of one such house can still be observed (archaeologically) beneath Vespasian's markets. See Amanda Claridge *Rome Archaeological Guide* (Oxford and New York: Oxford University Press, 1998), p. 112.

\(^{64}\) Indeed, overcrowding, high rent and insecurity contributed to the civil unrest towards the end of the Republic. As Augustus consolidated his power, the *Pax Augusta* re-instilled a sense of stability and pride in citizenship; this in a sense is what motivated the construction boom during the final years of the Republic.
Walking along the narrow streets, Vitruvius must have felt at least some tension in the city; no doubt he encountered thousands of urbanites, travelers and peasants in what can best be characterized as an emporium atmosphere. The landscapes were confused: Rome brilliantly planned vast territories but the city itself remained unplanned, plagued with disasters such as fires and floods, and subject to sudden bursts of redevelopment. It was predominantly the latter schemes that contributed to the chaotic feel as “[m]onuments to individuals embellished the city, yet such self-serving works conveyed rivalry and thus did not foster a unified urban identity” (Favro, 1996, 44-45). Within the crowded spaces, Vitruvius would have pondered the architectural writings of others and without doubt would have given serious thought to the intellectuals -- the poets, writers and philosophers -- of the time. To Baldwin (1990) at least, the Roman architect “had probably been reading more [than the] poetry” that he hinted at (432, footnote 46). Recall that this was a time when, in the search for ordered knowledge, Greek and Roman literature were given the task of persuading readers of new cultural and intellectual possibilities. The two literatures were inextricably linked; in fact, by Vitruvius’ lifetime, “the blending of Greek and Roman critical thought about the arts [was] so complete that neither can be said to be dominant or dependent” (Pollitt, 1974, 66). The writings reflected the times, often calling for a return for

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65 I will return to this below; beyond the Latins he listed, Vitruvius also named no less than 42 Greeks: In addition to the architectural monographs that were available to him, he named at least eleven authorities in his Book VII (preface. 12). Within Vitruvius’ lifetime, for instance, Marcus Tarentus Varro (116-27 B.C.) wrote at least fifty-six treatises, including some related to the building crafts.

66 Philosophical discourse had earlier been based in the oral tradition, but with the plays from Greece had come a philosophy that was textual, accessible at least to the elite. Cicero (106-43 B.C.) for example, advocated critical thinking and he saw philosophy as a discipline that should reinforce the traditional stances of political, economic, social and religious institutions. He felt that tradition should not be questioned, but instead reinforced by philosophy. His writings were known to Vitruvius (IX, preface. 17). As Vitruvius began to think about his treatise, the “New Poets” flourished (around 50 B.C.), including Catullus (c.84-54 B.C.) and Lucretius (99-55 B.C.) who, among others of their time, rebelled against the status quo in writing -- against the epics and tragedies -- and wrote for a more sophisticated audience in a form of highly intellectualized poetry. Lucretius, whom Vitruvius also made mention of (IX, preface. 17), wrote in a didactic tone on Epicurean physics and cosmology. His On the Nature of Things vividly described the natural landscapes of his time.

67 The Greek historians Polybius (c. 200-118 B.C.) and Diodorus Siculus (fl. c. 60-30 B.C.) as well as the Roman historian Sallust (86-35 B.C.) were also well known during the first century B.C.; it is difficult to ponder Vitruvius not accessing their texts.

68 There were many other “popular writers”. Latin literature was alive in Rome, with the influential work of the still popular Greek, Livius Andronicus (c.240 - 207 B.C.) as well as Seneca the Elder (c.55 B.C. - A.D. 40). Others were widely read, like the poet Albius Tibullus (55/48 - 19 B.C.) and of course, Virgil (70 - 19 B.C.), who replaced Accius (b.170 B.C.) and Ennius (c.239 - c.169 B.C.) in the school curriculum towards the end of the Republic (Schrijvers, 1989, 13). Terence’s (c.190-159 B.C.) works, dating to 170 or 160 B.C., like Plautus’ (254-184 B.C.) were based on the Greek comedies.
“the old ways”; Horace (65-8 B.C.) and Virgil (70-19 B.C.) were suggesting changes and the influence of Cicero (106-43 B.C.) and Lucretius (99-55 B.C.) underscored rhetoric and “science”.\(^{69}\) Vitruvius would have had a feel for the way people had lived during his past, including the way society had perceived those practicing his profession; that is to say, as Guy Métraux (1992) has pointed out, “money-grubbing tricksters” (327). So important was literature becoming in “persuading” people that Horace, for example, in his *Ars poetica*, called for the good behavior of poets. Onians (1988) rightly makes the point that the popular argument regarding “unnatural and inappropriate modern poetry [...was] parallel to Vitruvius’ contemporary attack on unnatural and inappropriate wall paintings” (40).\(^{70}\) This clearly suggests that Vitruvius was aware of cultural and intellectual change.

Writers of the day appealed to the educated and wealthy and the two groups were inextricably linked through patronage. The result of this link, of course, was that obligation could alter content; it would have been difficult, if not altogether dangerous, for example, for a writer to be outwardly critical of the lifestyle of a patron. Thus we find dedications of all kinds, including those within the *De Architectura*.\(^{71}\) This may be why Vitruvius was cautious in his critiques of certain building practices. At the same time, *recitatio*, or formal readings, were prepared for the *nobilitas*. This in turn generated more interest for intellectuals in writing and in turn, rhetoric. By the late Republic, the art of rhetoric was fundamental to education and philosophical thought; it offered a means by which complex issues and subjects could be analyzed, presented, argued and compared. Perhaps more importantly,


\(^{70}\) For a technical note on painting styles discussed by Vitruvius, see Sara R. Yerkes “Vitruvius’ *monstra*” in *Journal of Roman Archaeology*, volume 13, 2000, pp. 234-51.

\(^{71}\) The dedications will be further elaborated below.
rhetoric provided scholars and writers like Vitruvius with a vehicle within which a didactic approach to teaching and learning could be readily undertaken.\textsuperscript{72}

Thus Vitruvius found himself within vibrant social and architectural \textit{milieux} filled with the ideas and ideals of thinkers, notably of Greek persuasion, that drew an increasing amount of attention from Roman patrons (Wallace-Hadrill, 1989, 78-79). Whether considered within chronological frameworks, typological development, social context, or even comparative geographical \textit{schema} -- Rome and Italy, Rome and the provinces, or Rome alone -- the reality is that the Republican years were turbulent ones that manifested themselves as layered landscapes that cannot be readily elucidated as a clear and coherent cultural topography. The era, as we have seen, was comprised of disjunctive periods that deliberately sought to alter previously established social norms and their signifiers. In a sense, that the real past kept being substituted for a false one reflected the uncertainty of the ideological firmament. Before and especially during Vitruvius' lifetime, Rome and the provincial centers were being perpetually re-planned, forcing the thousands of urban and rural dwellers, as well as the transients from all over the Mediterranean and beyond, to crowd the narrow streets and interact in what would have been a set of disassociated spaces in a condition of constant re-construction. It is not certain that Vitruvius would have deciphered the spaces in terms of their temporal origins.

During the last hundred years of the Republic, state priorities were perpetually refocused within personal agendas; the result was the installation of military leaders as worshiped individuals and the periodic abandon, reuse and refurbishing of what had previously been

\textsuperscript{72} One aspect of Rhetoric is particularly relevant to the discussion to follow: the Art of Memory. In the Art of Memory, the speaker (or writer) activated and triggered the imagination with a set of \textit{loci}, or places sited in the mind. Commonly borrowed were landscapes and architectural models. An imagined building for instance, would be \textit{designed} with as many \textit{loci} as required, each "decorated" in a specific way; the individual \textit{loci} and related ornamentation represented particular parts of a \textit{discours} or set of ideas to be remembered. The rooms were then linked to distinct parts of the text or speech and revisited and retrieved as required.\textsuperscript{72} Familiar with Cicero, Vitruvius was \textit{de facto} conscious of the memory-shaping device, where "real" spaces could perhaps be substituted for "false" ones; I will return to his employ of rhetoric in the following pages.
significant spaces. Personally sponsored temples, for example, while outwardly dedicated to individual gods, were built within the spirit of self-aggrandizement and propagandist programs based on triumphalism, heroism and egoism. Similarly, the provincial and colonial apparatus sought to control settlers and others with its imposing grid plans, land tenure strategies and monumental projections of power, duty and devotion. The process accelerated as it reached Vitruvius' lifetime in the late Republic. A codified ideology was established, by which building types were used to inscribe particular memories through well-developed and self-propelling iconographic programs (Zanker, 1988). As means of representation, architecture allowed sponsors to write their own truths. And as the writing of histories became more sophisticated, so too did the manipulation of memories. Augustus' forum and his Res Gestae are the culmination of this modus operandi (Sablayrolles, 1981). Power was asserted, histories scripted and memories in turn altered. As the monuments recounted and incarnated particular versions of new “truths”, the old truths were perceived as disappearing. It was partly the latter that would motivate Vitruvius to write his treatise.

2.2 THE DE ARCHITECTURA LIBRI DECEM

Vitruvius lived in -- and wrote his treatise within -- multifarious intellectual and built contexts. He would have felt the volatility and no doubt recognized the changes in thinking. On the one hand he would have sensed the nervousness of a war-weary people; civil war especially would have brought upon a fear of social implosion (Knell, 1985, 6). And on the other hand, he would have been interested in the incoming intellectual thought of Greece. In this dynamic lifeworld he struggled to contextualize his built surroundings and the architectural profession in general. This may partly explain the significant and comprehensive set of requisites that the De Architectura outlines for building practitioners.

To Vitruvius, the architectus had to be “an experienced draftsman, well versed in geometry, familiar with history, a diligent student of philosophy, know music, have some acquaintance with medicine, understand the rulings of legal experts, and have a clear grasp of astronomy and the ways of Heaven” ([C], I, 1.3). He went further in elaborating the need for technical
expertise in mathematics, arithmetic, geometry, mensuration and optics (I, 1.4) and stressed the importance of technical (drawing) skills (I, 2.2). With this somewhat daunting range of required disciplinary abilities, it is not surprising that MacMullen (1959) finds the professional standard difficult to accept (211). It is possible, however, that he was simply outlining the set of skills one would need to satisfy a personal notion of the ideal builder; there is, after all, a later note indicating that he realized no-one can reach perfection (I, 1.13-14). MacDonald’s (1982) assessment of the tenets allows for this later consideration, concluding that the writer was probably listing “what the best professionals must always know” (138). Similarly, Frézouls (1989a) underscores that “la formation encyclopédique requise” was in keeping with the thinking of the time (40). And McKay (1985) echoes this sentiment as well (12). This is reasonable, given the intellectual underpinning and technical complexity to many architectural undertakings; the design requirements for theatres and temples, for example, would have necessitated multidisciplinary approaches. Other writers who were known to Vitruvius, like Cicero and Lucretius, were also advocating broad disciplinary knowledge in their own fields.

Like his contemporaries, Vitruvius highlighted the merits of a lifetime of learning (after the long digression on the required training), concluding “none but those who have climbed step by step, nurtured from an early age by education - in letters above all, and in the arts - to reach the loftiest sanctuary of Architecture.” ([C], I, 1.11). With what appears to be a conspicuous attempt at separating the learned architectus from the layperson, it is also entirely possible that the list of requisite knowledge related to some sort of elitism. We know that Vitruvius was cognizant of professional and social status because there is a note in Book VI that indicates that the practice of architecture by non-professionals could not be condoned and that “[o]ur ancestors, therefore, would pass their projects to architects who, first of all, came from proven good family, inquiring next whether they had been properly brought up, judging it best to entrust work to native modesty rather than aggressive audacity.” ([C], IV, 73

preface. 6). He was undoubtedly concerned with the growing number of successful merchants, who, eager to emulate members of the established leading class, were constructing their independently funded and personally designed houses.\textsuperscript{74} It would have been extremely difficult for Vitruvius to accept the designs of the uninitiated; architectura was a profession and a mandatory set of knowledge areas coupled to "superior" intellect would have been key in defending the position of a liberal thinker among other artists and scholars (Germann, 1991, 16). Here lies an important gateway into the intellectualized cultural realm within which the De Architectura was written: The conspicuous attempt at exclusivity through erudition and strict professional definition is a principle notion of Vitruvius' Architectura and is closely tied to his objectives; the whole leads to a set of important questions: What were the underlying purposes for such a textual undertaking; why present a "theoretical" treatise? Was it about Roman and Greek architecture; or was it about the architectural imagination of one man? Was the intent to present a historical text or a theoretical one? And were the depictions and descriptions of Vitruvius abstract spaces or particular places? The following sections take an in-depth look at the ancient text: its organization and composition as a treatise, its "theory" of Architectura and its illustrative devices and place/space referencing.

**TENETS**

To Vitruvius, Rome as a political entity and colonial power was especially manifested through its egregiae auctoritates -- the eminent dignity of its architecture; he wrote: "indeed the majesty of the Empire had found conspicuous proof in its public works..." ([C], I, preface. 2).\textsuperscript{75} Within his day-to-day panorama, he had a multitude of textual and visual

\textsuperscript{74} This may in fact be one of the reasons why there are so few details outlining private villas within the treatise. For a discussion, see Xavier Lafon "Vitrue et les villas 'de son temps'" in H. Geertman and J. J. De Jong's Munus Non Ingratum – Proceedings of the International Symposium on Vitruvius' De Architectura and the Hellenistic and Republican Architecture, Babesch – Bulletin Antieke Beschaving – Annual Papers on Classical Archaeology, Supplement 2, pp. 188-93, (Leiden: Stichting Bulletin Antieken Beschaving, 1989).

\textsuperscript{75} Silvio Ferri, in his translation/commentary of the De Architectura, postulates that to Vitruvius, auctoritas had both Latin and Greek significance (33, 58, 1960). Vitruvius' use of the term in different contexts
precedents that reflected this dignity—descriptions from colleagues and travelers, written monographs and commentaries, maps,76 memories of previous military travels,77 and as highlighted in the earlier part of this chapter, a matrix of sedimented landscapes from Rome’s past and present and their corresponding imagery, real or imagined (I, preface, 2; Jeppeson, 1989). These observations are obviously key in considering the topics included within the Books and the influence of his surroundings becomes apparent. I here draw from the summaries of Terquem (1885) and Fleury (1990):

Book I focuses on the training of the architect and related definitions, urban sitting, city walls, orientation of the winds, and the position of structures within city walls.

Book II elucidates the evolution of the primitive house and to some extent, humanity itself. Construction materials are also included.

Book III is devoted to temple architecture, including plans, proportions, types (of temples), and the Ionic Order, as it relates to temples.

Book IV is a continuation of the discussion on temples and the Orders, as well as ornament and the details of temple decor.

Book V continues with the theme of the type, including the basilica, forum, and other public buildings. The theatre section (both the Greek and Roman examples are included) is relatively comprehensive, touching on sitting, resonance vessels, plan, porticus, and so on.

Book VI is a discussion of houses, including measurements, proportions, inner spaces and their modification to suit owners.

Book VII is a relatively short digression on decoration: among other topics are stucco, paint, pigments and colors.

Book VIII presents waterworks and aqueducts in relative detail.

Book IX turns the reader towards astronomy, including the workings of the universe, celestial bodies and solar and water clocks.

would suggest that Ferri is correct. For a discussion, see J.J. Pollitt The Ancient View of Greek Art: Criticism, History and Terminology (New Haven: Yale University Press, 1974).

76 He mentions maps in Book VIII (II, 6).

77 There are hints that Vitruvius may have served under Caesar in the Maritime Alps (II, 9.15) and in campaigns in Africa (VIII, 3.25). These will be further discussed below.
Book X is a short treatise on mechanics, examining its history and related definitions, as well as civil and war machines.

(17-19; xxvi-xxvii)

At first reading, the contents and organization seem logical: As a former military officer, he would have felt that elucidating the layout of city walls and towers was a priority. As a building designer -- he mentioned that he designed a basilica at Fano (V, 1.6-10) -- he would have been intent on talking about construction materials, proportion and decor. And given the focus on temple building during his lifetime, it is not surprising that two Books were focused on temple architecture. Other building types are discussed, to a lesser extent, with the stone theater -- a relatively new idea to Rome -- given a more detailed rendering in Book V. Similarly, the houses of the ruling classes were included although as we have seen, little attention was given to the villa. Having been involved in waterworks and military

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78 There has been considerable debate as to the time of the De Architectura's completion. In the preface of Book I, it seems certain that Vitruvius is referring to a dead Caesar when he writes that “... when the council of the Olympians consecrated him among the abodes of immortality and passed his sovereignty into your own jurisdiction...” ([C], I, preface. 2). Frank Granger, in the Introduction to his translation of the De Architectura (Cambridge: Harvard University Press, 1983) states that the text would have been completed prior to 27 B.C. because Vitruvius never refers to Octavian as Augustus (Volume I, xiv). Elizabeth Rawson, in her Intellectual Life in the Late Roman Republic (London: Duckworth, 1985) is of the very plausible opinion that most of the treatise was written -- or at least conceptualized -- earlier in the third decade of the first century B.C. To her, Vitruvius would have, like many academics and intellectuals of today, formulated his thoughts earlier on during his career. R. Syme, in his “Imperator Caesar: A Study in Nomenclature” in Roman Papers, volume 1 (Oxford, 1979), on the other hand, feels that the treatise was written after 27 B.C. For a more complete assessment, as well as a discussion on “the identity” of the old writer, see B. Baldwin “The Date, Identity, and Career of Vitruvius” in Latomus, number 49, pp. 425-434 (1990), G. Lugli Tecnica edilizia romana. Volume 1 (Rome, 1957) and Pierre Gros “Aurea Tempia. Recherches sur l'architecture religieuse de Rome à l'époque d'Auguste.” in Bibliothèque des Écoles Française d'Athène et de Rome, numéro 231 (Rome, 1976). Date estimates range from between 25 B.C. and 14 B.C.. For a commentary related to a counter argument for the first century B.C. date, see Gerald Baldwin Brown “Dr. Ussing on Vitruvius” in Journal of the Royal Institute of British Architects, January 28, 1899, pp. 149-64.


80 For more on the villa and the related lacunae in Vitruvius, see Xavier Lafon’s Vitruve et les villas 'de son temps’”, in H. Geertman and J. J. De Jong (editors), Munus Non Ingratum – Proceedings of the International Symposium on Vitruvius' De Architectura and the Hellenistic and Republican Architecture,
machinery, it should not be surprising that he devoted the final Books to the specifics of 
*machinae*, mechanics. The section on astronomy may have been borne out of a combination
of his experiences and readings,\(^8^1\) he did read Lucretius' writings as well as a variety of 
specialized technical treatises (VII, *preface*).\(^8^2\) There are other topics, of course: The role
of the *architectus*, for example, which, as we have seen, had become somewhat eroded in 
society, was definitely on his mind and defining it would have been one of his primary
objectives.

The whole renders an approximation of an organized treatise. The topics roughly correspond
to Vitruvius' outlook on *Architectura* discussed in Book I, where the "parts of architecture" -
- *Aedificatio*, or Building, *Gnomonice*, or Dialling, and *Machinatio*, or Mechanics are
recorded (figure 2.6):

The divisions of architecture itself are three: *construction*,
gnomonics (the making of sundials), and mechanics. *Construction* in turn is divided into two parts, one of which
is the placement of city walls and *public works* in public
spaces, the other is the erection of *private buildings*. The
allocation of public works are three, of which the first is
defense, the second *religion*, and the third *service*.

\[(C), I, 3.1; emphasis in translation text\]

Perhaps Vitruvius saw the three as primordial.\(^8^3\) Dripps (1997) certainly feels that the origin
of the first house is primal, noting that "[w]hat Vitruvius describes is not merely the making


\(^8^1\) For a discussion on Vitruvius' use of the term astrologia (and possible links to magic), see Fr. J. F.
Marchal, "Notice sur le mot Astrologia, cité dans le Traité de l'architecture par Vitruve, d'après le
manuscrit 5253 de la bibliothèque royale" in *Bulletins de l'Académie Royale des sciences, des lettres et des
beaux-arts de Belgique*, pp. 165-76, volume XV, issue 2, 1848.

\(^8^2\) On the language used by Vitruvius, see Louis Callebat "La Prose du ‘De Architectura’ de Vitruve" in

\(^8^3\) The organization scheme -- the "parts" and the "books" -- seems flawed, with breaks, meanderings, lists
and prefaces that appear to have been added after the work was completed. Part of the difficulty of course
is due to the processes involved in transcribing and translating. Book II does not readily "fit"; it would
have been more logical to include it within Book X. The notions contained within Books VII and VIII are
shared between the Private and Public realms of *Aedificatio*. Similarly, Book II has sections that might be
better suited elsewhere. And there remain puzzling aspects to the treatise's organization and content. Why,
84 The idea of the *First House* is not new to architectural history discourse. Marc-Antoine Laugier, for example, in his *Essai sur l'architecture* (Paris, 1753) felt that from the “primitive hut” all elements of architecture were developed. In his Book II (1. 1-2-3) Vitruvius turns to the “First house” to elucidate his theory of where architecture began. To him, early dwellings were facsimiles of caves and huts, built by early people as they imitated more primal shelters. For a thorough discussion, see Joseph Rykwert *On Adam’s House in Paradise – The Idea of the Primitive Hut in Architectural History* (Cambridge: MIT, 1981), and Mark Cousins (1992-93) debate on the merits of a “First House” discourse in *Arch Text*, volume 1, pp. 35-38. Others turn to the “First House” theme in introducing their own theoretic. R. D. Dripps, for instance, in *The First House: Myth, Paradigm, and the Task of Architecture* (Cambridge: MIT, 1997) postulates that when Vitruvius uses the tale of the first dwelling (II, 1.1-3), he does so in order to develop an overall understanding of the cultural meaning of architecture; while this is possible, Vitruvius does not allude to this and I do not believe that he was seeking to fully explain cultural origins with his narrative.
Architectura) and not necessarily a direct aim at explaining “the origins of political structure.” The rationalization would have been linked to one of the main goals of the undertaking: elevating the profession to the status of the Liberal Arts; the importance of the profession as linked to the origins of humanity itself could have been part of the rationalization.

Another puzzling aspect of the organization of the treatise is related to the two Books on Temples (III and IV). Vitruvius introduced the two with the intent of discussing temples of the Ionic Order in Book III and the Doric and Corinthian Orders in Book IV. Book III, however, addresses much more than the Ionic Order per se: Symmetry, columns, typology and the foundations of temples are described in general terms and the Ionic Order is focused upon as “the proper style” (Rawson, 1985, 188). Book IV also contains much more than the prescriptions for the Orders that it overtly focuses upon; ornamentation and other tenets form part of the discussion. It is odd that Vitruvius did not reiterate in Book IV that the Ionic Order is the preferred ideal; in that book, he in fact advocated a corrected use of the Doric. The change seems contradictory and may be related to the use of different secondary sources.

While the set of Books obviously reflects Vitruvius’ personal views, it does not explain his motive for undertaking the project; the latter is elusive with only hints at purposes offered at sporadic intervals. One raison d’être is in the dedication of Book I:

Therefore, because I had been put in your debt for the favor whereby I will never harbor the fear of want for the rest of my life, I began to record these matters for you. For I perceived that you had already built extensively, were building now and would be doing so in the future: public as well as private constructions, all scaled to the amplitude of your own achievements so that these would be handed down to future generations.

([C], I, preface. 3)

In this significant quote, Vitruvius was telling the Imperator Caesar that the reason for the dedication was to thank him for his support; retired, the architect was receiving an annual
stipend through “the recommendation of ...[Augustus’] sister” (I, preface. 1-2).85 A little later, Vitruvius gave another reason, explaining to the emperor that it was due to the latter’s support of Architectura that he was dedicating the treatise to him (I, preface). This makes sense, given the massive building programs of Augustus. Yet dedicating a literary work is not a purpose onto itself and his motivation was more complex.

Vitruvius was explicit at the end of the first chapter in Book I86 when he addressed the larger building community and scholars in general. He wrote:

... I have striven to write them not as a great philosopher or an eloquent orator, nor as a grammarian trained in the finer points of his art, but as an architect who has dipped into literature. But on the power of my own art and the systems of reasoning within it, I promise that, as I expect, in these pages I will without a doubt prove myself possessed of the greatest authority - not only for those who intend to build, but also for all learned men.

([C], I, 1. 18)

Here he was no longer solely concerned with the emperor’s reading of the Books; he was writing for the aedificantibus, or builder, as well as to the sapientibus, or scholar of the day. With the audience widened even further in Book V’s preface, when he addressed all those involved with the building craft, the treatise appears aimed at a diverse readership ranging from emperor to craftspeople. Geertman (1989) deals with this: For the latter, Vitruvius simplified the rules of architecture for the everyday builder to readily interpret.87 This seems obvious -- design modus would have had to be readily interpreted for the reader -- yet at the same time it is puzzling that the rules are not clearly outlined and therefore not always understandable. Another reason for undertaking the treatise is provided in Book IV’s preface where the writer indicated that until that time, no work dealing with Architectura as a whole

85 Octavia had spent some time in Athens; this may in fact have had some bearing on Vitruvius’ preferences.

86 Philippe Fleury (1990) is of the opinion that the end of Chapter 1 (Book I) was the preface in the original draft of the treatise. His rationale is linked to the sequence in which specific items are discussed in the different prefaces. This, however, is as difficult to refute as it is to prove: Chapter I of Book II may have been the preface to the Book; the debate continues.

had ever been undertaken (IV, *preface*. 1). The gap in the literature would have preoccupied the presumably well-read architect and he would have wanted to fill it so as to reach a wide readership. But certainly there is more to Vitruvius’ motivation than the basic delivery of building instructions and filling-in a perceived literary gap.

While he aimed explicitly at architectural education, technical assembly and design prescription, the treatise goes much further. Living in a city pulsating with political irregularity and social uncertainty, not to mention covered in construction sites and in dire need of maintenance, it is conceivable that an architect such as Vitruvius would have wanted some sort of “order”. Another motive is thus apparent: He wrote with the idea that the task of the architect involved the ordering of all things related to architecture: site selection, city walls, street layouts, building location and design, water supply and war machines. Perhaps reflecting experience in the provinces, these are the tasks associated with the “proper functioning” of the city -- the ordering and coordinating of the populace through its architecture -- and Vitruvius would have wanted them incorporated within the responsibilities of his *architectus*.

Setting out rules for city planning and allotting the responsibilities for these to the *architectus*, however, is still probably not his primary motive. There is an attempt at organizing more than the practice and planning of building *per se*: Vitruvius was re-organizing the architectural discipline and in this light presented an *Architectura* that addressed the intellectual and architectural ideals of the time. This in a sense is part of the reason why he provided the dedication to the emperor. The idea was to ensure that the *egregiae auctoritates* (as manifested through the *De Architectura*) remain universal and worthy of the world power Rome has become; a dedication to the emperor would be a first step in ensuring this. In order to be accepted by the intelligentsia and élite, architecture had to maintain exclusivity through a specified erudition and most certainly had to be systematized and ordered. Thus while a first motive is linked to the organization of the city and a second one is related to the systemization of building, a third purpose is directly linked to the reorganization of the discipline within an ordered system. These
three purposes are reflected in Vitruvius' discussion of temple types. After organizing buildings in terms of their siting within the city in Book I, the temples are systematized within column-to-wall relationships and elevations-to-wall classifications (within human-body proportioning and other ratio schemata), to finally find their symbolic order within *Architectura* in Books III and IV.

Regardless of its organizational difficulties, the treatise had very specific architectural intents. At first reading these seem disparately focused; Vitruvius was, after all, attempting to do something that had not yet been done for architecture. On the one hand, he was compiling a practical builders' manual and filling-in a perceived gap in the literature, while on the other he was attempting to formulate the "theoretical" tenets of a discipline that he was hoping to redefine: It is as if Vitruvius wanted to present the discipline as both prescriptive and intellectualized, both set and alterable; the duality is significant.88 And how he accomplished this is key. He integrated a host of fields within his *Architectura* and this partly explains the long and difficult list of requisites discussed in the above introduction. Rawson (1985) grants Vitruvius a great deal of attention in this regard, rightly underscoring that to the old writer, all disciplines were "linked ... by their theory" (186).

To Vitruvius, the *architectus* was to be equipped with more than *fabrica*, or knowledge-of-craft. Because all disciplines were based within -- and linked by -- *ratiocinatio*, or theoretical and scientific knowledge (I, 1.1, 1.12-17), the architect would have had to be familiar with each discipline. *Fabrica* and *ratiocinatio* are thus fused within Vitruvius' theoretic. Reflecting the cultural influence of the times, the theoretic is especially buttressed by Greek language and ideas. This is why the treatise seems both descriptive and normative.89 In other words, the *De Architectura* on the one hand describes, while on the other, it seeks to prescribe. And this is also why it is punctuated with quasi-historic notions such as the

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88 I will return to the dualities contained in the treatise in the final sections of my dissertation.
89 The Etruscan temple is a good case in point; he used a Greek term, a neighboring geographic location and a Roman example to describe a type that had little to do with any of these but had everything to do with his idea of this particular temple type.
discourse on the origin of humanity and the first house in Book II (1) and pseudo-scientific notions such as the discussion of the elements and atoms, also in Book II (2.1). With a fundamental understanding of the theoretical basis of individual disciplines, the reader of the treatise, to Vitruvius, would be equipped to ensure that *Architectura* would reach its fullest potential and gain a higher level of social respectability. Thus in this sense Vitruvius not only idealized the profession, but aimed at, through the words in the Books, formalizing and elevating the profession.

How was this to happen? Well, consider first that the relatively new “multidisciplinary” approach advocated by Vitruvius was not borne exclusively out of his own thoughts. During the first century B.C., the Roman architect was not the most trusted individual; Vitruvius would have been concerned with righting this perception and reality. At the same time, the Roman intellectual world was being transformed as “[p]rofessional training... outgr[e]w the old, established values...” (Brown, 1963, 99). The changes would have been at once compelling and profound. And at this intersection between old and new, the search for a new intellectual tradition was on. Some, like Cicero, were looking for ways of restoring cultural stability by promoting, through formal education, an outlook that would take into account both Roman and Greek histories. We have seen that Greek philosophy was of particular interest to intellectuals such as Cicero (Pollitt, 1974); to him, it contained and transmitted wisdom, all-the-while training the practitioner in presenting convincing arguments (Griffin, 1989, 79). The Greek *enkyklios paideia*, or Liberal Arts, would have thus appealed to Cicero, Roman scholars, and ideally to Vitruvius; the *enkyklios paideia* had been founded in a tradition that encouraged a multidisciplinary approach to thinking, learning and eventually, professional practice. Vitruvius reminisced on a personal Liberal Arts education in Book VI (*preface. 4*) and it is within this approach that he found a vehicle by which he could attempt to secure *Architectura* as a re-established profession while elevating it to the higher “Liberal Arts”, thereby re-establishing its status (Goalen, 1995, 25). In this sense, the *enkyklios paideia* was a primary requirement for the architectural writer.

Brown (1963) makes the case that Vitruvius is the era’s writer “who expressed most freely and explicitly [the] trend” of applying the Liberal Arts to the curriculum (99-100). Brown’s
point may be true, but Vitruvius does more: Consider his use of the words “encyclios...disciplina” in Book I (1.12) when referring to the Greek-influenced body of disciplines that the architect is to be familiar with. This differs somewhat from the enkyklios paideia: the Greek term denotes “Liberal Arts” while encycloids...disciplina means more; it signifies the integration of many disciplines. The idea was not simply to adapt the Liberal Arts education to the architectural profession; it was one that would re-examine the status, role and definition of the profession itself. Key then is that to Vitruvius, Architecture-as-Liberal-Art represented more than the design and shaping of built environments; it would also be responsible for the modification and shaping of the intellectual environment.

This latter notion is very close to the writings of Cicero. Vitruvius held Cicero in high regard, citing him in his Book IX’s preface (17). The latter had written that familiarity with the disciplines was key in becoming an Orator and he had been among the first to use the word “architectura”. To Cicero, the discipline of Architectura was like Medicine and Scholarship: Each involved learning for a practical purpose. However, while Cicero grouped Medicine, Scholarship and Architectura together, he does not seem to have been entirely echoed by Vitruvius; the former wrote that the three disciplines were “honorable to persons of a lower class” (Granger, 1983, 16, note 3) while the latter, as we have just seen, sought to elevate the architectural profession to a higher status (Onians, 1988, 40).

Varro too had included Architectura as a Liberal Art in his De Novem Disciplinis. Now lost, much of Varro’s writing on art and architecture centered on “classification” and “definition” (Brown, 1964, 101). He had, however, discussed Rome’s architectural history, particularly as it related to house construction and surrounding urban landscapes, and it is highly probable that from his writings Vitruvius derived his own materials for Book VI on

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91 Vitruvius named Varro in at least two places (VII, preface. 14; IX, preface. 17).

92 In Intellectual Life in the Late Roman Republic (London: Duckworth, 1985) Elizabeth Rawson makes the point that Vitruvius would have looked to Varro’s De Novem Disciplinis and his Imagines; both would have been accessible in Rome during the 40s B.C.
private spaces: From Varro, Vitruvius noted, some of his thoughts on architectural principles had been formulated (IX, preface. 17).

If Cicero’s dialogues and Varro’s writings were popular during the first century B.C., so too were the didactic poems of Lucretius. Nisbet (1989, 108) reminds us that Lucretius too recalled the Greek way -- he especially espoused “Athenian civilization” in his Book VI of the De Rerum Natura. Baldwin (1990) and Fleury (1990) analyze the ideological links between the De Architectura and Lucretius’ De Rerum Natura. To them, Lucretius’ treatise was one of the primary texts that Vitruvius referenced and according to the two, Vitruvius turned to the earlier work in his discussions on order-in-architecture (I, 2.1), human origins (II, 1.1) and the atoms (IV, preface. 1). Their assertions are not proven, however.

Vitruvius also looked to other Romans for inspiration: Fufidius, who had written a volume on architecture, and Publius Septimius, who wrote two volumes on the subject (IX, preface. 17). As Rawson (1985) points out, it is possible that Vitruvius included Fufidius and Septimius as knowledgeable “experts” (188). It may also be that Vitruvius included them out of professional etiquette or personal respect. In this light it is also plausible that he felt that contrasting “amateurs” to Greek authorities would reinforce the notion that the Greek architect and Greek architecture were superior to that of Rome. He had probably read many of the pracepta symmetriarum, or rules (especially as they related to the Orders), of notable Greek architects; there existed a written corpus by Greek architects on individual projects and design theories. Beyond the sources cited in the De Architectura, there is also his life experience. Rawson (1985) advances one of the most fundamental ideas in this area, contending that the underpinnings of the De Architectura were probably founded during the earlier parts of Vitruvius’ life (186-87). This is fundamental to the reading of the De Architectura. We know that he postponed publishing the work because he recorded it in his comments relating to war turmoil in Rome: “I dared not, in the midst of such concerns, publish my writings on architecture...” ([C], I, preface. 1). And given his multifaceted career -- military, civil engineering and at least some design work -- it makes sense that the theoretical basis for his work was borne out of his past experiences and not exclusively out of his present realities. Certainly this would explain some of his omissions: The construction of
the amphitheater in 29 B.C., for example, was left out of the treatise which was completed at around this time.

Perhaps the best way to consider it is that Vitruvius gathered ideas -- consciously and unconsciously -- for his future writings during the earlier part of his career, say during the 50s and 40s B.C., and then when he decided to draft the treatise, he mined his recollections and amalgamated these to “present” observations. That said, it becomes relatively easy to understand why he made explicit reference to the above Romans. Cicero, Lucretius and Varro were especially popular during Vitruvius’ day, and indeed were representative of the intense intellectual discourse of the time. Their dialogues, writings and poems were all directed at a relatively learned readership (Schrijvers, 1989, 13) and Vitruvius was writing at least in part for the same audience, albeit expanded to reach those interested in building and related ideas. By appealing to the same readership, he was in fact doing for Architectura what others were doing for their respective disciplines. That is to say that he was intellectualizing Architectura and integrating it within the Liberal Arts.

In this light, the Roman writer looked steadily towards the Greek intellectual experience; the list of experts in Book VI (preface. 3) attests to this. In addition to the Liberal Arts ideal, there was also the historical context; he saw Greek architecture as historically preceding that of Rome’s and lamented the loss. He used History as a way of re-establishing continuity-in-architecture -- from Greek types to Roman designs, for example -- in turn reinforcing the notion of a discipline deriving from the Greek. To Vitruvius, the Romans had contributed much less in terms of the architectural wonders of the time. He listed mostly Greek sites, for instance, when enumerating the greatest temples: Ephesus, Miletus, Eleusis (VII, preface. 16) and Athens (VII, preface. 17). Interestingly, however, he did not completely omit Roman accomplishments; the last temple was designed by Cossutius, a Roman architectus (VII, preface. 15).

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93 The “experts” will be discussed below.
If a Roman had designed a great monument in Greece, it was many Greeks who had done so in Rome (Wilson, 1989, 361). And in keeping with the Hellenic presence in Rome, some forty-two Greeks were cited in the treatise. There are a variety of possible reasons for doing this. No doubt Vitruvius wanted to highlight his familiarity with Greek “authorities” and their writings.\textsuperscript{94} Theirs were monographs dedicated to singular buildings or specific topics; Pythias' writings, for example, centered on the Temple of Athena at Priene. Obviously the referencing of Hellenic sources was also linked to his intellectual aspirations. Having set exceedingly high standards for the architect, he may have felt that he needed to prove his intellect, wanting to situate himself among those he considered learned. Or he may have simply been keen on using the Greek-founded rhetorical devices that were in practice at the time; listing authorities works well as a basic rhetorical device. It may also be that he was reflecting the fact that Greek architects had been more successful at gaining commissions in Rome during the first century B.C.. The true extent to which he turned to sources -- Greek or otherwise -- is unclear; he did not always cite his referenced works and he employed a prose that did not readily reveal the use of secondary sources.

Gros (1982) suggests that Vitruvius was bounded by inherited Hellenistic traditions that limited his intellectual meandering and choice of writing styles (669). In this sense, Vitruvius' call for encyclopedic knowledge is just like that of the authoritative Greek writers of the time, he relied on authorities and precedents as was customary in Greek writing, and he readily accepted secondary source material just as the Greek scholars were doing in their writings. The first Greek stylistic inheritance -- the call for encyclopedic knowledge -- seems somewhat contradictory when we consider the sometimes overly general passages and the missing analysis in the treatise. Although he listed the disciplines and the detailed knowledge for practicing architecture, Vitruvius elected to remain general with his instructions. Unclear are his reasons for omitting a specific discussion of the problems associated with the unfocussed planning of urban Rome, for example. While not likely, it may be that he did not identify this as a problem.

\textsuperscript{94} For a further commentary on authorities in Vitruvius, see Pierre Gros, "Structures et limites de la compilation vitruvienne dans les livres III et IV du De Architectura" in Latomus, volume 35, 1975, pp. 986-1009.
The second inheritance -- the constant reliance on named and unnamed authorities -- is apparent throughout the text. Consider the *preface* of Book IX where he enumerated a series of “experts”:

...[t]he valuable precepts of Pythagoras, on the other hand of Democritus, Plato, Aristotle, and the other sages, cultivated by daily industry ... (2). As for Archimedes, although in his limited wisdom he discovered many wonderful things... (9). Now let our attention turn to the researches of Archytas of Tarentum and Eratosthenes of Cyrene ... (13). I especially admire the volumes of Democritus ... (15). Likewise many people born within our memory will seem to discuss science with Lucretius as if he were there in person, or the art of rhetoric with Cicero, and many subsequent generations exchange conversation with Varro about the Latin language...

(C), IX, *preface*

In spite of the enumeration, Vitruvius did not provide the sources of most of his descriptions and depictions, leaving today’s reader (and perhaps, although not certainly, the reader of his day) questioning the authenticity (and accuracy) of the latter. Similarly, his adherence and ready acceptance of secondary source instructions leaves the reader wondering if he ever had the confidence to question them. Dominant thinkers, like Archimedes (287-212 B.C.), who had by then devised methodological research approaches for mathematics and engineering problems, were mentioned yet do not appear to have had much influence on Vitruvius’ writing. And he did not indicate how he arrived at his concluding generalizations, not elaborating, for example, on the circular arrangement of the winds in Book I (6.2-13) (Plommer, 1971, 161-62; Pottage, 1968, 196). It is quite possible that he was simply paraphrasing from these sources.

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95 This was a relatively common rhetorical device employed by both Roman and Greek writers of the time.
96 He mentions Archimedes in Book I (1.7; 1.16).
Goalen (1995) suggests that Hermogenes was a main influence (28). Vitruvius does name him several times, but the level of reliance remains ambiguous. And the guidance of Hermodorus is not assured, although Gros (1973) indicates that it is likely (160-61). The two authorities were not necessarily commonly known and with little critical assessment or elaboration on Vitruvius’ part, we have scant means by which to accept these or his other secondary sources. We must conclude that Vitruvius either had complete faith in his sources and for this reason chose not to verify or question them, or, that the whole was beyond his own intellectual limit. The confident tone in his writing and his will to write about, promote and reorganize the discipline would seem to suggest the former.

Relatively few Roman examples were inserted as part of the references in the treatise. Other than the emulation of all things Greek, there are three possibilities for this: First, Vitruvius was not necessarily looking to Italian examples for his intellectual and aesthetic models. Second, he may have been following his Greek sources too closely, making little effort to locate Roman or Italian case-studies. Or third, he was deliberately choosing examples of what he considered to be well known and readily “pictured” by readers. It is probable that the three were part of his reasoning; regardless, the retired military man omitted a great many Roman construction details and examples.

Vitruvius was attempting to achieve a number of goals. There was the aim at prescribing building instructions to a varied audience. There was the wish to fill-in gaps and contribute to the literature of the time; certainly others were doing the same within the Liberal Arts and he may have wanted to amalgamate different writings already known to architects. There was the will to bring together the disparate components of the art of building and the goal of

97 Hermogenes is recalled in Books III (2.6; 3.8) and V (3.1).
98 The reference related to the difficulties with triglyphs (III, 3.9).
100 These two reasons are postulated by Fleury (1990, XLII).
101 For example, masonry construction techniques such as opus incertum and opus reticulatum were only briefly mentioned (II, 8.1). This is significant; as we have seen, masonry construction innovations during his lifetime were key in the development of new forms. Vitruvius may have chosen to omit certain techniques because of his personal preferences; he certainly critiqued the poor taste in frescoes (VII, 5.1, 2, 3).
elevating the architectural profession to that of a Liberal Art. There was also the larger project of reorganizing the profession and its praxis; linked to the latter, Vitruvius hoped to intellectualize the profession. It is also possible that he was aiming to appeal to an architectural client base attracted to all-things-Greek. Of course throughout all of this, the retired architect was living in a place and time where architectural design, which had been the responsibility of specialist practitioners, was now within the grasp of other “non-professional” individuals; by simply hiring a contractor, people of wealth and power could design and build whatever they desired without employing the services of the architect. The “design” function seems to have been moving away from the architect’s control. At the same time, the surrounding cultural topography was unstable and to Vitruvius, the methods of practicing architecture were unsuitable and the architectural superego of Rome had vanished. He thus infused his treatise with countless allusions to the Hellenic world -- the source of the old ways. The notion of a curriculum based on the *enkyklios paideia* as transformed into the *encyclios disciplina*, the many examples of Greek architectural works (with the de facto omission of Roman exemplary), and the profuse use of Hellenic “authorities” were all instilled in order to begin transforming architecture. How he attempted this transformation lies within his particular brand of theoretic.

**THEORY**

Vitruvius aimed to deliver a convincing argument to persuade his readership that change was required and that a return to the old (Greek) ways should be a part of that change. Further, the same readers had to be convinced that the architectural profession should be elevated to its “rightful” place among the Liberal Arts. His argument, if it can be called that, was a complex one. He provided a synthesis -- a loose system of principles and tenets. I suggest that he was not describing a unifying theory but instead was prescribing an idealized system. The system was based on Greek principles -- hence the plethora of Greek terminology -- interspersed throughout the *De Architectura*. Only by separating these principles and then re-assembling the whole can we begin (which is the best we can do) to understand his objective. The various tenets and principles of Vitruvius, as I will point out, are on the one hand inextricably
linked to an activity which is “organized”, while on the other hand to an activity which is not “organized” and is instead mediated through design, thus becoming an act linked to reflection, imagination and invention. It is in this light that this section takes an in-depth look at the “theory” of Vitruvius.

Much has been made of Vitruvius’ “theory” of *Architectura*. Later writers turned to the treatise for their cues regarding methods, materials, typologies and of course, theoretic. This process intensified especially during the Renaissance as the humanists translated, corrected and usurped its main tenets (Wittkower, 1949; March, 1998). From interpretations of the tenets, we have the basis, for example, of today’s ideals of perspective and proportion (Germann, 1991; Onians, 1981). This is fundamental; such influence has the interpretation of the treatise had on architectural thought that no comprehensive discussion of architectural theory can be undertaken without going back to it. But the multiple interpretations have rendered a “Vitruvian theory” that may or may not represent Vitruvius’ intent(s). In the first place, while “theory” is often applied to Vitruvius’ design tenets, it is difficult to accept his list of requirements as such. Theory as we know it implies a basis that extends beyond prescription, mythological and historical narrative *per se*; it calls for rules, procedures, assumptions and hypothetical(s) that produce at least partially predictable results. Alternatively, “system”, which can be interpreted as a method of organization and

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103 I will return to this later within the present chapter.

coordination, has been utilized by Kruft (1994) and may indeed be closer to what the architectus intended.

If Vitruvius’ motives were borne out of his desire for a better discipline, the buttresses for his theoretic (or system) were certainly borne out of mythological and “historical” realms. There is the myth of the origins of building in Book I (5.9), for example; it will be discussed a little later. And there is the “historical” notion of the old ways constantly referenced in justifying the organizing tenets. Consider the following quote in Book III:

> And so, if Nature has composed the human body so that in its proportions the separate individual elements answer to the total form, then the ancients seem to have had reason to decide that bringing the creations to full completion likewise required a correspondence between the measure of individual elements and the appearance of the work as a whole. Therefore, when they were handing down proportional sequences for every type of work, they did so especially for the sacred dwellings of the gods, as the successes and failures of those works tend to remain forever.

[C], III, 1.4

Vitruvius’ recalling of the ancients was fundamental in developing a system. In this quote, recalling how the ancients had turned to human body proportions to arrive at design solutions for temple-buildings, Vitruvius was relying on his readers’ respect for elders and the past: The design based on the human body was deemed ideal simply because the ancients had done it this way. Further, the ancients were correct simply because they had been, presumably, Greek ancients. Never mind the fact that the reader does not know if this had actually been how Vitruvius’ ancients had set out their building designs. Vitruvius perhaps did not know either.

Another example of the use of historical antecedents is found in Book IV where Vitruvius established a historical link between the Doric temple and the art of carpentry:

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... Drawing from these elements and from the art of carpentry and applying them to the construction of sacred dwellings in stone and marble, craftsmen imitated these arrangements in their sculptures and agreed that these inventions ought to be adopted. The craftsmen of old, building in some place or another, placed joists that protruded from the interior walls to the outer edges of the buildings. They built in between the joists and above them decorated the cornices and eves with fine carpentry for a more attractive appearance. Subsequently they decided that these projecting joists should be cut off where they protruded beyond the plane of the walls, and because the result looked unattractive to them, they fitted plaques in front of the cuttings, which were shaped as triglyphs are made today... (2). Thus, for Doric works the principle underlying the triglyphs and mutules was derived from these imitations (3).

[C], IV, 2.2-3

Considering the reverential treatment of the workmen of “old”, the explanation would have withstood scrutiny in spite of stone clearly not having the malleability of wood. When the reader moves to the next chapter on mythology -- Greek mythology, that is -- explaining how the Orders came to be, the notion of history and myth as proof is reinforced:

These cities, once they had expelled the Carions and Leleges, called this region of the earth Ionia after Ion their leader, and establishing sacred precincts there, they began to build shrines. First of all, they decided to build a temple for Panonian Apollo like the ones they had seen in Achaea, and they called this temple “Doric” because they had first seen a temple of this type in the cities of the Dorians. (5) When they had decided to set up columns in this temple, lacking symmetries for them and seeking principles by which they might make these columns suitable for bearing loads yet properly attractive to behold, they measured a man’s footprint and compared it with his height. When they discovered that for a man, the foot is one-sixth of his height, they applied this ratio to the column, and whatever diameter they selected for the base of the column shaft, they carried its shaft, including the capital, to a height six times the amount. Thus the Doric column came to exhibit the proportion, soundness, and attractiveness of the male body. (6)

[C], IV, 1.5-6

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With the recalling of myths, the justification for adopting the Greek *modus* is complete. Within the tenet of *decor*, for instance, Vitruvius tied the Orders -- Doric, Corinthian and Ionic -- to specific divinities. Doric was attached to Minerva, Mars and Hercules, for example. This is not new; the Orders as such had appeared in earlier times in Greece and they were utilized for specific purposes throughout Italy. Within Vitruvius’ treatise, a certain normative is established with relation to the Orders, however, by making links with the historical and mythological past.

Perhaps nowhere did Vitruvius better merge the historical and mythological past than in Book II’s first chapter. Here the story of the first house is recounted, in a sense reminding the reader of where people had come from. To the author, people had originated in the wilds and had lived rather crudely, finding shelter in caverns and forests (II, 1.1). The discovery of fire had provoked the gathering of people, wherein the first signs of communication occurred. Eventually, individuals began constructing shelters using twigs and tree limbs. Other groups dug earth shelters and others imitated birds with mud and branches used as walls (II, 1.2). The new builders exchanged ideas and made improvements on their structures. The *proof* for this, Vitruvius asserted, was in the fact that “...there is an ancient example to this day of a house daubed with mud. Likewise, on the Capitol, the house of Romulus shows us - and calls to mind - the ancient ways...” that are still observable ([C], II, 1.5). He continued: “Reasoning from these indications about the way in which the ancients invented building we can conclude that this is exactly how it happened” ([C], II, 1.6). Eventually, artisan communities evolved and their built structures became more complex and expansive. Vitruvius maintained the rationalization:

> Because these things had been so established in the beginning, and nature had not only equipped the people with senses like all the other animals, but had also armed their minds with ideas and plans and subjected all other creatures to their power, so from the making of buildings they progressed, step by step, to the other arts and disciplines, and thus they led themselves out of a rough and brutish life into gentle humanity.

[C], 2, 1.6

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106 *Decor* will be discussed in greater detail below.
Thus in a mythical story -- perhaps containing kernels of truth -- that explained the origin of humans, social "progression", and architectural origins, Vitruvius was able to link his discipline to Nature and eventually, the divinities. In this way, the principles of Architectura were gradually and subtly introduced, "proven" and rationalized.

It is somewhat paradoxical that while Vitruvius' principles are linked to what could be seen as an "organized" activity (the use of proportion and the correct use of the Orders), they are also related to an activity which is less organized and more abstract (the use of reflection and invention). What could thus be seen as a duality in Vitruvius' text is linked within the collective architectural memory of his intended readers. As contained in Vitruvius' books, however, the whole is confusing. Yet the principles are fundamental to the treatise and worth a detailed exposition. Consider them as summarized in figure 2.7. Vitruvius' principles are made up of Firmitas, Utilitas and Venustas (I, 3.2). This is the clearest part of his elucidation of the discipline as-he-sees-it. Firmitas, or solidity (or soundness), includes technique in construction, building materials and statics. Utilitas, or utility, signifies the notion of proper use and function of built structures. And Venustas, or grace (or attractiveness), means aesthetic value and includes ideas associated with proportion, the use of the Orders and the act of designing. The three principles are bound within one passage contained in Chapter 3 of Book I:

All these works should be executed so that they exhibit the principles of soundness, utility and attractiveness. The principle of soundness will be observed if the foundations have been laid firmly, and if, whatever the building materials may be, they have been chosen with care but not with excessive frugality. The principle of utility will be observed if the design allows faultless, unimpeded use through the disposition of the spaces and the allocation of each type of space is properly oriented, appropriate and comfortable. That of attractiveness will be upheld when the appearance of the

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107 Vitruvius is not yet cognizant of mathematically-based statics and relied solely on empirical knowledge and rules (Germann, 1991, 13). This may explain why he provided little description and explanation of, for example, vaults and arches, leaving only slight passages on their related elements (VI, 8). Similarly, he enigmatically left out the details of the Pantheon. One possible explanation is that Roman techniques in vaulting were not perfected until after his lifetime.
work is pleasing and elegant, and the proportions of its elements have properly developed principles of symmetry.

[C], I, 3. 2 (emphasis in translation text)

A second set of tenets is included within Venustas: ordinatio (I, 2.2), dispositio (I, 2.2), eurythmia (I, 2.3), symmetria (I, 2.4) decor (I, 2.5) and distributio (I, 2.8). They are relatively close in meaning and tend to overlap, especially in relating to proportion as one of the criteria for beauty. Here we interpret the tenets directly from the text.

Ordinatio, or taxis -- recall that Vitruvius often turned to Greek terms -- is a modular-based proportioning system and while he at times seems to have attempted to nuance the two, they
are in effect the same. The term implies complete proportioning based on the moduli, or modular unit, and assumes the building had been conceptualized accordingly. It is very close, and indeed at times overlaps with symmetria (see below). It seems odd that he would deliver this tenet so early; in Book I he had not yet described the proportioning ideal, nor the means by which it could be achieved.

Dispositio, or diathesis in Greek, is defined primarily as quality — qualitas — of arrangement. (Ordinatio is its prerequisite). It is through dispositio that the parts of a building can be integrated and put together; it is “the fit assemblage of details, and, arising from this assemblage, the elegant effect of the work and its dimensions, along with a certain quality or character” ([A], I, 2.2). To Vitruvius, there were different types of dispositio, each derived out of cagitatio, or reflection/imagination, and inventio, or invention (I, 2.2). Key for the argument to follow is that the latter forms the basis of “design” activity and includes ichnographia, orthographia and scaenographia (I, 2.2). Ichnographia is the assessment of the plan in terms of site and orientation; in a sense it is the plan itself. Orthographia, on the other hand, is the setting out of the elevation according to the building’s proportion scheme. And scaenographia is slightly more complex and has no doubt been the cue for subsequent and especially Renaissance “theorists”. It is the ability or act of tracing a perspectival drawing of the front elevation and its corresponding side elevations towards a vanishing point: “Item scaenographia est frontis et laterum abscedentium adumbratio ad circinique centrum omnium linearum responsus” ([D], I, 2.2). It is the act of carrying out a one-point perspective that carries within it the ideal of proportion. Thus dispositio is ultimately the

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109 Vitruvius did not detail his ideas on proportion when he first wrote about the concept in Book I. To him, “proportion” was not an aesthetic ideal; it was a technical device derived out of numerical juxtapositions. The more specific instructions on proportion are in Book III’s Chapter I.
110 Morris Hicky Morgan, in his translation (New York: Dover, 1914, 1960) refers to dispositio as “Arrangement”.
112 “As for scenography, it is the shaded rendering of the front and the receding sides as the latter converge on a point” ([C], I, 2.3); emphasis in translation text.
design of the building, including its execution as derived out of its plan, elevation and perspective.\footnote{For a more detailed discussion on orthographia, ichtnographia and scaenographia, see Maria Teresa Bartoli's (1978) "Orthographia, Ichnographia, Scaenographia" in Studi e documenti di architettura, volume 8, pp. 197-208.}

*Eurythmia* is also a subjective tenet as it is related to beauty and linked to proportioning and general arrangement of the building’s elements (I, 2.3). Thus it overlaps slightly with *dispositio*. To Vitruvius, the idea was to relate (proportionately) heights to width, and so on. It is the result or effect of applying the rules of proportion. However, it is not clear if *eurythmia* was meant to apply to “drawing”, or to “building”. The former would involve imaginative interpretation; the latter would be concerned with the practicalities of building. Again, ambiguity prevails: Granger (1983) translates it directly to “proportion” (27); Kruft (1994) writes that the tenet “corresponds more or less to the modern conception of harmony” (26). Considering the significance of the following tenet -- *symmetria* -- it appears likely that it was meant to apply to design methodology and not necessarily to the building technology. It may be because of their closeness in meaning that Vitruvius later (VI, 2.5) attempted to make the distinction between *eurythmia* and *symmetria*.

*Symmetria* is the concept of harmony in a building once complete, both as a comprehensive whole and as a set of separate parts relating to the whole (I, 2.4). While similar to *eurythmia*, there is a difference. Puzzling is that Vitruvius appears to have interchanged *symmetria* with *ordinatio* in his prescriptions (Frézouls, 1989a, 44). Granger (1983) translates *symmetria* quite directly as “symmetry” (27) while Kruft (1994) makes the case that with *eurythmia* Vitruvius would have meant what we now consider as “proportion”. Recall that Granger had translated *eurythmia* as proportion. Perrault (1684 [1996], 11, *footnote* 9) also utilizes “proportion” (in French) in this case. Considering that Vitruvius was here delivering the first clue to what continues to be one of the most fundamental ideas on architectural theory -- that is to say, the relating of architectural proportions to the human body -- “proportion” likely was the intended meaning.
I believe, however, that *symmetria* was also meant to evoke “balance” (of building elements). In the discussion on temple planning, Vitruvius highlighted that:

The composition of a temple is based on symmetry, whose principles architects should take the greatest care to master. Symmetry derives from proportion, which is called *analogia* in Greek. Proportion is the mutual calibration of each element of the work and the whole, from which the proportional system is achieved. No temple can have any compositional system without symmetry and proportion, unless, as it were, it has an exact system of correspondence to the likeness of a well-formed human being.

[C], III, 1.1; italics in translation text

Note that symmetry and proportion -- *symmetria atque proportione* -- were presented as two distinct ideas; one leads to the other. In other words, proportion would have been the means to symmetry and the two should not be translated as equals.

Related to proportion, consider another part of Vitruvius’ commentary on the human body proportioning scheme:

Just as in the human body there is a harmonious quality of shapeliness expressed in terms of the cubit, foot, palm, digit, and other small units, so it is in completing works of architecture.

[C], I, 2.4

The nose (three lengths) to the face, and the face itself are the fundamental modules:

For Nature composed the human body in such a way that the face, from the chin to the top of the forehead and the lowermost roots of the hairline should be one-tenth [of the total height of the body]; the palm of the hand from the wrist to the tip of the middle finger should measure likewise; the head from the chin to the crown, one-eighth; from the top of the chest to the hairline including the base of the neck, one-sixth; from the center of the chest to the crown of the head, one-fourth. Of the height of the face itself, one-third goes from the base of the chin to the lowermost part of the nostrils.
to a point between the eyebrows, and from that point to the hairline, the forehead also measures one-third. The foot should be one-sixth the height, the cubit one-fourth, the chest also one-fourth....

[C], III, 1.2

The concept is then tied to geometry and, de facto to numerology:

So too, for example, the center and midpoint of the human body is, naturally, the navel. For if a person is imagined lying back with outstretched arms and feet within a circle whose center is at the navel, the fingers and toes will trace the circumference of this circle as they move about. But to whatever extent a circular scheme may be present in the body, a square design may also be discerned there. For if we measure from the soles of the feet to the crown of the head, and this measurement is compared with that of the outstretched hands, one discovers that this breadth equals the height, just as in areas which have been squared off by use of the set square.

[C], III, 1.3

This is what later theorists and historians referred to as “Vitruvian man”. It must be underscored that this rationalization of the human body as the ideal template for proportion is just that: a rationalization. Vitruvius continued the prescription by describing the relationship of the human body to numbers by sub-division (III, 1.5-6-7-8). While evocative, the presentation somewhat breaks down when one of his perfect numbers -- the number ten -- is presented as corresponding to the ten fingers (III, 1.5). He used Plato to substantiate this point and then “the mathematicians” to highlight another perfect number: the number six. With the latter Vitruvius did not have Plato to fall back upon and thus spent a great deal of time proving the number’s perfection by showing that it could be divided into units congruent with its proportions (III, 1.6). Combined, Vitruvius said that the two made the most perfect of all numbers (sixteen). This has little to do with the human body of course, and it does not associate the idea of proportion to number. What it does, however, is render authority to

114 In Book IV (1) Vitruvius makes his only links between proportion and numbers when addressing temple types.
the human body—proportioning ideal. Vitruvius concluded the discussion of temple proportion by writing that:

... it is agreed that from the limbs of the human body number was discovered, and also the fact that a correspondence of dimension exists among individual elements and the appearance of the entire body in each of its parts, the is left for us to recognize that the ancients, who also established the houses of the immortal gods, ordered the elements of those works, so that, in both their shape and their symmetries, fitting dimensions of separate elements and of the work as a whole might be created.

[C], III, 1.9)

There are difficulties in accepting this: Quite simply, no two individual bodies are identical and thus the rules for proportion according to the human body are inexact. Symmetria, then, is meant as an approximate tenet that signifies the proportion of separate parts relating to a whole (I, 2.4). I will return to the human body in my discussion of mental loci.

Decor is the next tenet Vitruvius enumerates (I, 2.5). Relatively speaking, he spent considerably more time defining this particular aspect of building. Here he considered the precedents -- the codes contained in older buildings that had been presumably designed by the Greeks. Decor is akin to style appropriateness; it signifies appropriateness of place, form, building function and links to spatial areas and to other buildings. In other words, the end result -- the final form -- should be set out to suit its meaning. Vitruvius dealt with two things here: He was calling for following convention in selecting building styles and at the same time he was ordering that the use of interior fashion be appropriate. Interestingly, however, he went beyond aesthetics with the tenet, evoking the gods and their temples, for example, as instances when convention should (must) be followed:

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115 In Book IV is contained a discussion of columns and column proportions. Here the scale of the columns associated with the Doric are deemed male. Vitruvius allots the number six (the height of the male) as the basis for the height of the column, with its base equaling one (IV, 1.6). On the other hand, the columns within the Ionic Order are associated with the female body and assigned the number eight for column proportioning (IV, 1.7). The two can be adjusted -- slendered -- using the numbers, respectively, seven and nine (IV, 1.8).

116 Morris Hicky Morgan, in his translation (New York: Dover, [1914], 1960) refers to decor as "Propriety".
Correctness of function occurs when temples dedicated to Jupiter the Thunderer and Heaven or the Sun and Moon are made open-air shrines, beneath their patron deity, because we see the appearance and effect of these divinities in the light of the outdoor world. Temples of Minerva, Mars, and Hercules will be Doric, because temples for these gods, on account of their courage in battle, should be set up without a trace of embellishment. Temples done in the Corinthian style for Venus, Flora, Proserpina, at the Fountain Spirits (nymphae) are those that will seem to possess the most fitting qualities, because, given the delicacy of these goddesses, the works executed in their honor seem best to augment a suitable quality of correctness when they are made more slender, ornamental, and are decorated with leaves and volutes. If temples are constructed in the Ionic style for Juno, Diana, Father Liber, and other gods of this type, the principle of the "mean" will apply, because their particular disposition will strike a balance between the stern lines of the Doric and the delicacy of the Corinthian.

[C], I, 2.5

Similarly, he prescribed appropriate style use for interior spaces:

... Correctness of tradition will be expressed if, when buildings have magnificent interiors, their vestibules have been made equally harmonious and elegant, but had entrances deficient in dignity and respectability they would lack correctness.

[C], I, 2.6

Now this is not about adding features to the built form; it is about choosing the right style for the correct purpose. He was here beginning to link esthetics to ethics as he reintroduced (once again) the use of the old ways -- the Greek Orders -- and went beyond aesthetic, hinting at the meaning attached to the Orders. I will return to this in a moment.

Distributio, or oikonomia in Greek, is the final tenet included within Venustas. It signifies appropriate choice of material use and economy.\(^\text{117}\) To Vitruvius, the balanced use of these

\(^{117}\) Morris Hicky Morgan, in his translation (New York: Dover, 1914, 1960) refers to distributio as "Economy".
was fundamental in architectural practice (I, 2.8). The idea of choice is also meant to include appropriate design choice depending on the uses of the said building. The latter means that distributio belongs to Venustas; the former links distributio to Utilitas. As with all of the tenets, this one is subtle in its meaning. There remains much ambiguity -- especially as it relates to proportion -- because Vitruvius simply did not define the term with a great deal of precision. The best we have is his introductory comment of Book III's first Chapter on Temple Planning:

The composition of a temple is based on symmetry, whose principles architects should take the greatest care to master. Symmetry derives from proportion, which is called analo gia in Greek. Proportion is the mutual calibration of each element of the work and the whole, from which the proportional system is achieved. No temple can have any compositional system without symmetry and proportion, unless, as it were, it has an exact system of correspondence to the likeness of a well-formed human being.

[C], III, 1.1; italics in translation text

While the reader is not told how the concept of distributio is to be incorporated within practice, the link to human-body proportions is once again articulated -- this time as the basic modular underpinning.

Figure 2.7 of a few pages back graphically portrays the principles, as I read them, of Vitruvius’ Architectura. Recall that there are six sub-tenets that fall within Venustas. On the use of proportioning, ordinatio, eurythmia and symmetria fall within two of the main principles: Firmitas and Venustas. On design -- the activities of cogitatio and inventio -- dispositio and its three sub-activities are linked to distributio and to some extent decor. Finally, distributio and decor, while clearly within the main Venustas principle, are also linked to Utilitas. This interpretation of Vitruvius’ tenets correlates with Kruft’s (1994) yet it differs somewhat from Germann’s (1991). Germann’s reading of the tenets is provided in Figure 2.8. Firmitas, Utilitas and Venustas are main principles; this is no surprise as they are the ones most clearly identified by Vitruvius in Book I. Beyond these three, however, the
reader must go back a few chapters for the other tenets (I, 2.1-9). The differences between my interpretation (and Kruft’s) and Germann’s lie in the subtleties of term definitions and their order within the treatise itself. Proportion, for example, cannot be readily defined until Book III. And even there it is ambiguous.\footnote{I am not asserting that my interpretation is more correct than Germann’s; I am simply illustrating the difficulties in interpreting the treatise.}

Germann (1991) turns to \textit{intercolumnium} and \textit{modulus} as opposed to \textit{ordinatio}. He may be more correct; \textit{ordinatio} is indeed unclear. Recall that Vitruvius gave the Greek word \textit{taxis} as corresponding to \textit{ordinatio}: “\textit{quae graece taxis dicitur}” (I, 2.1). Coulton (1989) shows that when the older writer used \textit{modulus} in his discussion of Ionic capitals, it was meant to reflect a precise proportioning system that transcended units of measure; in fact, \textit{modulus} “implies a quite specific type of design” (89). Kurent and Muhic (1977) also attach \textit{modulus} to precise design features (210-11). But again, Vitruvius’ definition of the word was not precise; while

\footnote{I am not asserting that my interpretation is more correct than Germann’s; I am simply illustrating the difficulties in interpreting the treatise.}
he used it some forty-two times, it was not always employed with the same connotation. For this reason the term *ordinatio* has been maintained in my *schema* within the sub-tenet of *Venustas*. Germain (1991) presents three of the tenets -- *symmetria, eurythmia* and *decor* -- as belonging to one group of aesthetic principles (1991, 18). He replaces *dispositio* with *aspectus* -- "un bel aspect" -- which he feels is part of a second aesthetic principle: *eurythmia* (1991, 21). Again, the differences in opinion serve as a reminder of the ambiguity of the ensemble.

To underscore a point I mentioned a few pages earlier, my main reason in presenting the various tenets and principles of Vitruvius is to show that the whole is on the one hand inextricably linked to an activity which is "organized" -- the use of proportion and the correct use of the Orders, for example -- while on the other hand it is an activity which is not "organized" and is instead mediated through design, thus becoming an act linked to reflection, imagination and invention.

Acknowledging, as we have already seen, that based on the Liberal Arts the discipline of *Architectura* was rooted in both theory and practice, Geertman makes the observation that the discipline had become, for Vitruvius, an applied science. Further, this applied science can be seen as a social phenomenon, whereby its three branches, *Aedificatio, Gnomonice* and *Machinatio*, gave the discipline its pertinence -- its *raison d'être*, so to speak, in addition to ways through which controls could be maintained by the elite. Architecture as a social and political phenomenon is obvious, but here it is the three main principles that we have already discussed -- *Firmitas, Utilitas* and *Venustas* -- that serve as the governing criteria by which the discipline is practiced. And the sub-tenets -- the six that we have grouped under *Venustas* -- serve as the means by which the criteria satisfy the requirements of building. The whole can in this sense be considered as a process. Geertman elaborates a great deal on this and his notion of *Architectura*’s social and political role is important.

That said, the point does not clarify the precise meaning of Vitruvius’ principles. Perhaps the best way to view the differences and overlaps of interpretations of Vitruvius’ terminology is as follows: Vitruvius’ architectural tenets and principles were clearly taken from a disparate set of sources, including textual, oral and experiential. Fleury (1993) has shown that...
Vitruvius combined written sources with his own experience. And these experiences were part of both his past and his present. Also, Vitruvius turned to both Greek and Latin works and words. It is quite possible -- indeed probable -- that these sources would not all have intended the same precise meaning although employing the same terms. This would have been especially true of technical terms, perhaps changing as they moved, for instance, with military contingents. Ambiguity is inherent when using disparate sources. Further, the reader -- in this case Vitruvius -- was not necessarily adept at the Greek language; he may not have been looking at the nuances between the different sources. And it is quite possible that when observing the monuments within his day-to-day, he may at times have been misinterpreting their features in relation to his written sources. The overlaps, redundancies and unclear instructions have thus remained for the reader and interpreter of today. We have discussed some of these: *ordinatio* and *symmetria* as well as *dispositio* and *eurythmia* overlap in meaning and were probably interchanged by Vitruvius (and by subsequent transcribers and translators). Other tenets, like *distributio* and *decor* coalesced in their relation to the Orders. In short, we may never know exactly what Vitruvius’ terminology were intended to represent.

Certainly a great deal has been written on the Orders. Beginning with Alberti, Renaissance writers whose treatises were obviously directly influenced by Vitruvius, emphasized the

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119 In his *La Mécanique de Vitruve* (Caen: Presses Universitaires de Caen, 1993) and “Traités de Mécanique et Textes sur les Machines” in Les Littératures Techniques dans L’Antiquité Romaine - Statut, Public et destination, Tradition -- Colloque Vandavres, 21-25 août, 1995 (Genève: Publié sous la direction de François Paschoud par Bernard Grange et Charlotte Buchwalder, 1996) and in his “Le De Architectura et les Traités de Mécanique Ancienne” in Pierre Gros (editor) *Le Projet de Vitruve – Objet, Destinataires et Réception du De Architectura*. Actes du colloque international organisé par l’École Française de Rome, l’institut de recherche sur l’architecture antique du CNRS et la Scuola normale superiore de Pise, Rome, 26-27 mars, 1993 (Rome: École Française de Rome, 1994) Philippe Fleury underscores that Vitruvius was adept at technical terminology related to machines (Book X). He makes the case that this was precisely why Vitruvius left out crucial details; he would have been so familiar with particular words that to him their meaning was obvious and thus did not necessitate elaboration. The argument of Fleury’s is convincing for Vitruvius’ machines; whether it holds for the principles and tenets of *Architectura*, however, is not certain by any means.

Doric, Ionic and Corinthian Orders, at times adding others like the Tuscan (IV, 7). Certain is that these were not a Vitruvius or Roman invention; the Greeks had written about the Orders earlier. Vitruvius’ Orders are for the most part associated with the column; he provided a brief introduction to the three in his Book I (2.5) and later within long narratives explaining their origin and rationalizing their continued use (Book IV); they were further discussed within the temple genera and their related columns in Book IV (1 to 3). They were not set out as an ensemble, however, and the formalized set of Orders only made its appearance later. As of the sixteenth century, the idea of the Orders was appropriated by writers to specifically codify architectonic arrangement. Thus, stylobate, plinth, base, shaft, capital, architrave, frieze and cornice, among others, become “organized” within the discipline.

The genera are not only relevant to Vitruvius’ tenets, they relate to his cultural lifeworld. Consider the following: Onians (1988) reminds readers of the De Architectura that “[o]ne implication of Vitruvius’ remarks on proportions [and the Orders] is that columns which are shorter and thicker have a greater dignity than more slender ones. This implies that Doric must be the most dignified of the three Orders, and it is notable that in the initial passage on decor, the virtus which is attributed to Doric can also be seen as marking it out as morally superior to the others” (39). We know that the notion of virtus -- moral quality -- is a recurring theme in Cicero’s later work (especially his De Officiis). By spelling out that the Doric Order is the one most associated with virtus, Vitruvius was attempting to appeal to the

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122 Genera signifies “kind” or “type” as in “kinds” or “types” of temples. It can be read as “order”, but without the connotations attached to the Orders of Alberti and subsequent theorists.
morality of the times. It is interesting that Vitruvius was trying to do this in spite of the fact that the architecture of the time did not favor the Doric Order; the discussion of the Orders is one of the most detailed in the treatise and it is a paradox that Vitruvius did not adhere to the tenets when he described specific building types in later Books. This is another signal that his written architecture was not one founded in a built reality, but one borne out of the imagination of an individual.

Vitruvius had a main purpose in aiming to persuade his readership that change was required and that the architectural profession should be elevated to its “rightful” place among the Liberal Arts. He provided a synthesis -- a loose system of principles and tenets that he adapted, mostly from Greek sources, in his attempt to organize his discipline.

Key is that Vitruvius was not describing a unifying theory; he was prescribing an idealized system. And he was not presenting Roman architecture as it is; he was outlining it as he wished it to be. What he saw in his day-to-day life was not explicitly reflected in his writings; the writings reflected instead a set of desired principles; those are the tenets that I have just discussed. Vitruvius’ “theory” was not a realized architecture; it was in fact an idealized -- his idealized -- Architectura. The latter was highly imaginative and, as we are about to see, formulated and presented with a variety of devices that includes imagery contained within the Roman collective memory. This is important because all subsequent readers of the treatise would fuse personal imaginations to that of Vitruvius’.

DIAGRAMMA

It is puzzling that while the De Architectura was devised to appeal to those interested in architecture and the building crafts, few visual elements were included to complement the textual depictions. This reality is not without its significance and the resulting interpretive

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123 The virtus argument and its moralizing attachments will be elaborated upon in Chapter 4.
difficulties are compounded by the fact that the few sketches that did supplement the treatise are no longer extant. The generalized descriptions become compelling and immediate because the readers -- then and now -- can fill-in what is missing: Readers can automatically participate in imaginative constructions, combining personal familiarity and cumulated and learned histories with the generalized tenets of Vitruvius. This means that Vitruvius' treatise can be read within the widest interpretive fields. When new illustrations are produced within transcriptions and translations, they can initially liberate the imagination because the reader does not have to work at formulating a personal visual; however they can also etch the former along a new imaginary track and bind it to a particular rendition. I think that inevitably, any new illustrative device forces the reader's interpretation to fit the visual.124

Vitruvius chose to visually elaborate few passages, omitting graphic displays of buildings.125 Only a handful of drawings were provided to complement some of the quasi-scientific notions and formulaic design features that were most probably paraphrased from others or derived out of secondary sources. The long sections on temples and theatres, for example, might have been better understood with diagrams. As an architect he would surely have been familiar with the power of the diagrammatic. We can see that he was very much aware of the link between drawing, imagination and design; when in Book I he recorded that “The species

124 The compulsion to illustrate copies and translations of the De Architectura of Vitruvius seems irresistible. Scholars and erudites continue to produce versions of the treatise with drawings to complement passages, diagrams to elucidate design tenets and plans to check the old architect's descriptions. Just as Caesar Cesariano's (1483-1543) translation of 1521 contains a set of highly imaginative visual depictions for example, so too does Morris Hicky Morgan's translation (New York: Dover Publications, 1960 [1914]) include an assemblage of figures; the latter includes no less than sixty-one photographs, plans and assorted schemas. Illustrations also accompany the recently published English translation of Ingrid Rowland and Thomas Howe (Cambridge: Cambridge University Press, 1998). The difficulty of course, is that the reading of the text, regardless of philological accuracy, can be significantly altered by visual representations; as architectural historians, theorists and practitioners continue to arbitrate the classical through the treatise, the text's interpretive essence becomes even more significant when new pictorial dimensions are added. For a related discussion of Cesariano's illustrations, see Alessandro Rovetta “Le illustrazioni del Vitruvio di Cesariano (1521) e dintorni” in Disegno de architettura, volume 11, pp. 51-54, April, 1995.

of design, which are called *ideas* in Greek ... are produced by *analysis* and *invention*” ([C] I, 2.2; emphasis and italics in translation text), he was clearly conscious of the inventiveness of the mind applied to design and in turn the effects the illustrations would have on subsequent interpretations. He would have perused the illustrations supplementing the treatises of other writers like Aristotle,\(^{126}\) he would have had knowledge of the design *croquis* sometimes inscribed upon the surfaces of monuments,\(^{127}\) he was acquainted with drawing techniques,\(^{128}\) and he was familiar with the drawings and plans that he explicitly recalled, for example, in Book V (8.2). With such familiarity, why would he provide so few illustrations within his books? In this section, the “visuals” of the *De Architectura* will be explored. These include more than sketches; they embody diagramma, imaginary scenes, myths, and mnemonics teased out (or teased into, as I contend) the collective memory of his readership, all within Vitruvius’ goal of re-defining the discipline.

What can we tell about the illustrative material provided by Vitruvius when the original figures no longer exist? From the treatise there appear to have been some ten schematics.\(^{129}\)


\(^{127}\) See Lothar Haselberger “The Construction Plans of the Temple of Apollo at Didyma,” *Scientific American*, number 253, pp. 126-32, 1985, where the sketches etched upon the temple’s surfaces are outlined. Vitruvius writes about the use of drawing instruments in Book I (1.4).


\(^{129}\) In the Introduction to his Book I translation, Phillipe Fleury suggests that one of the illustration references (the final one in Book X) may not have been intended as a drawing; to the modern scholar, it is possible that the passage designated a reference to the previous drawing—of Archimedes’ screw—and not to a unique sketch. That the two final references point to the same diagram, however, is difficult to accept and there is no proof to Fleury’s allusion. Others maintain it as a separate diagram; see Frank Granger *Vitruvius De Architectura* (Cambridge: Harvard University Press, 1934, 1983) and Morris Hicky Morgan *Vitruvius The Ten Books on Architecture* (New York: Dover, 1914, 1960).
The circle of the winds and the orientation of streets contained in Book I (6.12); the notions of entasis/scamilli impares and the design of Ionic volutes in Book III (3.13; 4.5; 5.8); the harmonic limits to musical notes referenced in Books V and VI (V, 4.1; V, 5.6; VI, 1.7); the chorabates in Book VIII (5.1-3); the geometric replication of the square and Pythagoras’ triangle, both in Book IX (preface, 5, 8); and finally, the positioning of Archimedes’ screw in Book X (6.4). With the possible exception of street orientation, these would not have been particularly straightforward ideas to convey. Nor would they necessarily have been readily conceptualized by readers; the complexities, formulaic properties and abstract notions of these concepts lend themselves particularly well to the diagrammatic.

The first mention of a drawing is contained in the long set of verses elucidating the Circle of the Winds in Book I (figure 2.9). Interestingly, this section takes up most of the chapter devoted to street orientation, underscoring a preoccupation with climatology as it relates to salubrity and, more generally, geography as it applies to urban siting. The notion of wind dominates the chapter while street layout is only gradually explicated. First, Vitruvius cited Mytilene as a poor example of urban planning, recording that “... in that community, when the south wind blows, people grow sick; when Corus blows, they cough; with the north wind, their health returns, but they cannot gather in the streets or side streets because it is so chilly” ([C] I, 6.1). Then he described the Four winds, followed by the Eight winds, with the more complex arrangement of the twenty-four winds developed a little later (I, 4-5, 10-12). The passage becomes increasingly difficult as the name of each wind and calculations of the earth’s circumference are textually linked and interspersed without any apparent direct relation to orientation. The whole begs for illustrative clarification and this is probably why Vitruvius inserted a forma.

130 The diagram for the circle of the winds is the most certain representation provided in the original treatise as the text itself refers to specific points on the illustration.

131 Much of the material that Vitruvius chose to complement with sketches was paraphrased from Greek sources. It is quite possible that his translation into Latin would have been simplified with visual inclusions.
The section relating to the disposition of streets is equally blurred, especially within the short passage where the author prescribed how the winds should, as much as possible, be broken-up by the streets. The verses are difficult to follow and without a visual device to complement the text, the reader is literally forced to trace one out as the lines are read. Again, probably recognizing this difficulty, Vitruvius added designating letters to link the points of the text to those of a sketch. Thus, “... in the angle between Eurus and Auster there will be the letter G; between Auster and Africus, H; between Africus and Favonius, N; between Favonius and Caurus, O; between Caurus and Septentrio, K; between Septentrio and Aquilo, I; between Aquilo and Solanus, L; between Solanus and Eurus, M. When these have been established...” ([C] I, 6.13). A second croquis -- directly linked to the first one -- was therefore provided (figure 2.10).

132 I include these illustrations for reference and the reader’s orientation only; they are almost certainly based on Fra Giocondo’s edition. The latter’s translation will be discussed at the end of this chapter and in Chapter 3.
The next pictorial is that outlining *entasis*, the slight outward curve given to columns in order to correct the illusion of concavity occurring along the length of the columnar shaft. The technique had been previously developed by the Greeks and this may be why Vitruvius gave no formulaic account for calculating the correct convexity-to-height ratio in the text. Presumably this was covered in the diagram, “[a]t the end of the present book ... [where Vitruvius] record[ed] the illustration and method for the addition made to the middles of columns...” ([C] III, 3.13). Without a chart or model, it would not have been possible for the reader to accurately outline how the *entasis* ideal could be achieved (figure 2.11).

As with *entasis*, *scamilli impares* also requires a formulaic approach. The meaning of *scamilli impares* -- a term not found anywhere else in the literature of Antiquity -- has been
debated throughout the *De Architectura*’s philological life. The problem relates to the optical illusion resulting as the relatively long and straight lines of horizontal stylobates appear to bow downwards at their center. The *scamilli* would presumably have helped in offsetting the illusion and may have been the ensemble of small step-like forms designed within the stylobates. It may also have been a device used to render lift at the center of stylobates. We simply do not know. What seems certain, however, is that the *scamilli* of Vitruvius were intended to be something which act in a similar fashion as *entasis*, but with the temple stylobate somehow pushed upwards at its centre as opposed to column shafts curved outwards. Regardless of the exact meaning,

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134 It is not certain if the stylobate was actually “curved”; the device may have been illusional.
Vitruvius presented a diagram, probably because of the sliding scale involved in differing stylobate lengths and temple proportions (figure 2.12).

A little later in the same Book, Vitruvius referred to another illustration in elaborating on the design of Ionic volutes: "At for drawing the volutes so that they are properly coiled with the use of a compass, and the way they are drawn, the form of the principle for these will be set down at the end of the book" ([C] III, 5.8). A volute, of course, would not have been difficult to define for the architect. But the proportionately precise development of the spiral scroll would have been key in obtaining the graduated effect of the column capital of the Ionic Order. Again, a textual description did not suffice and Vitruvius provided the builder with an explanatory sketch (figure 2.13). The depiction related to harmonic ranges seems somewhat distant from what would today be a part of building practice. The topic was included in setting out the limits to musical notes as they relate to sounding vessels in theatres; theatre designers would have had to provide specially adjusted vessels within pre-determined niches located at strategic points in the cavea. Vitruvius made three references to this diagram (V, 4.1; V, 5.6; VI, 1.7). Here he was dealing explicitly, although perhaps not exclusively, with someone else's work: Aristoxenus. Judging by the complexity of arrangement according to theatre size and vessel location, it is easy to see how he would have required a visual depiction to complement the discussion. He thus adopted the sketch of Aristoxenus (figure 2.14).

The next reference to a graphic representation is linked to the chorabates in Book VIII. The chorobates is a wooden, bench-like leveling device, built with a water-filled slot along its center. Its use -- and thus its design -- is key for construction projects extending beyond the aqueducts that Vitruvius was dealing with in this particular section. While its

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135 For a thorough, albeit somewhat imaginative discussion on the Ionic volute, see Maria Losito "La Ricostruzione Della Voluta Ionica Vitruviana nei Trattati Del Rinascimento," in Mélanges de l'École Française de Rome, Italie et Méditerranée, volume 105, number 1, pp. 133-175, 1993.
Figure 2.12 - Scamilli Impares, Book III

Vitruvius - Iterum Florentiae - Sumptibus Philippi de Giunta (1513 Edition)
University of British Columbia - Woodward Library

Figure 2.13 - The Ionic Volute, Book III

Vitruvius - Iterum Florentiae
Sumptibus Philippi de Giunta (1513 Edition)
University of British Columbia - Woodward Library
practicality is certainly problematic — it is difficult to ponder how the apparatus could be properly installed in inclined terrain, for example — Vitruvius presented the implement as indispensable; no other construction tool was given as much attention.\textsuperscript{136} He thus chose to provide an assembly drawing to complement the text (figure 2.15).

Vitruvius’ recourse to external sources is certain. When in Book IX he evoked the work of Plato, he was probably paraphrasing the latter in delivering his description of the geometric replication of the square. He gave a “demonstration” by doubling a one-hundred square foot cube, echoing Plato’s idea in a long-winded and indirect passage (IX, \textit{preface}, 4-5). It may be because of the indirect explanation that the whole becomes problematic. For clarity, the writer was forced to provide a further \textit{exemplar} (figure 2.16).

\textsuperscript{136} On the \textit{chorobates} of Vitruvius, see Jean-Pierre Adam \textit{La Construction Romaine – Matériaux et Techniques} (Paris: Picard, 1989).
Figure 2.15 – Chorobates and other Instruments, Book VIII

Figure 2.16 – Geometric Replication of the Square, Book IX
In a similar passage, the principles of Pythagoras are recalled (IX, *preface*. 8). Again, Vitruvius was using someone else’s theory -- this time within a prescription for stair design. The communicative difficulty relates to the preceding one where the description lends itself readily to geometry and not easily to text:

If the height of a story from the topmost joist to the floor below is divided into three parts, then five of these parts will be the proper length for the run of the steps of the staircase. So, whatever these three parts of the distance between joists and pavement measure, move four such units horizontally, and there place the feet of the stringers. If this procedure is followed, then the placement of the steps themselves will be calibrated properly. The design of this matter will be illustrated as well.

[C], IX, *preface*. 8

Although the visual is textually conveyed, it remains incomplete without a diagram. The author must have realized this and complemented the passage with a sketch (figure 2.17).

The last mention of a drawing is made in Book X (6.4) where Vitruvius outlined Archimedes’ screw. It is interesting that he linked the positioning of the screw to the Pythagorean triangle earlier presented in Book IX: After characterizing the water screw, Vitruvius sent the reader back to the previous Book in prescribing its installation. Fleury (1990) suggests that the two resulting diagrams may have been the same. This is not assured; Vitruvius seems to have been making reference to an independent sketch which would contain the screw itself (figure 2.18).

Thus we have an approximation of the *De Architectura’s* illustrations. Significant is that these are not building depictions, measured drawings or construction details *per se*; they are
Figure 2.17 – Pythagoras’ Triangle, Book IX

Figure 2.18 – The Water Screw, Book X
instructional *formae* provided to complement rather complex textual descriptions of mostly quasi-scientific notions with very broad technical or building applications. Vitruvius seems to be rejecting the idea of the architectural illustration. Perhaps he felt he could rely on the use of models from his landscapes — geographical, architectural and imaginary. I think that related to this he also felt he could use “memory” to illustrate the treatise; I will discuss this further on. For now, I want to consider his possible travels.

**DISTANT VIEWS**

Vitruvius mentioned a number of specific places. Some were simply locations where particular architectural models could be found. Others, like Fano, were described in such a way that left the impression of an eye-witness or personal account. He also mentioned a host of monuments in both far-away and closer locations — especially temples — that he may or may not have inspected. Whether Vitruvius wandered through and around particular sites and monuments has been the subject of intense debate; the difference between lived experiences and imaginary ones is crucial as they inform the theoretic that was just discussed. Certain is that he would have scrutinized many of the temples and other buildings of interest in Rome. He made personal observations and evaluated -- consciously or unconsciously -- their relevance within his *Architectura*. While it is not possible to assess the extent of these inspections, it is reasonable to suggest that monuments were selectively used to highlight specific tenets for his treatise. Key is that he very rarely chose Roman examples. He looked to models in Italy, Greece and beyond, evoking a set of distant geographies, perhaps based on his personal travels, in order to site his architectural imaginaries.

Vitruvius’ work as a military architect is definite; it included the design of buildings, hydraulic machines, and artillery. These activities would have involved, presumably, some travel. In Book I he hinted at his military assignments, noting that: “And so I was put in

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137 The extent to which Vitruvius traveled remains unclear. Certain is that maps were available at the time; see John P. Snyder *Flattening the Earth — Two Thousand Years of Map Projections* (Chicago and London: The University of Chicago Press, 1993).
charge, along with Marcus Aurelius and Publius Minidus and Gnaeus Cornelius, of outfitting catapults as well as the repair of all other sorts of war machines...” ([C] I, preface. 2). While this is a specific reference to military service, it is only a clue that he sojourned beyond the immediate area of Rome. He may have been obligated to locate himself close to theaters of war, but it is equally plausible that the work was undertaken in Rome or nearby.

In Book X (16), he outlined sieges that he knew had taken place: Rhodes (16.3-8), Chios and Appolonia (16.9), and Marseilles (16.11-12). The first three were surely borrowed from literary sources as they occurred in Vitruvius’ historical past. The fourth, however, corresponds closely to Caesar’s siege of Marseilles in 49 B.C. and it is possible for him to have been present at this location. Granger (1983) seems to think he was there (65, footnote 1). Certainly the years fit, as well as his particular specialty in war and siege machine design. However, he did not explicitly state that he had been there. Baldwin (1990) does not think the he visited the place and notes that the reason for inserting the story of the siege of Marseilles at the end of Book X may simply have been to “give him a chance to end the De Architectura Libri Decem with a self-deserving flourish…” (432). In Book II, Vitruvius spoke of the siege at Larignum in the Alps (9, 15-16). Rawson (1985) and Baldwin (1990) suggest it is possible that he had been there. They base their opinion on the simple fact that Caesar’s siege at Larignum is not described elsewhere and Vitruvius was, in effect, rendering an eye-witness account. There is no conclusive proof to this as he may have been relying on one or more secondary sources unknown to us.

One of the most compelling sets of arguments for Vitruvius’ travels has its basis in Book VIII:

Gaius Julius, the son of Masinissa, who owned all the fields of this town, served in the army with the elder Caesar. He was my house guest. In our daily contacts, it was only natural that we would turn to learned discussion.

[C], VIII, 3.25

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138 The siege at Appolonia, for example, had taken place at around 214 B.C..
The subject is the Numidian war of 46 B.C. Jeppesen (1989) goes as far as concluding that Vitruvius had served under Caesar in Numidia (1989, 32) and strongly suggests that if he was at Numidia, he would also have been involved in the fighting at Ponthos and Zola (1989, 32). The assertions, however, remain unproven.

If the passage related to Vitruvius’ presence in Numidia is the best we have to assess his travels, then what can we say about the other described places such as the Nile (VIII, 2.6), Halikarnassus (II, 8.10), Ephesus, Miletus and Eleusis (VII, preface. 16) and Athens (VII, preface. 17)? Linked to this (and perhaps more importantly), is how Vitruvius mapped places in the imaginary landscapes of the reader; the latter’s mental topography would have informed subsequent interpretive reactions. I will return to this notion in a moment.

There are many ways that Vitruvius attempted to persuade his readers that the contents in the set of Books represented truths: the dedications to the Emperor, references to experts, profuse use of Greek technical terms and an authoritative and didactic writing style were all part of a determined declaration of “authority”. At first glance in fact, it seems as if one of the main modi in highlighting authority lies in the use of detail in site depictions -- those I just listed, for example -- and space descriptions such as the basilica at Fano, in order to buttress the authoritative intents of the treatise. Consider the tracing of the Nile’s course, where the impression of first hand knowledge is readily conveyed:

The sources of rivers can serve as proof that these things happen as we have described, for in the earthly globe (as depicted by the geographers and like wise in their written accounts) most of them, and the greatest, are found to emerge in the north. First of all in India the Ganges and Indus arise in the Caucasus; in Syria the Tigris and Euphrates; in Asia, in Pontus: the Borysthenes (Dnieper), Hyanis (Bug), and Tanaïs (Don), in Colchis: the Phasis; in Gaul, the Rhodanus (Rhone); in the land of the Celts, the Rhenus (Rhone); in Cisalpine Gaul, the Timavus (Timavo) and the Padus (Po); in Italy, the Tiber; in Maurusia, which we call Mauretania, from Mount Atlas, the Dyris, which after arising in the northern region proceeds west to Lake Eptabolos, where it changes its
name and is called Agger. Then, from Lake Eptabolos it flows underneath the desert mountains through southern regions, and flows into what is called The Swamp, circles Meroë, which is the kingdom of the southern Ethiopians, and from these swamps it winds through the rivers Astansoba and Astobia and many others, to pass through the mountains to the [sixth] cataract, and hurling itself over this it continues toward the north between Elephantis and Syene, and the Theban countryside in Egypt - and there it is called the Nile.

[C], VIII, 2.6

The fact that the head of the Nile flows from Mauretania can be understood above all from this: that on the other side of Mount Atlas there are other sources of rivers that also flow into the western Ocean, and there the ichneumons occur, and crocodiles, and other beasts and fishes of similar nature, except for hippopotami.

[C], VIII, 2.7

As with the earlier hints of travels, these too present interesting questions: Were they included as part of personally experienced recollections? Were they taken from secondary source(s) and inserted to show erudition? Or were they included for other reasons? Vitruvius described the Nile only after naming a list of other bodies of water; why outline this particular river’s trajectory? His circuit has been studied in detail: Sourced at Mount Atlas, Vitruvius’ Nile rises in the north, then flows west to Lake Eptagonus (presumably Lake Victoria), then to Lake Eptabolos (probably Lake Albert), south of a set of mountains and into what appears to correspond to the White Nile (Granger, 1985, footnote 6) then flowing through Meroe, south of today’s Athbara and eventually through the mountains to Egypt. Note the second passage where Vitruvius felt he had to show more precisely that the Nile’s source was in Mauretania. Recall that Mauretania is situated to the west of the continent, south of the east-west Atlas mountains. Here I reach the same concluding logic as most: There is clearly a level of uncertainty within the architect’s geography. Lake

139 Granger (1983) indicates the opposite, suggesting that Lake Eptagonus was “[p]robably the Albert Nyanza” and that Lake Eptabolos was “[p]robably the Victoria Nyanza” (volume II, page 149, footnotes 3 and 5). Louis Callebat in his (1973) translation of Book VIII suggests that Vitruvius’ Nile had its source in Lake Victoria (plate V). The debate continues...
Eptagonus is nowhere near the Atlas Mountains and the orientation of the Atlas Mountains is off.\footnote{Callebat (1973, XXI) for example -- have attributed the error to a secondary source that is not mentioned; that is to say, King Juba. Callebat's suggestion that Vitruvius may have been "political", by deliberately choosing to source the Nile in Mauritania is evocative, yet without support. We know that there were itineraries and versions of what we would call maps; in his \textit{Cartes Géographiques et Cartes Marines de la Normandie et du Pays de Caux du XVIe au XVIIIe Siècle} (Paris: Bertout, 1998), Gérard-A. Furon discusses the "Table de Peutinger" and estimates its first drafting under Augustus.}

Yet what of it? The tracing of the river is erroneous and at first reading seems to have little to do with architecture \textit{per se}. And even if Vitruvius had been there, is it possible that at the time of the writing of the treatise he had no map and it is thus only his recollections that are wrong? Here we need to recall what I pointed out earlier: In Book I Vitruvius insisted that an architect should have encyclopedic knowledge; a person had to show erudition to be a promoter of \textit{Architectura-as-Liberal-Art}. It is possible that in the quest for authority via textual representation, he amplified whatever geographic knowledge he had -- \textit{without precision} -- to support the "encyclopedic knowledge" requisite of \textit{Architectura}. He also inserted scary monsters and the like, in order to make the passage memorable to the reader. No people; just a fantastic riverway. In the distant Nile depiction then, Vitruvius was not concerned with accuracy; it seems more likely that he was preoccupied with the delivery -- and display -- of knowledge.

One place that Vitruvius described in detail is Halikarnassus. We find the note appearing somewhat out of context in Book II as various masonry types are discussed (8.10-15). Among other examples, he cited the use of sun-dried brick at the palace of Mausoleus, King of Caria during 377 to 353 B.C. (II, 8.10):

\begin{quote}
His sharp wit and expertise at building may be discerned from the following story: although he was born in Mylasa, when he perceived that Halicarnassus [sic] had a naturally fortified site, a suitable marketplace, and a handy port, he established his residence there. Now this site is similar to the curvature of a theater. In the lowermost part, next to the port, the forum has been set up. At a height halfway up the slope, at the landing between the tiers of seats, so to speak, there is a street of spacious breadth, in the center of which the Mausoleum has been
\end{quote}
made with such outstanding care that it is listed among the Seven Wonders of the World. In the center of the upper citadel, the shrine of Mars has a colossal acrolithic statue made by the noble hand of Leochares. (Some people say that Leochares made this statue; others think it is the work of Timotheos.)

On the summit of the right-hand peak there is a shrine to Venus and Mercury, right by the fountain of Salmacis.

[C], II, 8.11

Once the fountain was reached, Vitruvius reverted to a familiar device -- that of situating a story within a story. In this case, the tale of the fountain of Salmacis:

This is falsely believed to infect those who drink from it with venereal disease. However, I am not reluctant to show why this opinion has been spread around the globe by misleading rumors. It cannot have happened because - as they say - people are really made soft and shameless by that water, for the fountain’s spring is utterly clear and its taste outstanding. However, when Melas and Arevanias led a colony in common from Argos to Troezen to be sited here, they had to eject the barbarian Carians and Leleges. These, in turn, driven away to the mountains, gathered together and made incursions down into the area, and set upon the colonists cruelly in their raids. Afterward one of the colonists outfitted a tavern next to the spring with every amenity, taking advantage of the excellence of the water to make some money for himself, and in running this business he attracted these barbarians as well. Coming down from the mountains one by one and taking part in city society they were gradually changed from their harsh and wild ways to Greek habits and were subdued into gentility by their own volition. Therefore this water did not gain its reputation from the vice of shameless disease but rather from the gentling of barbarian spirits by the allurements of humanity.

[C], II, 8.12

And so once the passage has the reader meander through the local topography, the siting of the settlement, its street layout, the Mausoleum, then to some of the monuments dispersed within the city, a recitation of the fountain tale takes place, making the whole memorable. A few more site details were provided later:
It remains, now that I have arrived at the description of the walls, for me to outline what the city is like as a whole. Just as the shrine to Venus and the spring mentioned above stand on the right-hand side, so on the left peak there is the royal residence which king Mausolus placed according to his own plan. For from its vantage, one looks out on the right toward the forum, the port, and the full extent of the city walls; hidden to the left under the walls is a secret port that no one can see or know what happens there, yet the king himself could spot from his house what was needed for his soldiers and sailors without anyone else knowing.

[C], II, 8.13

Here Vitruvius detailed the vantage point afforded by the positioning of the palace vis-à-vis the lower harbour. The latter “secret harbour” has an interesting aspect to it; it seems that the King’s wife Artemisia had known how to utilize the local topography in defending the port against the Rhodians (she had taken over the reign after Mausolus’ death). Again, a story is inserted within the exposé:

And thus after the death of Mausolus, when his wife Artemisia reigned, the Rhodians, outraged that all the cities of Caria should be ruled by a woman, set out with an armed fleet to occupy the kingdom. When this was reported to Artemisia, she commanded that a fleet be concealed in that port, with hidden rowers and marines at the ready, while the remaining citizens were to man the walls. When the Rhodians, with their well-armed fleet, had disembarked in the main harbor, she ordered that her subjects raise a cheer and promise to betray the city. Just then, when the Rhodians had entered the city and left their ships behind empty, Artemesia led her fleet out of the small port along a canal made into the sea and thus she bore into the large harbor. Then, disembarking her soldiers [and boarding them on the enemy ships], she led the Rhodian fleet out into the high seas. The Rhodians, in the meantime, having nowhere to retreat, were closed off on all sides and cut down right in the forum...

[C], II, 8.14

There has been considerable debate surrounding the question of whether or not Vitruvius visited Halikarnassus, with reason, as some nine percent of all monuments Vitruvius discussed are at Halikarnassus. Typically, discrepancies are pointed out between the “actual” and the “depicted”. The mausoleum was indeed one of the seven wonders of the ancient
world, with Pliny (23-79 A.D.) and Strabo (63 B.C.—25 A.D.) also describing it at different times. Bommelaer (1989) concludes that the topography does not offer the possibility of the arrangement as presented, comparing the text to archaeological surveys and suggesting that the Mausoleum is positioned at an elevation much lower than that inferred by Vitruvius (24). Waywell’s (1993) conclusions are similar; to him the forum-mausoleum-temple axial arrangement outlined in the first quote does not fit the site. And Hoepfner and Schwandner (1986) show a major street axial arrangement running perpendicular to what Vitruvius suggests (185). The same type of problem appears when the sight angles that Vitruvius traces from the mausoleum are re-drawn: The view from the building could not have afforded the lines of sight outlined in the passage. The general consensus then, is that Vitruvius’ presence at Halikarnassus is dubious. But the question seems unnecessary.

As with the Nile notation, while it is important to register the travels and presences of Vitruvius, the conclusion seems of little use. Vitruvius never actually claimed to have been to Halikarnassus. (Nor did he claim to have visited the Nile). While it is possible that a sojourn during an earlier part of his career took place, it is also plausible that by the time of its recording, his memory had partially faded. That said, the site description seems to have little to do with the intentions of the treatise. I think it was instead adopted -- and adapted -- to outline an idealized landscape: The exclusive vantage points, secret topographies, centralized palace location and corresponding set of monuments and forum are all part of the apparatus of power sited at Halicarnassus. Vitruvius re-organized the apparatus as an ideal, and aware of the local features -- *grosso modo* -- used the ensemble to site memory *loci*. He was not describing the specifics of Halikarnassus; he was prescribing an idealized urban planning *schema* and a landscape of power. By making the notice memorable with the recounting of the tale of the mystical fountain of Salamakis and the story of the triumph over

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142 See Pliny N. H. (36, 47) and Strabo *The Geography* (XIV, 2.16-17).
143 I base this conclusion on drawing lines within a two-dimensional framework; the actual sight-lines, as far as I have been able to ascertain, have never been precisely calculated.
144 It is interesting to note that Dinocrates of Halicarnassus moved to Rome in 31 B.C.. Vitruvius may have been in some sort of contact with him.
145 Recall that the main intent of Vitruvius is to re-define architecture as a “new” liberal art: *Architectura*.
146 I will elaborate on my thoughts on the way Vitruvius modulated memory in the coming pages.
the Rhodians, the *loci* became fully inscribed within his readers’ memory. There was no need to include details relating to individual spaces -- temples, *basilicas* and so on, because this is a planning scheme and building typologies would be included in the other Books. Regardless of the inaccuracies, the depictions have the quality of impressing upon the reader that the treatise possesses a set of *truths*.

Now consider a space for which Vitruvius provided relative detail: the *basilica* at Fano.\(^{147}\) Debate and discussion over the existence of a *basilica* at Fano has been as animated as that of the architect’s presence at Halikarnassus. Barbaro and Palladio studied the Book V description and attempted reconstructions; similar hypothetical models continue to be advanced in spite of no definitive archaeological trace having been uncovered at Fano. Very recently in fact, Alzinger (1989), March (1998) and Wilson Jones (2000) have completed detailed studies focusing on reconstructing the basilica from the text. All are speculative; philological debate, textual analysis and geometric postulations abound. The physical description is evocative and unsurpassed by any other in the *De Architectura*:

\[\ldots\text{I myself have designed this type of building in Fano (the Colonia Julia Fanestris), and supervised its construction, in which the proportions and symmetries have been constituted as follows: the central hall, between the individual columns, is one hundred twenty feet long, and sixty feet wide. Its portico, which surrounds the central hall, is twenty feet wide between columns and walls. The columns are of a uniform height: fifty feet including their capitals, and five feet in diameter. Behind them, they have pilasters twenty feet high, two and one-half feet wide, and one and one-half feet thick. These hold up the beams onto which the upper floor structure of the porticoes is carried. Above these are a second set of pilasters of eighteen feet, two feet wide, one foot thick, and these, too, receive the supporting beams for the rafters and ceilings of the porticoes that are set underneath the main roof. The areas between the beams spanning columns and pilasters, that is, the areas along the intercolumniations, are left for the windows. The columns along the breadth of the central hall, including the left and right corner columns, number four; along the length nearest the forum, still including the corner columns, eight; on the opposite side, including corner}\]

\(^{147}\) The architect claims to have designed and built the said *basilica*.
While the search for physical evidence of a basilica continues, it may be useful to consider the possibility that Vitruvius was imagining the space and inserting it in his narrative as a locus to be retrieved and activated by the reader at a later time. As we have seen, Vitruvius tended to use Roman (Italian) models to highlight specific features. He was, however, dissatisfied with most of the architecture at Rome. Recognizing that overt criticism of Roman models was not possible -- recall that Vitruvius was financially supported by Augustus’ sister -- the writer quietly turned away from the prototypes of the city. With the basilica type, the architect had definite preferences. He chose Fano as a site for his design, perhaps because of an earlier visit, literally or textually, maybe because of knowledge of the new colony’s urban plan, or as I contend, due to the fact that the place was geographically removed from Rome. But the issue of his presence at Fano is not the central one; the building type as outlined in Book V was intended to offer a specific design modus for the reader. Distance away from Rome may have afforded opportunity for the delivery of new ideas without offending sponsors, all-the-while maintaining a sense of authority by naming a real place. Compare the Fano basilica to another example situated closer to his immediate surroundings.

Vitruvius’ digression on the Etruscan-based, Tuscan style temple involves the use of models in Rome. He wrote at length on the araeostyle temple -- a Greek term -- highlighting its Tuscanic plan, wide-spaced columns and triple cella. He specified that the temple was to have an architrave made of wood and include the use of “terracotta ornaments or gilded bronze in Etruscan style...” ([C], III, 3.5). He admired the detailing. The features had been incorporated within Roman architecture since at least the second century B.C., although not in use during the final decades of the first century B.C., and they were based -- albeit passing at

\[148\] Recall that Augustus is in the process of reconstructing the city and its monuments.
some point through Etruria -- primarily on Greek details. Yet they did not fit within the Greek “Doric-Ionic-Corinthian” Orders and for this reason, a new category -- the “Tuscan fashion” (III, 3.5) -- was conceived. Oddly enough, however, the characteristics were no longer common to Etruria. Vitruvius thus selected nearby models and in this rare moment, turned to Roman examples: the Temple of Ceres, the Capitoline Temple and Pompey’s Temple of Hercules (III, 3.5) were prototypes within Rome that he used to exemplify Greek-featured tenets. Turning to these local and known monuments would have been a way of specifying very precise detailing.

Now consider another example. When Vitruvius turned to the temple of Diana at Magnesia in his discussion of the pseudodipteros temple (III, 2.6), he must have been aware that the majority of his readers would not have visited the place:¹⁴⁹

A pseudodipteros, in turn, is so designed that there are eight columns each in front and rear, while on each side, counting the corner columns, there are fifteen. The walls of the cella should be opposite the four central columns of the front and rear. Thus the space between the cella walls and the outer edges of the rows of columns will be equal to two intercolumniations plus the thickness of a single column. There is no example of such a temple in Rome, but the temple of Diana in Magnesia, by Hermogenes, and the temple of Apollo at Alabanda executed by Menesthenes are of this type.

In this case, the imagery is of distant models and is therefore indefinite in terms of precise details. The vagueness (in terms of the recollection of the readers) of the imagery allowed Vitruvius to insert his prescriptions within an acceptable framework. Greek architecture was recalled -- the old ways, so-to-speak -- while Roman architectural detailing was prescribed according to Vitruvius’ “new ways”. Thus it appears that Vitruvius used immediate examples when presenting ideas that would have already been part of architectural practice, and turned to more geographically distant models when the ideas were not yet part of the Roman architectural imagination.

¹⁴⁹ Magnesia is located in Asia Minor.
There are also myths regarding people, places or events inserted within the treatise. These too can be of a temporally and geographically distant nature and are used to illustrate specific points. They appear randomly and Vitruvius made good use of them in a manner similar to that of the place/space depictions. The use of the myth as substitute for elaborate illustration is exemplified by the tale of the origin of the Caryatid. Recall that when Vitruvius made the case for a comprehensive architectural education, he underscored the importance of a knowledge of “history” (I, 1.4-5). He gave an example of the importance of such erudition when he highlighted the meaning attached to the use of particular architectural features, writing: “...if anyone has decided, in place of columns, to insert statues of women clad in stolae - the so-called Caryatids - into his work, and above them to set cornices and mutules. For those who inquire he will give the following rationale...” ([C] I, 1.5). He then recounted the legend of the people of Caria who had conspired with Persia against Greece and lost. The women of Caria were subsequently taken into slavery, led away in full aristocratic dress to reinforce the triumph of the conquering Greeks. Architects eventually memorialized the event by constructing embodied columns “as weight-bearing structures” ([C] I, 1.5).

Upon reading Vitruvius’ account, the reader would have immediately recognized the meaning of the “caryatid” and assimilated its very specific design features within a personal memory bank. Form, use and meaning then, were quickly and readily transferred from myth to imagination and then to design. A similar saga was furnished for the telamones in Book I (1.6-7) and later in Book VI (7.6) with the story of Atlas supporting the firmament. The “historical” myth was used to rationalize the “appropriate” use of specific architectural components, equipping the imagination with detailed spatial outlines. No actual drawing would have been required to illustrate the feature.

A similar example is found in Book IV (1.3-6) where Vitruvius recounted the birth of the Doric Order:
... Dorus, the son of Hellen and the nymph Phythia... built a temple to Juno, a shrine whose shape chanced to be of this type. Thereafter, in other cities of Achaea he built other temples of the same type, although the principle of its symmetries had not yet come into being...

The Athenians, spurred by an oracle from Delphi, founded thirteen colonies in Asia at one time with the approval of all the rest of Greece... First of all, they decided to build a temple for Panionian Apollo like the ones they had seen in Achaea, and they called this temple: Doric because they had first seen a temple of this type in the cities of the Dorians... When they had decided to set up columns in this temple, lacking symmetries for them, and seeking principles by which they might make these columns suitable for bearing loads yet properly attractive to behold, they measured a man's footprint and compared it with its height. When they discovered that for a man, the foot is one-sixth of his height, they applied this ratio to the column, and whatever diameter they selected for the base of the column shaft, they carried its shaft, including the capital, to a height six times that amount. Thus the Doric column came to exhibit the proportion, soundness, and attractiveness of the male body.

[C], IV, 1.3-6

While taking a rather circuitous route, the narrative reminded the reader that the Doric column was to be proportioned according to the human male. And as the tale highlighted that “proportioning” was crucially important, it also reinforced the notion that the ways of the ancestors were to be respected. In other words, these were not whimsical instructions to follow; they were precedents that had been set in the past -- according to Vitruvius -- and that were to become part of a “new” architectural memory. Vitruvius undertook a similar elucidation with the female body as representative of the Ionic Order and the maiden figure corresponding to the Corinthian Order (IV, I 7-9). The three were linked to his use of the human body figure (see below). The myth was presented and in turn remembered as historical “fact”, transferred to the collective architectural memory, and eventually transformed into a memorized architectural design tenet.
The tale of Dinocrates in Book II had a similar function.\textsuperscript{150} The architect recalled how Dinocrates had made a successful attempt to catch King Alexander's attention in order to obtain a building commission. The king was delighted with the novel proposal -- here Dinocrates had just proposed the topographic transformation of Mount Athos into a colossal figure -- but could not provide a suitable site for the project. The king told Dinocrates that “[a]s much, therefore, as I think that the design is to be commended, the choice of the site is to be condemned ([C] II, \textit{preface}, 3). The king in turn invited Dinocrates to follow him to Egypt, where the planning of Alexandria was eventually given as a commission to the ambitious architect:

From then on, Dinocrates never parted from the king, and followed him into Egypt. There, when Alexander had noticed a naturally secure port, a thriving market place, wheat fields all around Egypt, and the great usefulness of the immense river Nile, he ordered Dinocrates to lay out the city of Alexandria in his name.

\[\text{[C], II, \textit{preface}, 4}\]

Clearly the tale highlights the importance of site and site selection.\textsuperscript{151} As with the recounting of other myths, Vitruvius tamed the reader's imagination with a memorable account that prescribed his planning and siting priorities for the reader to assimilate.

Complementing the myths were recounted stories that had within them some elements that relied -- at least partly -- on fact. One such story was the tale of the first house. This time the myth was not recalled to prescribe a design priority, it seems to have been inserted to impress upon the reader the all-important notion of “the origin of architecture”. In his Book II, Vitruvius turned to the primal shelter to outline his theory on the beginnings of building (1.1-2, 4): He recounted that after being “[t]errified by the flames” of haphazardly occurring fires, people recognized the advantages of maintaining it and grouped themselves around its


\textsuperscript{151} For another take on the tale (on Dinocrates and the notion of marketing), see Editor, “Excerpt: Dinocrates, Architect” in \textit{Progressive Architecture}, volume 71, number 4, 1990, April, p. 121.
warmth ([C] II, 1.1). Speech evolved from the inevitable social interaction. People then began constructing shelters in the form of cave-like trenches, twig and nest-shaped structures, and ultimately, huts. Finally, mutual learning, competition and cumulative personal knowledge facilitated increasingly complex constructions (II, 1,2,4). Vitruvius offered a proof for his theory by pointing the reader to the remains of what was said to be the straw and mud “Hut of Romulus” (II, 1.5).

The legend is evocative and its legacy endures. The authority Vitruvius appropriated is one of material fact -- the hut was there and it underwrote a founding historical myth that was meant to exclude any other theory of architectural roots that may have be lurking in the readers’ imagination. The writer gave the reader a history and rationale for the discipline, all-the-while rendering a tectonic visual. Even if another myth would have been partly recalled within some other pre-existing mental narrative by the reader, Vitruvius re-aligned it. The vignette was presented within an authoritative, authentic and legitimate mode, setting the tone for what Vitruvius was about to recite; that is to say, his principles of Architectura.

The story of the people of Larignum in Book II is a further myth that had its “authority” in the historical narrative. After listing various kinds of timber, Vitruvius arrived at his example of the larch tree (II, 9. 14-17). He began by describing the tree and then turned to a story to highlight its superior qualities. In the story, Caesar and his army were in the Alps near the settlement of Larignum where the inhabitants had refused to provide the requested war tax, the annona militaris. Caesar decided to attack the walled settlement that happened to be protected by a high tower made of the said wood and, attempting to burn the tower, the flame-retardant quality of the larch was observed. Caesar eventually captured the town and the wood was transformed into a commodity. From “Larignum” was derived “larch” and in

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152 Marc-Antoine Laugier, for example, in his Essai sur l'architecture (Paris, 1753) felt that from the “primitive hut” all elements of architecture were developed. For a thorough discussion, see Joseph Rykwert On Adam’s House in Paradise – The Idea of the Primitive Hut in Architectural History (Cambridge: MIT, 1981).

153 For a discussion on the debate on the merits of the First House discourse, see Mark Cousins, “First House” in Arch Text, volume 1, pp. 35-38, 1992-93. Others turn to the “First House” in introducing their own theoretic; see R. D. Dripps, The First House: Myth, Paradigm, and the Task of Architecture (Cambridge: MIT, 1997). He may be over-extrapolating from Vitruvius’ short passage (II, I. 1-2-3), when he uses the tale of the first dwelling to develop a “theory” of the cultural meaning of architecture.
this way the town's name became a mnemonic for the tree just as the battle was for the same
tree's fire-resistance quality.

Mythic tales linked to "histories" were not the only such narratives that Vitruvius used. The
myths linked to the Doric, Ionic and Corinthian Orders have female and male bodies as
imaginary templates that would have struck an impression upon the reader's memory; this
seems obvious as the human body is effortlessly retrieved from one's memory. From the
onset of the treatise, Vitruvius' use of the body image, especially within his proportioning
scheme, was central. It is worth repeating the quotation reproduced earlier as part of the
discussion on proportion:

For Nature composed the human body in such a way that the
face, from the chin to the top of the forehead and the
lowermost roots of the hairline should be one-tenth [of the
total height of the body]; the palm of the hand from the wrist
to the tip of the middle finger should measure likewise; the
head from the chin to the crown, one-eighth; from the top of
the chest to the hairline including the base of the neck, one-
sixth; from the center of the chest to the crown of the head,
one-fourth. Of the height of the face itself, one-third goes
from the base of the chin to the lowermost part of the nostrils,
another third from the base of the nostrils to a point between
the eyebrows, and from that point to the hairline, the forehead
also measures one-third...

[C], III, 1.2

... So too, for example, the center and midpoint of the human
body is, naturally, the navel. For if a person is imagined lying
back with outstretched arms and feet within a circle whose
center is at the navel, the fingers and toes will trace the
circumference of this circle as they move about. But to
whatever extent a circular scheme may be present in the body,
a square design may also be discerned there...

[C], III, 1.3

Here Vitruvius quite effortlessly sketched out the human body as governor of his design-
proportioning scheme. The notion would have been readily conceptualized by the reader, as
it would be later by so many Renaissance interpreters. The evocation of the body has the
same effect as a set of diagrams -- perhaps stronger -- but with an added result: While it
would have freed the imagination, it would have done so along a certain prescribed track.\textsuperscript{154} The reader would not only construct a personal sketch from the description, but just as significantly, the sketch would have been reconstructed in the reader’s self image.\textsuperscript{155} No drawing was required to produce the desired illustration.

Myths, tales and “histories” then, etched a set of readily accessible images onto the reader’s memory. These operated as illustrations that could be referenced by the reader within the reading of the passages and eventually, within the interpretation of the principles of Vitruvius’ new \textit{Architectura}.

\textbf{RHETORIC and MEMORY}\

Beyond the ten line drawings, the textual sketches, and the vignettes related to myths and body imagery, there were other, perhaps more deliberate sets of memory aids included within the \textit{De Architectura}. All of the examples already discussed have a lot to do with the way the mind draws its own images and the way memory was used within Rhetoric; the attempt at formally organizing the treatise, the classification of “types”, and the narrative \textit{loci} were all part of the set of rhetorical devices to which Vitruvius turned.\textsuperscript{156} Beyond these, there was also the relatively simple use of the mnemonic; Vitruvius included memory-aids to make certain that the readers’ interpretation would be on the one hand easy to commit to memory, while on the other, readily retrievable. In Book V, for example, he used a mnemonic to register his treatise within the reader’s memory:

\begin{quote}
\begin{itemize}
  \item The idea of linking the human body to basic (and somehow perfect) forms -- squares and circles -- would later be embraced by Renaissance theorists. Key is that the notion of using these forms, rather than those arising out of the complex mathematically-derived proportions of Medieval architects, came from Vitruvius’ human-body proportioning schema. For an elaboration of these ideas, see Kenneth Clark \textit{Civilization – A Personal View}, (London: BBC and John Murray, 1976), pp. 93-106.
  \item It is also possible that the use of the body as image would have been related to notions of power over individuals and masses.
\end{itemize}
\end{quote}
Therefore, as I employ these esoteric names and the proportions derived from the components of architectural projects, I shall explain them briefly so that they may be memorized. In this way, readers' minds shall be able to absorb the information more quickly. And no less emphatically, because I have observed that the city is thronged with people wholly engrossed in their business, public and private, I have decided that it is better to write concisely, so that people reading in their restricted leisure time may understand these points quickly.

Pythagoras and those who followed his sect decided to write down their precepts using the principle of cubes; they thought that two hundred sixteen lines constituted a cube and that there ought to be no more than three cubes in a single written composition.

Now a cube is a body, squared all round, made up of six sides whose plane surfaces are as long as they are wide. When it thrown, the part on which it lands (so long as it remains untouched) preserves an immovable stability; the dice that players throw onto the gaming board are like this. The pythagoreans seem to have taken the image of the [literary] cube from dice, because this particular number of lines, landing like dice on any side whatsoever, will there produce immovable stability of memory. The Greek comic poets divided up the space of their plays by inserting a song by the chorus; defining the parts of the play by the principle of the cube they relieve the actors' speeches with these intervals.

[C], V, preface. 2-4

Evidently Vitruvius felt the treatise merited a memorial device focusing on itself. By the time he reached Book V, he was attributing a great deal of importance to his work and it is perhaps in this light that he developed the all-encompassing cube mnemonic. But the use of memory devices and mnemonics was also slightly more subtle than this example might suggest.

157 I should point out that while the cube was intended to work as a mnemonic, it is not certain that it actually worked; the numbers generated out of it do not correspond to the number of Lines, Chapters or Books in the De Architectura.
Consider for a moment that often coupled with listings of Greek experts, the memory-sites of Vitruvius were mostly Greek, including the large number of temples as well as the majority of all other building examples of the treatise. In fact, less than ten percent of all sites recalled in the *De Architectura* -- temples, city walls, palaces and so on -- are Roman! One might be tempted to conclude that Vitruvius was simply aspiring to Greek architecture and therefore chose Greek models. Perhaps so, but while he deliberately channeled the readers' recollections towards Greece, the exemplars, as I have pointed out, were still not included as drawings. They remained vague, especially when considering that most of the intended readers (and perhaps Vitruvius) may not have actually visited the places -- let alone inspected the spaces -- and thus would have had no immediate recollection, aside from imagined versions transmitted via the collective architectural memory.\(^{158}\) Why did he do this? Here I want to pause briefly to discuss memory in broader terms and look at the way Vitruvius was or would have been conscious of the memories of his readership and suggest a way by which he could have altered his readers' architectural recollections.

Rhetoric, the art of presenting convincing arguments with eloquent speech, was not new to the Romans; Greek orators had perfected the practice much earlier. From its five components -- *inventio*, *dispositio*, *elocutio*, *memoria* and *pronuntiatio* -- it was *memoria*, or memory, that was deemed the most important. After all, the speech had to be readily recalled in order to be delivered effectively. We get much of our information on Rhetoric from the *Ad Herrenium*. To the anonymous author of the *Ad Herrenium*, there were two types of memory: a natural one and an artificial one.\(^{159}\) The first was linked to what could be called automatic thought and the second to the deliberate training of the mind in terms of its recollecting abilities. I will return to artificial memory in a moment but first I would like to expand a bit on natural, or personal memory, as well as collective memory.

\(^{158}\) I have noted that Vitruvius aims the treatise at a wide readership: He dedicates it to Augustus (I, *preface*. 1) and writes “... I will without a doubt prove myself possessed of the greatest authority - not only for those who intend to build, but also for all learned men” ([C] I, 1. 18). Victor Mortet in his “Recherches Critiques sur Vitruve et Son Oeuvre” in *Revue Archéologique*, troisième série, tome XLI, pp. 39-81, juillet – décembbre, 1902, makes the point that Vitruvius may very well have travelled, based on the Hellenisms he uses in the Books; the argument, however, does not take into account that perhaps Vitruvius is using terms that he would have picked up while working with others in the building trades.

\(^{159}\) *Ad Herennium*, III, xvi-xxiv.
The natural memory referenced in the *Ad Herrenium* includes what people recalled without making a concise effort at memorizing. When a person saw a specific monument for example, the sight would have been linked to something seen in the past, something learned from experience, something assumed or even imagined, or a combination of any of these, and then interpreted accordingly. The monument’s meaning and intent would have been registered “naturally” and would have remained within the viewer’s memory without necessarily deliberately memorizing it. Related to the notion of memorial places, the mind of the individual Roman would have also been occupied by sets of what I would call “pre-loaded” mental images -- what was observed and accepted within the day-to-day experience.

The same applied to groups making up the collective, in terms of learned meanings and significances. Observations of monuments and sites would be linked to shared notions of the past, whether they be derived from mythology, experience, oral histories or the individuals and moments attached to the monument by virtue of sponsorship and/or dedication. Meanings associated with individual monuments and sites would thus “live” within the collective memory without deliberate effort. The notion of past occurrences would have played a vital role in the shaping and maintenance of the collective memory. Clear too is that there was an awareness of the past among architects.

We know from Vitruvius that there was an awareness of the past as living within architectural memory. Vitruvius alluded to the architectural memory of his readership when he mentioned *memoria* at numerous intervals. He also pointed to *memoratur*, or remembering, at various points. And in Book I, he evoked memory as he referred to his own “zeal […] which had remained faithful to […] the emperor’s father’s] memory” before mentioning that the emperor’s monuments were “a memorial to future ages”. Vitruvius was fully aware of the posterity, legacy and meaning of Republican landscapes -- especially

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160 I recognize that the meanings may have varied from one individual to another and from group to group; I argue that the general ideas would have been preserved over time.
161 Related to the above footnote, it is clear that a certain amount of “forgetting” would have been involved in “remembering”; in other words, the collective would have selected what it wanted to remember.
162 Vitruvius mentioned *memoria* in Books I, III, V, VII, IX and X.
163 Vitruvius alluded to *memoratur* in all Books except I, V and VI.
built landscapes. He was cognizant of a cultural memory, the recording of history, oral or otherwise, and the reliance on tradition. The three were in fact juxtaposed within his notion of the old ways. In Book I for example, he underscored the importance of the architect keeping track of "useful precedents" and remembering historical antecedents. Later, he reminded the reader of previous textual and memorized works and he noted the importance of the memorentur antiquitus -- his own antiquity. All this to say that the architectus of Vitruvius' day was familiar with the notion of the collective memory.

That Vitruvius was conscious of the memory of his readership is significant: It means that "meaning" and "intent" were part of architectural planning and design considerations and in turn intrinsically linked to the collective (architectural) memory. This notion becomes interesting when we take this awareness into consideration as we return to the notion of rhetorical memory. Consider for a moment the way Cicero, Quintilian and the author of the Ad Herennium depicted the modus by which one could best remember a speech.

In order to remember, one would establish a setting in the mind -- a real or imaginary building or city, for example -- with a corresponding set of places, or loci. Each place would be "decorated" as uniquely as possible; this way they could more readily be memorized. Important also was that there be easy flow between the individual spaces. To each locus would be attached a specific portion of the speech that was to be recalled. The entrance, for instance, could be identified with the speech's introduction. The places would then be referenced either in the same order when recalling the ensemble, or, if need be, independently. What would result, of course, was a mental topography within which the loci could operate as cues, much like those of a roadmap that might alert one to the features

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166 Book I, 1.4.
167 Book I, 1.5.
169 Book II, 6. 2-3.
170 Cicero, De oratore, II, lxxvi, 351-4.
171 Quintilian, Institutio oratoria, XI, ii, 17-22.
172 Ad Herennium, III, xvi-xxiv.
173 Recall that rhetorical speeches would last sometimes a few days.
I think this would have worked for both individuals and collectives. Complementing the “pre-loaded” image bank, there were the orally transmitted tenets and rules that would have been passed down to craftspeople as part of training and apprenticeship processes. While there would undoubtedly have been a certain amount of note-scribbling taking place, memory would have been key: Students would have remembered design rationale, architectural elements, construction details, building examples and architectural histories with the help of memory aids; through monuments, citizens would correspondingly remember victors, sponsors and rulers and their corresponding rules and accomplishments. Thus the notions around rhetoric and mnemonic loci were well engrained in the personal learning experience.

Some might argue that there are difficulties with this notion because no two people possess the same complete sets of memories, memory cues and memory triggers. Further, Vitruvius’ memories would have been different from that of his readers. As for any writer, Vitruvius’ entry into new landscapes could never have been fully unprepared, accounts of new domains were never completely neutral and place depictions were thus never completely thoroughly accurate. And the same would be true of the reader. Thus along with the writer’s -- and the readers’ -- lived experiences, there would always have been traces of other places, people and events -- unmentioned fragments and vignettes that permeated their imaginative fields. Some imprints of these were sited within the minutia of detail -- amid distances and times; others would have been located within the narrative -- in the midst of portraits and episodes. They were all part of the memory sites that were unconsciously -- and at times more consciously --

174 On the modi by which individuals and collectives construct memories, see Maurice Halbwachs La Mémoire Collective (Paris, 1925). The latter is part of the collective memory, readily invoked at specific moments to intensify particular feelings or present imaginary visuals. Certain is that within the space of the collective memory there is opportunity for individuals to connect en masse. The use of public memory devices such as monuments to commemorate moments or individuals in order to evoke sentiments has been part of the public persuasion modus at least since classical times. Provoking via memory cues is of course not specifically limited to architectural monuments or other visuals. Writers employ memory devices to more closely interface with readers; for a detailed account of classical memory techniques, see Frances Yates The Art of Memory (London: Routledge and Kegan Paul, 1966) and Mary Carruthers The Craft of Thought - Meditation, Rhetoric, and the Making of Images, 400-1200 (Cambridge: Cambridge University Press, 2000).
woven into the textual and visual narratives of the De Architectura. The reader, as I have pointed out, would have possessed sets of imaginary loci. These would have been made up of previously etched narratives -- real or imaginary -- and retrieved as part of the interpretive process involved in mediating between the textual and the mind’s visual. Thus when the architect of Augustus’ time alluded to, through specific design narratives, events and meanings, the reader would have retrieved bits from the mental repertoire, comparing the written to the stored to arrive at a particular rendition. Each would possess an archive that intermittently would have overlapped with that of the other. Where there was overlap there would have been interface and connectivity. Sometimes there could be correspondence and the communicative link would thus have been flawless; in other instances the two versions could theoretically be completely opposing. But this is the space in which the writer and reader met. Within the memory repository some sites dominated: Personal histories that would have been permanently etched, and versions of shared tales -- passed down knowledge -- that while also capable of being very personal, were available to the wider community.

Now to go back one step and consider very briefly the significance of cultural and social memories. The latter is complex, at once historical and traditional, all-the-while closely related to identity and in many ways akin to “collective memory”. Maurice Halbwachs eloquently defined collective memory as “lying where tradition ends and history begins”. Halbwachs’ words apply to today, but for the Romans of Vitruvius’ day, tradition would have been bound to memory and would not have necessarily ended as histories were written. It contained histories and realities expressed, for example, in the building images and monuments that filled landscapes -- lived and imaginary. Catherine Baroin (1998) makes a good case for the Roman house operating as a key memory device; in this sense, it is easily arguable that other buildings operated as mnemonics for both design and lived modi.

175 See Maurice Halbwachs, The Collective Memory (New York: Harper Colophon Books, 1980), pp. 78-84. Here I use “collective memory” to designate both the passed-down knowledge of the architect and the knowledge derived from the latter’s lived experience.
The notion of a mental topography is complex too and I do not intend on developing a psychoanalytical argument in this chapter. However, I do want to look briefly at the way such a topography might begin to operate within the individual and collective psyche. First, I think that it is safe to say that Vitruvius and the architects of his day were conscious of rhetorical memory techniques and the collective memory -- albeit not referring to them in those terms. Some of these individuals may have given thought to the way the two might be altered; this would have fit well within the self-aggrandizement agendas of late Republican leaders.\textsuperscript{176} Contrary to conventional belief, there was no wide-scale propaganda apparatus in place during the later part of the Republican era; how notions related to not only architectural design but also civic comportement were transmitted through architecture may have formed part of Vitruvius' thoughts.\textsuperscript{177} Vitruvius' writings contained bits from a variety of cues, triggers and representations installed throughout the architectural landscapes of his lifeworld. The naming of individual monuments, as I have shown, was part of recalling specific design notions.

There are two things I would like to propose that derive from this: First, that the system could work in reverse, whereby a writer could supplant \textit{loci} into a narrative (and thus invent an imaginary topography) and then later on in the narrative use these pre-installed \textit{loci} to trigger reactions within the reader. And second, that this process could have operated within architectural design. The art of memory and its associated mnemotechniques were common memory tools for the Roman student, scholar and to some extent, citizen; it is fair to assume then, that a learned architect or writer would also be familiar with memory devices. That said, the same individuals would have been able to alter the set of memory spaces by

\textsuperscript{176} As the ultimate authority of Augustus was accepted, society became transformed, and a new type of visual communication was derived from his own lived and mythologized behaviour. What happened as Augustus installed himself is that his own image, the honors given him, over the years, delivered messages through various means, but certainly through architecture, especially in the provinces. Key is that the messages did not necessarily reside within individual monuments; they “lived” within the totality that art, architecture and the urban schema, among other places. In other words, they lived within the collective memory. What resulted was a certain behaviour that took its cues from “the built”: not only religious ritual and state ceremony, but also day-to-day exchanges and movements, as well as social interaction. The monumental ensemble at Orange, among other provincial centers, formalized, memorialized and commemorated a set of \textit{loci} for the populace to take its cues from; this is the subject of my first Interlude. Textual writing was not necessary; nor was the actual instruction(s) on how to behave: the myth of how the emperor lived as cued by the urban ensemble was enough to instruct the viewer.

\textsuperscript{177} I will discuss this further in my first Interlude.
suggesting new corresponding cues in singular and sets of monuments (physical topographies).

I believe that the mnemonic could have also worked covertly: In addition to operating as a memory aid for the person wishing to remember, it could be usurped by the writer or architect to inscribe specific memories. Thus just as textual rhetorical loci could have reminded readers of what it was they were supposed to remember, a set of monuments sited on a particular landscape could in the same way remind viewers of particular histories and accepted behaviors. The architect could thus plant precise memory cues within the mind of both reader and viewer. And much more importantly, the extent to which the latter would be permitted to enhance the cue could also be controlled. A fine depiction of a place, for example, could incise a memory track from which it would be very difficult to wander; a more generalized description could in turn allow the viewer to interpret the visual (or textual) more broadly and color it with the fragments and vignettes that inhabit the personal imaginary field. While we know little of the Roman imagination and there are dangers in directing transfers from the textual to the imaginary -- there is always a loss in the translation and therefore a risk of misalignment -- the architect, I believe, could have experimented by modulating the extent to which the imagination was provoked by narrowing or widening the descriptive field.

With the popularity of rhetoric and the oral, memory-based learning tradition, it should not be surprising that the De Architectura contained loci that channeled thoughts through precise tracks towards specific sets of architectural features residing within the reader’s imagination. The same, I think, could be practiced by the architect in the provinces; I will highlight this in my first Interlude below. And even more importantly perhaps is that once the loci were installed within the viewers’ memory, the architect would have been able to tune these to preferred historical and social intents.
In presenting his *Architectura*, it is possible that Vitruvius altered his sources, recollections and narratives to fit his systematized way of looking at architecture and to establish memory sites; it is perhaps more probable that the writer simply described things the way he wanted them to be. In other words, his depictions may very well have been quite real to him, albeit not necessarily physically extant. In turning to temporally distant examples to illustrate his preferred prototypes, he was not simply recalling known models; he was modifying "present" Hellenic examples to suit the ideals that he situated in the "present" Roman imagination of his reader. Thus certain notions would become automatically evoked within the specific design *loci* he referred to. While temple instructions contained in Books III and IV appear to correspond fairly closely to the architecture of the sanctuaries of third and fourth century B.C. -- the past -- Vitruvius provided enough tenets within the instructions that the models cannot be considered as replicas; they are entirely new spaces.\textsuperscript{178} By choosing distant prototypes, the architect allowed the reader to interpret certain tenets broadly, yet with restrictions. By explicitly naming Greek examples the architect forced the reader to interpret the models within a specific Greek mode.

To return for a moment to Vitruvius' use of the Temple of Diana at Magnesia (III, 2.6) for an example of the *pseudodipteros* temple, we see on the one hand that he used a place he would have known the majority of his readers would not have been to, all-the-while knowing that the temple had overwhelming weight in terms of cultural meaning. The use of a definite yet distant prototype allowed Vitruvius to insert his prescriptions within an acceptable framework: Greek architecture and one of its principle models were recalled while specific tenets on proportion were dictated. Whether the proportions were exactly the same as the Temple of Diana's is of little significance; what matters is the reader's excepting of the example as fact. The result was a personal architectural knowledge directed -- consciously or unconsciously -- by Vitruvius.

\textsuperscript{178} There is debate around the question of Vitruvius' impact on the architecture of his time. Some, like Auguste Choisy, attribute an important status to the author in terms of the development of Augustan architecture (1909). Others, like Axel Boethius, refer to Vitruvius as an architect looking to the past, with little or no influence on his present (1939). Onians pronounces "Vitruvius' theory of architecture owed little to earlier practice [and that] it had little influence on the future" (1988, 41). The debate continues...
When the instructions needed to include ideas or tenets that already existed within the Roman design modus, Vitruvius did not hesitate to provide Roman examples. He did this in Book II as he recalled the temples of the Citadel (1.5), in Book III with the monuments located in Caesar's forum (3.2) and in Book VII as he evoked the temple of Flora (9.4). The Roman cases, albeit few in number, were recalled to render specific, to-the-point instructions that already existed within Roman architectural practice, or, the Roman architectural collective memory. The fact that less than ten percent of the memory-sites -- temples, city walls, palaces and so on -- were Roman, gives an indication of what he felt about his surroundings.

One might be tempted to conclude that it was because Vitruvius was aspiring to Greek architecture that he chose Greek models. However it was not Greek architecture per se that he aspired to; it was the old ways (albeit derived from the Greeks) -- the old ways as defined and imagined by Vitruvius. It is important to underscore that most exemplars were vague. Because most of the readers would not have visited the spaces that Vitruvius named, they had no immediate recollection of the details contained within their designs; their mental sketches were therefore very generalized and were thus available for filling-in, so-to-speak. The details were filled-in by Vitruvius' tenets as the reader juxtaposed Greek generalizations with Roman -- and Vitruvius' -- precisions.

What can we conclude from Vitruvius' textual, visual and imaginary sketches? Well, he certainly wanted less visual: at most, only ten basic illustrations were provided. These sketches may not have been his and he may have included them as part of paraphrased passages. They certainly tended to complement difficult concepts not related to specific buildings. In terms of images for his architectural examples, he chose few Roman cases and deliberately included temporally and spatially distant Greek models. The ambiguity created by turning to distant examples allowed for a broader interpretation of his Architectura: The reader would have retreated from the personal experience and reassembled an architecture based at once on the vague images and on the precise tenets. Vitruvius turned to diagramma to force his readership to establish new memory paths. To deliver specific rationales,
particular design details and "new" architectural principles, the architect released the imagination of his readers by providing new memory-places. Throughout, he established credibility, and with mnemonics he provided relatively easy ways of remembering his issues of priority all-the-while installing these within the mind. As Vitruvius narrated myths, he amplified knowledge and rendered authority to his text. "Newness" and "mysteriousness" captivated the readers' attention and sense of wonder; lists of authorities provided "proofs". He was conscious of the visual and intellectualized repertoire of symbols in his lifeworld and therefore selected his "illustrations" with this in mind, excluding any memory-place that would have opposed his theoretic. By being selective (much like any historian) in his use of prototypes and in his choices of histories, geographies, places, spaces and tales, he would aim to reorganize the collective architectural imagination of Roman builders.

The De Architectura includes memory cues that served as the bits Vitruvius required in presenting his Architectura. The illustrative narrative is highly imaginative, simultaneously descriptive and normative, all-the-while both historical and "theoretical". The architectus was writing in a time and place where building practice was transmitted orally; memory aids routinely supplemented graphic portrayals. As mnemonics, the aids had illustrative qualities akin to sketches, also setting the reader's imagination along specific tracks. And while the tracks lead away from Rome and appeared to navigate towards the Hellene, they did not necessarily lead directly to Greece. The Architectura of Vitruvius was to be a re-aligned and re-designed discipline. In arguing for a new Architecture, Vitruvius turned to classical knowledge of how memory could be scripted in order to modulate the reader's interpretive capacity.179

179 The following passage, among many others, underscores the awareness of memory in Vitruvius' writing: "... as I employ these esoteric names and the proportions derived from the components of architectural projects, I shall explain them briefly so that they may be memorized" ([C], V, preface. 2).
Vitruvius defined his principles very broadly. Much of his diagramma, as I have shown, relied on the ready acceptance of the treatise and the reader’s willingness to leap towards Greece without necessarily having seen its monuments. The ease with which the text can be connected to all-things-classical may in fact be why it has remained in circulation so long beyond its completion; other treatises had been written, but this one has survived. Yet its very broadness and appeal to what I term classical imaginations, while having safeguarded its survival, have also assured its change in time. Transcription and emendation have taken place and we are left with an altered set of writings that is at best, a facsimile of the original. It is partly for this reason that translators have included illustrations as part of newer versions. As I will show in Chapters 3 and 4, the ease with which translators have complemented the textual with visuals is directly connected to the notion of turning to the treatise to reconstruct, correct and “study” observable monuments. This is a new use for the treatise and it would seem that the memory devices incorporated by Vitruvius have been usurped in order to produce some “new” classical architecture. I will return to this notion, but for now, I want to outline in a general sense, the treatise’s trajectory. I will end this section with a short discussion on the latest English-language translation and highlight the significance of complementing it with interpretive diagrams.

While the De Architectura appears to have been rarely recalled in its early life, its epistemological trace dates to Antiquity. Pliny (23-79 A.D.), in his Naturalis Historia referenced Vitruvius’ text regarding three themes: trees (XVI), pigments and colors (XXXV), and stone (XXXVI). While it may seem odd that Pliny did not reference the De Architectura for what might be more significant items such as Vitruvius’ architectural tenets, the few
references still indicate two things. First, as Granger (1983) points out, "the manual of architecture was already a standard work" during the first century (xv). Second, and perhaps more importantly, it underscores that from the early years of Augustus' reign, Vitruvius was referenced as an authority in spite of having presented, as we have seen, a particular architecture that did not directly correspond to that of Rome per se.

Other writers were doing the same, treating Vitruvius' treatise as an authority on architecture. Sextus Julius Frontinus (c. 35-103 A.D.) made reference to Vitruvius in his De Aquis Urbis Romae, insinuating that Vitruvius was the expert when it came to water-related technology (De Aquis Urbis Romae, I, 25). A little later, Cetius Faventinus (born c. 250 A.D.) summarized portions of the treatise in his own De Diversis Fabricis Architectonicae, placing himself on the same expertise level as Vitruvius. The fact that Faventinus chose to provide abbreviated portions of Vitruvius' treatise speaks for itself; Vitruvius' work was perceived as an important work at the time.

Another of the followers of Vitruvius, Rutilius Taurus Palladius (4th century A.D.) authored an agricultural handbook, the De Re Rustica, that to MacDonald (1977) at least, was partly based on the previous writer's text (52). Fleury points out that Palladius may have been using Faventinus as a reference and not necessarily Vitruvius directly (1990, XLVII). Regardless of the conflicting opinions, it is reasonable to believe that Palladius and Faventinus relied on the older treatise either directly or indirectly. Finally, Sidonius Apollodorus (c. 430-483 A.D.)

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180 For a discussion on the links between Vitruvius and Pliny, see Michael Greenhalgh “Pliny, Vitruvius, and the Interpretation of Ancient Architecture” in Gazette des Beaux Arts, volume 84, serial 6, pp. 297-304, 1974.


182 Cetius Faventinus wrote “De artis architectonicae perita multa oratione Vitruvius Polio allique auctores scientissime scriptere” (p. c); this quote is from Philippe Fleury (1990, X). For a translation of De Diversis Fabricis Architectonicae, see Hugh Plommer Vitruvius and Later Roman Building Manuals (Cambridge: Cambridge University Press, 1973). Cetius Faventinus' book is also known as the Artis Architectonicae Privatis Usibus Abreuiatus Liber.

183 Sidonius Apollodorus wrote: "...quaque, si fors exigit, tenere non abnuit cum Orpheo plectrum, cum Aesculapio baculum, cum Archimede radium, cum Perdice circinum, cum Vitruvio perpendiculum..."; this is quoted from Philippe Fleury (1990, X).
and Servius\textsuperscript{184} (fl. early fifth century A.D.) also cited Vitruvius as an expert on architecture. Apollodorus went so far as to position Vitruvius vis-à-vis Architecture, just like Orpheus was paralleled to Music and Archimedes was associated to Geometry (Fleury, 1990, XLVIII). From very early on in architectural discourse then, Vitruvius was accepted as an authority in order to buttress technical narratives and in turn to render an authoritative feel to writers' texts as they discussed architecture in general and architectural history and theory in particular.\textsuperscript{185} Copying portions of the treatise and referring to it in general terms, however, is the extent to which Vitruvius was “studied” during late Antiquity.

Some scholars like Kruft (1994) contend that the treatise’s “rise to fame began only in the fifteenth century” (19). However, references to it persisted in the interim; Flavius Cassiodorus (c.468 - c.562 A.D.) for example, referenced Vitruvius in a letter of around 511 A.D. and the treatise was also referenced during the Middle Ages (19).\textsuperscript{186} We do see fewer references during the Middle Ages; this may be because, reflecting the cultural shifts in Italy and the rest of the western world, "classical" design was seldom considered beyond the fourth century as architects become less liberal arts planners and more trades-oriented master builders (Bieber, 1961, 254; Frézouls, 1982, 436-37; Marta, 1989, 13). It is for this reason that the conventional view of the \textit{De Architectura} being "lost" during the Middle Ages has persisted until present day. De Camp (1993) still notes that the treatise was "recovered" only at the onset of the Renaissance (357). But others like Ciapponi (1984, 72) more rightly point out that the manual was referenced during the Middle Ages. Krinsky (1967) supports this notion, recording some seventy-eight different Vitruvius manuscripts accessible during the Middle Ages; others have

\textsuperscript{184} Servius wrote: “Vitruuvis, qui de architectonica scripsit...”; this is quoted from Philippe Fleury (1990, X).
\textsuperscript{185} The notion of buttressing “hypothetical” archaeological and architectural arguments (for theater reconstructions) using Vitruvius has been explored elsewhere; see my “Textual Imaginations: Vitruvius in Archaeological [Re]constructions” in \textit{Assemblage – Sheffield Journal of Archaeology}, volume III, (Sheffield: University of Sheffield Graduate School of Archaeology, 1988).
since been added to the list.\textsuperscript{187} Considering the period and its modes of transmitting knowledge, this is a high number.\textsuperscript{188}

Later in the Medieval era, numerous copies -- some with commentary -- were produced, including those eventually owned by learned individuals such as Petrarch (1304-74) and Boccaccio (1319-75) (Ciapponi, 1984, 72). Why these individuals acquired it in the first place and the extent to which they used it remains unclear. However, the simple fact of its inclusion within their libraries attests to some importance. In addition to the practical "building trade" uses, the text was referenced for the more theoretical aspects of building design. The atriums of Old Saint Peters, Cluny III, St. Laurent at Tournus and Anzy-le-Duc, for example, were proportioned according to Vitruvius' atrium of the third class (Book VI, 3.3). As architectural focus shifted from one mired in state agenda to one based in Christian ideology, Vitruvius' treatise was (paradoxically) preserved partly through the Church. While the master builders looked away from many of the building types outlined by Vitruvius, they did look to his \textit{basilica} for church design.\textsuperscript{189} Although an ongoing polemic -- mostly because we do not know to what extent it has been used -- the treatise continued to be copied and utilized in both


\textsuperscript{188} The oldest extant manuscript is the \textit{Harleianus} 2767 that dates back to the IXth century; others may have similar dates: The \textit{Gudianus} 132 manuscript and the \textit{Vaticanus Reginensis} 1504 manuscript are estimated to date back to the Xth or XIth centuries. The \textit{Bruxellensis} 5253 manuscript is thought to have been prepared during the XIth century. For a discussion, see Philippe Fleury, \textit{Vitruve de l'architecture - Livre I}, pp. LIII - LIV, 1990.

\textsuperscript{189} Kenneth Connant, in his "The After-life of Vitruvius in the Middle Ages" in \textit{Journal of the Society of Architectural Historians}, volume 27, pp. 33-38, 1968 has shown this with his work at Cluny III. Also, Michael Greenhalgh, in his \textit{The Survival of Roman Antiquities in the Middle Ages} (London: Duckworth, 1989) underscores that Einhard may have been directly inspired by the \textit{De Architectura} in his use of Roman-like masonry for his church design at Steinbach (159). Copies were also kept within the royal houses where the status associated with classical architecture had not completely disappeared; King Theodoric (491-526), undertook rebuilding programs at both Ravenna and Rome. He sponsored, for example, the restoration of the theatre at Pompey according to his own interpretation of the classical ideal.
training and teaching throughout the period (German, 1991, 10; Heitz, 1975, 741-52; Krautheimer, 1963, 48; Moressi, 1988, 81).  

Toward the end of the Middle Ages, the *De Architectura* gained further popularity among western intelligentsia; "as soon as the essence of architecture...[was] considered to be philosophy and mathematics (the divine laws of order and proportion) and archaeology (the monuments of Antiquity), the theoretician and dilettante...[were] bound to assume a new significance [for the Vitruvian text and the architectural profession in general]" (Pevsner, 1943, 188). This is a key moment: When philosophy, mathematics and archaeology were connected to the treatise, the reconstruction of classical monuments by means of the text, was enabled. In 1414-15, Poggio Bracciolini noticed a copied manuscript of the *De Architectura* at the monastery at St. Gall (Krinsky, 1967, 36; Moressi, 1988, 81) and from this point onwards, the treatise was re-popularized within what would have been a “new” profession of architecture that was directly linked to archaeology. And as I highlighted earlier, from this moment onwards, architects and intellectuals such as Brunelleschi (1377-1446) analyzed ruins and compared their findings to the descriptions and tenets of Vitruvius (Ettlinger, 1977, 99; Schevill, 1963, 419). I will elaborate on this in Chapter 3, but for now, however, it is useful to follow the treatise along its path to the present.

Around Brunelleschi’s time, the papal authority took on the preservation of Antiquities as a priority; we know that Raphael (1483-1520), for example, was given carte blanche by Pope Léon X to halt any construction or demolition work deemed as damaging to any

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190 Paul Frankl, in his *The Gothic – Literary Sources and Interpretations through Eight Centuries* (New Jersey: Princeton University Press, 1960), shows that the treatise was accessible to the students and builders associated with monasteries. Also, the apprentices at the various building lodges that emerged during the fourth and fifth centuries, albeit secretive, would have had the opportunity to refer to the ancient text; builders would have found the technical instructions particularly relevant to the medieval builder’s needs: Proportion and geometry (III, 3.1; 5.1-15), Siting of buildings (I, 7.1), and Timber and its uses (II, 9-10). Also, the concise procedures for dealing with pigments and colors were directly applicable to fresco and wall painting (VII, 5.1-8). See Spiro Kostof "The Architect in the Middle Ages - East and West" in *The Architect - Chapters in the History of the Profession*, (Oxford: Oxford University Press, 1977), pp. 59-95.

191 Philippe Fleury (1990, LI, footnote 124) points out that at least three scholars (Spitzmuller, Krinsky and Gros) argue for a different date (1416); I leave the argument to them. See L. Ciappomi “Il De Architectura di Vitruvio nel primo umanesimo” in *Italia Medievale e Umanistica*, volume 3, p. 59, 1969 for a discussion on the diffusion of the manuscript from St. Gall.

192 I will return to this in the early parts of Chapter 3.
monument or stone inscription of Antiquity (Müntz, 1880, 316). In this way, importance was granted to the study of monuments; comparing the remnants of Antiquity to the De Architectura became key in architectural training. In other words, within the renewed interest in classical architecture, interest in the De Architectura shifted from its technical prescriptions to its antiquities depictions.

By the time Alberti finished his treatise, a new way of interpreting Vitruvius was born (Krautheimer, 1961, 65). Alberti’s De Re Aedificatoria recalled the De Architectura in both form and content, yet had a different set of motives. Acknowledging, as van Eck (1998) has recently pointed out, that Alberti may not have exclusively turned to Vitruvius for his treatise’s template, the older book was most surely his key influence (280). While illustrations did not come down with the older manuscript, Alberti imagined his own, providing an array of detailed engravings. Significant is that these contained within them a set of corrections and realignments: He interpreted the differences between his field observations and the descriptions outlined in the older treatise as mistakes by Vitruvius and chose to undertake corresponding “corrections” within his own book. This fit well with humanist thinking where “Renaissance patrons were not content to remain in second place [after ancient Rome]” (Pellecchia, 1992, 377). At the same time, it is not that Alberti and the architects of the time rejected medieval architecture (as Burkardt would have it), it is that they did not necessarily identify it differently

193 Alberti wrote his treatise around the year 1452, just as he was taking on the role of conservateur des monuments historiques de la papauté. His treatise was not written as a direct translation of the ancient text; the older one recalled the past while Alberti’s tended to look ahead, using the past to rationalize ideas related to technique and design. In this way, he was able to transform the non-Christian text into one which was palatable for his humanist patrons and Catholic consumption. However, most sections still described design very much like Vitruvius had, with, for example, suggestions for optimal siting and forms based on examples from antiquity (Alberti, Book VIII, 7). For detailed accounts of Alberti’s transformation of the De Architectura, see Georg Germann Vitruve et le Vitruvianisme – Introduction à l’Histoire de la Théorie Architecturale (Lausanne; Presses Polytechniques et Universitaires Romandes, 1991), A. W. Eden “The De Re Aedificatoria of Leon Battista Alberti” in Town Planning Review, volume 19, number 1, pp. 10-28, 1943 and Chapters 3, 4 and 6 in Hanno-Walter Kruft Geschichte der Architekturtheorie: Von der Antike bis zur Gegenwart (München: C.H. Beck’sche Verlagsbuchhandlung, 1985), translated into English by Ronald Taylor, Elsie Callander and Antony Wood as A History of Architectural Theory From Vitruvius to the Present (New York: Princeton Architectural Press, 1994).


from Roman. To Alberti, there were two “styles” -- the “old” one and that of the “present-day”. And the style of the day depended greatly on the re-interpretation of Antiquities -- textual and observed (Smith, 1992). Observations of Roman monuments were in this way utilized to realign Vitruvius' text.

The idea of correcting the *De Architectura* according to observable monuments would eventually change: As I will show in the next chapter, it would later be the text that would be used to correct observable monuments.196 Beyond Alberti, two types of Vitruvius-related architectural writings emerged: First, there were theoretical treatises such as those of Antonio Averlino (1400-69), also known as Filarete, Sebastiano Serlio (1475-1554) and Philibert de l'Orme (1510-70). These focused on strict geometry and conceptual constituents such as the Orders. Filarete wrote his treatise with formal typologies in mind (Spencer, 1965) and Serlio strove to present formal typologies and “theoretical” tenets that were solidly anchored in the *De Architectura*. At the same time, treatises more “practical” for builders also appeared. These include the writings of Francesco di Giorgio Martini (1439-1501/2),197 Vincenzo Scamozzi (1552-1616), Giacomo Barozzi Vignola (1507-73), Andrea Palladio (1508-80) and Daniele Barbaro (1513-70).198 As builders, they highlighted functionality and construction and they correspondingly looked to Vitruvius within their technical mindsets. Each of the two groups interpreted Vitruvius through personal lenses that ultimately resulted in different interpretations of classical architecture.

Both types of architectural writing borrowed from Vitruvius’ treatise. Some, like Alberti, modified and “corrected” it, while others, like Fra Giovanni Giocondo De Verona (c.1435-c.1514) reorganized it into separate chapters to suit his particular architectural theoretic.

Both groups used it to remind the reader of specific “classical architectures”; they both tended to follow Vitruvius in turning to building assembly as the basis “for advancing architectural styles and forms” (Lesnikowski, 1987, 33). Other translations focused on illustrations; the book by Giovanni Cardinal in 1511 included numerous woodcuts (Rowland, 1995-96, 8). Key here is that for over three hundred years, related “research” was not focused on Vitruvius and the De Architectura per se; instead, the writings were appropriated within agendas that sought to fit the architectural thought to the times. Once the facsimile of the treatise was rediscovered at St. Gall, a host of translations were produced in Italy; there have been at least thirty-two major Italian works (Moressi, 1988) as well as a number of English, French, German, Italian, Spanish and other linguistic editions produced since the fifteenth century. Related to the present research, the French treatment of the De Architectura is of particular interest.

Fra Giovanni Giocondo sojourned in Paris from 1495 to 1505, teaching a course on Vitruvius and classical architecture during the earlier part of the sixteenth century. As well, one partial

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French edition of the *De Architectura* had been previously accessible to architects and builders. And not unlike his Italian counterparts, Jan Martin prepared a translation in 1547. With an introductory essay by Jean Goujon, its influence upon French architecture was profound; the illustration that Goujon provided for the Vitruvius example of caryatids, for instance, was used a few years later as a basis for the design of the *Salle des Caryatides* in the Louvre. Similarly, Jean Bullant based his sixteenth century architectural treatise on the book of Vitruvius as he “corrected” his interpretations of classical monuments (Pauwels, 1997, 100). And Jan Gardet and Dominique Bertin, whose edition I will discuss in detail in the next chapter, prepared a particular translation in 1559 that directly linked the ruins of southern France to the *De Architectura*. The two traveled to the south of France to measure the vestiges of Arles, Nîmes and other places in the spirit of providing a basis for their corrections to the older manuscript. Like Martin, they referenced Alberti and other "homme[s] de grande doctrine et de bon jugement, auquel l'architecture est beaucoup redevable" (Graillot, 1919, 292) and accepted Alberti's earlier changes as corrections that reconciled the past with their observable present. They thus undertook their work with similar aims; that is to say, observing monuments and correcting the treatise, all-the-while codifying a particular classical imagination.

A little later, another Frenchman, Perrault, began his study and translation of the *De Architectura* (1673). By the mid-seventeenth century, the focus in France under Louis XIV

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203 A French language resumé of the *De Architectura* had been available in the 1526 work of Diego de Sagredo, translated from Spanish into French at around 1530. Its title is as follows: *Raison d'architecture antique, extraite de Vitruve et autres anciens architectes, nouvellement traduit de l'espagnol en français à l'utilité de ceux qui se délectent en edifices.*

204 I devote a section to the translation of Jan Gardet and Dominique Bertin in Chapter 3.


206 Hanno-Walter Kruft in *Geschichte der Architekturtheorie: Von der Antike bis zur Gegenwart* (München: C.H. Beck'sche Verlagsbuchhandlung, 1985), translated into English by Ronald Taylor, Elsie Callander and Antony Wood as *A History of Architectural Theory From Vitruvius to the Present* (New York: Princeton Architectural Press, 1994), identifies Charles Perrault as commentator on Vitruvius and dates the work at 1648 (17). However, it was Claude Perrault who in his translation of 1673 turned to the Goujon illustration to highlight the caryatids. For a relatively recent English translation of Perrault's work on the Orders, see
was on the state, and all disciplines had, as part of their official objectives, the glorification of the throne (Picon, 1995, 4). Architects and artists, among the scholars employed by the King, were instructed to produce works that reflected the royal view. So as Perrault undertook his work, he did it with the belief and will to highlight that "science" had progressed since Antiquity (Dalmas, 1986). And while he was not one to regard Antiquity with longing (as had the humanists), he did see monuments as part of an architectural heritage that was to be preserved to the glory of the King. Consider his dedication:

Voici la seconde fois que l'Architecture de Vitruve a l'honneur d'être dédiée au plus grand prince de la terre. Son illustre auteur la présenta autrefois à l'empereur Auguste, et elle se trouva alors dans un tel degré d'élévation, qu'il semblait qu'elle ne pouvait plus aspirer à rien de semblable. Son Interprète l'offre aujourd'hui à Votre Majesté, et ne doute point que la gloire que cette belle Science reçoit en ce jour, n'égale celle dont elle se vit aujourd'hui comblée...

Les dix livres d'Architecture, 1673, [1995], i

Thus he dedicated his work -- translation and commentary -- to the king, just as Vitruvius had done for his own emperor. In this way Perrault used Vitruvius' writings to directly link classical architecture to the French state. In acknowledging the grandeur of the classical, Perrault's ideal was to equip the French architect with a corpus that would enable a "new" architecture for France. He changed the original text in at least two ways. First, he simplified and abbreviated the language. Vitruvius' eurythmia and symmetria, for example, were combined into symmètre. Second, he utilized specific French projects as examples within his discussion. We thus find the Observatoire in Book I and the Colonnade du Louvre in Book VI, both works Perrault had been involved with. In this prescriptive manner, he signaled to the French architect that the "present" architecture (one inextricably linked to a classical vocabulary) was to be the architecture of France. The result, of course, is that in the same way that Alberti and his Renaissance counterparts had changed the older text, Perrault too changed and adapted it to suit his own ideals.

Indra Kagis McEwen (translator) Ordonnance for the Five Kinds of Columns After the Method of the Ancients (Getty Center for the History of Art and the Humanities, 1993).
The king delighted in the translation and Perrault became known as *le Vitrue Français* (Picon, 1995). His work remained the definitive French translation until the late nineteenth century with regular re-editions published and referenced by architects and archaeologists to this day.²⁰⁷ Perrault’s translation is significant because it served as a means by which the *De Architectura* and classical architecture were adapted within the French *official* state ideal. Beyond, Perrault’s book, the Vitruvius treatise fell into disuse.²⁰⁸ And while other Vitruvius-influenced treatises were produced in France, no other French translation was as significant as Perrault’s until August Choisy’s (1841-1909) edition of 1909, which provided a renewed emphasis on materials and technique.²⁰⁹

As elsewhere, in France the study of Vitruvius was reinstigated in the late nineteenth century. As engineer and mathematician, Choisy made an effective *Directeur du Service des Cartes et Plans de l’École des Ponts et Chaussées*; as erudite and humanist, he provided an analysis and translation of Vitruvius’ text (Jacques, 1991). Choisy’s work followed his *L’Art de bâtir chez les Romains* of 1873 and his *Histoire de l’architecture* published in 1899.²¹⁰ The translation was thus informed by his histories. He provided a series of illustrations that were less connected to specific building examples and instead related to a more generic set of building components. In this sense, he was closer to Vitruvius’ method of presenting ideas because the latter provided no architectural drawings and relied more on textual description. Choisy’s drawings were less whimsical than those provided by earlier translators, however, with a

²⁰⁹ Although the study of classical architecture was reinvigorated during the eighteenth century Greek Revival period, few translations were produced. See Christine Casey “‘De architectura’: an Irish Eighteenth-Century Gloss” in *Architectural History*, volume 37, pp. 80-93, 1994.
somewhat stricter adherence to Vitruvius' textual descriptions (and of course his own field observations). He systematized his study of classical architecture into an architectural “theory” that appealed to his contemporaries; his work appealed to French architects looking on the one hand for meaning in classical architecture, and on the other, for reassurances of the links between Rome and France.\footnote{I am referring simultaneously to the classical of Vitruvius and the classical of nineteenth century France.}

At about the same time that Choisy was working on his studies of Vitruvius and the classical world, A. Terquem (1885), in his La Science Romaine à L’Époque d’Auguste – Étude Historique D’Après Vitrue, provided what would have been the most up to date commentary on the De Architectura and its author.\footnote{Terquem’s work was most probably sparked by V. Rose and H. Müller-Strübing’s Vitruvii De architectura libri decem (Leipzig: Teubner, 1867), which is widely accepted as the first “scientific” edition, most probably because of its apparatus criticus and passage numbering. Rose re-published the work almost immediately afterwards, using the same title: Vitruvii De architectura libri decem (Leipzig: Teubner, 1899).} As in Choisy’s publication, French study of the ancient treatise was no longer limited to introductory commentaries, passing references or short anecdotal articles; Terquem’s work went back to early Latin versions and thematically organized the old text’s passages.\footnote{See Valentin Rose Vitruvii de architectura libri decem (Leipzig, 1899) edition for the Latin text.} A more critical analysis would have to wait until the turn of the century, when Victor Mortet (1902-06), in a series of articles in the Revue Archéologique, developed arguments that extended beyond translations and thematic discussion. He considered the purposes and objectives of Vitruvius as well as a host of other issues such as the still controversial epigraphic sources. The work of Terquem and Mortet instigated French and to some extent German philological research interest in Vitruvius that reached beyond translations and the writing of similar treatises.

schemes, epistemological and philological debates, canonical analysis, comparative architectural study, technical apparatus and so on. German studies of the earlier part of the century continue to be extended by the French. In Germany, for example, the work of A. Birnbaum focused on comparing the words of Vitruvius to the “new” archaeological finds of places like Priene, Magnesia and Olympia. And in the past few decades an emphasis on the social, political and ideological aspects of the architectural discipline of the first century B.C. is being reflected within related work. Specialized colloquia in Rome (1980), Darmstadt (1982), Berlin (1983), Strasbourg (1984), London (1986), Vienna (1986), Leiden (1987) and Pisa (1992) have included papers that extend beyond the treatise and its writer. Also, new and re-


220 See especially the work of Louis Callebat and Philippe Fleury in their translation and commentary of Books IX and X (Collection des Universités de France, 1990-99).

221 For example, see Heiner Knell Vitruvs Architekturtheorie - Versuch Einer Interpretion (Darmstadt, 1984). For a list of German, Austrian, Italian (and other) dissertations on the subject during the early part of the century, see Hanno-Walter Kruft Hanno-Walter Kruft Geschichte der Architekturtheorie: Von der Antike bis zur Gegenwart (München: C.H. Beck’sche Verlagsbuchhandlung, 1985), translated into English by Ronald Taylor, Elsie Callander and Antony Wood as A History of Architectural Theory From Vitruvius to the Present (New York: Princeton Architectural Press, 1994), p. 447. For a detailed discussion on the German philological work, see Pierre Gros “Vitruve: l’architecture et sa théorie, à la lumière des études récentes” in Aufstieg und Niedergang Der Römischen Welt, Tome II, 30.1 (Berlin, 1982). This is not to say that no other research is presently undertaken. See especially the work of B. Wesenberg (1983) that links the treatise to Republican architecture, as well as the work edited by Enaudi’s (1997) that has re-instigated research in Italy.

published translations are fueling interest in Vitruvius-as-architectus. Among others, the work of Ingrid Rowland (et al.) is of note and worth a brief detour. The “new” translation and its accompanying drawings are part of the translation tradition and from this particular example, we can see the production of (classical) knowledge at work, particularly as it becomes amplified with the use of illustrations.

As twentieth century translator of Vitruvius’ treatise, Rowland renders somewhat clearer some of the confusing notions contained within the De Architectura, all-the-while reconciling the latter within current theoretical frameworks and with archaeological advances in mind. However, while the translation is relatively unambiguous, the illustrations and commentary by Thomas Noble Howe, albeit extensive and having as their objective “to investigate the possibility of a consistent design approach” and “to illustrate the relation of this approach to the broad principles of liberal knowledge” (xv), are imaginative at best.

I have noted that Alberti, Serlio, Cesariano and Barbaro, among many others, were part of a translation “tradition”. In English, Sir Henry Wotton translated the treatise in 1624, as did William Newton in 1771 and Joseph Gwilt in 1826. However, it was for the most part the Latin edition of Valentin Rose published in 1867, complete with its apparatus criticus, that informed subsequent twentieth century English versions; Rose’s work -- based on Fra Giocondo’s manuscript -- remains a benchmark for translations, including Morris Hicky Morgan’s of 1914, Frank Granger’s of 1931, and now Rowland’s. The latter also approaches the task of translating with other sources at hand; while using Giocondo’s and Rose’s as primary texts, the interpretation also draws from other manuscripts. In other words, Rowland’s translation is not necessarily that of a single manuscript; it is an approximation of what she feels best represents Vitruvius’ words.

The recourse to emendation, the correction of a text due to what are thought to be errors or corruptions in transcription, is prominent in Rowland’s rendition. Rowland retraces

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interpretive errors contained within previous versions. In Book VI (6.4), for example, Rowland distinguishes between *sublinata* and *sublimata* and tells the reader that while Granger writes about granaries with “concrete floor[s]”, probably following the British Library Harleianus 2767 manuscript, another choice is available from the Wolfenbüttel Gudianus 69 manuscript (and adopted by Rowland), where the granaries are said to have “elevated” floors. The difference is subtle, yet not insignificant.

The treatise contains a few *hapax legomenon* -- terms or phrases that are not found elsewhere in classical texts. Rowland treats these according to their individual complexity and context, thus preserving textual intent and significance as much as possible. The term *trabes evergoneae* in Book V (1.9) is a good example. The translation of the words seems straightforward; Rowland uses “outward-sloping beams” as the equivalent and while “knee-brace” may have been more to the point -- the reader would be better able to identify the building component -- the choice is adequate. Other difficult passages are treated with balance and interpretive logic and where translation is not readily possible, as with the case of another *hapax legomenon*, *scamilli impares*, Rowland leaves the words intact (III, 4.4 and V, 9.4).

From its position within the treatise and especially from examples found in Greek temples, it is certain that the term *scamilli impares* refers to the rise of stylobates as they curve towards the center along a horizontal plane. While the objective of *scamilli impares* is presumably dual: to counter the illusion of downward curvature and to allow moisture to drain more effectively, the term remains problematic and no-one has yet been able to clearly articulate its technical significance. In other words, while “uneven benches” is one way one could translate the words, exactly what these would have been and what they would have done is not known. Giocondo’s treatise and Cesariano’s 1521 Como edition include drawings that attempt to convey its meaning but theirs as well as other Renaissance views have been shown as incorrect. Rowland opts to leave the term in Latin, italicized, with a simple reference to “figure 46” in the Commentary. Now there are two generally posited solutions to the term: First, there is the possibility that *scamilli* are little step-like notches cut into the stylobates; these notches would be *impares*, that is to say, uneven, or odd-sized. Second, *scamilli* may be referring to specific devices used to generate a rise at the center of the horizontal stylobate
arrangement; these would perhaps be leveling blocks of graduated sizes. No example of the former is known; the latter is adopted by the commentator/illustrator. The implication in the Commentary, however, is that Vitruvius employed the term with this particular meaning in mind. This is a good example of the difficulties that can arise when allowing drawings to interface directly -- without corresponding textual remarks -- with the reader's imagination.

Another example of what could be seen as a slightly liberal interpretation of the old treatise relates to the passage describing Vitruvius' basilica at Fano (V, 1.6-10). I have already discussed the basilica and remind the reader that evidence for its existence has never been found. Rowland translates the passage quite clearly and in fact, when paralleled with Morgan and Granger, the depiction is eloquent. In this part of the treatise Vitruvius outlined a set of proportions and dimensions that went beyond his normal generalizations; indeed, some hypothesize that the passages were inserted at a time beyond Vitruvius' writing of the treatise. Regardless, when drawings are presented by Howe, complete with a detailed axonometric outlining truss and beam arrangements, they go way beyond the textual depiction. Vitruvius did not precisely outline this array of timbers; nor did he stipulate the roof structure as posited. Thus, while the textual interpretation seems appropriate, the visual depictions generate what could be construed as exaggerations. The difficulty of course, is that the reading of the text, regardless of its philological accuracy, can be significantly altered by visual representations. As archaeologists, architectural historians, theorists and practitioners continue to arbitrate the classical through Vitruvius' treatise, the text's interpretation becomes even more significant when new pictorial dimensions are added.

The problem is magnified when the illustrator blends images that represent the De Architectura passages with diagrams that are meant to show the state-of-the-architecture of the day. Recall that Vitruvius is not describing architecture as it is; he is depicting it as it should be. Further, when the illustrator writes that "gaps and ambiguities in the drawings are left because that is probably the way he [Vitruvius] intended them to be understood" (xvi), the implication, undoubtedly unintentional, is that there were many drawings accompanying the De Architectura. The point is, however, that Vitruvius would not have "intended them to be understood" because there were only ten drawings with his text (as opposed to the over
500 illustrations included within the 139 figures of Rowland’s book). That said, many of the drawings do support the translation. The illustrated temple types and column ratios in figures 39 to 42, for example, seem fair visual depictions of the words in Books III and IV. Similarly, the techniques sketches outlining what Vitruvius probably meant as he wrote about brickwork -- *opus testaceum, opus incertum* and *opus reticulatum* in figures 31 and 32 -- complement the translation. Other drawings, like that depicting men “chopping down trees to build an encampment” in figure 36 are perhaps unnecessary.

Finally, it is somewhat of a paradox that while the *De Architectura* was devised to appeal to those interested in architecture and the building crafts, few visual elements seem to have been included to complement the initial textual depictions. This is part of a custom of “extract[ing] representations of architectural elements from Vitruvius without the availability of direct sources” (Moressi, 1988, 85). Inevitably the pictorial can end up forcing the reader’s textual to fit the visual, thus altering the text -- and intent -- of Vitruvius. The previously discussed basilica at Fano is an example of this; from the drawings one could imagine that Vitruvius outlined it as shown. Further, while the Introduction and Commentary indicate that the diagrams are meant to explore a “consistent design approach” and “to illustrate the relation of this approach to the broad principles of liberal knowledge”, there is no final synthesis accompanying the drawings and one’s interpretation is again left to the imagination. The risk in the end is that the work of Vitruvius on the one hand and the translator on the other can be significantly altered by the illustrations. I will show in the coming chapter what happens when Vitruvius’ book is interpreted with the use of drawings.

There we have it: copious translations, interpretations and commentary, faithful to varying degrees, all purporting to be accurate while fitted within personal or state agendas. Many include commentary that, while not analyses *per se*, are attempts at understanding the late Republican writer and the *De Architectura*. With the exception of the Italians, the French have
produced more translations than anyone else. And related to the translations are treatises that at times purport to mirror the ancient text, while in other instances render the impression that they aim to completely replace the old set of Books. References to the text are profuse, dating back to shortly after its completion and extending to the present. During the twentieth century especially, commentaries on specific ideas and themes have flooded the related literature, at times focusing on narrow subjects (such as the full name of Vitruvius) and in other instances seeking answers to much broader questions (such as those dealing with architectural curricula and training). Of late, new translations and related studies have been instigated, especially -- although not uniquely -- by the French Academy. The work of Pierre Gros and his colleagues is paramount, with ongoing translation and commentary as well as a profusion of philological studies that transcend Vitruvius per se, situating the treatise within its broader historical and theoretical fields. The commentaries contained within the Collection des Universités de France editions are fundamental and the two volume Concordance du De Architectura of Callebat, et. al. (1984) has decidedly updated the earlier compendium of Hermann Nohl’s (1876) Index Vitruvianus. The Budé volumes descend directly from the French classical tradition. It is in how this production of classical knowledge is used that I want to focus upon in the remainder of this thesis.

CHAPTER CONCLUSION

As the “Revolution” threatened Rome during the final decades of the Republic, the many landscapes of the Urbs -- built, intellectual, social and natural -- became inextricably linked within a confused cultural matrix. It was not simply a set of places that Vitruvius was observing; he was living within spaces that, while having lost many of their explicit meanings over time, contained within them implicit cultural codes for him to ponder. So systematic and formalized was the state apparatus that monument sating, and not necessarily

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monument construction, would have been enough to recall notions of duty and adherence to the central authority. I will illustrate this for the provinces in my first Interlude. As Rome and its surroundings became perpetual construction sites, expansionist strategies and citizenry schemes allowed for the introduction of completely new techniques and ideas, leading to previously un-used building forms and types.

From the contents of the Books, we can see an attempt at more than organizing the discipline. The uneven and unstable landscapes of the Republic provided the impetus for Vitruvius to present a “new” Architectura that addressed his ideals. For the architect, there was no longer a canon; the architectural superego of Rome had essentially vanished. He thus infused his treatise with countless allusions to the Hellenic world -- the source of the old ways -- in the hope of acquiring credibility, persuading his readers of the accuracy of his truths and depicting his own personal classical architecture. Vitruvius wrote his treatise within a certain set of webs of power: dedications, authorities, quasi-scientific notions, place and space descriptions and depictions, and of course, the recollection of all-things-Greek. This juxtapositioning of multiple “authoritative” references was an effort to tame and eventually redirect the architectural imagination of the reader. In a sense, Vitruvius decomposed and then redistributed the Greek (architectural) knowledge at his disposal to create his own. Vitruvius provided a depiction of his architectural vernacular married to his architectural imagination -- his Architectura.

Thus Vitruvius was not describing Roman architecture as it was; he was describing it as he wished it to be. Indeed, it is highly possible that the author exaggerated and altered traditions, locations and sites in order to suit his argument. As sites of knowledge, his places were especially useful; who would question the descriptions of far away domains? Instead of describing a unifying theory, he was prescribing an idealized system. It was a narrative that was simultaneously descriptive and normative, and all the while historical and, wishfully theoretical. There are a host of reasons to question his examples and subsequent models.

First, the vantage point of a single individual living within a specific place at a particular moment in time was, and continues to be, limited at best. Much of the architecture that is
now referred to as “classical”, for example, was built during the later part of Augustus’ reign, after Vitruvius completed the *De Architectura*. Second, there are incorrect details within the treatise that can be amplified through interpretative error; there are geographical, architectural and cultural inaccuracies that leave the reader wondering if Vitruvius actually saw much of what was inserted within the treatise. And there is also the probability that errors were contained within the secondary sources used by Vitruvius. Third -- and most relevant here -- Vitruvius generalized in order to arrive at the broad sets of tenets contained in the books: He would have observed during his travels, read the current texts, listened to descriptive accounts, absorbed prescriptive instructions, and then combined these within a personal architectural definition -- one that would have been very real to him. It is by regularizing all of these that Vitruvius eventually arrived at his classical types and corresponding spaces. At the same time, it seems reasonable to assume that personal preferences would have formed part of the ideal. Thus an imaginative component comprising of the writer’s own notion of classical architecture, based on travels, readings and perhaps more significantly, an acceptable version of strength, utility and beauty -- *firmitas, utilitas, venustatis* -- would have served as a basis for the treatise.

The monuments erected during the Republic had been emplaced with the intent of reminding the populace of what was to be remembered. In a similar way, as a memory device, the *De Architectura* recalled for the reader what *Architectura* should be like. Vitruvius’ treatise sought to imprint a set of instructions on the collective Roman architectural soul. He produced an architecture that was constructed, scripted and negotiated through narratives that were for the most part deliberately left spatially and temporally ambiguous to allow the tenets illustrated within the tales, myths and prescriptions to be readily accepted and eventually adopted by the reader.

The looseness characterizing the tenets and illustrative text of Vitruvius is precisely what has enabled imaginative interpretations over the centuries. With the hundreds of related studies, each has over time added weight and authority to the treatise. In Chapter 4 I will show that by
including drawings within translations, the classical imagination becomes fused with memories of what monuments should look like; the reconstructed images in turn become inextricably linked to fantasy. And while fantasy is clearly necessary in presenting hypotheses, it does lie between the search for truth and what is imagined; it is made up of disjointed fragments -- memory traces -- and is thus not representative of the totality that it reconstructs. And this same looseness is what allows present-day scholars to usurp the text within their theoretic. Dripps (1997), Gordon-Smith (1988) and March (1998), among many others, use Vitruvius in much the same way as others have at least since the time of Alberti.
INTERLUDE I – On MEMORY in ARAUSIO

For the most part, classical architecture rests on the use of the Orders as transmitted by Rome mostly through columns and their entablatures. This is not new, of course, and I will not elaborate on it. Usurping the Orders and related architectural vocabularies within memory strategies, however, is an under-appreciated notion. The extent to which the use of the Orders and associated elements translated into the writing of new histories and in turn new memories imposed on Roman provincial society remains relatively understudied. With very few exceptions, the Orders are typically examined within research focusing on the technical aspects of building, leaving out interpretation and meaning as perceived by those experiencing them. In this light, consider for a moment that the Orders and “order” are inextricably linked within the Roman collective memory. Here I use Arausio, present day Orange, France, as an example to highlight the way memory-based links operated to display power and especially instill notions of appropriate comportement, or behavior within the individual and the Roman collective. It is quite probable that Vitruvius was consciously or at least unconsciously aware of this process. I will quickly introduce Orange -- a place I will return to often in my next chapters -- and its monuments and then show how the Orders affected memory and in turn, order.

ORANGE

Arausio -- Orange -- was a Roman colony founded at around 36 B.C. by veterans of the second legion. Not long after its founding, an important set of defensive ramparts was erected as well as a grouping of monuments completed at different times, but generally in use by the end of Augustus' reign in 14 A.D. The regular grid plan was surveyed onto a relatively flat topography sited to the north of what is now known as the colline Saint Eutrope. From Figure I-1, the dominance of the theatre and the spaces connected to it is immediately clear: The theatre and its adjoining forum are central to the plan, the town, and undoubtedly local and regional cultural life. One would have felt its importance walking along the cardo and through an arch -- l'arc d'Orange -- situated some 600 meters away from the forum.

The ramparts are almost perfectly aligned in a hexagonal shape that takes the hill into account (figure I-2). Passing the arch and heading towards the town centre, the Roman visitor would have encountered an important door, flanked by two imposing towers, just to the south of the arch. The monumental axis, extending from beyond the northern side of the same arch all the way to the theatre area would have been unprecedented for a western Roman colony. The whole would have provided a scaenographic landscape whose effect

229 On Roman surveying and a brief discussion of the discovery of cadastral inscriptions at Orange, see B. Campbell “Shaping the Rural Environment: Surveyors in Ancient Rome” in The Journal of Roman Studies, volume LXXXVI, pp. 74-99 (and footnote 60), 1996. In addition to the above listed sources, for further discussion of the cadastral inscriptions, see A. Piganiol Les Documents Cadastraux de la Colonie Romaine d’Orange – Supplement à Gallia, numéro XVI, 1962.
231 The arch is believed to have been completed at around 25 B.C.
Figure I.1 - Arausio: Site

air photo: musée d'Orange; dmm

Figure I.2 - Arausio: Site Plan

"Plan Général et Géométral - 1807"; musée d'Orange; dmm
upon the viewer would have provoked awe. The forum, while today not fully understood, has what appears to be a temple at its centre. The latter dominated the space and it may have been fronted by *nymphaeum*. Another monument, probably an altar, stands between the temple and the theatre whose axis parallels the *cardo*.

The theatre is enormous, to say the least, and while I turn to this specific example, I need to say that it, along with the other theatres of the Narbonnaise, constitute the best samplings of the building type within the western Empire.\(^{232}\) And of these, the Arles, Vienne and Orange monuments are especially key in that as reconstructed,\(^{233}\) they reflect very closely the principles established by Vitruvius in his Book V: Semi-circular *cavea*, radiating stairs and lateral access corridors installed parallel to the *proscenium*, all to some extent vaulted and supporting *tribunalia*, and of course, a *scaena* wall, well preserved especially at Orange, with its tiered decorative *Orders*. Another feature of these theatres is the “enclosing” feel provided by the roughly corresponding heights of the seats and the *scaena* wall. While these features are aligned (as reconstructed) closely to the schema offered by Vitruvius, the theatre of Orange also appears to follow the design of the theatre of Marcellus in Rome, begun at around 20 B.C.. Regardless, it seems certain that the model is patterned, to varying extents, after Rome.\(^{234}\)

I need to briefly discuss the arch, the wall appearing to line the *cardo*, and the theater. The arch’s four levels persist (figure I.3):\(^{235}\) The lower level comprising the three arches, the architrave above the arches, an attic and pediment, and then a second attic with a cornice separating it from the lower one. There may have been a set of statues atop the structure and the whole was decorated with reliefs that related to battle scenes and Roman land and sea dominance. There are traces of color and dozens of clamp sockets that hint at vivid surfaces, bronze (?) inscriptions and/or statues mounted onto the horizontal surfaces. The arch was a


\(^{233}\) I will return to the theatre of Orange in Chapter 3 and discuss the reconstruction problematic; I will return to the Arles and Vienne theaters in Chapter 4.


didactic tool and the viewer would have been immediately struck by scenes of power and might. The tripartite arrangement -- in addition to the upper attic -- echoed the design ideals of Rome. Aside from the arches themselves, still dominant are Corinthian columns "supporting" the structure. I say "supporting", but they are purely decorative. Installed to each side of the central arch and the outer arches to add a feel for depth and increased volume, they are also, quite plainly, operating as extensions of Roman design ideals. With their repetitiveness, for example, the Orders would have reinforced notions of "Roman grandeur" and order for the viewer.

However there is more to it than that.

On the sides of the lower arches of the north face there are reliefs of "spoils of war" (figure 1.4): Still observable are spears, swords, trumpets, battle standards, drapery and shields. The clamp sockets over the main arch suggest probable "victories". More clamp sockets on the architrave and the smaller central pediment hint at an inscription on the former and some sort of bronze (?) decoration on the latter. Similarly, the lower attic is
made up of naval scenes -- not ships *per se*, but individual elements such as, on the right hand side, an anchor and an inclined mast, complete with rigging, a ship’s prow in the form of a dragon’s head, trident standards and other items. On the left of the north lower pediment, there are yet further related elements including a ship’s prow. The upper attic is made up of three pedestals, with the central one decorated with a ship’s prow. The upper attic is made up of three pedestals, with the central one decorated with a ship’s prow. The whole is somewhat abstract in presentation. On the left side of the central pedestal are sacrificial elements that some suggest may be linked to the founding of the colony.

On the eastern elevation there are more Corinthian columns -- four of them -- that split the face into three areas decorated with, in part, reliefs. They are in fact “trophy reliefs”; within the central area are barbarian prisoners, hands bound and roped to a wooden stake. Above them are the actual trophies; these are made up of “clothes horses” with garments, helmets, shields, spears and swords hanging. The standards of Gaul -- wild boar -- are installed above. Yet further above all of this is a frieze showing men in battle. Jupiter revolves above. The lower attic at this point still has the sea as its main theme, complete
withy men and monsters engaged in some sort of battle. On the south side, there is a great deal of reconstruction and is difficult to read the themes: Shields with names, as well as more naval scenes dominate. The ensemble suggests a rich set of vignettes for the viewer to ponder.

Thus we have scenes -- snapshots really -- of notions that are connected to a variety of ideas. The whole does not necessarily represent detailed “historical” narratives; it represents “moments” that cue the viewer’s recollective capacities. Whether the builders had actually experienced Rome is not significant; what is significant is that the builders would have had within their collective (architectural) memories, notions of what the arch should represent. This is one of the reasons why the abstract vignettes and the superficial use of the Orders would have operated as cues that would remind the viewer of general ideals. I will return to this in a moment.

I leave the arch now and go back very briefly to the wall that appears to parallel the cardo for a moment (figure 1.5). At fifteen meters in height, the wall is impressive. The main detail I want to highlight relates to its appearance and not its construction. Note the blind arcades. These show up along the lower reaches of the wall, at least as far as I have been able to tell. In terms of specific purposes -- after all, a wall, one would think, is built to delineate space -- there have been a number of posited roles including “gymnasium”, “cirque”, and “theatre”. None has been proven.

If the purpose of the cardo wall is uncertain, the theatre is definite in terms of its use. It is the central element to the urban landscape and simply cannot be avoided.237 The bâtiment de scène, or scaena wall -- when I refer to the theatre I am referring especially to the scaena wall and not the cavea which has for the most part been reconstructed during the last hundred and fifty years -- is immense. Roughly speaking, it measures some 36 meters in height by 103 meters in length; the whole is approximately 6 meters deep. On the outside, along the north façade, blind arcades continue the pattern contained within the cardo wall (figure 1.6). The outer face of the scaenae wall is scarred with indentations that may have served as

237 In their description of the monuments of Orange, R. Amy and F. Salvat contextualize the theatre as the central piece to the ensemble; see “Orange Antique – Livret-guide C 3” in UISPP – IXe Congrès, pp. 155-64, 1976.
Figure I.5 - Arausio: Wall Parallel ling the *cardo*

Figure I.6 - Arausio: Theater Outer *Scaenae Wall*
anchor points for an adjoining structure, perhaps a portico, built during — or after — the theatre’s lifespan. Caristie and Formige\textsuperscript{238} suggest that the slot and cornice above the arcade correspond to a portico that would have been held up by a series of columns installed parallel to the wall.\textsuperscript{239} The same north façade of the \textit{scaena} wall is pierced by three main access points leading to the inner space and eventually directly onto the \textit{pulpitum} itself. Other minor entrances lead to the areas within the wall. The upper portion of the exterior wall is problematic in that it must have been rebuilt at a relatively early point in its life: For instance, not all of the \textit{vela}-supporting masts are aligned.

The present-day access to the inner \textit{cavea} is through a barrel-vaulted passageway — the \textit{auditus maximus}. I leave the \textit{cavea} aside and focus on the \textit{scaena} and \textit{scaena} wall (figure I.7). The building dwarfs the viewer, as it would have done during the early first century A.D., when it was probably built.\textsuperscript{240} Caristie, certainly the most celebrated of the theatre’s “academics”, suggested that at least 122 columns decorated the three levels of the wall (figure I.8); Formigé, in the earlier part of this century, postulated that 76 columns may have been more probable. Either way, both estimates are striking in that the \textit{scaena} wall would have included \textit{columnatio} that would have without doubt operated as a visual testament to the grandeur of the emperor represented in the statue in the central niche: Augustus. Formigé re-installed a few columns (figure I.9) -- those along the eastern sections -- and the positions seem reasonable; the single column to the west of the center is \textit{in situ} (figure I.10), as well as a few traces of marble, all held to the wall with clamps. The hundreds of clamp sockets attest to the extent to which the wall would have been covered in marble. The only feature that may have equaled the marble \textit{revêtément} is the statuary located in the niches; one statue of Venus -- or some of its pieces -- was unearthed below the right central niche. Complementing the marble facing and the statues were intricate marble friezes depicting centaurs.\textsuperscript{241}

\begin{footnotesize}
\textsuperscript{238} I will discuss Caristie and Formigé in Chapter 4.

\textsuperscript{239} For a discussion that accepts the reconstruction of Caristie, see M. Bieber \textit{The History of the Greek and Roman Theatre} (Princeton: Princeton University Press, 1961).

\textsuperscript{240} For a generalized description, see D. S. Robertson \textit{Handbook of Greek and Roman Architecture} (Cambridge and London: Cambridge University Press, 1929), pp. 280-82.

\textsuperscript{241} For an analysis of the friezes, see N. Janon “Centaures” in \textit{Théâtre antique d’Orange}, Musée municipal d’Orange, pp. 29-58, 1988.
\end{footnotesize}
Figure I.7 - Arausio: Theater

1940s postcard

Figure I.8 - Arausio: Theater: *Scaenae* Wall Drawing by Caristie

1950s postcard
Figure I.9 - Arausio: Theater: Scaenae Wall: Reinstalled Columns
I am glossing over many details here, but my point is rather basic: Aside from the frontality and scale of the theatre, arch, *cardo* oriented wall and the *mise en scène* of the monumental center, there are two fundamental memory-related devices at play: The first is the repetition of features -- columns and arcades especially. And the second is the abstractness of some of the features -- specifically, those contained in the arch. So how did this assemblage of monuments and architectural language function to re-write memories and in turn inform behaviors? As I conclude, consider once again the notion of classical memory.

**CLASSICAL MEMORY**

As I pointed out in Chapter 2, in classical times, memory was seen as a double entity: a natural one and an artificial one. The first one includes what people actually recalled without making a concise effort at memorizing. And the second involves that which is
purposely installed within the mind. When a person saw a monument, the monument’s meaning would have been registered “naturally”, and to some extent, “artificially”. Related to memorial places, the mind of the individual Roman was also occupied by sets of pre-loaded mental images -- what was observed within the day-to-day. I have pointed out that we know from Vitruvius that there was an awareness of the past as living within architectural memory. If Vitruvius was aware of that kind of memory, so too were the architects of the time. Some might argue that the grandiose and often ostentatious monuments were set up as part of a propaganda program emanating from Rome. I suggest that this is not necessarily the case and that they were the result of other processes more closely related to memory.

First I need to say that while the frontality and scale of the main monuments at Orange would have projected notions of power and dominance, this was not necessarily deliberately directed from Rome. Nor was the use of the Orders. Paul Zanker (1988) has shown quite clearly that emulation of and not emanation from Rome was more likely what motivated the construction of such important monuments. In other words, the construction of monuments was not necessarily directed from Rome; it may very well have been a provincial desire. To go back to the time of Orange’s founding, at around 36 B.C., the previous self-aggrandizement methods of successive leaders was changing; I showed in Chapter 2 that it was being transformed into the worship of a new ruler. Augustus, to the populace (and to himself), had been chosen by the gods and partly for this reason, how he behaved was observed and ultimately emulated and copied by his subjects. This new acceptance of authority was, not surprisingly, reflected in art and architecture. To repeat the point, until relatively lately, many have felt that a vast propagandist agenda was operating out of Rome and manifesting itself in the provinces.

Yet consider that the memory -- one that may or may not have represented reality -- of the Emperor’s way of living (how he behaved publicly, or how he was thought to behave publicly), was directly connected to the monument types and the Orders contained within their design(s); they were, after all, sponsored by the Emperor or close followers. Now consider that the memory of past events, or how they were reconstructed within the collective imagination, was also partly reflected in the same monuments. The use of the Orders and associated decoration then, was directly tied to the collective memory and in turn to a
perceived comportement -- an Augustus-like comportement. The repetitive use of the Orders in the provinces (with columns and arcades, for example) in the arch, cardo wall and theatre, amount to the planting of loci within the collective memory and, eventually, the directing of a certain way of behaving. When the colonial architectus and builder designed monuments, they had a memorial vocabulary that, regardless of what Rome aimed at projecting, triggered certain connections to the memory of the way the elite was thought to behave.

In Orange, we have a well ordered landscape, complete with an organizing urban grid and ramparts, a triumphal arch with the Orders clearly depicted on all sides, a wall aligned with the cardo with blind arches, a theatre with the Orders used to decorate its scaenae and more blind arches along the outer scaenae wall. The whole involves rhetorical devices: Repetition, narrative (although blurred), eloquent decoration and a host of memory loci.\textsuperscript{242}

As the ultimate authority of Augustus was accepted, society became transformed and a new type of visual communication was derived from his own lived (and mythologized) behavior. Coupled with the honors given him, Augustus’s image was delivered through various means including architectural vocabulary. Monument types, the Orders, and related decoration became mnemonic cues that were tied to the modes of behavior of the elites, be it real or as imagined by the settlers in the provinces. Further, the messages did not necessarily reside within individual monuments or their components; they “lived” within the totality of art, architecture and the urban schema, among other places, and thus became installed within the collective memory.

What resulted at Orange was much more than a landscape of power: Because the messages became, over time, anchored within architectural language, behavior was automatically cued by built form; not only religious ritual and state ceremony, but also day-to-day exchanges, movements and social interaction. The monumental ensemble at Orange, among other provincial centers, formalized, memorialized and commemorated a set of loci for the populace to take its cues from. When the viewer approached the arch with its Orders, the wall aligned with the cardo with its repetitive blind arcades, the theatre with both its blind arcades and use of the Orders, a set of behaviors directly linked to Augustus’ perceived way

\textsuperscript{242} The arrangement recalls Vitruvius’ obsession with the site of Halikarnassus.
of behaving was activated. Textual instruction was not necessary; myths of how the emperor lived as cued by the urban ensemble was enough to instruct the viewer.\textsuperscript{243}

\textsuperscript{243}I say this realizing that it is entirely possible that at times individuals could have mis-read the cues; I am thus generalizing to make the point.
INTRODUCTION

In Chapter 2, I argued that the De Architectura was written with specific objectives that did not necessarily reflect the architecture of Republican Rome and instead had more to do with the architectural interpretations of an individual. I do not mean that it was simply a book written as a description of an individual’s surroundings; the treatise was drafted with an idealized architecture in mind. Vitruvius used an assortment of devices generally connected to Rhetoric and at times more specifically associated with memory in order to attempt to convince his reader that Roman architecture required re-assessment, elevation to the Liberal Arts, and indeed, a new way of looking at itself and building in general. The impressive array of authorities is an example of one of his rhetorical devices; the use of mnemonics is another. I believe that he also experimented -- consciously or otherwise -- with mental imagery by combining distant places with more immediate spaces in order to etch new loci upon his readers’ mind. Ultimately, his Architectura relied extensively on Greek foundations while depending, with some exceptions, on the Roman innovations of the day.

This chapter highlights the transformative and adaptive ways through which the treatise can be interpreted. It is clear from the last chapter that it is mired in canon rhetoric; here I use an example to show how it was usurped, from at least the sixteenth century...
onwards, by French archaeological practitioners and within the French quest to define some of its landscapes as classical. Two sections follow: *The New Ruin: Rome, and France* traces the early "tradition" of archaeological practice in Rome up to the moment when, partly through the conquering of Rome by Napoleon, it is adopted in France. This dissertation is not about the Renaissance uses of the *De Architectura*; others have looked at this in detail and I will not elaborate on it here. 244 The first section, *The New Ruin: Rome, and France*, is intended to provide a backdrop for the example that will follow later on in the chapter; it leaves out a certain amount of detail which will be revisited in Chapter 4. The second section, *New Landscapes: Vitruvius and the French Ruin* looks at one of the ways the *De Architectura* and its author became connected to the French archaeological landscape.

3.1 The NEW RUIN: ROME, and FRANCE

I mentioned in Chapter 2 that Pliny, Frontinus and later, Cetius Faventinus were familiar with the *De Architectura*. Within their lifetimes they were able to access a multitude of literary works as society gradually embraced the texts of Antiquity and the ideas within them. A variety of treatises dealing with an array of topics was collected and referenced by erudites during late Antiquity and the Middle Ages (Jacks, 1993; Krinsky, 1967). The early centuries A.D. witnessed intellectual development, as well as institutional realignment and religious transformations (Grant, 1996). If Faventinus lived beyond the age of 62, he without doubt would have observed some of the changes resulting from Constantine's conversion at around 312 A.D. Later in the fourth century, for instance, non-Christian practices were outlawed, with

temples either closed or converted into churches as new rules “swept away a lax aristocratic ethic and substituted strict moral laws...” (Veyne, 1997, 164). At the same time, ongoing conflicts -- war abroad and disaster at home\textsuperscript{245} -- and the relocating of the capital to Constantinople, Milan and eventually Ravenna, changed the optimistic mood of the Roman populace. It was at this moment that large groups of citizens began to migrate from the hill neighborhoods of Rome to the Tiber shores.

The move away from the Roman “suburbs” that began in the late fourth century resulted in a dense core bordered by sections of disused lands and discarded buildings. While this does not mean that past uses were completely forgotten, the physicality of abandoned spaces and eventually, “mysterious” ruins, blended over the next centuries with myths and lore into muddled local histories.\textsuperscript{246} Second and third century élites had maintained buildings and monuments,\textsuperscript{247} but the large-scale abandonment afterwards rendered vague the architectural meanings and intentions of their initial builders. In short, the collective knowledge of what Rome had been like almost disappeared from the fourth and fifth centuries onwards.

We can see the level to which mythology had become attached to discarded monuments from the dozens of itineraries -- travel guides -- that were produced during the early to late Middles Ages. As late as the eighth and ninth centuries, itineraries such as the Einsiedeln Itinerary traced paths through neighborhoods, noting what were perceived as important monuments and connecting these to folklore. The most important of these itineraries, the Mirabilia Urbis Romae,\textsuperscript{248} incorporated legends and erroneous interpretations of past and “present” landscapes that perpetuated distorted views of Antiquity well into the sixteenth century (Weiss, 1988, 6).

\textsuperscript{246} This is not to say that attempts were not made at preserving monuments; Theodoric I, among others, undertook the re-building of Pompey’s theater during the fifth century.
\textsuperscript{248} The Mirabilia Urbis Romae was drafted some time during the twelfth century.
Other mirabilia were based on it, containing misinterpretations, linking, for example, the Pantheon to "evil gods" and the Coliseum to a temple dedicated to the Sun.

The popularity of mirabilia coincided with the rise of Christianity and related tourism. Thousands of pilgrims from Germany and France, among other places, converged upon the city to see the tomb of Saint Peter and the relics housed within the new churches. Similarly, the traveling masses were attracted to Rome for its pagan ruins. Travelers and scholars began to study buildings and the lore surrounding them. Archaeology did not exist as such, but treasure hunting became common, as was the search for statuary and architectural fragments. Sponsoring the study of finds increased in popularity, with support, for example, for the study of inscriptions by powerful individuals such as Charlemagne (742-814). Scholars sought to locate, translate and transcribe dedications, laws, or any other classical text that could be found; traders correspondingly strove to have as many antiquities as possible available for the growing market\textsuperscript{249} that operated through to the tenth century and beyond.

In spite of the ruinous state of so much of Republican Rome, its footprint persisted and Roman aristocrats as late as the eleventh century began installing themselves within the abandoned districts; the outcome of this was in many ways positive as reconstruction activity preserved many spaces; they repaired and modified what was relatively intact by quarrying some of the less-desirable buildings. Stone was reused and marble was either included within new designs, or excluded, to be melted in lime kilns or exported to other places in Italy, England and France. The scarred appearance of Republican Rome that remains today arose in large part from this process.

It was within the values of the humanists that a particular view of ruins would be adopted by the intelligentsia.\textsuperscript{250} Many have written on Humanism and I do not propose replicating the work here. As Peter Murray (1981) so aptly put it, humanist thought consisted of "the development of the individual through the cultivation of the will, the restraint of feeling, and the development of one's own capacity in order to secure the public good" (53). And Antiquities were deemed representative of this way of thinking. Humanism thus adhered to the Roman view of the individual. That said, the core ideas of Humanism did not specifically emerge with early Renaissance scholars; as Weiss (1947) reminds us, it was in the late thirteenth century that intellectuals began to read the earlier texts with a critical eye, and at this moment that "...the examples from ancient history began to be interpreted in a different light" (4-5). Francesco Petrarch (1304-74), who had studied at Montpellier and Avignon, and Giovanni Boccaccio (1313-75), born in Paris both critically assessed texts and had elaborate manuscript collections in their libraries. The Medieval and eventual Renaissance return to all-things-classical was gradual, yet it was without precedent; to be learned was to be familiar with the Rome of Antiquity.

One example of the way Antiquity was adopted within intellectual circles involves tours: The itineraries were coupled to choreographed, "intellectual" walks, organized along a new topography of Rome that focused on "findspots", to use a term employed by Koortbojian (2000), with the objective of locating and studying monuments. The focus on locating remnants necessarily involved map making and with the itineraries, a "literary topography" (Moatti, 1993, 35) resulted as ruins were unearthed, monuments "identified", locations mapped, and sites eventually corroborated by classical texts.

When France’s Philip IV decided to relocate the papacy to Avignon (in 1309), the effects on Rome were profound: With the pope away, renewed nationalism re-instigated and reinforced interest in the classical past. It was at around this moment that widespread “archaeology” was borne. On the one hand, collecting and trade in marble and bronze statues, inscriptions and architectural components continued and became widespread, while on the other, intellectuals like Cola di Rienzi (c. 1313-54) began calling for a return to notions and values associated with the former Rome. To the latter and his humanist counterparts, the values of Antiquity were contained within classical literature, epigraphic inscriptions, and of course, monuments and architecture. So popular were his ideas of restoring Rome to its former status that after spending time in Avignon and gaining papal favor in 1343, he was able to convince the pope and eventually the Roman population of the cultural value of Antiquities.\textsuperscript{251} With Rienzo’s work, old Rome’s remains were used to connect political fervor with humanist values.

At about the same time, Popes were tearing down pagan buildings to make room for their own projects. Pope Sixtus IV (b. 1414), for instance, granted permission in 1471 for his builders to quarry whatever monuments they deemed appropriate.\textsuperscript{252} The process of “dismantling” begun just after the abandon of urban areas in late Antiquity was thus continued throughout the Middle Ages and the Renaissance. And at the same time, the practice of “unearting” promulgated another set of activities: collecting and displaying. The Laocoön Group, discovered in 1506 in the Domus Aurea, was displayed in the previously opened Belvedere along with dozens of other statues.\textsuperscript{253} The items in the collection would be copied, studied and replicated by countless artists and scholars from throughout Europe. This is key because the habit of modeling and patterning new works was borne out of this practice.

The search for antiquities intensified through the collecting of drawings, statues, coins, manuscripts and architectural fragments; “interpreting” also became a goal for intellectuals. After the Laocoön Group was discovered and shown to correspond to a passage in Pliny’s

\textsuperscript{251} Cola di Rienzi was eventually made tribune.
\textsuperscript{252} Sixtus IV’s builders required building materials for the Vatican Library.
\textsuperscript{253} The Belvedere was opened in 1471 by Pope Sixtus IV.
Historia Naturalis, corroborating material finds to textual references was one of the chief aims of the humanist scholar.\textsuperscript{254} Once texts became linked to sites, the practice of using the former to interpret the latter was borne, and as the texts were transcribed and adjusted to personal views, they were in turn corrected to correspond to the observed monuments. While Vitruvius' treatise had been known throughout the Middle Ages\textsuperscript{255} and then re-popularized after the humanist Poggio noticed it at St. Gall, the practice of comparing and correcting it to match visible remains was formalized by Alberti in the 1480s.\textsuperscript{256}

In the mid-sixteenth century Antiquarianism became a profession. Some humanists, like Felice Feliciano (1433-80) added the title of antieaglie to their names as they acquired power through the trade of memorabilia (Jacks, 1993, 9). The practice was inextricably linked to the creation of a new antiquity; all'antica, which became a "style" onto itself, based on personal interpretations, measured drawings and detailed observations of ruined monuments.\textsuperscript{257} At the same time, philology, epigraphy and to some extent numismatics were popular intellectual pursuits that went hand in hand with archaeological exploration; the search for all-things-Roman included manuscripts and inscriptions as scholars traveled throughout Italy (and beyond) in order to transcribe and "explain" the contents of newfound texts.\textsuperscript{258} Popes and rulers sponsored scribes and collections grew.\textsuperscript{259} Philology of course,

\textsuperscript{254} Pliny's comment is as follows: "...The reputation of some, distinguished though their work may be, has been obscured by the number of artists engaged with them on a single task, because no individual monopolizes the credit nor again can several of them be named on equal terms. This is the case with the Laocoön in the palace of General Titus, a work superior to any painting and any bronze. Laocoön, his children and the wonderful clasping coils of the snakes were carved from a single block in accordance with an agreed plan by those eminent craftsmen Hagesander, Polydorus and Athenodorus, all of Rhodes" (H. N. XXXIV, IV, 36-37, translated by D. E. Eichholz). For details on how the discovery of this particular item worked within a production of Antiquity, see Michael Koortbojian "Pliny's Laocoön?" in Alina Payne, Ann Kuttner and Rebekah Smick (editors) Antiquity and its Interpreters (Cambridge: Cambridge University Press, 2000) pp. 199-216.

\textsuperscript{255} I highlighted this Chapter 2.

\textsuperscript{256} See also Peter Murray The Architecture of the Italian Renaissance (London: Thames and Hudson, 1981).

\textsuperscript{257} For a recent set of essays dealing with the discovery and invention of Antiquity during the Renaissance, see Alina Payne, Ann Kuttner and Rebekah Smick (editors) Antiquity and its Interpreters (Cambridge: Cambridge University Press, 2000).

\textsuperscript{258} I will return to the persistence of these professions as linked to archaeology in Interlude II.

\textsuperscript{259} The Vatican Library, during the reign of Pope Nicholas V (1447-55), became the most important library in Europe.
included the study of the treatise of Vitruvius, with the first printed edition published in Rome at around 1486. Choay (2001) refers to this movement as "The Classicizing Phase", whereby the focus was only on classical architecture and art, "to the exclusion of those of any other era" (27). The study of antiquities through Vitruvius, although read through the eyes of interpreters, was in vogue for students of architecture (Poisson, 1989, 83). And the De Architectura may very well have been referenced by artists; Joseph Rykwert (1981) makes a convincing argument when he suggests that Piero di Cosimo (1462-1521) was reflecting the dawn of civilization as told by Vitruvius in his Book II (1).

There were Latin editions circulating, with the first Italian rendition completed in Como in 1521 by Cesar Cesariano, a student of Bramante’s. In France, the treatise arrived as a document within Fra Giovanni Giocondo’s baggage, probably in manuscript form.

Still in Italy, architects, publishers and artists like Nicolas Poussin (1594-1665) “… focused on ruins, which they treated as elements of a landscape” (Moatti, 1993, 75). This is a significant moment; the ruin became part of the artistic “present” and eventually, individuals such as Battista Piranesi (1720-78) with his hundreds of engravings of maps and architectural drawings, reinforced the notion of fantasia in the interpretation of ruins through veduta, the “architectural vignette” (Ficacci, 2001, 7).

Within the latter’s work, scholars found on the one hand accurate renditions like his drawings of Hadrian’s Villa, while on the other, they


264 See for example, Piranesi’s Invenzioni Capric di Carceri (Rome, 1745-61), reproduced as Giovanni Battista Piranesi - The Prisons (Le Carceri) (New York: Dover, 1973).
could also be looking at highly inaccurate imagery like his cartographic interpretation of the Campus Martius. In this way, and in addition to confusing the importance and relationship of monuments, Piranesi’s work condoned both imaginative and “real” depictions. The popularity of his gravures was without precedent as eventual travelers on the Grand tour sought out related pictorial memorabilia (Moltedo, 1990, 21-23).

Collecting became increasingly lucrative, with little or no attention given to what today would be called archaeological context or authenticity. Pieces from different statues, for example, were collaged into new sculptures and the whole was market-driven with buyers willing to transport “real” antiquities to France, England and beyond. This habit had profound implications to the disciplines of Art History and Archaeology; in France, the collage approach has until recently continued with sculpture components retrieved and assembled into “new” compositions (figure 3.1). Through his engravings, Pirenesi promoted a certain aesthetic based on the beauty of both imaginary and real ruins.

Other people within Piranesi’s lifetime were advocating different philosophies regarding the uncovering of antiquities. Joachim Winkelmann (1717-68) was working on his opus, the History of Ancient Art, a treatise based on the belief that Greek art and architectural aesthetics were closer to “real” beauty (Choay, 2001, 55). While this countered Piranesi’s (and many others’) views that accepted fantasia within monument interpretations, Winkelmann’s book was the first to look at ancient art critically; as of its publication in 1749, Art History became part of archaeological practice and from then on, works of art and architecture would be studied within their Historical context.

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267 Winkelmann saw artistic development as fitting within four temporal units: “The Ancient”, “The Sublime”, “The Beautiful” and “The Decadent”, which corresponded to Archaic Greece, the fifth, fourth and first centuries B.C.; this was the first time anyone had looked at antiquities beyond collecting.
As Piranesi and Winkelmann debated the value of Roman antiquities, the French *Académie de France à Rome* was busily studying Rome and its *bâtiments antiques*. As early as the 1660s, Colbert insisted that the lodgers of the *Académie* study specific architectural/archaeological problematic and send drawings back to Rome upon their return to France.\(^{268}\) This is significant in that French architects-in-training, beginning at least since Colbert’s time, were required to propose monument restitutions as part of their study terms in Rome.\(^{269}\) Their eventual exposure to Piranesi’s work would have been formative.

One of the most important dates in the history of the *Académie* is over a hundred years after its founding, in 1778. During that year, the official policy of the *Académie* made it

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compulsory for pensionnaires, upon their return to France, to send sets of drawings back to Rome. The plans fell into three types: comprehensive architectural/restitution projects, measured drawings of “modern” buildings (any building not considered a monument of Antiquity -- be it Renaissance, Baroque or eighteenth century), and measured drawings of antiquities. Whatever the choice, students were obliged to give consideration to the ruins. Further, the rules of the Académie stipulated that all students submit measured drawings accompanied by proposed restitution schemas. Drawings of the monuments at various newly discovered places -- Herculaneum (1713), Paestum (1746) and Pompeii (1748) and so on -- were subsequently produced. This is highly significant: It was primarily in this way that the detailed study of antiquities was embedded within the training of French architects from the seventeenth century onwards.

The notion of sending measured drawings and restitution projects to Rome once back in France poses an interesting set of questions: Assuming that the reconstruction drawings were based on measurements and site observations, then what role would the imagination of the architects take when tasked with completing the work once back in France? And if the drawings were sent back to the Académie later, how faithful would they be when it would be difficult, if not impossible, to check site details? It seems as if the two poles -- accurate reconstruction and imaginative interpretation -- residing within Piranesi’s work were instilled within the Académie’s students. The policy remained in place through to the nineteenth century, with architects like Auguste Caristie sending temple restitution drawings back to Rome during the 1819-23 period,271 the latter’s restitution of Le Temple de Sérapis à Pouzzoles (1819-23) is typical of the work that depicted restituted monuments, engraved or painted, in “realistic” solutions (figure 3.2).

271 The Académie did not alter the rule until 1968; I will return to the Académie in Chapter 4.
Returning to the eighteenth century for a moment, another set of events accelerated archaeological exploration in Rome and the popularity of ruins in France: The taking of Rome by Napoleon Bonaparte and his troops in the 1790s included activities typical of those associated with conquering: The excavation and removal of thousands of finds were extensive and by the time the Treaty of Tolentino was signed in 1797, pillaging was complemented with the confiscation of privately accumulated antiquities and the appropriation of public collections. A year or two later, hundreds of horse-drawn carriages made their way to Paris, containing thousands of items that included the Renaissance masterpieces that are still highlights in the Louvre, as well as early Roman sculpture, fragments and coins, and some 500 manuscripts. In Paris, the material was housed at various locations, eventually to end up in the Louvre in 1801. Considering that this would have been the most important set of Roman artifacts ever assembled in one place, it should not be surprising that interest for the ruins within the French countryside correspondingly increased during the early nineteenth century.

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272 The Treaty of Vienna provided for the return of much of the Vatican property in 1815.
And of course, in order to study the French ruins, one would have to be equipped with an appropriate texte de base: the De Architectura would thus be embraced within the study of French monuments.

3.2 NEW LANDSCAPES: VITRUVIUS and the FRENCH RUIN

The mention of Vitruvius’ De Architectura has been a powerful device in the production of architecture and related histories since soon after it was completed in the late first century B.C.. From the references in the treatises of Pliny and Frontinus to its adaptations in the texts of humanist scholars, the treatise has been a principal source and primary reference for architects and archaeologists in interpreting classical monuments and antiquities. In Renaissance France it became a staple in the libraries of architects almost as soon as Jan Martin and Jean Goujon finished their translation in Paris in 1547 and Guillaume Philandrier published his expanded Annotations in Lyon in 1552.

In the mid 1550s, just a few years after these publications, Jean Gardet and Dominique Bertin were developing their own interpretation, complete with a set of Annotations aimed at delivering a new understanding of Vitruvius’ treatise. This section examines their overlooked rendition and outlines how the translators repeatedly critiqued the Martin and Goujon edition and in turn began linking the monuments of southern France with passages from Vitruvius. The result of this process is significant in that it would enable the inscription of a particular view of French antiquities upon the architect and archaeologist’s mind -- a view that would henceforth provide a means by which Gallo-roman ruins could be re-interpreted as “Roman” and directly connected to the De Architectura.
When in 1547 Jan Martin (1500-1553)\textsuperscript{274} and Jean Goujon (1515-1568)\textsuperscript{275} set out to translate the *De Architectura* from Latin into French, they could not have anticipated that theirs would be one of the most influential renditions of Vitruvius’ treatise in Renaissance France.\textsuperscript{276} Martin had translated other works before this one\textsuperscript{277} — texts related to his employment as Secretary to the humanist and promoter of arts, Cardinal Robert de Lenoncourt (1498-1561)\textsuperscript{278} — yet with this particular focus on architecture, his aim was more than translation *per se*: He wanted to provide practical knowledge for French builders so that they could be better equipped to compete with the Italian craftspeople settling in France. His partner in the project, Goujon, prepared many of the illustrations and addressed the reader in the book’s final pages.\textsuperscript{279} Martin and Goujon rendered accessible a particular version of Vitruvius’ architecture as well as their interpretation of newly popularized drawing techniques and related geometrical applications to a non-Latin readership.

\textsuperscript{274} On Martin, see Françoise Fichet, *La théorie architecturale à l’âge classique — Essai d’anthologie critique* (Paris: Pierre Mardaga, éditeur, 1979), pp. 55-76.

\textsuperscript{275} On Goujon see Pierre du Colombier, “Jean Goujon et le Vitruve de 1547” in *Gazette des Beaux Arts*, 1931, pp. 155-178.


\textsuperscript{277} Among other treatises, Martin had translated the first two books of Serlio in 1545. Serlio himself supervised the accompanying illustrative work. For a listing of other works translated by Martin, see Françoise Fichet, *La théorie architecturale à l’âge classique — Essai d’anthologie critique* (Paris: Pierre Mardaga, éditeur, 1979), p. 56.

\textsuperscript{278} For a brief biographical note on the Lenoncourt family, see *Biographie Universelle, ancienne et moderne* (Paris: Desplaces) 24, 1856, p. 137.

\textsuperscript{279} Goujon’s Commentary title is as follows: *Svr Vitrve. Ian Govion Stvdievx d’architectvre avx lectevrs. Salv.* He prepared 40 of the approximately 155 illustrations in the translation; the balance came from other sources including 4 from Serlio’s treatise.
This was not the first time French architects had been exposed to Vitruvius. Fra Giovanni Giocondo da Verona (c. 1435-c. 1514) had sojourned in Paris from 1495 to 1505, teaching a course on Vitruvius and classical architecture during the earlier part of the sixteenth century and at least one partial French edition of the De Architectura had been previously accessible to architects. The treatise was also available, in Latin, in a host of libraries. Martin and Goujon’s book, however, with its numerous illustrations and a lexicon of technical terms and authors -- the Declaration des noms propres. Et motz difficiles contenvz en Vitruve (the explanation of proper names and difficult words contained in Vitruvius) -- became a standard in terms of classical architectural interpretations in sixteenth century France. Its appeal to French architects and humanists was due especially to passages where Vitruvius alluded to possible first-hand experiences in Gaul. The book’s completion also roughly coincided with Guillaume Philandrier’s (1505-1673) Annotations of Vitruvius’ treatise and this certainly helped popularize Vitruve. Martin and Goujon’s book

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281 See Vladimir Jufen, “Fra Giovanni Giocondo et le début des études vitruviennes en France” in Rinascimento, 14, 1974, 101-15, and Lucia A. Ciapponi, “Fra Giocondo Da Verona and His Edition of Vitruvius” in Journal of the Warburg and Courtauld Institute, volume 47, 1984, pp. 72-90. Fra Giocondo had produced his own rendition of the treatise; he will be discussed below. French architects such as Jan Martin, interested in the classical ideal, would have found transcribed Latin copies persisting in the libraries of monasteries and individuals like his patron cardinal Robert de Lenoncourt. Printed editions were available since 1486.
282 A French language resumé of the De Architectura had been available in the 1526 work of Diego de Sagredo, translated from Spanish into French at around 1530. Its title is as follows: Raison d’architecture antique, extraite de Vitrue et autres anciens architectes, nouvellement traduit de l’espagnol en français à l’utilité de ceux qui se délectent en edifices.
284 I here respect the spelling conventions of the original. In some instances these may appear to conflict; they conflict in the original.
285 Other treatises such as Philibert Delorme’s Premier tome de l’Architecture (Paris: Frédéric Morel, 1567) were equally important but it was as a translation of Vitruvius that Martin and Goujon’s book dominated.
286 Vitruvius probably traveled to Gaul; he hinted at stays in Books II (1.4), VII (13.2), VIII (2.6) and X (16.11-12).
288 Guillaume Philandrier, Premier livre des annotations sur les dix livres du De Architectura de Marc Vitruve Pollion par Guillaume Philandrier, Français de Châtillon, citoyen romain (Lyon: Jean de Tournes, 1552). Philandrier had released an earlier version in Rome in 1544.
success, if measured by subsequent commentaries, seems doubtless.289 With this particular interpretation then, Vitruvius would become a staple for the French designer and a requisite for the French architectural reference library.

The apparent acceptance of the Martin and Goujon edition was not unchallenged. In the mid 1550s, Jean Gardet and Dominique Bertin290 were in Toulouse preparing their own rendition, complete with a set of illustrations and Annotations that would openly criticize the earlier interpretation (figure 3.3).291 The idea of providing Annotations was no doubt sparked by Philandrier’s work, but the project appears motivated by a different set of notions than the latter’s or Martin and Goujon’s (figure 3.4). That is to say that aside from purporting to bring Latin (and Greek) closer to the French architect,292 the project does not appear to have been a direct response to the incoming Italians and their design methods, as had been the case with Martin and Goujon’s book.293 Its close reading suggests on the one hand that it was a reaction to the Martin and Goujon treatise, while on the other that it had something to do with the way the De Architectura related to the monument remnants lying within the French countryside.

289 For a partial list of commentary authors, see Françoise Fichet, La théorie architecturale à l'âge classique - Essai d'anthologie critique (Paris: Pierre Mardaga, éditeur, 1979), p. 56.
290 For biographical notes on Gardet and Bertin, see Henri Graillot, “Deux architectes-archéologues du XVIe siècle dans le midi de la France” in Revue des Études Anciennes, tome 21, 1919, pp. 290-94. For indices on dates of their births and deaths, see Henri Graillot Nicolas Bachelier (Toulouse, 1914).
291 Gardet and Bertin’s full title is as follows: Épitome ou Extrait Abrege des dix livres d'architectvre de Marc Vitruue Pollion. Enrichi des figures & pourtraits pour l'intelligence du liure. Par Ian Gardet Bovronnois, et Dominiqve Bertin Parisien. Auecq les annotations sur les plus difficiles passages de l'auteur, dediées à tresillustre Seigneur Rene de Daillon, Euesque de Lusson, & Abbé de Charroux. At least three editions were published: Toulouse: Guion Boudeville, 1559; Paris: G. Buon, 1567; and Paris: G. Buon, 1568. Original copies of the three are located, among other places, at the Bibliothèque Nationale in Paris. A further copy of the 1567 edition is located at the Canadian Centre for Architecture in Montreal. I am grateful to both institutions for making these available for the present research.
292 In their Annotations they write: “…nous ne deuions regarder à autre chose, qu’à l’avancement de notre langue, & à l’instruction des moins exercés à lettres Grécques & Latines: auxquels il facheroit beaucoup de les apprendre maintenant…”, 51. (...we did not have to look at anything but the advancement of our own language and the instruction of those less experienced in Greek and Latin literature, to whom it would cause much annoyance to learn them now…). All quotes are from the 1559 edition. References to the Annotations are henceforth noted as “Annotations”; references to the Translation are henceforth noted as “Translation”.
293 Italians continued to move to France under the protection of the Valois. The appearance of a new French edition would no doubt have further informed French builders.
ARTISTIQUE
ou Art de bien bastir,
de Marc Vitruve Pollion Autheur
ROMAINE ANTIQUE: MIS DE LATIN EN
Francoys, par Ian Martin Secretaire de Mon-
seigneur le Cardinal de Lenoncourt.
POUR LE ROY TRESCHRESTIEN HENRY II

A PARIS.
AVEC PRIVILEGE DU ROY.
On les vend chez Iacques Gazeau, en la rue Saint
Jacques a l’Escu de Colongne.
M. D. XLVII

Martin et Goujon; 1547
University of British Columbia Library; dmm

Architectvre ou Art de bien bastir, de Marc Vitruve Pollion Autheur romain antique: mis de latin en
Francoys, par Ian Martin Secretaire de Monseigneur le Cardinal de Lenoncourt. Povr le roy treschrestien
Henry II. A Paris avec privilege du roy. On les vend chez Iacques Gazeau, en la rue Saint Jacques a
l’Escu de Colongne. M.D.XLVII
While their readership would have generally been the same as that of the earlier edition -- builders and students of classical architecture -- the work appears to have been triggered by a deeper need to reconcile personal classical architectural imaginations (derived at least partly out of the panorama of ruins of southern France) to Vitruvius' set of classical precepts. In this sense at least, the immediate textual, visual and philosophical landscapes in Toulouse, which would have been somewhat different from Martin and Goujon's in Paris, closely informed their edition. While the Martin and Goujon translation had provided (and popularized) an initial link between the classical architectures of France and Italy, it was with the interpretation of Gardet and Bertin that the association of French antiquities to Roman classical monuments would become textually connected and formalized.

GARDET and BERTIN as HUMANISTS

Very little is known of Gardet and Bertin. Both spent some years in Toulouse and Bertin worked on sculpture at the Auch cathedral in the early 1550s. He was later named lieutenant du général des œuvres de massonerie et fortifications du royaume (lieutenant of the general in charge of the king's masonry and fortifications projects).294 Significant is that the général des œuvres was Jean Delorme, brother of the architect Philibert Delorme (1510-1570),295 and Bertin would have thus been well connected to French architectural circles; he may have been aware of the important work being prepared by Delorme.296 The partnership between Gardet and Bertin was undoubtedly born out of a shared task of locating marble quarries

294 Bertin held other positions, including architecte du roi, capitaine de Bagnères-de-Luchon, garde des mines pour le roi and conducteur des marbres for the royal estates. See Henri Graillot, “Deux architectes-archéologues du XVIe siècle dans le midi de la France” in Revue des Études Anciennes, tome 21, 1919, p. 291.
296 Delorme's Nouvelles inventions pour bien bâtir à petits frais was published in 1561; his more famous Premier tome de l'Architecture appeared in 1567.
necessitated by the Louvre alterations and similar projects in Paris. As they mapped and assessed sites (and eventually oversaw shipments of marble to Paris),\textsuperscript{297} the two came across ruins scattered throughout the Midi topography. Among other places, they refer to Saint-Bertrand-de-Comminges, where remnants of the hillside Gallo-roman theatre may have been apparent from a considerable distance and sections of a first century B.C. aqueduct would have been visible in their fallen state.\textsuperscript{298} It is at around the time of these travels that Gardet and Bertin set out to provide the French architect with a new translation of the \textit{De Architectura}.

As was customary during the Renaissance, the two architects interpreted their views of classical architecture through Vitruvius and therefore would have noticed the differences between the old text and the surrounding ruins. In hand, they had Martin and Goujon's edition\textsuperscript{299} and with their own work-in-progress on Midi antiquities\textsuperscript{300} it would have been relatively straightforward to identify discrepancies between Vitruvius' prescriptions and the built realities of Gaul. Martin and Goujon's interpretation, of course, was not the only related


\textsuperscript{298} Their comments on the ruins at Saint-Bertrand-de-Comminges are the earliest mention of the site. The note is contained in the Annotations, 67: “...auons nous veu aux monts pyrénéées, tout auprêts de la ville de Saint Bertrand, le plat fons, & lacunaire d’un grand conduit qui est sous terre...” (...we have observed in the Pyrenees, close to the town of Saint-Bertrand, upper and missing sections of a large conduit which is underground...). They comment especially on the qualities of masonry and mortar but are clearly impressed by remnants such as the aqueduct that they observed. Other monument traces would have been visible: the baths, forum, temple and so on. For historical accounts of the ruins at Saint-Bertrand-de-Comminges, see Raymond Lizop, \textit{Histoire de deux cités gallo-romaines – Les Convenae et les Consoranni (Comminges et Couserans)} (Toulouse: E. Privat, 1931), Roland May, \textit{Saint-Bertrand-de-Comminges (Antique Lugdunum Convenarum) Le point sur les connaissances} (Toulouse: A.P.A.M.P., 1986) and more recently, J. Guyon, P. Aupert, C. Dieulafait, G. Fabre, J. Gallagher, M. Janon, J.-M. Pailler, J.-L. Paillet, C. Petit, R. Sablayrolles, D. Schaad, J.-L. Schenk and F. Tassaux, “From Ludunum to Convenae : Recent Work on Saint-Bertrand-de-Comminges (Haute-Garonne)” in \textit{Journal of Roman Archaeology}, 4, 1991, pp. 89-122.

\textsuperscript{299} Martin is referred to in a variety of passages within the book. See for example Annotations, 26, 41, 42, 61, 62, 66, 73 and 81.

\textsuperscript{300} Although there is no known copy of their Commentary on Midi antiquities, they refer to it in the dedications of both the Translation and the Annotations; see for example “…duquel nous auons parlé en noz commentaires d’architecture, poursuivans vne bonne partie des choses mémorables, qui se treuuent de par de la.” (Annotations, 70). (… of which we spoke in our commentaries on architecture, following a great many of the memorable things, that can be found there.)
book the two possessed; among others, they mention the books of Philandrier\textsuperscript{301} and Guillaume Budé (1467-1540)\textsuperscript{302}, as well as those of Leon Battista Alberti (1404-1475) and Fra Giocondo.\textsuperscript{303} Certain it is that the two were influenced by the humanists and especially by Fra Giocondo; his earlier restoration of the \textit{De Architectura} was still popular in the 1550s and it was the principal one they would turn to for their translation.\textsuperscript{304}

Fra Giocondo had completed his fully illustrated edition of Vitruvius’ treatise by 1511.\textsuperscript{305} The book included 138 drawings, a glossary, and a chart of mathematics-related symbols employed by Vitruvius that would be echoed by Gardet and Bertin.\textsuperscript{306} Prior to the friar’s work, renditions of the treatise had had very few, if any, illustrations; copyists and translators rarely made corrections, editorial alterations, or adjustments to counter the inevitable corruptions evolving from repeated transcription. Further, the reading of the \textit{De Architectura} had been confused, due in part to Vitruvius’ ambiguous phraseology and use of Greek terms,\textsuperscript{307} as well as the fact that words, phrases and even an entire page had been out of sequence.\textsuperscript{308} Fra Giocondo had taken care to make his text clear, comparing different versions and including the combinations he felt best represented Vitruvius’ words.\textsuperscript{309} He was explicit with regards to his rationale for the emendations and alterations, stating in his title: \textit{ut}

\textsuperscript{301} Philandrier is referenced less than Martin; see for example, Annotations, 10 and 84; the latter is wrongly paginated as 66.
\textsuperscript{302} See for example, Annotations, 49. For a relevant biographical sketch of Budé, see J. Plattard, \textit{G. Budé et les origines de l’humanisme français} (Paris, 1923).
\textsuperscript{305} On early transcriptions of the \textit{De Architectura}, see the introductory paragraphs in Gustina Scaglia “A Translation of Vitruvius and Copies of Late Antique Drawings In Buonaccorso Ghiberti’s Zibaldone” in \textit{Transactions of the American Philosophical Society at Philadelphia}, 69, part 1, 1979, pp. 3-30.
\textsuperscript{306} Annotations, 39.
\textsuperscript{309} Not everyone agrees with Fra Giocondo’s emendations; see for example T. L. Donaldson “Some Particulars Relating to Manuscripts Preserved in Various European Libraries” in \textit{Royal Institute of British Architects, Transactions}, I, 1835-36, p. 116.
iam legi et intelligi posit\textsuperscript{310} (so that it can be read and understood). Indeed, having practiced architecture and engineering under several rulers in both France and Italy, he was well equipped to render a more clearly legible and understandable treatise. His interests in philology, archaeology, numismatics and epigraphy added to his interpretation and it was his knowledge of antiquities especially that offered a particularly appealing rendering for humanists: He provided an almost reverential text that subsequent translators, including Gardet and Bertin, would emulate in their quest for textual \textit{rapprochements} with Antiquity.\textsuperscript{311}

Recall that prior to the Renaissance, the monuments of Antiquity -- its treatises, buildings and ideas -- had not been temporally separated from the immediate past. They were utilized, rather, at specific moments where need arose or when solutions to arguments or problems necessitated them. Humanists began distinguishing Antiquity from the present and as Antiquity was extended back into time, it became part of a revised collective memory, was idealized, and in turn provided a template by which new monuments -- textual, architectural and ideological -- could be modeled and ultimately assessed. A new class of intelligentsia, learned in ancient thought, classical languages and their application to the new temporal realities, became experts in philology and especially archaeology.\textsuperscript{312} Between 1450 and 1600, ancient Rome was unearthed by learned individuals such as Alberti, as they drew, studied and identified monuments, all-the-while re-interpreting the \textit{De Architectura} according to their observations.\textsuperscript{313} The practice for which Alberti is so well known soon became entrenched within architectural and archaeological practice; Fra Giocondo, Martin


and Goujon, and Gardet and Bertin would necessarily engage in it within their own training and intellectual development. When Fra Giocondo temporarily relocated to France, he reinforced humanist notions within the minds of his students. Similarly, Martin and Goujon encouraged a humanist approach in interpreting classical architecture in the 1540s. And as Gardet and Bertin navigated through the landscapes of ruins of the Midi, they too would have been preoccupied with the idea of temporally distancing Antiquity through the study of texts and monuments. This would have permeated their lived experiences, shaped their outlook, and ultimately manifested itself within their translation and its Annotations.

The TRANSLATION and its ANNOTATIONS

Although never presented in a completed form, the translation and accompanying Annotations constitute an incredibly candid -- if not altogether bold -- commentary on previous interpretations of the De Architectura. The work took considerable time to reach publication and with the exception of sporadic references to later Books, only the first three are discussed within the Annotations. Judging by the errors in the page headers and pagination, the publisher may have been in a rush to print. Regardless, from the 87 pages of comments, it is possible to gain a glimpse of the thoughts of Gardet and Bertin on Vitruvius, the De Architectura, their personal classical architectural imaginations, and most certainly, the prior translation of Martin and Goujon.

314 The translation is complete; the Annotations are incomplete.
315 While there are annotations to the first three Books only, the plan seems to have been to cover the entire treatise. On page 26 of the Annotations, Bertin writes: "C'est là ... comme nous montrerons ci après sur le 7. chap. du 9. livre" (It is there ... as we will show hereafter on chapter 7 of book 9), suggesting that further discussion will take place at a later juncture.
316 The header of page 47, for instance, refers to Book II, although the discussion relates to Book I.
317 For example, page 84 is numbered as page 66.
318 A rush to publish would explain the book's unfinished state.
Written by Gardet, the Annotations begin with a dedication to René de Daillon, Bishop of Luçon, followed by polite praise for Martin and Goujon and a four page introduction within which Vitruvius is carefully recalled:

*M. Vitruue Pollion, autheur d’anciéne marque, en la suite de ses dix liures : Si non si amplement, & par telle facilté qu’on desireroit bien, aumoins aueq’ grand témoignage de son érudition, & connoissance de maintes disciplines, desquelles il auoit acompagné l’expérience de céit art...”*  
(Marcus Vitruvius Pollio, author of ancient stature, in the course of his ten books, if not amply and with such facility as one might well desire, at least with great testimony to his erudition and knowledge of many disciplines, with all of which he had accompanied the experience of this art...).

And as with previous translators, the importance of the *De Architectura* is stressed:

*...les écris de telle importance & qui apartiécnten plus à l’institutin d'un architecte, que les épisodies aux farces & fables des anciens.*  
(...the writings of such importance that belong more to the instruction of the architect than the episodes do belong to the farces and fables of the ancients).

The introduction seems to suggest that the translators do not value the classical myths (and perhaps other classical texts) as highly as they do the treatise of Vitruvius. Nonetheless, the section is followed by an additional three-page message to the reader. The long passage has a personal tone to it and its position in the work suggests it was probably added after the initial drafting of the main text. One sentence is particularly revealing:

*Or puis qu’il est ainsi, que l’vtilité commune doit être préférevre aux particuliéres affectionts, & que ces choses se doient iuger à la mode des Séuères, & incorruptibles aréopagites athénienfs, ie consens volontiers que mes fantasies soient mises en la même balance, ou i’ai poisé le labeur*  

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319 Bertin drew the illustrations.  
320 Annotations, 2.  
321 Annotations, 3.
d'autre". (Because it is such that common utility must be preferred over singular affections, and that these issues must be judged by the ways of the severe and incorruptible Athenian areopagites, I agree willingly that my fantasies be placed on the same balance in which I have placed the work of others).

What Gardet is saying is that a certain amount of imagination formed part of his interpretation. This is not unordinary, of course; what reader does not incorporate personal sets of meanings and mental images in reading a text? However, in this case, Gardet seems to be suggesting that he has incorporated his imaginaries within the translation and that these are as acceptable as any text written by the ancients. While all translations are interpretations and thus alter the earlier version, here the implication is that there is some level of inventiveness and that this inventiveness is quite acceptable.

It is somewhat paradoxical that while admitting to the liberal interpretation of some passages, Gardet repeatedly points to Martin’s text as erroneous; Gardet in fact almost immediately begins to focus on what he see as errors in Martin’s translation. From the beginning, Gardet appears to be positioning himself above Martin as a superior arbitrator of meaning in terms of Vitruvius’ words. Oddly enough, however, Gardet’s partner uses the drawings provided by the earlier translators as models for his own; figures 3.5a-b and 3.6a-b, for example, show how the capital and theatre engravings of the Martin and Goujon edition were reversed and only slightly altered for the new book. The sectioned column, for instance has been changed, and the upper capital is slightly different, but otherwise the two “revised” engravings offer no substantial change to the original versions.

322 Annotations, 6.
323 Gardet and Bertin would not have known the extent to which Martin and Goujon were turning to their own fantaisies in translating the De Architectura. It is probable that they would have assumed that they were.
Figure 3.5a - Gardet et Bertin; Composite Capital

Gardet and Bertin; 1567, Translation, p. 87
Canadian Center for Architecture

Figure 3.5b - Martin et Goujon; Composite Capital

Martin et Goujon; 1547, Translation, p. 48
University of British Columbia Library; dmm
Figure 3.6a - Gardet et Bertin; Theatre Plan

Gardet and Bertin; 1567, Translation, p. 141
Canadian Centre for Architecture

Figure 3.6b - Martin et Goujon; Theatre Plan

Martin et Goujon; 1547, Translation, p. 75, verso
University of British Columbia Library; dmm
The first term discussed in the Annotations is *graphis* and Gardet carefully presents it with its related vocabulary.\(^{324}\) The discussion focuses on the importance of providing graphic depictions for buildings: "[...] il fait le plan, & la montée d'vne des faces, & la montre des cotés r'acourcis par l'art de perspective...".\(^{325}\) (he makes the plan and the elevation of one of the façades, and then shows it from its sides foreshortened by the art of perspective).

Once the basic instruction is given, Gardet’s narrative moves to the need for a wooden model. To the latter, Vitruvius was calling for such a model when he turned to the word *exemplar* in Book I.\(^{326}\) In order to fully convince the reader, Gardet suggests that this is also what the Elder Pliny had intended in his Book XXXV.\(^{327}\) Gardet is here reverting to the familiar device -- one employed repeatedly by Vitruvius -- of turning to ancient sources to purport authority. It is possible (and probable) that this is how Pliny had interpreted Vitruvius, but this does not necessarily make it more accurate.\(^{328}\) As Gardet continues with an argument for a wooden model, he shifts the emphasis from *graphis*, to *exemplar*; to him, *exemplar* is similar to *forma* and *formare* and it signifies "pour faire modelle" (to make a model).\(^{329}\) Gardet includes other terms such as *graphicè*, *grammicè*, *formatio*, all incorporated within what becomes a complex and circular discussion of *graphis*.\(^{330}\) In the end, the reader has to take his word for it. Yet when we go back to Martin, we see that he did not mention a wooden model at all; he wrote: "*modelle faict apart*" (model made separately)\(^{331}\). Nor did Vitruvius, who probably used "*exemplaribus pictis*" (painted examples)\(^{332}\). It would seem then, that in this case at least, it is Gardet who is misinterpreting Vitruvius’ manuscript as he switches from a painted model to a wooden one.\(^{333}\)

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\(^{324}\) Annotations, 7.

\(^{325}\) Annotations, 7.

\(^{326}\) See "*exemplaribus*", I (I, 4).

\(^{327}\) Historia Naturalis, XXXV. 12.

\(^{328}\) Pliny mentions the *De Architectura* in Books XVI, XXXV and XXXVI of the *Historia Naturalis*.

\(^{329}\) Annotations, 7.

\(^{330}\) Annotations, 7-10.

\(^{331}\) Martin, 5, verso.


\(^{333}\) It is not clear why Gardet would have opted for a wooden model in the first place, although he may have been guided by his own prior training and experience.
Considering that the Martin Annotations are comprised of relatively short entries that for the most part explicate geographical terms and identify classical personages, Gardet undoubtedly wants to fill-in what he sees as gaps. Yet he goes much further than supplying more details than Martin: He repeatedly points to “errors” within the earlier book. A little later in the Annotations, for instance, in a section regarding timber use by the Colchian people, Gardet records that:

...Jan Martin n'a pas assez entendu quelle étoit la manière de bâtir en Colchis : voire que ni la figure de Iaconde, ni celle de l'italien, ni du françois, ne peuvent point reuenir au sens de l'auteur : à raison de quoi, ie te mettrai le texte latin, afin que tu le collationnes s'il te semble bon à la version française.  

(Jan Martin has not sufficiently understood the way of building in Colchis: Neither the drawing of Giocondo, nor that of the Italian [Alberti], nor that of the Frenchman [Martin], are able in any way to go back to the intent of the author. For this reason, I shall put here the Latin text for you, so that you may compare it if you wish, to the French version).

Here Gardet points out that Martin (and others) have erred in their pictorial and textual interpretations and he inserts the Latin version of the said passage, recounting the story of timber construction among the Colchian people.  

Aside from the obvious authoritative feel rendered by the inclusion of the Latin quote, there is no reason for him to include it; if he is translating it correctly as he says he is, then why reproduce it within in his text? Further making his point difficult to interpret, Gardet offers no drawing to clarify the apparently confused visual representation presented by Martin. Again, he does not actually show how Martin erred; he represents the story and leaves the reader with the impression that his is the most correct and credible.

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334 Annotations, 42.
335 He is here referring to the narrative found in Book II (1.4).
336 Annotations, 51.
337 The drawing that Gardet is referring to is in Martin and Goujon’s Translation, 16, recto.
338 In Martin and Goujon’s Annotations, Colchi is included and geographically situated in a brief entry; no discussion related to the Chalcidian timber construction narrative is provided.
Consider another example of the criticism: In his discussion of the Circle of the Winds for instance, Gardet writes that:

_{Si l'on pratique la traduction de notre epitome, sur la figure du 16, feuillet, il sera facile de sortir de la confusion qui est au texte de Ian Martin.}^{340} (If one works with the translation of our epitome, on the basis of the figure of folium 16, it will be easy to escape the confusion which is in Jan Martin’s text).

To Gardet, Martin’s translation is confused and the diagram is inadequate, rendering interpretive error in the reading of the section on winds. Gardet provides a diagram of his own, presumably to offset the Martin “ambiguity” (figure 3.7a-b). In this case, Gardet’s criticism can be initially seen as fair as Martin does not provide nomenclature linking the drawing in his translation to the text. However, closer perusal of Martin’s drawing suggests that it is well integrated with his discussion of the winds as relating to town planning. While the cardinal directions are not necessarily explicit in Martin’s drawing, the governing grid in his illustration suggests an implicit meaning to the reader. In Gardet’s translation, the drawing becomes confusing because of its placement: The illustration is not discussed in its proper place; while reference to it is made on page 26 of the Annotations, it is not discussed until page 40. The placement of the diagram and its references and links to the text in fact render an exposition of the Circle of the Winds that is much more confused than Martin’s passages.

In the Annotations to Book II the references to Martin’s “errors” multiply. Consider the passages related to the use of wall surfacing and stucco or plaster.\footnote{The Circle of the Winds passage is in Vitruvius' Book I (6. 4-13).}^{340} \footnote{Annotations, 26.}^{341} \footnote{References to wall and revêtement are made in other Books. For example, aside from Book II (3.2 ; 4.3 ; 5.1 and 8.20) there are sections in Book VII (2, 3, 4, 5, 6).}
Figure 3.7a - Gardet et Bertin; Circle of the Winds

Gardet and Bertin; 1567, Translation, p. 16
Canadian Center for Architecture

Figure 3.7b - Martin et Goujon; Circle of the Winds

Martin et Goujon; 1547, Translation, p. 12, verso
University of British Columbia Library; dmm
Note that in three areas of this chapter, and in one of the following chapter, Jan Martin has given the wrong meaning to *tectorium*, taking it for a covering.

The said mis-interpretation is highlighted as one that centres on “wall covering” versus “plaster” or “stucco” and Gardet indicates that Vitruvius himself:

*...traitte au 7. livre, de oper & tectorio, qui est la maniere d’enduire les murailles.*

On the one hand Gardet asserts that *tectorium* was employed by Vitruvius as meaning “method” of applying wall covering, while on the other he sees Martin as having translated the word as “covering”. The usual authorities are evoked to buttress the argument:

*...de quoi Pline fait mention, au lieu dernierelement allegue, & Palladius en parle, au 15. chap. du I. livre* (... of which Pliny mentions, in the place just recalled, and Palladius speaks of it, in Chapter 15 of Book I).

Throughout, the implication is that Pliny and Palladius are in some way more correct than Martin. The only “proof” of the “flaw”, however, is in the naming of authorities. Closer reading of Martin’s text suggests that it is Gardet who is misinterpreting the words of Vitruvius: While Martin does not directly refer to wall covering such as plaster in all related passages, he does allude to the poor quality resulting in the method of application of mortar...
to brick walls. The lines in Martin's book are relatively clear and do relate to "method". Without the effort on the reader's part to compare the versions, the recalling of authorities by Gardet renders a feeling of accuracy and "truth" that Martin's text does not provide.

The case against Martin continues within the elaboration of cubicula -- a private sleeping chamber:

Le commentateur Italien, peut avoir donné occasion à Jan Martin, d'interpréter en cet endroit, cubicula, les troux qu'on fait pour échauffauder ; mais ici & en plusieurs autres lieux cette diction signifie les couches & asiettes des pierres. (The Italian commentator may have given occasion for Jan Martin to interpret in this place cubicula as the cavities created for scaffolding. However, here, and in many other places, this expression signifies the layers and courses of the stones).

As in the previous case, Gardet insinuates that there is interpretive error in places beyond the immediate notation. The statement revolves around eschiquier -- a squared pattern in stone (and brick) construction -- and he suggests that the term refers to the arrangement of stone courses rather than the openings left in stone walls for the installation of scaffolding. The insinuation is that Martin has interpreted the segment as meaning the latter. It is worth quoting Martin's words here:

Les especes de massonnerie sont, celle qui est faicte en retz ou eschiquier, de laquelle chacun se sert au temps qui court: & l'antique appellée incertaine. Celle en eschiquier, est de forme beaucoup plus belle: toublesfois elle est merueilleusement subiecte a se fendre, a cause qu'estant destoincte en toutes les parties, ses troux qui ont esté faictz pour eschauffauder, & s'es lyaisons ne se peuvent si bien massoner comme il seroit requis. (The types of masonry include that made up of interlocked and chequered patterns, which are currently in

347 Annotations, 62.
348 Martin et Goujon, Translation, Book II (8), 20, verso.
use; its name in Antiquity is unknown.  This chequered type is the most beautiful, although it is prone to fracturing due to its disjointedness on all sides as well as the scaffolding cavities and the jointing problems posed by the nature of the patterning).

Note that while Martin does state that the cavities left for scaffolding weaken the wall, he in no way suggests that that is what he means with the word “eschiquier”. It appears once again that it is Gardet who is misinterpreting the wording.

As a final example, consider Gardet’s notice regarding Martin’s discussion of construction details and to some extent, moellons, or squared building stones. He disagrees with Martin, registering that:

\[\text{De ce tendre moellon Vitruue ne prend point en ce lieu, polita, pour signifier élégante ni polie, mais pour denoter vne structure vnie & à l'équierre, pour se faut il corriger dans Ian Martin, de blocage poli ni délicat.}\]

(Of this tender building stone, Vitruvius does not employ polita to signify elegant or polished; he employs it to denote a structure which is united and squared and in this sense we have to correct in Jan Martin).

The note seems trivial; Vitruvius was discussing Greek methods and while Martin does write “blocage poly ny délicat”, the interpretation is not altogether erroneous.

The underscoring of the errata and misinterpretations of Martin (and Goujon) is dotted throughout the Annotations of Gardet and Bertin. It is in fact the main concern of the

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349 The pattern discussed is no doubt related to opus reticulatum.
350 Vitruvius, Book II (8.5).
351 Annotations, 66.
352 Martin and Goujon Translation, 21, verso.
353 Callebat, for instance, uses the term plastique, among others, in his translation; see Callebat and Gros, 25.
Annotations. Without actually presenting “proofs”, Gardet repeatedly implies confusion and error in Martin’s interpretations. The fact is that Vitruvius’ tenets are general and his language is at times obscured by the use of Greek terms and his own style of writing. Martin -- as other translators -- is simply making the best out of the transcriptions that have come down to him; no translation of the De Architectura is without its ambiguities. Why then, are the two architect-translators from Toulouse so intent on discrediting the earlier work of Martin and Goujon? One reason seems probable: They highlight “errors” in the previous translation in order to give their work a higher degree of “accuracy” and legitimacy. I would like, however, to suggest a further, related reason: They need to take on authority (by questioning the accuracy of previous translators) in order to present another argument: They want to suggest that Vitruvius’ treatise is directly connected to the ruins in the French countryside.

CONNECTING VITRUVIUS to the FRENCH LANDSCAPE

Another trend emerges within the pages of the Annotations: Within his examplar, Gardet repeatedly evokes the notion of memory as he turns to Midi antiquities and their associated significance. That he highlights “memory” should not be surprising; Vitruvius certainly had done so in several places and including it is in a sense a rhetorical device. The latter alluded to the architectural memory of his readership when he mentioned memoria and memoratur at various points. In Book I, for example, he evoked memory in referring to his own “zeal [...] which had remained faithful to [...] the emperor’s father’s] memory” before mentioning that the emperor’s monuments were

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354 Martin and Goujon had echoed Vitruvius’ words in their translation, but they had not given it any attention in their Commentary.
355 Vitruvius mentioned memoria in Books I, III, V, VII, IX and X.
356 Vitruvius alluded to memoratur in all Books except I, V and VI.
357 In this note and those that follow, I turn to the translation of Vitruvius by Ingrid D. Rowland (Cambridge: Cambridge university Press, 1999). “Cum autem concilium caelestium in sedibus
“a memorial to future ages”\textsuperscript{358}. He was fully aware of the posterity, legacy and meaning of Republican landscapes -- especially built landscapes -- and he was cognizant of a cultural memory, the recording of history, oral or otherwise, and the reliance on tradition. As I have already pointed out, the three were in fact juxtaposed within his notion of the old ways. Early on in Book I he underscored the importance of the architect keeping track of “useful [architectural] precedents”\textsuperscript{359} and remembering historical antecedents.\textsuperscript{360} Later, he reminded the reader of previous textual and memorized works\textsuperscript{361} and he noted the importance of the recording of memorentur antiquitus -- his own antiquity, as he wrote about Mount Vesuvius.\textsuperscript{362} What Vitruvius did, in fact, was link built monuments to cultural memory.

\textsuperscript{358} “Cum ergo eo beneficio essem obligatus, ut ad exitum vitae non haberem inopiae timorem, haec tibi scribere coepi, quod animadverti multa te aedificavisse et nunc aedificaret, reliquo quoque tempore et publicorum et privatorum aedificiorum, pro amplitudine rerum gestarum ut posteris memoriae tradarentur, curam habuitur. Conscripsi praescriptiones terminates, ut eis adiendens et ante facta et futura qualia sint opera, per te posses nota habere.” (“Therefore, because I had been put in your debt for the favor whereby I will never harbor the fear of want for the rest of my life, I began these matters for you. For I perceived that you had already built extensively, were building now and would be doing so in the future: public as well as private constructions, all scaled to the amplitude of your own achievements so that these would be handed down to future generations. I have set down these instructions, complete with technical terms, so that by observing them you could teach yourself how to evaluate the works already brought into being and those yet to be.”); I (preface, 2).

\textsuperscript{359} “Litteras architectum scire oportet, uti commentariis memoriam firmiorem efficere possit.” (“An architect should understand letters so that he may strengthen his own memory by reading what has been written in the field.”) I (1.4) Emphasis is in translation text.

\textsuperscript{360} “Historias autem plures novisse oportet, quod multa ornamenta saepe in operibus architecti designant, de quibus argumentis rationem, cur fecerint, quaerentibus reddere debent.” (“He should know a great deal of history because architects ofetn include ornaments in their work, and ought to be able to supply anyone who asks with an explanation why they have introduced certain motifs.”) I (1.5) Emphasis is in translation text.

\textsuperscript{361} “Maiores cum sapienter tum etiam utiliter instituerunt, per commentariorum relationes cogitata tradere posteris, ut ea non interfrent, sed singulis aetatis crescentia voluminis edita gradatim perveniret vetustatibus ad summam doctrinarum subtilitatem.” (“Our ancestors, not only wisely but also usefully, established the practice of transmitting their ideas to posterity through the reports of treatises, so that these ideas would not perish, but instead, as they grew with each passing age and were published in books, they would arrive, step by step, at the utmost refinement of learning.”) VII (preface, 1).

\textsuperscript{362} “Non minus etiam memorentur antiquitus crevisse ardores et abundavisse sub Vesuvio monte et inde evomuisse circa agros flammam.” (“Antiquity records that fires cropped up in greater abundance under Mount Vesuvius and that flames vomitted forth from thence into the surrounding countryside”). II (6. 2).
Of course Vitruvius' memory of the past -- his ancients -- would not necessarily have been synonymous with Gardet and Bertin's personal memories -- personal constructions -- of Antiquity; Renaissance humanists were just beginning to differentiate "recent" from "distant" pasts. However, recall that one of the humanists' main preoccupations was to connect present thought to the notions associated with Antiquity. In this light, linking their built and cultural landscapes to ancient Rome would have been fundamental. And for the French humanists who were geographically removed from Rome, this goal would have been somewhat amplified. In the case of Gardet and Bertin, their day-to-day exposure to Vitruvius' text would have been a constant reminder of the grandeur of Rome; coupled to that, their regular contact with the antiquities of the Midi would have hinted at the grandeur of Gaul. It is no leap of logic to say that for this reason they would have attempted to link the monuments of the Midi to Vitruvius.

In the Annotations to Book III, Gardet includes a detailed discussion of some of the sepulchers that he and Bertin had observed during their travels.\textsuperscript{363} They transcribe and reproduce related inscriptions, as well as provide relatively detailed explanations for their examples.\textsuperscript{364} The locations of the monuments in the vicinity of Narbonne and Saint Girons, along the east-west transect of the Midi, reflect the marble-seeking mandate of the two architects. Their itineraries would have traced a path from Narbonne through the early Roman route to Tolosa -- Toulouse -- as well as dozens of villas such as Arnesp and Chiragan, military camps, marble quarries, outpost towns like Callagoris and Vernosole, and of course, the sepulchers along the way.\textsuperscript{365} The two studied a variety of ruins as they navigated throughout the region and worked on their now lost Antiquities Commentary. The monuments in these places remained unexcavated and "un-revived" within their lifetimes and it is only through the use of their collective imagination that they would have been able to

\textsuperscript{363} Annotations, 65.
\textsuperscript{364} The inscriptions are reproduced in Graillot, 292-293.
\textsuperscript{365} They went at least as far east as Saint-Bertrand-de-Comminges.
interpret them. This brings us back to a previous point: the translation's reference to the use of *fantaisies*. In an early passage of the Annotations, Gardet writes that:

_Aprèq l'architecte a imaginé vne certaine ordonnance de l'édifice futur, avant toute œuvre il en pourtrait le plan ou forme du parterre, ce que Vitruve appelle ichnographie, par vn nom emprunté des grecs... Cette espece prouvent de la fantaisie, & aussi de l'invention de l'artiste..._ 366 (After the architect has imagined a certain order of the future building, before any work is done, he draws the plan or ground shape, with what Vitruvius calls *ichnographia*, with a name borrowed from the Greeks... This space is derived out of fantasy and is also the invention of the artist...)

This is not the first time that he uses the word *fantaisie* but here he goes beyond the use of imagination in architectural design and in the interpretation of Vitruvius’ words; he implies the liberal use of the imagination -- *l'invention*, which should be tempered by the tenets of the _De Architectura_. This is part of Bertin’s wider argument suggesting that it is acceptable to interpret the _De Architectura_ and ruins with a certain amount of fantasia -- the ruins’ interpretation being tempered through the reading of Vitruvius. Thus if the connecting of the French landscape of ruins to that of the Roman classical world is not directly enabled through the translation of the _De Architectura_, it is facilitated through the Annotation’s approval of imaginative interpretations.

Consider the discussion of the term *sepulcrum* where Gardet digresses on monuments, memory and the way the two are related. While referring to his own translation, 367 he writes:

... _ce qui est au texte latin, de nonnullis monumentis...Ian Martin l'a traduit, Par certaines reliques d'antiquité, & au parauant au 7. chapitre, il auroit dit, fragmens d'antiquité : mais nous prenons ici monumenta pour les sépulchres, ou monumens, suivant le témoignage de Térence Varron, qui au livre de la langue Latine montre ces mots, memoria,

366 Annotations, 10.
367 He is referring specifically to page 32.
manimoria, mamuria, monere, monimenta, être sortis tous d'une lignée".\textsuperscript{368} (…in terms of the Latin text, of nonnullis monumentis…Jan Martin has translated it as ‘certain relics of Antiquity’, and in the earlier Chapter 7, he said ‘fragments of Antiquity’. But here we take monimenta to signify sepulchres or monuments, following the testimonial of Terence Varro, who in his On the Latin Language outlines these words memoria, manimoria, mamuria, monere, monimenta as derived from a single lineage).

Now that he has evoked the writings of Varro, he immediately quotes him:

\begin{quote}
Les monumens des sepultures, dit-il, sont pour cette cause, sur le chemin, à fin qu'ils amonêtent les passans d'être mortels, et qu'ceux qui ont été là enséuelis, ont été quelquefois : et de la est venu qu' toutes autres choses écrites ou faites en memoire de quelqu'un ont été appelées monimenta'.\textsuperscript{369} (The monuments of the sepulchres, he says, are for this reason located along the roads, so that they may remind those passing by that they are mortal, and those who are there buried, that they were once mortal. And from thence all things written or made in the memory of someone were called monimenta).
\end{quote}

This is arguably one of the most significant moments in the Annotations: What Gardet is saying is that “nonnullis monumentis” -- the many monuments in the landscape -- should not simply be interpreted as “reliques d'antiquite” or relics of Antiquity (as Martin had done) but that they should instead be understood as monuments in the context of the sepulchres Varro had written about -- the sépulchres. By insisting that Vitruvius was writing about “monument” in terms of memory, which is obvious, and that the sepulchres of the Midi are typical monuments of memory, there is a link between the word “monument” in the De Architectura and the sepulchres -- the monuments -- of the Midi that becomes established for the reader. After this point, the monument references within the Annotations relate not only to those of Rome, but also to those of the Midi.

\textsuperscript{368} Annotations, 62-63.
\textsuperscript{369} Annotations, 63.
Once “the memory of Antiquity” and “the monuments of the Midi” are partnered, Gardet is free to infer that the classical monuments of southern France are synonymous with the monuments that Vitruvius refers to. Gardet uses what is in his immediate surroundings to define what is meant by “monument” within the De Architectura -- this in spite of the fact that Vitruvius could not possibly have been writing about the sepulchres of Gaul. And if the reader of the Annotations accepts Gardet’s idea that imaginative interpretations of Vitruvius’ treatise are acceptable, the latter readily become tied to the French ruins. In other words, to these translators especially, it is not uniquely the grandeur of Rome’s monuments that the De Architectura is about; it is also the grandeur of Midi antiquities.

CONCLUSION

At first reading, the project of Gardet and Bertin appears to have been prompted by the Martin and Goujon book. The two architects in Toulouse had a very different set of realities in the Midi and regarded the earlier translation as flawed, aiming to provide an alternative reading of Vitruvius’ treatise. Aside from purporting to bring the classical treatise closer to a non-Latin readership of architects and builders, Gardet and Bertin had other objectives in mind. By readily admitting to the possibility of errata in their own work\textsuperscript{370} and underscoring that other versions also contained interpretive errors, they assumed authority and correctness over prior translations. In order to point out the “errors”, they offered a set of Annotations that extended well beyond the lexicon-like commentaries of some of the earlier editions, undertaking what would have been an early version of an apparatus criticus. While this is noteworthy -- no-where, for instance, had anyone been so explicitly critical of Martin’s passages -- it is more significant that while openly critiquing other translations, they freely

\textsuperscript{370} Annotations, 6.
admitted that fantasia -- "mes fantaisies", as Gardet called them -- informed part of their work.\textsuperscript{371}

The project of Gardet and Bertin seems to have been precipitated by a need to reconcile their immediate landscapes and architectural ideals with Vitruvius’ set of classical precepts. What Martin and Goujon had not done (directly link the Gallo Roman landscape to the Roman panorama), Gardet and Bertin would attempt to do within their Annotations. In spite of admitting to the recourse of fantasia in interpreting Vitruvius, Gardet and Bertin lured the reader towards their interpretation and implicitly towards themselves as purveyors of a more accurate \textit{De Architectura}. The open critique of Martin and Goujon’s translation repeatedly reminded readers that Gardet and Bertin’s was more correct. And as Vitruvius had done, they turned to classical “authorities” to strengthen their case. The inheritance of Antiquity sited on the one hand within the textual renditions of Fra Giocondo’s book (the \textit{texte de base} for Gardet and Bertin) and on the other hand within the visual remnants of the Midi, provided the two with a particular set of vignettes that, with the use of the Annotations, juxtaposed one with the other to provide a set of classical models within the French architect’s geographical reach. Now that the monuments of the Midi were textually tied to those of Rome, the former could be more readily accepted as classical models to be later reconstructed according to combinations of Vitruvius’ prescriptions and examples of Rome. All the French architect had to do to understand the classical architecture of the south was dig up antiquities, or better yet, imagine these through a reading of the \textit{De Architectura}. This \textit{modus} would ultimately facilitate the production of a particular body of classical architectural knowledge directly linking the Midi monuments to the words of Vitruvius.

\textsuperscript{371} The comment is made in the Annotation introduction, page 6.
CHAPTER CONCLUSION

With the popularity of learned inspection of Roman monuments and the re-discovery of classical texts, the habit of comparing what was observed in the field to what was read in the texts was born. Accurate and measured drawings on the one hand, and more imaginative and inventive renderings on the other hand, of the monuments at places like Rome, Pompeii, and Paestum were produced from the very early part of the Renaissance onwards. To be learned was to study classical texts and monuments. Eventually, mostly through the Académie’s policies, reconstructing monuments became part of the architectural and archaeological curricula.

The popularity of the study of ruins in France was delayed (as compared to Rome). However as architects traveled through the Midi on the way to and from Rome, they undoubtedly would have pondered those monuments -- Orange, Vienne, Arles, Nîmes and so on. In order to study the French ruins, one would have to be equipped with an appropriate texte de base: the De Architectura would thus be embraced within the study of French monuments.

The transmission of the De Architectura to France during the sixteenth century had a significant impact on the interpretation of ruins, the classical architectural imagination of French architects and archaeologists, and, as I will highlight in the next chapter, the production of architectural and archaeological knowledge and the construction of classical monuments. The translation and annotation project of Gardet and Bertin in the 1550s is an example of how the treatise of Vitruvius was attached, inextricably, to the antiquities of southern France. The two architects aimed at providing a reading of Vitruvius’ books that would, through the admitted use of inventiveness, reconcile ruinous French landscapes and architectural ideals with Vitruvius’ set of classical precepts. This would become an ongoing tradition that would continue well into the present century, facilitating both classical architectural knowledge production and the liberal use of the imagination in interpreting the older treatise and linking it to ruins.
In this second Interlude, I would like to illustrate, as plainly as I can, the difficulties with the practice of classical-archaeology-as-science. I relate my critique -- and it is a critique -- to my experience in the field and the methods manuals I have turned to during the past decade. This is therefore not intended as a discussion of the theoretic that permeates the academic literature; it is an illustration of a reality -- my own -- as observed over a dozen seasons of fieldwork in France. While my thoughts are grounded in this fieldwork, I take my cues from the philosophy-of-science work and observations of Bruno Latour (1999) and especially his discussions of "circulating reference" and the questions around "pack[ing] the world into words" (24).


Bruno Latour's 1999 Chapter entitled "Circulating Reference - Sampling the Soil in the Amazon Forest", in *Pandora's Hope – Essays on the Reality of Science Studies* (Cambridge and London: Harvard University Press, 1999) is a re-edited version of an earlier paper entitled "Le 'Pédofil' de Boa Vista" in *Common Knowledge*, volume 9, number 1, spring, pp. 144-87, 1995. I also consider his "Les 'vues' de
Acknowledging that there are different thought streams in archaeological practice, they all to some extent use “science” as a primary pillar. This includes conservation archaeology, environmental impact archaeology, new world archaeology, “archaeology as human ecology”\textsuperscript{375} and so on. What I would like to discuss here is a disciplinary focus that takes on a particular view of archaeology; that is to say, “the classical world” as represented through material culture. I am talking about sanctioned projects which exist for the most part within state (cultural) or academic (classical) programs and that rely for the most part on the investigation of monuments or other sites linked to classical antiquity for their interpretations.

As pointed out in the introduction to Chapter 3, the discipline of archaeology has persisted as a collector/interpreter practice since its inception during the early Renaissance. Until the 1840s it was an activity undertaken mostly by historians and antiquarians. And while geologists practiced an archaeology of soil -- especially by looking at stratigraphy for clues regarding geomorphology -- the scientification of the discipline did not really begin until the mid to late nineteenth century as archeologists looked to geology and in turn, chemistry, physics and biology for their generalized scientific approaches. When I refer to classical archaeology then, I mean the disciplinary practice that includes on the one hand the inherited habits that are linked to the antiquarians’ collecting, and on the other, linked to the borrowed theoretic of \textit{la méthode scientifique}.

The first thing that needs to be said about classical archaeology is that it is inextricably linked to philology, epigraphy and numismatics. The interpretation of classical texts,
engravings and coins is especially important in determining the significance of specific sites and monuments. As I have pointed out with Vitruvius' treatise, classical texts are interpreted, analyzed, re-translated, annotated, recalled and referenced whenever needed; they are, in this sense, most authoritative in nature. Textual references, whether Vitruvius, Strabo, Pliny the Elder or any other classical author, give an archaeological site added importance that is difficult to question: Because the site's name is in the book, the site is significant and "real". Aside from establishing a textual reference to a site, there is perhaps nothing more tantalizing for the archaeologist than to locate un bout d'inscription; the unearthing of a marble fragment with an inscription, for instance, is one of the most significant developments of any excavation. However partial, it is cleaned, photographed, "rubbed", sketched, measured and of course, transcribed and translated. Of late it is even geo-referenced using a laser theodolite and global positioning system that situate it precisely onto the terrain and a subsequent map. Its position -- vertical, horizontal, and vis-à-vis other finds and the walls of the trench -- involves the all-important idea of context, a notion I will return to below. The finding of a coin, not unlike the text and the inscription, especially if determined to have been found "undisturbed" from its initial context, is key in assuring the "dating" success of the dig. After careful measurement within its "found" state, the coin is cleaned and examined under a magnifying glass; the archaeologist might even spit on it to accentuate the relief, then, after identification, sketch and photograph it.

The philologist, epigraphist and numismatist are "interpreters" and work closely with the archaeologist. The three "sub-disciplines", if I can call them that, are closely related to the collecting mode of Art History; in other words, they carry within their disciplinary structures, the memory of Art History. I leave them aside for a moment and in order to illustrate the transformative process that occurs in archaeological practice, I need to describe the main activities of the archaeologist.

One of the first activities of the field archaeologist is the perusal of maps and photographs. This activity is somewhat complex -- even mysterious -- involving the assessment of mapped
features, all considered along with other factors as deduced from detailed cartes topographiques, air photographs, satellite imagery and so on. Within the map is the work of countless individuals, all experts in their own scientific disciplines; there are very few errors, if any, and the sheet reveals a certain ground "truth". The map seems to be a code within which official grids, measured elevation patterns, surveyed roads, waterways, lot lines, parcel numbers and feature labels are deciphered to arrive at the best few square meters to excavate. Supplementing the map are any previous archaeological surveys produced by earlier archaeologists. The older surveys, however, are not to be trusted; they are used with extreme caution and part of the overall task will be to verify and correct them: This will be the mise-à-jour du plan archéologique, arguably one of the most significant components of the archaeological project. Thus the archaeologist carefully weighs all of the mapped information and once private permissions and public permits are secured, ground surveying activities can begin.

Ground surveying is closely linked to the scrutinizing of maps and photographs and includes all kinds of related actions, depending on project budgets, personnel abilities, team capacities, equipment availability, and so on. Photogrametry, stereoscopy, geophysical prospecting, electrical resistivity, magnetic surveying with proton magnetometers and proton gradiometers, seismic surveys, satellite imagery and among others, the more rudimentary ground search survey are possible options. All of these rest within a single premise: The precise locating of any "discovered" element is key in understanding it. Its spatial context within some sort of grid superimposed upon the terrain thus becomes crucial. Most advances in archaeological field methods have in fact been related to the development of equipment and ability to situate finds at varying scales within the archaeological site. In France, the Lambert Coordinate system\textsuperscript{376} is used as "interlocutor"\textsuperscript{377} between the ground and the map.

\textsuperscript{376} Developed in the late eighteenth century by Jean Henri Lambert (1728-1777), the Lambert Coordinate System is based on an equal-area azimuthal projection; Lambert coordinates are used for establishing grid-points and grids.

\textsuperscript{377} I here use Bruno Latour's term, signifying the device through which "world" is transformed into the "word".
The next step, after the perusal of maps and surveying of the site, is one which is closely linked to surveying; it is the siting of the *sondage*, or trench. Many questions arise -- two by three meters or three by four meters, for example -- and aside from logistical considerations such as the amount of labor available for earth removal, the trench is framed within the general site. If the archaeologist is fortunate, a laser theodolite will be available. With millimeter accuracy and data referencing compatibility with satellite coordinating systems, the archaeologist can pinpoint (literally) the position of the *sondage*. The resulting position, or set of positions, because the position of the *sondage* is established not just in relation to its surroundings, but also to other *sondages*, is “accurate” and establishes more than physical limits; it assigns and registers scientific authority to the site and more significantly, it in turn establishes the scientific limits of the study. Even before actual excavations begin, with corner posts and strings delineating the future hole, there is a certain sanctity to the site; something important lies beneath. At some point in the early stages of the digging, the trench is divided into smaller units, squared, to facilitate the positioning of finds, and to better manage the process. The *sondage* is now fixed, measurable and mapable, ready to be peeled, layer by layer. And at the same time, the grid hovers above, ready to assist in the positioning and situating of whatever it is that is about to be uncovered. The imposition of a grid upon the archaeological terrain and subsequent surveying and precise positioning of features are the first steps in a complex process involving the transformation of the unexplored earth into a tamed, known entity.

The best *sondages*, most archaeologists will agree, are those with the most perfectly aligned walls -- vertically and in relation to each other. In other words, the faces should be, as much as possible, at ninety degrees to each other and the walls should be, as much as possible, at ninety degrees to the bottom. This is presumably so that the stratigraphy can be closely observed as one descends towards the lower reaches; it is, however, more often related to the fact that it tends to make better photographs. The reality of this *modus operandi* is that it too closely controls the excavation outcome: The archaeologist, if following disciplinary protocol, is not permitted to go beyond the trench wall. So strict is the protocol in fact that at
one site I was involved with, when two tibiae were found to protrude out of a trench wall, the archaeologist simply sawed them off, leaving the remainder of a skeleton in the ground, and "storing" the bones in a plastic bag.

In an ideal trench, it should be possible to "read" the stratigraphy and hence understand the human induced environmental changes between the bottom -- the earliest state of the site -- and the top, where the most recent occurrences have taken place. Thus the archaeologist excavates as perpendicularly as possible. The top layer of soil -- the detritus -- is discarded, presumably contaminated by its more recent exposure to the elements and human or animal activity. Once the level beneath the detritus is reached, the sondage becomes sacrosanct; the surrounding area is delineated and roped off, and the area becomes more restricted.

Thus very closely associated with the regularization of the sondage walls is its stratigraphy. Carefully the archaeologist removes each layer and stops, before touching the next; what sits on top or beneath a layer is connected to it in temporal terms. Very carefully the archaeologist sweeps away the dust covering and surrounding bone, shard, stone, charcoal or glass bit of cultural memory. Each layer is photographed from various angles, in color and black and white, perhaps at different film speeds, or even digitally, so that the moment of truth is recorded, each providing proof for the final report's narrative and conclusions.

The archaeologist thus descends, clearing the earth, layer by layer, according to soil differences, including color, texture, composition, contamination, and so on. This is a complicated matter: Color nuances are most subjective, texture involves judging by feel, composition requires a knowledge of geology and perhaps even geomorphology, and contamination, mandating the assessment of the latter three simultaneously. There are ways around the difficulties: With the Munsell Color Chart,\textsuperscript{378} for instance, one can compare colors and give them numbers that anyone else can refer to in the future. Using the comparanda, the "exact" color can be determined and the resulting accuracy becomes

\textsuperscript{378} \textit{Munsell Soil Color Chart} (New York: Gretag Macbeth, 1998).
difficult to refute; a Munsell Color “number” in an official report might convey a color better than, say, “light gray”. In many ways, the soil itself is transformed into an artifact, or artifacts, as it is sampled, sometimes randomly and at other times less-so, according to oddities, outstanding features or even arbitrary transects. Dark spots or colored traces for instance, are scooped and bagged, with tags identifying the layers from which they originate. Sacs of earth are hence stored according to stratigraphic layers and grid coordinates, all geo-referenced for future reconstitution.

Stratigraphy is of course what governs the descent into time. As each layer is uncovered, the top and bottom elevations of the next are carefully measured. Each day the archaeologist sets up an instrument for this purpose: the topographic level. Using the latter, it is possible, with the use of a pre-established point, to calculate relative differences between found objects or layers from within or without different sondages. If a topographic level is not available, then the archaeologist resorts to a useful device: the string level. Either way, the aim is to be able to differentiate -- altitudinally -- whatever is found, and then restitute it in the notebook. Fiches, or systematized forms, are designed to this end and along with the resulting information matrices that articulate archaeological context, one knows “exactly” where something has been found in relation to anything else.

To return to the artifact, it too is geo-referenced. It is also classified according to type (ceramic, glass, charcoal and so) and then more closely identified according to its general size, features and eventually, place of fabrication, if deemed relevant, and time of use. The identification is done through comparative analysis that rests in the years of experience -- individually and collectively -- in collecting and classifying according to temporal and location contexts. Thus once the artifact is assessed for relevance by the archaeologist, it is isolated, cleared, situated, cleaned, photographed, sketched, classified and stored.

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Artifacts, of course, are not the sole elements in terms of finds. There are the monuments themselves, which most consider as prizes in classical archaeology. Investigating a significant monument is deemed more important than, say, a small Roman farm compound. The archaeological and architectural study of the monument in large part involves the excavation of foundations and foundation construction trenches. When located, the foundations too are subjected to the isolation-to-storing process as samples of their building materials are selected for future analysis. The whole is precisely located within the site’s grid and the Lanbert Coordinate system so that it may be, eventually, in the laboratory, precisely re-drawn and re-assembled in relation to other wall or masonry finds uncovered within the various areas of the site.

As foundations or wall bases are uncovered, the tendency is to descend to their lowest reaches (as opposed to the frowned-upon practice of following their courses). From the evidence around the initial construction levels, the methods of construction, chronology and (possible) alterations are determined. Like the small artifacts and the soil, the walls are “sampled” with, for example, mortar and (perhaps) marble or stone samples -- les prélevés -- extracted for later analysis. Exactly where the samples are extracted from is meticulously recorded. Along with the architectural finds of course, are the survey datasets, aligning all of the built components onto a master plan. Key is that most of this data collection relies extensively on the level.

The difficulty with levels and similar devices is that they too are subject to personal reading and interpretation. Further, and this is seldom mentioned, they are only as accurate as their installation is within the terrain context. Whether it be a laser theodolite or a topographic level, each has to be related to the ground. This is done in the crudest of manners, whereby the distance between the instrument’s footplate and the earth’s surface, is measured with a carpenter’s tape measure. The problems lies in the fact that no-one really knows where the surface of the ground is. What if one has kicked some dirt away from the same surface area? Will the millimeter accuracy of the sondage and the artifact’s placement be affected?
Similarly as the string level rests it often becomes bowed and its accuracy correspondingly diminishes. The large data sets made up of thousands of points rests on the "accuracy" of a tape measure and tired string. However, by purporting millimeter accuracy, they have the effect of rendering unquestioned authority to the final report's narrative. It is important to register that once the excavation is over, this data becomes reality and difficult to question.

The notebooks containing the descriptions, classifications, sketches, matrices and surveys, like the artifacts themselves, are then delivered to the laboratory. All of which I have described is directly related to what Latour terms "circulating reference". Out of the meandering process within which tiny steps -- the sampling, labeling, bagging and classifying activities -- allow for a set of changes in the way we recognize the artifact. Others point to the difficulties in accepting the steps from one type of information to another. Law (1985) outlines some of the transformative processes that inscribe new meaning to data as it is moved: Among others, these include "selection", "reduction by virtue of technical realities", "enlargement", "schematization" and "metric reduction" (67). Law is writing about medical equipment, but the effects are the same: As long as a human being makes choices, the results cannot be unbiased. Daniel Jacobi (1985) echoes Law; paradigms exist within which illustrations, vocabularies and presentation methods codify the reading and interpretation of scientific literature. That said, these "transformations", while applying so well to la méthode scientifique, only take us to a certain point when it comes to classical archaeology.

To return to what I mentioned in my introduction to this Interlude, along with the science included within classical archaeology, there is also the legacy of Art History. The scientification of the excavation and its found objects is only one part of the discipline; there is also the memory -- personal and collective -- of Art History which affects the immediate -- conscious and unconscious -- assessment of the finds. At one extreme, the questions include: Is this a publishable piece? Is it a museum piece? And at the other extreme the archaeologist
thinks: Is this the most exemplary piece to be found? Should we keep it, just in case? If “science” dominated, then these questions would be redundant. Each time the archaeologist looks at a find, an immediate assessment is made of the value (artistic) of the object. Based on this decision, the artifact is channeled in certain directions that assign to it certain values. Even if it is not a publishable piece or a museum piece, its “art worth” is appraised, judged evaluated, explicitly and implicitly, overtly and covertly, by the archaeologist.

Here it is useful to return to Latour. In his argument regarding “circular reference”, he outlines the “gap” that exists between “World” and “Language” (1989, 69). Each time a “fact” is transformed into data, there is a gap which is formed between it -- via the word -- and the interpreter. While this is key, what Latour does not say is that at those moments, there is the opportunity for something else to happen: The “personal” assessment of the artifact by the archaeologist. This, I contend is precisely where classical archaeology connects “science” with “art”. In the scientific mode, only at the moments where there is a void between fact and word can “art” enter into play. I call these “art gaps”. At each juncture -- between discovery, description, classification and so on -- the archaeologist makes decisions based on cumulated knowledge(s). And the latter are inextricably linked to Art History because that is what the classical archaeologist has been trained in.

There is more to this, however, and while I could turn to the philologist, epigraphist or numismatist to make the point, it is with the architect’s functions that I would like to continue this discussion. I want to illustrate another aspect of the “art gap” phenomenon by looking more closely at the activities of the laboratory architect.

By the time the accepted finds make their way to the laboratory, they have been completely removed from their context and re-placed within a scientific framework -- described, classified, compared and partly explained. In the laboratoire, there are usually experts
focusing on different disciplinary areas. Trained in planimetric drawing, perspectival presentation and classical architecture, the architect is entrusted with the task of making sense of the thousands of numbers and information bits that have been recorded. Plainly, the primary work of the architect is to reconstruct landscapes according to the evidence provided. The architect unpacks the survey data and measurements from the databases and notebooks, looks at field sketches and measurements, and then begins the task of “reconstructing”. The architect plots the data on a corresponding grid, at suitable scales, all in an effort to “contain” the relevance, context, and ultimately, “truthfulness” of the data. From the points surveyed on the terrain, the architect begins to sketch a plan. In the process, the samples, unless stunning, are stored, in case a detailed analysis is ever required; coins and pottery shards are sketched to suit the Final Report’s format, but it is the drawings that form the main set of activities.

Here I need to pause briefly to describe the official duties of the architecte-en-charge, the person who leads the data interpretation process. There is a well-developed set of responsibilities that is formally assigned to architects attached to the associated laboratories in France, as established by the Centre Nationale de la Recherche Scientifique, and I here list the official Activities and Competences required of the Architecte-archéologue:

**ACTIVITÉS**

- Assurer et coordonner les relevés topographiques et architecturaux du site et leur mise au net
- Définir la stratégie de dégagement des structures dans le cadre du programme archéologique
- Développer des méthodes et techniques pour l’analyse des monuments et vestiges architecturaux
- Réaliser la recherche bibliographique du domaine pour répondre à un problème spécifique de site
- Intervenir en tant qu’expert pour la restauration et la reconstruction de vestiges architecturaux; orienter vers des spécialistes d’autres domaines pour la conservation des peintures murales, mosaïques, …
- Proposer des reconstructions des monuments étudiés (graphique, maquettes, …)
- Diffuser et valoriser ses résultats sous forme de rapports techniques, publications, présentations orales,…
• Actualiser ses connaissances par la bibliographie et la participation active à des réunions (colloques, écoles, stages, ...) et à des réseaux professionnels

COMPÉTENCES

• Avoir des connaissances fondamentales en architecture et en histoire de l'architecture*
• Maîtriser les différentes techniques de relevés topographiques et architecturaux
• Maîtriser les outils de relevés topographiques
• Avoir des notions de base en archéologie
• Connaître les techniques de fouille archéologique
• Maîtriser les outils de représentation graphique spécialises (plan, 2D, 3D) et suivre leur évolution
• Maîtriser les techniques de réalisation de maquette
• Connaître les champs de recherche et les sites étudiés
• Adapter des méthodes et outils d'analyse et de représentation architecturale à des problématiques spécifiques
• Dialoguer avec des interlocuteurs d'autres domaines et avec son milieu professionnel
• Pouvoir s'exprimer dans les langues pratiquées dans la zone de recherche

* Le niveau des connaissances mises en œuvre est équivalent à celui qui peut être acquis lors d'une formation de niveau Grande École de domaine

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Document validé par le Comité d'orientation et de suivi de l'Observatoire des métiers.

The first thing that comes to light on this official list of duties and responsibilities is something that has to happen before anything gets to the laboratory. That is to say that the architect is assigned the task of developing the overall excavation strategy. This seems appropriate at first glance, but consider that ultimate responsibility of the same person is to present the findings graphically. In the laboratory, the latter is in fact the most important activity of the architect. The problem lies in the fact that only when the monument has been graphically portrayed can the architect claim success in terms of excavation strategy. This is why the duties of the architect revolve around certain key words: restauration, reconstruction, maquette, graphique. Future project phases, present project objectives and personal (professional) reputations are at stake. The pressure to present a solution, no matter how hypothetical, is intense.
The four key words listed in the last paragraph are not insignificant and each can be re-traced to one type of activity: the use of the imagination. And while each of the same words is closely linked to drawing (in a classical sense) and Art history (in the use of precedents as models), it seems odd, even problematic, that if the architect is to interpret data “scientifically”, this should be done within imaginative frameworks. In other words, when the architect turns to the data to produce the reconstruction drawings and models, these become translations of the data that are subject to the architect’s interpretations. Between the data and the drawing, there is a gap; and that gap is what I have already termed the art gap. It is so because the architect, trained in classical archaeology, has a certain “appreciation” of classical architecture, be it through Vitruvius or more recent texts such as Jean-Pierre Adam’s *La Construction Romaine* (1989) and Pierre Gros’ *L’Architecture Romaine* (1996). The details that are missing from the data can thus be filled in using the architect’s classical imagination. How else could the same person reconstruct, for example, building elevations, when at best all that can be deducted from the scientific data (surveys and perhaps wall foundations) is a two-dimensional plan? Certainly there are calculations that can be made, based on column drum diameters, for instance, but these too fall within the realm of hypotheticals.

Now recall that one of the main tenets to archaeology -- any archaeology -- is that it is the systematic destruction of the evidence. Once the stratigraphic layers and material finds are removed, the context can never again be replicated. This means that it cannot be verified; nor can the hypotheses generated from it. With the work of the architect then, the final interpretation of the data becomes almost impossible to question because the site conditions have been destroyed. The whole relies almost exclusively on the architect’s ability to, and I quote from the above duties and responsibilities, “Adapter des méthodes et outils d’analyse et de représentation architecturale à des problématiques spécifiques”.

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Consider again the field methods upon which all of the laboratory work is based. One of the most common traits they share is the notion of “accuracy”; all of the conclusions will rest on the accuracy of the measurements and subsequent descriptions and classifications. In the end, surveying, sondage exploration, sampling, drawing, photographing, classifying, comparing, are all used in a process that ultimately transforms the wild, inhuman terrain into a tamed, scientific set of realities. Hypothesis-bound results and typological expectations lead to anticipated conclusions; by turning to regularizing grids and sondage delimitations, for example, the generalized findings appear scientifically chosen. It is always possible to claim success because the measurements are always more precise than those of predecessors; this is easy to do when each successive wave of technical advance presumes “accuracy” to a higher level of exactitude.

In the end we have two processes that work hand in hand within one sequence of activities: The scientific process, which operates overtly, providing “accuracy” and quasi-irrefutable proof. And the Art History process which operates more covertly, assuming that artifacts and reconstructions are selected and generated to perpetually produce reports couched within acceptable classical archaeological narratives.
INTRODUCTION

It is not possible to discuss the French ruin and subsequent “new” classical monuments without looking to the work of Françoise Choay (1999, 2001). In The Invention of the Historic Monument, Choay outlines, among other notions, the close link between “urban heritage” and present day “cultural identity”. She certainly does not avoid the idea of capitalism as perpetrator of monument popularization. Yet it seems almost redundant to say that capitalism is the cause; while tourism economics accelerate and amplify the process, the whole relies extensively on “knowledge”, expert advice and as I highlighted earlier, “science”. Further, the same process can only operate if it has mass appeal. That said, what is it that has allowed for the seemingly unquestioned acceptance of new monuments?

This chapter will explore the factors that have led to the ready adoption of new classical landscapes. I will pick up where I left off in the introduction to Chapter 3 and retrace the main events and cultural shifts that set the tone for the emergence of France’s monuments historiques and domaines archéologiques. While it will not seem apparent in the first sections, what I ultimately aim to highlight is the way knowledge related to Vitruvius is produced; I aim to show that this production is based on the one hand, on accepted practices of adopting classical styles, while on the other, on imaginaries based on the same styles — personal and collective. In carrying out this research, initially found very little evidence for recourse to Vitruvius; this will be evident in the first sections of this chapter. It was only by looking at a specific monument — one which most key players of Les Monuments Historiques had a hand in restoring — that I was able to ascertain the treatise’s use. In the final section of this chapter I
thus reconstruct the path of the intellect as it seeks -- and struggles -- to connect ruins to Vitruvius and then materialize architectures of Antiquity. These architectures are difficult to refute because in the case of ruins the collective no longer has recollection of what a particular monument *would* have been like; it only has a hint of what it *could* have been like. I focus on France, where I am most familiar with the discipline of classical archaeology, although it is quite possible that similar phenomena persists elsewhere in the classical world. With the reconstruction of a set of Greek theaters, for example, the new plans will undoubtedly reference Vitruvius’ Greek theater.

The discussion of classical monuments revolves mostly around degradation into ruin, inventive reconstruction, and in some instances, the preservation problematic. Quite plainly, the majority of studies centre on *disappearance*: How a monument has fallen into disuse, the extent to which it might be possible to understand its prior significance, and the way it might be possible to rebuild it are usually the main focal points. Here I want to propose considering things from another vantage point: I want to focus especially on *appearance*. Closely related to my thoughts on the way monuments are invented is Roberto Weiss’ (1947, 1988) now classic work. In his *The Renaissance Discovery of Classical Antiquity*, he outlines the invention of Antiquity during the Renaissance. I think that the *De Architectura* has played, and indeed, continues to play a significant role in the same invention. How Vitruvius was rediscovered and subsequently canonized during the same era (and beginning much earlier), is quite similar to the way Leonardo da Vinci was “invented”.\(^{380}\) It is with this in mind that the present chapter looks at thepersisting links between the production of archaeological knowledge and the construction of classical architectures.

\(^{380}\) A. Richard Turner has done a great deal of work in this regard; see his *Inventing Leonardo* (Berkeley: University of California Press, 1994).
Two sections follow: The first revisits the key individuals and events that established what I call “habits of acceptance”; acceptance in the sense that when it comes to monuments, the French populace and intellectuals have rarely challenged the direction of state institutions and especially scholars. From the French Revolution onwards (and in fact, prior to the Revolution), it seems as if whatever authorities decided to do with monuments, be they private, public or religious, the masses have agreed. And even prior to the Revolutionary custom of organizing objects and collecting taking hold, there was a well established habit of doing so. I take a close look at one individual -- le comte de Caylus -- who facilitated the process of “acceptance” before the Revolution took place; the purpose of the focus on Caylus is to show that along with the institutions, individuals were also part of the move towards the establishment of the cult of monuments. In this first section, Vitruvius will be rarely mentioned; this reflects the literature. However, in the second section, New Monuments: Vitruvius and the Production of Archaeological Knowledge, it will become clear that Vitruvius has persisted within the work of those involved with Les Monuments Historiques. The same section considers the production of archaeological knowledge as it relates to the subsequent construction of a specific monument -- the theater at Orange.

4.1 HABITS OF ACCEPTANCE

PRIVATE INTERESTS - LE COMTE DE CAYLUS

During the first half of the eighteenth century, a renewed climate of intellectual curiosity was manifesting itself throughout Western Europe; scholarly thought and especially "science" were dramatically changing the cultural realm. France in particular was undergoing philosophical

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change, as evidenced by the writings of Voltaire, with his *Essai sur les moeurs*, Montesquieu, with *l'Esprit des lois* and Diderot and his *Encyclopédie*. These as well as others represented "the first systematic criticism of the Catholic religion, the administration of justice, and the absolute monarchy" (Kalnein and Levey, 1972, 299). In short, French culture was being redefined.

And with a new definition of culture came a correspondingly new debate involving "taste" in art and architecture. Indeed, the Rococo had made its appearance, reflecting new ideals in "transform[ing] scientific observation into the enjoyment of sensuous stimuli..." (Norberg-Schulz, 1986, 13). And the Late Baroque burgeoned in Central Europe, focusing on notions of rhetoric and charm as well as "monumental forms" (Stierlin, 1964, 15). These new styles in architecture were, in a sense, transitional, linking the *Grand siècle* with those new notions attached to the Age of Reason.383 And as new styles were being tested, other cultural and social factors were contributing to change in taste in art and architecture.384 I have already highlighted the archaeological excavations at Pompeii and Herculaneum and the related dissemination of imaginative images of ruins which fuelled the debate over the "useful" and "necessary" vis-à-vis the "sublime" and the "beautiful" (Wiebenson, 1969, 58-61). Paralleling these trends, there was also a general feel of nostalgia for the greatness of Louis XIV -- *le bon goût du siècle précédent* (Boime, 1987, 149). All of these factors translated into a new consideration for classical forms (and hence, the *De Architectura*), an emphasis on the functional, and a renewed search for "significance" (Kaufmann, 1955, 181; Benevolo, 1977, 28). Just as Piranesi and Winkelmann were popularising the study of antiquities in Rome, so too were others doing so elsewhere, including in France.

The critique of the Rococo in France emanated from two viewpoints: That of the *philosophes'* and that of the *antiquaires'.* The *philosophes* (including Diderot) were supporters of the French

383 On the *Grand siècle* see Emil Kaufmann *Architecture in the Age of Reason Baroque and Post-Baroque in England - Italy - France.* (London: Dover); see especially p. 181.
384 In this section I am generalizing and thus leaving out the political factions as linked to notions of taste and style. I am interested in the "results" of these and leave the complex political debate to others.
tradition -- the status quo (Hautecoeur, 1953, 259; Szambien, 1986, 126). And the antiquaires called for a renewed interest in Classical ideals (Watkin, 1986, 314). The former group was outspoken against the Rococo style, using the École d'Architecture (with Blondel at its head) to promote “the functional” (appropriate use and symmetry), while the latter group attempted to influence style through the promotion of classical forms and vocabularies and open criticism of art and architecture as it stood during the early century (Wiebenson, 1964, 58-61). It is the latter group, the antiquaires, that I would like to focus upon in this section. In particular I want to look at the person heading the group: the Comte de Caylus; in a more general sense, I would like to briefly discuss the period directly following that of the Rococo in France: The Minor Greek Revival (le goût grec). How Caylus exerted his classical influence, I believe, is fundamental to the habit of accepting classical monument reconstructions.

Caylus was born in 1692 into a bourgeois family of Auxères origin and was schooled in the Classics. It was during his late adolescence and early adult life, while participating in military service (1710-1715) that he acquired a deep interest in Classical archaeology (Eriksen, 1975, 160). As a military officer, he spent time in south central France, pondering, sketching and studying the surrounding ruins (Fleuret, 1935, 169). This coincided with the prevailing interest in ancient cities and monuments; the "resurrection of dead cities", as Brion (1951) called it, was about to begin (317). In 1715, Caylus travelled briefly to Italy, organizing a much longer trip as soon as he returned home (Boime, 1987, 147). In 1716, he left for a tour of Greece, where he grew interested in ancient texts, antiquities, and their artistic “reconstructions” (Matheson, 1991, 5). In 1717, he returned to Paris and spent his time in the "study of Classical

385 The debate essentially paralleled the ancient-modern discussion manifesting itself throughout Britain and the rest of Central Europe; it is clear that there is a political current at work in the adoption of classicism in France at this time and despite the political objectives of Colbert (and the reformers around Soufflot) classicism and the apparatus around its production continued.

386 His full name is as follows: Anne-Claude-Philippe de Tübieres Grimoard de Pestel de Lévis Caylus.

387 It would be another one hundred years before Schliemann (1870) would announce his discovery of Troy at Hissarlik. See Eri Melas (editor) Temples and Sanctuaries of Ancient Greece (London: Thames and Hudson, 1973) p. 151.
archaeology" (Eriksen, 1974, 160) and, "[r]iche d'observations personelles, de mémoires et de quelques reliques précieuses", he became gripped by the desire for collecting (Fleuret, 1935, 133). Thus began the career of a philanthropic-collector, or, as Wiebenson (1969) has called him, an "antiquarian-connoisseur" (34). He became a passionate collector and by 1729 was spending "four fifths of his large [mostly inherited] income on antiquities" (Boime, 1987, 146-47).

In 1731, Caylus was "received by the Academy of Painting as a ‘conseiller honoraire amateur’ ... " described in the Academy’s register as a ‘connoisseur profond’" (Blomfield, 1921, 192) and in 1741 he was admitted to the Academy of Inscriptions. Caylus had been particularly interested in the various archaeological excavations taking place at the time. The excavations at Herculaneum were his favourite; at the foot of Mount Vesuvius and destroyed at the same time as Pompeii with the eruption of Vesuvius in 79 AD (Canby, 1984, 386), Herculaneum contained undisturbed examples of roman vernacular architecture and furnishings. In 1751,

388 While becoming popular as a collector/purchaser, he also became a sought after dealer, selling off fakes, forgeries and his own acquisition mistakes to less knowledgeable collectors. Caylus' collecting began ay least as soon as he ended his military career in 1715 as he acquired sketches, etchings and fragments during his travels in southern France (Fleuret, 1935, 169), Italy, and eventually Magna Graecia (Eriksen, 1974, 168). By 1740 the collection had become a serious endeavour, taking into its breadth, furnishings and architectural elements (Hautecoeur, 1912, 23). The collection was "refined" over time as he prioritised his focus on what he deemed "classic." The items were well catalogued and for this reason were accessible to designers of the time. George Jacob, cabinet maker, and Jean Henri Eberts, interior designer, for example, both used the Caylus braziers for basic object and design motifs (Boime, 1987, 153). The collection items inspired many architectural works; Robert Adam would derive his inspiration for his own ornamental and decorative work from the collection. Similarly, Cochin used motifs from the vases of the collection to decorate the interior of the royal Chateau de Choisy. Cochin in fact, is attributed with having brought the King's attention to the Classical "style". He began to depict the King as a "benefactor" and "humanitarian" within his artwork and decoration. The scene of Augustus closing the gates of the Temple of Venus, for example, was used as a vehicle in the decoration of the Château to stress a peaceful and gentle King (Boime, 1987, 161). This is key because from this point onwards (1762), the "official style" in decoration decidedly changed. The collection eventually grew quite large, rivalling that of any other collector of antiquities in Central Europe and it became (for Caylus) a way of rationalizing a Classic style with a Greek/Antique aesthetic.

389 During the decades that followed his entry into the Academy of Painting, he continued to concentrate on collecting, trading and to some extent, lecturing. His ongoing affinity to all-things-classic convinced him that the Rococo was indeed a "sign of decadence and French weakness" (Boime, 1987, 147) and he wanted to reinstate antiquity not only as a guide for a new French style, but to rationalize this new style with an "histoire raisonnée de l'art" (Picon, 1988, 288). His views of the Rococo were clear: He submitted two papers to the Academy in 1749 in which he criticized the "gout mauvais et mesquin que l'on fait aujourd'hui par la décoration..." (Eriksen, 1974, 27). Thus Caylus’ early education at Versailles, eventual military travels in the proximity of Gallo-roman ruins, subsequent travels to Italy, Magna Graecia and other areas, and keen interest in archaeological excavations were all contributing factors to his Classical convictions.
Soufflot brought him back remnants of a frieze and Caylus added these to other pieces he had from the site. He saw the Pompeii and Herculaneum sites as containing the best examples of classical finds and sought to possess as many as possible.

Thus, with these interests in mind, Caylus aimed to transform French Rococo into a style based on Classic ideals (Middleton and Watkin, 1987, 69; Wiebenson, 1969, 57). He did this in various ways, including the establishing of a vast network of colleagues, sponsoring students and artists, expanding his collection, actively participating in the Academies, and eventually publishing his Antiquities collection. Caylus' approach to influencing style was deliberate, multifaceted and untiring.

Blomfield (1921) writes that as soon as Caylus was admitted to the Académie de Peinture "as a first-rate authority" (1731), he made lecturing his main objective in life (192-193). Still according to Blomfield, Caylus rarely avoided Académie meetings for the rest of his life (193). Eriksen (1972), however, concludes that until 1746 "or so," he only attended the Académie meetings "once a year" (161). This seems contradictory but it is possible that Eriksen is looking at Caylus' earlier career; he would have been 39 when admitted in the Académie. From the textual references, it appears that Caylus did indeed deliver lectures regularly.

His lecture at the Académie des Inscriptions, on January 7, 1449 is significant: Until then, it appears that Caylus was mostly concerned with collecting objects. But with this lecture, it becomes certain that the antiquarian was deeply interested in architecture. In the lecture entitled "De l'architecture ancienne", Caylus made clearest his antiquarian beliefs. He "stressed historical development of the Orders [while] adhering to the idea of general beauty and the subordination of the artist to it" (Wiebenson, 1969, 50). The orders prevail and the De Architectura permeates his ideals.
From the onset of his career Caylus established networks. His main associate was the Abbé Jean-Jacques Barthélemy. Barthélemy had apprenticed under the keeper of the royal Cabinet des Médailles and during an earlier stay in Rome had organized a small network of like minded individuals that shared an interest for Caylus' work in collecting (Boime, 1987, 149). This was a cornerstone of Caylus' own network. Another early affiliate was J. P. Mariette, a collector and dealer of antique prints (Fleuret, 1935, 173). He too had a network of his own, involving contacts in Britain as well as alliances within the publishing realm. He would later help Caylus with his publishing projects. In 1751, the Marquis de Marigny replaced Lenormant de Tournehem as Directeur des Bâtiments. This is not insignificant; the influence that Caylus would have on the Marquis would eventually be reflected through the Marquis' work as Directeur. Further, it had been Caylus who had recommended the Marquis to Lenormant and when the Marquis did get the post, he returned the favour by facilitating the transit of antiques for Caylus from Italy (Hautecoeur, 1912, 60). The Duc de Choiseul, French foreign minister, was also one of Caylus' contacts. He had been French ambassador to Rome (1753-1757) and served as go between for Caylus and his Rome antiquities connections. The Duc too was influenced by Caylus; he commissioned Gian Paolo Panini to paint the "Imaginary Gallery of Roman Art". The painting represented all Caylus stood for and one could say that it was a portrait, figuratively, of Caylus' collection -- classical architecture with antiquities as ornaments and related decorations abounding. Caylus' network was far reaching and at influential levels. He established contacts in Rome and Britain, within the French aristocracy, and eventually, les Bâtiments Historiques.

As patron, Caylus supported artists and architects that he felt best represented his own beliefs. His support was sometimes in the form of financial rewards or purchases, but more often, in subtle influences exerted onto his network of associates for the promotion or official sponsorships of promising individuals. Many of the individuals he supported were

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pensionnaires at the Académie in Rome and in this way the earlier work of Colbert was echoed. Similarly, as lecturer, Caylus was able to reach influential individuals. He published numerous articles and eventually decided to gather together in a single production, all of his collected drawings, etchings and catalogued antiques, for the benefit of educating the French on the Classic form (Caylus, 1752, lecture notes quoted in Wiebenson, 1969, footnotes section). Hence, his seven volume "Recueil d'antiquités égyptiennes, étrusques, grecques et romaines" was born, published in instalments between 1752 and 1767. He used his own etchings (some 600 in all) and he supervised all facets of the work.

To some, the "Recueil" was "nothing more than the catalogue or inventory of this personal mania" (Boime, 1987, 147). But to Caylus, it presented what he felt was an objective study of ancient art. Clearly, he was influenced by the Encyclopedists, and just as certainly, he wanted to fit in with "science" and the scientifique: observation-description-classification. He organized his possessions geographically and thematically, and eventually used other collectors' pieces to supplement the "Recueil". The geographic and thematic order gave it a sense of authority and the cataloguing had a feel of the "scientific." The last volume included the large Gallo-roman monuments, providing measurements and detailed descriptions of the structures. What is more significant about the seven volumes is the distribution and visibility it

391 Louis Joseph Le Lorrain (1715-1759), for example, had become well known for his designs for the Festa della Chinea (1745-47) by the time Caylus decided to adopt him. Caylus felt the designs were in keeping with the ideals of the antiquaires and recommended him to Ange-Laurent La Live de Jully to carry out furniture designs (Middleton and Watkin, 1987, 69). Significant is that from Le Lorrain's eventual furniture designs, a new wave of le goût grec was instilled. This not only included furniture, but residences as well. "In 1754, on [Caylus'] recommendation Le Lorrain designed for the dining room of the castle Åkerö in Sweden a scheme of decoration that may be regarded as the first neo-classical interior decoration of the century" (Kalnein and Levey, 1972, 326-27). Le Lorrain was also engaged, again on Caylus' recommendation, to revise Le Roy's drawings for Les ruines des plus beaux monuments de la Grèce, an artistic requiem of Greek ruins. Similarly, Jean-Francois de Neufforge (1714-1791) was also a protégé of Caylus. He too believed in the ideals of Laugier and Caylus eventually helped him publish the "Recueil élémentaire d'architecture" (Szambien, 1986, 33) which proved to be one of the most influential theoretical works of the time (Kalnein and Levey, 1972, 304). Caylus also became mentor of Joseph-Marie Vien (1716-1809) who studied at the Académie in Rome from 1744 to 1750. His work often contained motifs and versions of antiquities in Caylus' collection and the latter saw in Vien a disciple he could eventually use to his own advantage: When Vien returned to Paris in 1750, Caylus arranged a teaching job for him as Adjunct Professor in the School of Art, "teaching the ideal Greek serenity taught him by Caylus" (Boime, 1987, 157).
seems to have had. Designers and architects (Robert Adam, for example) used it for their own inspiration, with or without Caylus' approval.392

While there are difficulties in accepting the “Recueil” as a set of “truths”, the books did operate as disseminators of knowledge, albeit debated in-so-far as accuracy was concerned. And the recognition of, for example, "Egyptian art as a style with its own laws was [part of] the meritorious achievement of the Comte de Caylus..." (Kalnein and Levey, 1972, 331). Finally, although one could say that he was just continuing Renaissance ideas (Vidler, 1985, 125), we could also say that he was actively promoting the debate regarding “style” and “accuracy” in depiction. The reappearance of Classicism within the world of French architecture was initiated by a group of like-minded individuals, with Caylus at their forefront. Caylus lived at a time when Winkelmann and Piranesi, as I highlighted earlier, were contributing to the dissemination of the Classical style. What sets him apart was his belief that the Classical represented "purity" in style and he did his utmost to achieve it; as will become apparent, the Caylus collecting legacy continued beyond his century. His methods of convincing the French populace that a Classical style was representative of the ideals of France remained beyond his day: the establishing of networks, the sponsoring of

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392 While I have not discussed the critics of Caylus, this is not to say that there were none. Diderot, for example, considered Caylus his bête noir. They claimed to be diametrically opposed to each other. While Caylus was influenced by Diderot's Encyclopédie, (at least in-so-far as methodology is concerned), Diderot felt that Caylus was completely unscientific. And earlier this century, Blomfield (1921) noted that the Académie "had sold its birthright for a mess of pottage" by accepting Caylus within its realm (192). Fleuret (1935) states that Caylus may have, in his anxiousness to collect (especially in-so-far as the antiquities of Herculaneum are concerned) been too rushed in his conclusions (185). The transfer of so much material from Rome to France was not without its critics. The architect Quatremère de Quincy for one, advocated the preservation of Roman monuments and, perhaps more importantly, the context within which the artefact was initially uncovered; to Quincy, where an item was found was just as important as the item itself (Boyer, 1994, 130-31). The debate in France was fierce and the hurried approach to collecting may have been the source of Diderot's lack of acceptance. And these feelings towards Caylus were not helped by his cavalier approach to collecting; after all, collecting was not "science" if it was not done in a systematic fashion. He freely admitted to this when, regarding etchings for example, he said "je jette ces gravures dans un coin" (Hautecoeur, 1912, 24), signifying (to the experts of the time) disrespect for the very specimens to be used in the spirit of "science."
students and artists, the enthusiasm for collecting, the participating in the Academies and the publishing of collections are all activities that would be institutionalised by the state.

**PUBLIC INTERESTS: STATE and REVOLUTION**

To return momentarily to the time before Caylus, prior to the first quarter of the eighteenth century, only a few buildings and objects escaped “use” *per se*: royal collections and religious items. Buildings and monuments were for the most part removable, especially when it came time to expand existing structures or to construct new ones. Even ruinous structures like the theatre at Orange were put to good use; the latter was woven into the urban fabric of the eighteenth century city. Charles-Louis Clérisseau (1721-1820) on his return from Italy, drew the theater in relative detail, showing the extent to which the structure had been incorporated into a neighborhood (McCormick, 1990, 139-40, 260). This is not to say that there was no awareness of the uniqueness of certain monuments. As early as 1703, there were proposals to outlaw the destruction of certain buildings and objects (Sire, 1996, 16). And there were efforts at documenting France’s built heritage; Roger de Gaignières (1642-1715) in an effort to maintain the memory of certain buildings, sponsored the drawing of some 25,000 monuments for his private collection. Similarly, Bernard de Montfaucon published between 1729 and 1735, his five-volume *Monuments de la Monarchie française* (Paris). At the same time, there were critics, both from within France and also from without; Rousseau critiqued the conditions of the Arènes at Nîmes in 1737 and even later in 1787, Thomas Jefferson (1743-1826) lamented the condition of the theater at Orange; the monuments were perceived as disappearing from the landscape. 393 During the same year, Quatremère de Quincy vehemently opposed the destruction of the Fontaine des Innocents by Jean Goujon (built in 1549). After the invention of lithography by Alois Senefelder (1771-1834) in 1796, the reproduction of architectural imagery further popularized the ruin as an aesthetic. 394

393 Evidence for this exists in the many guidebooks and commentaries of the time that lament the disappearance of the monuments.

If awareness of historical value had existed in the late eighteenth and most of the nineteenth centuries, it certainly persisted during and immediately after the French Revolution. To Hutton (1993), "[i]t was in republican imagery that the revolutionary tradition was enshrined in civic rituals in the late eighteenth century and through which the identity of modern France as a nation-state was formed" (125); it was in fact with the Revolutionary government's penchant for the use of monuments in re-writing histories that much of the same identity was reinforced. When the monarchy ended on the morning after the August 10, 1792 insurrection, the first main intervention emanating out of the offices of the revolutionary government was that "Toutes les statues, bas-reliefs, inscriptions et autres monuments en bronze et en toute matière élevés sur les places publiques, temples, jardins, parcs et dépendances, maisons nationales, même dans celles qui étaient réservées à la jouissance du roi, seront enlevées à la diligence des représentants des communes qui veilleront à leur conservation provisoire" (edict quoted from Sire, 1996, 18-19). The instruction was clear: All memories of the monarchy were to be erased immediately and from this point onwards, it would be difficult to stop the destruction.

At just about the same time, French archaeology enthusiasts were increasingly drawing attention to the commemorative value of classical monuments. In 1790, Aubin-Louis Millin, the same historian that would later call so much attention to the theater at Orange, used the term "monument historique", probably for the first time. The confiscation of hundreds of properties -- Church and Crown -- forced the new government to assess and prioritize the newly acquired goods; choices ranged from melting objects to restoring and displaying them; scholars and experts were recruited to specify the care and restitution of priority monuments and their first task was to catalogue and list the thousands of items and buildings. To do this l'Assemblée created the Commission des Monuments in 1790, the Commissions des Arts in 1793, and established a set of laws; in spite of a set of edicts forbidding destruction, the obliteration and defacing of hundreds of buildings continued (Choay, 1999, 80-83).

One important character that voiced his opinion was the Abbé Grégoire (1750-1831). In 1794 he began to protest the destruction of church objects and buildings, as well as other significant monuments. He pointed to the existence and importance of the patrimoine collectif that, to
him, defined national memory and identity. He was commissioned to draft three reports looking at the looting and dismantling of monuments, and ways of stopping the destructive practices. Significant is his coining of the term "vandalisme" which he said he created in order to kill it (vandalism). He identified three causes: l'ignorance, l'insouciance and la friponnerie (Sire, 1996, 20) -- ignorance, carelessness and looting -- and he signaled that the local authorities hired to look over the objects, buildings and antiquities were also individuals that recognized their value at auction and had a tendency to benefit from the dismantling; in effect what had been taking place was a form of legal looting (Sire, 1996, 20-21). Still in 1794, a new, all-encompassing edict was passed whereby all destruction was outlawed; in an effort to solve the problem, all portable monuments and objects would be transported to the new regional museums. The goal of the state remained the same: identifying, inventorying and inscribing (to the credit of the nation) all objects of significance. By the end of the eighteenth century, the museum of Alexandre Lenoir (1761-1839), an institution I will return to below, was a popular attraction.

For France, as elsewhere, the birth of the historical discipline lies in two practices that, up to the mid-eighteenth century, had been for the most part separate: Antiquarianism395 and Philosophical narrative -- la narration édifiante (Poulot, 1996, 465); this is the cultural context within which Caylus had operated. By 1795 Pierre Claude Daunou (1761-1840) was reorganizing l'Institut de France and completing his Histoire de France, begun earlier by the Benedictines. Under Daunou, the Institut de France focused primarily on collecting and disseminating historical knowledge. By 1803, the classe d'histoire et de littérature ancienne was created and when in 1806 the Institut de France was placed in charge of les inscriptions des monuments publics, des médailles, de l'histoire métallique de l'Empire, the habit of linking texts to material culture -- which was obviously not a new practice -- was formalized within the institution.

The new responsibilities of the *Institut de France* reflected a set of trends: The Musée National was founded in 1799 in Marseilles and dozens of local historical societies were established throughout France. Key is that the *sociétés savantes* began to align themselves with schools; the result was a shift towards the teaching of history focusing on the imperial past of France. *L’histoire de la Gaule* was taught, as were notions of classical origins and the glorification of ancestors, all with the aim of gaining favor from the state apparatus; national histories thus increasingly embellished the exploits of ancestral heroes. N. Lemercier (1771-1840), for example, drafted his *Les Ages français* (1803), a poem retracing French history through the centuries. Histories were written with the objective of precisely narrating, year by year occurrences, all in the spirit of defining France as a first nation and the French as a first people (Poulot, 1996, 467). Throughout, the glorification of a classically rooted past persisted.

Thus in the final years of the eighteenth century and the first years of the nineteenth century, there was a deep preoccupation with the recounting of the French past with as much “accuracy” as possible; archaeological publication flourished and the idea of *le patrimoine* was born. As French erudites began to recognize that they were at least fifty years behind the English in terms of the study and documenting of classical (and other) monuments, the new Republic made the idea of “conservation” a priority. Politics dictated the emphasis: Celtic and Roman ruins took precedence over Christian monuments in the quest to find a set of monuments that could link the French to Celtic or Roman origins (Chastel, 1993).

Yet the conservation ideal was confusing: While the *loi de 1792* ordered the destruction of all feudal-related monuments, it also stipulated that art and sciences objects, as well as books and manuscripts, be preserved. The difficulty with the law lay in its subjective nature; along with the wish to forget pre-Revolution pasts, the destruction of monuments (through official efforts

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396 The Musée National was not a museum *per se*; it was an institution whose objective was to teach, among other topics, literary history and drawing.

397 Lemercier also wrote *La Mérovéide* (Paris, 1803), a poem dedicated to the glorification of the “first race”.

398 I will return to the notion of *patrimoine* in my concluding chapter.
and less-official looting and vandalism) increased to such an extent that by 1810, yet another law against vandalism had to be passed. Before being destroyed or substantially altered, monuments had to be evaluated within a double criteria: *utilité* and *jouissance* (of the public) (Sire, 1996). By 1810, the state became heavily involved in the protection and definition of monuments. Monument statistics began to be maintained and to Poulot (1996), it was at this point that the cult of monument restoration was born.

At about the same time, church leaders were also concerned with the neglect and pillaging of their monuments. The publication of the *Génie du christianisme* focused attention on the degradation of church buildings. Interest in church buildings (as well as the ruins that dotted the French countryside) helped popularize “archaeology” and the dissemination of related reports (Durand, 2000) and by 1834, the *Société française d'archéologie* was founded. In this light, Chastel (1993) documents an important reality: Prior to the Revolution, heritage had been closely linked to the church; the permanence of sacred objects was essential to communities as relics and sanctuaries were at the base of communities’ identity (406-08). The whole changed of course, with the Revolution, after which time the state became the keeper and inventory manager of “heritage”. With archaeology and the study of classical monuments, the notion of “antiquity” became inextricably linked to “culture”. The Revolution had seen the melting and degradation of countless items and monuments, yet through the inventorying, there arose an awareness of the power of objects. As thousands of objects were stored in convents, churches, palaces and so on, the cataloguing and sorting gave rise to the museum.

LENOIR'S MUSEUM

Before moving on to *Les Monuments Historiques*, it is worth pausing and taking a closer look at another institution: Lenoir’s museum at the *dépot des Petits Augustins*. As eighteenth century interest in buildings and their preservation grew, so too did interest in objects. Caylus

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399 The listing of monuments, however, applied to “official” monuments only. Further, not all départements participated.
400 Paris, 1802.
and his erudite friends had transformed collecting into a popular activity for the wealthy; one could purchase articles and become a part of French intelligentsia. The whole was in fact well connected to the way objects fell in and out of fashion. The same applied to church articles, where it was not necessarily a question of stylistic taste, but more a question of iconographic imagery; with the Revolution, religious icons had clearly fallen into disfavor. Collections were assembled, disassembled, expropriated, sold separately and purchased in lots throughout the eighteenth century and especially during and just after the Revolution.

And the dispersal of collections did not end with the arrival of the Revolution. The decree of September 10, 1792 I just referred to is a good case in point: It had stipulated that all articles belonging to churches be inventoried and a great deal of the metal objects were subsequently melted. Churches lost most of their Trésors, palaces lost their fitments and even convents were freed from their contents (Chastel, 1993); much of what was not melted was sent to Paris to the dépôt des Petits-Augustins. In the warehouse he was charged with, Lenoir sorted what was to be kept (for the Musée national) and what was to be auctioned off. He kept paintings, of course, and had them moved to the Louvre and after auctioning furniture and other more popular items, he was left with a great deal of sculpture.

What Lenoir did with his warehouse is fundamental to the way museums evolved in France (and elsewhere): He organized the lot into a set of rooms, differentiated by historical periods. The difficulty, however, is that the historical periods did not necessarily correspond to the items. Nor were they based on historical fact. As Sire (1996) points out, “il n’hésite pas à assembler dans des remontages qu’il invente des morceaux de sculptures ayant appartenance à des monuments différents” (47-48). In effect, he presented a chronological arrangement of sculpture; the chronology however, was of his own invention. Nonetheless, the montages were extremely popular and in 1795, the Comité d’Instruction publique made the warehouse into a museum. The basic idea was to re-educate the populace within a Revolutionary ideology using the museum.

401 The Church successfully argued for the safeguarding of reliquaries; they were saved as potential material for later melting, should the state require it.

402 By 1792 the Louvre was filling up with goods confiscated from the royal houses. The 1794 nouveau Louvre was officially changed from reliquary of French art to conservatory of universal art.
Lenoir's museum became a focal point for artists who came to study sculpture of “different” historical periods. However, the looseness with which the whole had been arranged ended up fueling critical comment. Quatremère de Quincy, among others, spoke out against the presentation, noting that without spatial and temporal context, an item becomes meaningless. To the latter, the museum signaled an end to art itself and because the museum was based on “erroneous” precepts, it was ideologically incorrect. His arguments against the museum were founded in “transfer” and “collecting” activities that were considered detrimental to art. To him, the moving of artwork to Paris disadvantaged the provinces. He organized a petition and a counter petition emerged, arguing that France was the only nation capable of protecting its patrimoine; without its protection, the proponents of the museum argued, the French populace would not be properly instructed. The petition, probably emerging out of the Comité d'Instruction publique’s offices, postponed action by the state. And as the debate raged, Lenoir continued to request more artwork from the provinces.

The result of the debate was that monuments became linked, mostly through the writings and critiques of Quatremère de Quincy, to the notion of l'esprit de lieu -- the attachment of ancestral memory to local landscapes. Lenoir’s argument had been that the museum presented an opportunity for the monument to speak of its history. Certainly it made an attempt to re-territorialize the displaced artifact. Eventually, the latter’s argument became linked to cultural consumption (the capital wanted to present itself as an alternative to Rome). But in the end, the critique against Lenoir persisted; he was perceived as having a vandalisme attitude towards objects, his restorations were of poor quality and there was no real context for the viewers. In effect, Lenoir’s production failed and was rebuffed by individuals like L.-P. Dessine who lamented the way by which monuments were dismantled and transferred to Paris, thereby destroying their spatial and temporal relevance (Poulot, 1996, 484). The whole resulted in the further refinement of the “listing” process and some valuable lessons in the production of culture.

403 The precision with which historical narrative purported to recount events did not go unchallenged. As early as 1820, individuals such as Augustin Thierry (1795-1856) argued that history was being invented and that the authority purported by texts was dishonest (Poulot, 1996).

404 Dessine did admit that the museum would function well as a didactic tool.
Just before the founding of the Société française d’archéologie in the late 1820s, the French interior minister was François Guizot (1787-1874), a man who passionately believed in monument preservation. Guizot proposed, in 1830, that the position of inspecteur général des monuments historiques be established. The post was to have a dual purpose: to oversee the safeguarding of listed monuments and to promote education in terms of preservation. The new inspecteur would travel throughout the country and assess monuments and determine their artistic and cultural value, ultimately cataloguing more of the built memory of the nation. The first to be appointed to the position was Ludovic Vitet, a man I will return to in my discussion of the theatre at Orange. Vitet unfortunately was not allotted sufficient resources to undertake significant work, although he did manage to obtain the power to stop the demolition of private buildings of significance.

Vitet’s replacement was Prosper Mérimée (1803-1870), a man who also happened to work as a travel writer. In his Notes d’un voyage dans le Midi de la France (Paris, 1835), he outlined his thoughts as he ventured from town to town, visiting monuments and sites. In Orange, among the many places he visited, he recorded that the streets were overly narrow and that the theater was neglected. His book was well read as he readily translated the “scientific” for the reader interested in the ruins being uncovered, especially in the south (Grenier, in Beck and Chew, 1999, 133). He was one of the first to attempt to look at the landscape in historical terms. Mérimée continued as inspecteur for some twenty years and during this time, his method of working was adopted by other inspecteurs as the Commission des Monuments Historiques (created in 1837) became an increasingly dominant force in French monument-related policy. By 1835, in fact, a cohort of inspecteurs was hired to draw, describe, decipher, translate and archaeologically understand all of the monuments of France. One of these inspectors was the Abbé Jean-Benoit Cochet (1812-1875), a key proponent of l’archéologie scientifique. Cochet’s interest was in “context” and he realized early on that once an object was lifted from the ground, regardless of its material value, it lost much of its worth because it was removed from
the place it operated within. In his *La Normandie souterraine* (Paris, 1855), he described how he sought to write the history of the Gallo Romans and the Moravian peoples. Throughout the themes of the book, the idea of discovering “truth” through scientific means prevails.

Getting back to Mérimée, his work as a travel writer reflected a trend: Baron Taylor and Charles Nodier’s twenty-five volume *Voyages pittoresques et romantiques dans l’ancienne France* (Paris, 1820-78), for example, was a significant factor in terms of public interest in monuments (Paris, 1820-78). The set of books outlined in detail the dozens of classical monuments as well as scenes of “past” everyday life that provoked a certain feel of nostalgia and memories of “the past” for the reader. When Mérimée was pronounced head of *Les Monuments Historiques*, his decision to focus on restoration and protection was relatively unchallenged. His all-encompassing definition of “monuments”, however, became a burden; he included literature, works of art, “scientific” objects, and sought to locate “tous les documents qui peuvent se rapporter à l’histoire morale et intellectuelle du pays” (quoted in Sire, 1996, 33). In 1840, as *Les Monuments Historiques* grew, architects were charged with built monument restoration.

As this new group of specialized -- because they did become specialized -- architects began to study classical monuments, they correspondingly began to require specialized “restoration” knowledge. It was not a simple question of excavating; nor was it a pure design/construction activity. The restoration trade became linked to the “history of art” and the “history of construction”. Choay (2001) makes a good case for Vitet and Mérimée being the deans of the oldest related training program in France (99). Certainly architects had been trained in the history of Greek and Roman construction methods (at least since the time the Académie had been installed in Rome during the seventeenth century). And many knew about the emergent discipline of archaeology. But to connect knowledge of classical architecture and archaeological finds was another matter; marrying the finds to some sort of historical reality was no easy feat. Vitet and Mérimée in effect became the teachers of the first cohorts of restoration architects. The difficulty of course, was that the two focused in large part on the history of Medieval architecture.
The training of restoration architects reflected the thoughts and priorities of the time. The challenges of the two deans involved their own relatively laconic knowledge of Medieval architecture, the nonchalant attitude of new (Parisian) architects towards working on (provincial) commissions, and the low level of recognition and prestige attributed to the focus on old monuments. Further, with the focus on Medieval, the new architects would not necessarily become specialists in classical architecture, regardless of training.\textsuperscript{405}

Mona Ozouf (1998) has outlined this eloquently in her work on the Pantheon.\textsuperscript{406} The habits of acceptance that took root in the eighteenth century have remained and persisted. In spite of

\textsuperscript{405} Here it is useful to go to Eugène-Emmanuel Viollet-le-Duc (1814-1879) and John Ruskin (1810-1879). Viollet-le-Duc, in complete agreement with the principles of Restoration, would have a great deal of influence on the way historical monuments would be considered. In his \textit{Dictionnaire raisonné sur l'architecture française du XI au XVI siècle} (Paris, 1854-68), he devoted an entire section on Restoration. In 1846 when he was made head of \textit{Les Monuments Historiques}, he was already defining what the term "restauration" was to mean. He wrote: "Both the word and the thing are modern. To restore an edifice means neither to maintain it, not to repair it, nor to rebuild it; it means to reestablish it in a finished state, which may in fact never have actually existed at any given time. The idea that the constructions of another age can actually be restored is an idea that dates only from the second quarter of our own century, and it is not clear that this kind of architectonic restoration has ever been clearly defined" (translated by Kenneth D. Whitehead, 1990). To Viollet-le-Duc, within the remains of buildings there were traces of styles; from these traces, restauration should take its cues. Key for the later discussion of the reconstruction of antiquities is that his ideas paved the way for the use of imaginative reconstructions, provided they "fit" within certain stylistic categories. To him, each building would have to be restored according to the style type identified within its ruins. Mérimée and Vitet were close allies and he praised them, quoting the latter in his writings (1854, 202-07). The difficulty with Violet-le-Duc's restoration philosophy lies in the subjective aspects of his interpretation. His church renovations (Saint-Sernin in Toulouse, for instance) and his castle reconstructions (such as at Carcassonne) were clearly borne out of his personal preferences and imagination and not out of any "evidence" or research linked to the original structures. Thus while he advocated the outlawing of monument removal and quarrying, what he rebuilt was not necessarily representative of what had been in place.

With Viollet-le-Duc, another part of the conservation debate was activated; this time it was over what should be considered true heritage: Would heritage be better recognized as a ruin or as a restored bit of a past? Ruskin, in \textit{The Lamp of Memory} chapter to his \textit{Seven Lamps of Architecture} (London, 1849) was writing that the French left buildings and monuments to ruin only so that they could later restore them; he also wrote about restoration: "Neither the public, nor by those who have the care of public monuments, is the true meaning of the word \textit{restoration} understood. It means the most total destruction which a building can suffer: a destruction out of which no remnants can be gathered: a destruction accompanied with false description of the thing destroyed. Do not let us deceive ourselves in this important matter: it is \textit{impossible}, as impossible as raise the dead, to restore anything that has ever been great or beautiful in architecture" (1849, 194).

The question was one of intervention: Viollet-le-Duc felt that intervention was indeed necessary, if anything at all was to be saved, while Ruskin felt that the ruin should be left to speak for itself. Ultimately however, the question of intervention was about something else: If the ruin was left, then a great deal was left to the imagination; intervention by the state -- the keeper -- in a sense guaranteed that the imagination would not stray too far from that expected. The latter point is not insignificant and has indeed been part of the political agenda of each new government since the French Revolution.

individuals criticizing the museum of Lenoir and later, the restoration practices of Viollet-le-Duc, the rearrangement of objects and buildings to suit historical narratives -- based to a large part on the personal preferences of individuals operating in the service of state political motives -- the official stance was one that continued to encourage restoration/reconstruction practices. Further, the public and in turn the related “experts” embraced the *modus operandi*. I will return to the state’s aims in terms of “heritage”, “conservation” and “monuments” in my concluding chapter, but for now, I would like to go back to Vitruvius.

With the exception of passing comments, it seems difficult to ascertain the extent to which Vitruvius was used by those involved in monument reconstructions. Yet in order to provide convincing arguments to authorities, *Monuments Historiques* architects would have had to provide at least some basis for their historical renderings of ruins that for the most part were no longer extant. Recall that for the architects of *Les Monuments Historiques* in the provinces away from Paris, the notion of working on ruins was not in itself an appealing career path. Many, if not most, would have spent time at *l’École Francaise de Rome*, where monuments were deemed more important. The route to Rome however, took the architects through the south of France. And the scale of the ruins -- Arles, Nîmes, Orange, Vaison la Romaine and so on -- attracted their attention. At the same time, travel writers were also promoting the same sites. One possible way to advance one’s career, if one was obligated to work within *Les Monuments Historiques*, would have been to attribute as much importance as possible to specific monuments. Reconstructing them (hypothetically and eventually physically) thus became key in building careers. Most of the individuals I have already named, had a part in reconstructing the main classical monuments of the south. Their arguments can be retraced through the archaeological literature and especially through archival correspondence and journal notes. And from the latter, as I am about to show, I have found it possible to retrace the Vitruvius element of their work.
Recourse to the *De Architectura* is neither new, nor without significant impact upon the study of classical architecture, the practice of archaeology, and the reconstruction of monuments. While I have stressed this throughout Chapters 2 and 3, it would not appear that this is the case from the above section. When I began researching the use of the *De Architectura* during the eighteenth and nineteenth century, I found little mention of the treatise and my narrative in the above sections reflects this. Caylus almost certainly turned to Vitruvius for his lectures, but the extent to which the others turned to Vitruvius seems uncertain. However, as I kept examining monuments throughout the south of France and in particular, the way they have been reconstructed, I felt that Vitruvius’ book has served -- and continues to serve -- as a pattern book for such reconstructions. The theatre at Orange, arguably one of the best “preserved” monument of its type in Europe, is a good case in point. By carefully examining the records of the individuals in charge of the theatre, it is possible to retrace the use of Vitruvius in imagining the theatre at Orange.

In this section, I highlight that with the use of Vitruvius’ treatise, hypothetical models and proposed restitutions can be facilitated and readily enabled. This is in part due to the lack of similar texts, the reception and acceptance of Vitruvius’ words, the broad interpretation of his generalized tenets, and their ready application to personal imaginations as linked to voided landscapes. The resulting canonical body and especially the ongoing and persisting “habit” of referencing the treatise within classical architectural and archaeological study cumulatively add to its “authenticating” quality, all-the-while epistemologically binding it to the architectural and classical archaeology disciplines. So mired is disciplinary practice with Vitruvius’ text that its referencing is a key component in the textual production of architecture and a main buttress in the construction of a “new” classical architecture. Such an example is what I here explore. Through the archival, academic and travel literature, it is possible to trace the production of Vitruvius-bound knowledge and follow it through the course of the reconstruction of a monument. Consider one of the most important classical
theatres outside of Asia Minor -- the theatre at Arausio, or Orange, which I introduced in my first Interlude. The city is mentioned by early chroniclers like Strabo (The Geography, IV, 1, 11) and Pliny the Elder (III, 36), among others; its importance in Antiquity is without doubt.

The THEATRE at ORANGE

Sited within the urban plan of the Roman settlement, the theatre was initially constructed during the late first century A.D. and would have been, quite clearly, a magnificent civic monument (figure 4.1). For an idea of its scale, consider that the cavea, its circular seating space, is approximately 103 meters wide and seats some 7,000 spectators that still attend performances -- les chorégies -- during the summer months. The highest seats are over 30 meters above the orchestra, the seating area for dignitaries. The orchestra, situated just at the bottom of the gradins, or seats, is 19,10 meters in width. The scaenae wall or scene, is divided into horizontal levels, with an assortment of bays and niches that would have accommodated statues on its inner facade as well as a set of doorways along the lower part of its elevation: the valva regia or main royal entranceway into the scaenae space from the porticus postscenaem, and valva hospitalia, or secondary scaenae entrances. The scaenae building has inner spaces designed for a variety of uses and along its inner and outer faces can still be seen traces of the architectural decor, discussed in Interlude I, that would have fit

408 For a discussion of some of the early sources related to the Orange theatre, see Louis Chatelain "Les Monuments Romains d'Orange" in Bibliothèque de l'École des Hautes Études, fascicule 170 (Paris, 1908).
409 Behind the scaenae frons, the main scene wall, is situated the postscenaem, or the set of rooms designated for actors, storage and theatre-related fitments.
within comprehensive iconographic and memorial programs.\textsuperscript{410} The north (outer) facade of the colossal building confronts the present-day viewer as it must have stunned the urban dweller or visitor of Antiquity. Outside the building, to the north of the main wall, is a plaque that reads as follows:

\textbf{UNESCO}

Cet ensemble monumental est inscrit sur la liste du Patrimoine mondial. L’inscription sur cette liste consacre la valeur universelle et exceptionnelle d’un bien culturel ou naturel afin qu’il soit protégé au bénéfice de l’humanité.

Théâtre Antique d’Orange
Patrimoine mondial

\textsuperscript{410} On décor, see for example N. Janon \textit{La frise des Centaures – Cesar, Centaures} (Orange: Musée municipal d’Orange, 1988).
With words like “Patrimoine mondial”, “valeur universelle” and “protégé au bénéfice de l’humanité” it is impossible to consider the space about to be entered without a pre-registered feeling of awe. As one reads the plaque and then looks beyond it, the solid mass of the bâtiment de scène rises over 35 meters above the outer plaza.

Just before reaching the main entrance that is today used by tourists and visitors, another official plaque is installed, at eye level, reading:

THÉÂTRE ANTIQUE

Adossé à la colline Saint-Eutrope, jouxtant le forum, le théâtre antique occupe un îlot de la ville romaine. Il fait partie d’un ensemble monumental lié au culte de l’empereur et date de la fin du règne d’Auguste (10-25 après J.-C.). Son intérêt réside en la conservation de son mur de scène long de 103 m et haut de 36 m relié par des passages voûtés à la cavea pouvant accueillir 9000 spectateurs. Les gradins organisés autour d’une orchestra semi-circulaire forment avec le mur un système clos et acoustique parfaitement adapté aux spectacles scéniques. Le théâtre romain le mieux conservé du monde occidental est inscrit, comme l’arc de triomphe, au Patrimoine mondial de l’U.N.E.S.C.O.. Restauré au XIXème siècle par Caristie qui le débarrassa des maisons construites dès le Moyen Âge dans la cavea, il jouit d’une renommée internationale grâce à son festival d’art lyrique, les Chorégies, qui a lieu pendant la saison estivale.

Cl. M.H. : liste de 1810

Here too, with the state’s authoritative words, one cannot doubt the importance of this monument.

The same observer might very well purchase the official guidebook, published by the Direction du Patrimoine (Sous-direction de l’Archéologie) of the Ministère de la Culture, de
la Communication et des Grands Travaux,\textsuperscript{411} the guidebook is part of the “guides archéologiques de la France” series, which are reference books relating to the most important archaeological sites of France. Opening the book to the theater section, the second sentence of the description reads as follows; “cet édifice, comme celui d’Arles, présente toutes les composantes du théâtre latin selon Vitruve : la cavea en hémicycle à escaliers radiaux, les accès latéraux, le mur de scène à ordres décoratifs superposés et les parascena” (italics in text).\textsuperscript{412} With UNESCO, the Direction du Patrimoine and Vitruvius as ultimate authorities, questioning the authenticity of the monument seems quite futile.

The theatre monument appears to have fallen into disuse some time during the fourth or fifth centuries after waves of barbaric attacks are said to have resulted in fires devastating the inner areas.\textsuperscript{413} Burn marks on the walls seem to confirm this, although attempts at dating the fire(s) are ongoing and have thus far been inconclusive.\textsuperscript{414} Little is known of the theatre’s use during the Middle Ages. It probably served as an advance defensive structure for the castle built upon the hill to the south; remnants of a medieval (?) tower built atop the scaenae wall were still partially intact during the early nineteenth century.\textsuperscript{415}

One of the earliest textual references to the theatre is contained within Jean Bouveyroy’s *Discours des entiquitez de la ville dorange* [sic] of 1649,\textsuperscript{416} where he describes it among other monuments. Bouveyroy’s narrative is detailed, albeit somewhat difficult to read; on the

\textsuperscript{413} For a history, see Prosper Mérimée *Notes d’un voyage dans le Midi de la France* (Paris, 1835), pp. 112-14.
\textsuperscript{414} Study is ongoing; see P. Milner “Further studies of the Roman theatre at Orange – A progress report for Dr. M. Woehl” unpublished *Technology Note*, number TN-00/1, September, 2000.
\textsuperscript{415} The tower was demolished in the early 1830s; see Prosper Mérimée *Notes d’un voyage dans le Midi de la France* (Paris, 1835), footnote 1, p. 113. See also, Louis Chatelain “Les Monuments Romains d’Orange” in *Bibliothèque de l’École des Hautes Études*, cent soixante-dixième fascicule (Paris: Librairie Honoré Champion, 1908), p. 89.
\textsuperscript{416} Jean Bouveyroy “Discours des entiquitez de la ville dorange” in *Archives Municipales d’Orange*, manuscript Z 1174, dated August 24, 1649.
one hand the prose is challenging, while on the other, the document itself has deteriorated. What it does reveal, however, is the presence of bâtiments situated in the cavea where the seats should be.\textsuperscript{417} From his commentary, we are told that at some point before the seventeenth century, the space was altered substantially; gone is the cavea proper and new are dozens of houses that fill the area.\textsuperscript{418}

At approximately the same time that Bouveyroy was writing his Discours, Joseph de la Pise was preparing a history of the city and its monuments. His Tableau de l'histoire des princes et principauté d'Orange\textsuperscript{419} provides an account of the theater. The narrative combines site observations with a multitude of references to Antiquity's erudites such as Varro, one of Vitruvius' sources.\textsuperscript{420} What is most interesting is the illustration he provides (figure 4.2). In the fanciful depiction, la Pise outlines the theater with the scaenae in full elevation, the versurae covered by sloped roofs, and the cavea fitted with two horizontal sections of seating, complete with animal-fighting gladiators within the orchestra. The mur de scène and cavea are completely intact. The difficulty of course is that the figure conflicts with Bouveyroy's mention of houses in the cavea; for such a drawing to be prepared one would have to create it out of at least some image bank sited far from Orange and probably closer to the monuments found in his landscapes; his set of ruins included a personal imagination. In other words, if we accept Bouveyroy's words, this illustration seems to have less to do with the remains of the ruined theater -- certainly in-so-far as the cavea is concerned -- and more to do with a depiction based partly on the referenced classical texts mentioned and the personal classical architectural imagination of la Pise.

\textsuperscript{417} Bouveyroy, p. ddd. Note that the Monuments Historiques plaque does indicate that the cavea was freed from houses built within it during the Middle Ages.
\textsuperscript{418} Bouveyroy, pp. ddd, dd, eee.
\textsuperscript{419} The full title of la Pise's work is as follows: Tableau de l'histoire des Princes et Principauté d'Orange Divisé en quatre parties selon les quatre races qui ont regn€€ souverainement depuis l'an 793. Commenceant a Gvillavme av Cornet Premier Prince d'Orange. Jusques a Frederish Henry de Nassau à prefent Regnant (La Haye: De l'Imprimerie de Theodore Maire, 1640).
\textsuperscript{420} Reference to Varro is on page 16.
It is possible that la Pise saw the treatise by Giuliano de Sangallo (c. 1452-1516), which contained multiple studies of theaters, including that sited at Orange. Not unlike Alberti and others like Baldassare Peruzzi (1481-1586), Sangallo was adept at interpreting Vitruvius and comparing remnants in the south of France, and one of the ones he focused upon was the theater at Orange. Not unlike Alberti and others like Baldassare Peruzzi (1481-1586), Sangallo was adept at interpreting Vitruvius and comparing remnants in the south of France and one of the ones he focused upon was the theater at Orange (figure 4.3). His *modus*
operandi was the same for each theater: With Sangallo’s study of the theater at Ferento, we can see that his sketch of the monument is combined with the schema derived from Vitruvius’ Latin theater description;\(^{421}\) the Vitruvius-based diagram is then fitted to the initial sketch, allowing a textual “analysis” of the Ferento theater to be undertaken (figure 4.4). We do not know if la Pise was familiar with Sangallo’s work. Regardless, from the latter’s manuscript it is certain that the theater at Orange was part of the collected views of those following in Alberti’s tradition (Günther, 1988).\(^{422}\)

La Pise’s textual and visual renderings become even more problematic when one examines late eighteenth and early nineteenth century engravings (figures 4.5, 4.6 and 4.7). The three show that at some point after the abandonment of the structure-as-theatre, the cavea is overtaken by houses and transformed into a distinct urban living area. The depiction of the cavea-as-neighbourhood is more in keeping with Bouveyroy’s words and

\(^{421}\) I will elaborate on Vitruvius’ Latin theatre later in this section.

\(^{422}\) Sangallo’s work (and Alberti’s) is not the same as that undertaken by la Pise; there is no evidence to suggest that la Pise was measuring monuments.
Figure 4.4 – Giuliano de Sangallo’s Theatre at Ferento - late 15th c.

manuscript photo: Günther 1988, 309

Figure 4.5 - The Theater at Orange – late eighteenth century

P. Fourdrinier (XVIIIth century), Musée municipale d’Orange; dmm
Figure 4.6 - The Theater at Orange – late eighteenth century

Charles-Louis Clériesseau (1721-1820); late XVIIIth century
manuscript photo: McCormick 1990, 140

Figure 4.7 - The Theater at Orange – early nineteenth century

John-Claude Nattes (1765-1822);
Bibliothèque municipale d'Avignon; dmm
less-so with la Pise’s rendering. And while it is possible that the engravers are imagining sections of their respective spaces, it is quite likely that they are reflecting the realities of their immediate surroundings. Clérisseau spent five years in Rome and would have had a keen eye for details when rendering his version of the theatre. In another textual reference, Digonnet tells us that “... sur l’emplacement des gradins, une cinquantaine de masure se pressaient les unes contre les autres ; deux rues et deux impasses y donnaient accès” (quoted in Chatelain, 1980, 89). And we get further confirmation that the cavea was a fully functioning quartier of nineteenth century Orange from the very early nineteenth century Napoleonic cadastral plan (figure 4.8). Within the survey, the cavea is sub-divided into dozens of lots, complete with a street running east-west along the front of what would have once been the pulpitum, or stage. The mur de scène remains intact, as it is within the engravings (and both Bouveyroy’s and la Pise’s texts).

By the early nineteenth century then, it seems certain that the cavea had been dismantled during the period between its abandonment in the fourth or fifth centuries and the nineteenth century. While the scaenae stands as a reminder of a past theatre, the whole of what had constituted the physical cavea has visibly disappeared. The building materials for these “new” smaller buildings (and perhaps the Chateau des Princes d’Orange and its ramparts located atop the hill into which the cavea was initially constructed) were probably quarried


from the cavea seats;\textsuperscript{425} this is in keeping with the normal practice of reusing building materials during medieval times.\textsuperscript{426} What does remain (in terms of the cavea) during the early nineteenth century, is la Pise’s highly imaginative rendering. Most subsequent researchers would look to it as a starting point in their quests to understand and reconstitute the cavea. La Pise’s drawing, like other architectural illustrations, acted as a reference point within the collective imagination; his cavea “exists” from the moment the viewer glances at the depiction.

\textsuperscript{425} Although probable, the re-use of the cavea’s masonry in the upper chateau has not been proven. Aubin-Louis Millin, in his \textit{Voyage dans les départements du midi de la France - Tome II} (Paris: l’Imprimerie Impériale, 1807) certainly thinks it is. See his footnote 1, p. 152.

\textsuperscript{426} As previously cited, see Michael Greenhalgh \textit{The Survival of Roman Antiquities in the Middle Ages} (London: Duckworth, 1989). Louis Chatelain, in his “Les Monuments Romains d’Orange” in \textit{Bibliothèque de l’École des Hautes Études}, fascicule cent soixante-dixième (Paris: Librairie Honoré Champion, 1980), thinks it is likely, saying that “…il est permis de supposer que la forteresse fut en grande partie élevée avec des matériaux du théâtre” (88).
The story of today’s cavea at Orange begins in 1807, with Aubin-Louis Millin’s travel book entitled *Voyage dans les Départemens du Midi de la France.* Millin is a well respected man, member of no less than nineteen learned societies and at least nine scientific academies, as well as being Professor of Antiquities. His book on the Midi describes urban areas and focuses primarily on antiquities. For Orange, the entry is substantial and important. He initially outlines the streets and houses and then quickly moves to the triumphal arch and the theatre. In a specific reference, we see that the prior work of la Pise is referenced; Millin’s tone is one of confidence. He begins his theatre discussion with the “partie circulaire dans laquelle les sièges des spectateurs étoient établis” (148). Note that he uses past tense — “étoient établis” — when he refers to the seats. This contrasts with his use of the present tense in the rest of his description. The implication is that the seats are no longer in situ. Two sentences later he writes: “Vitruve fait mention expresse de ce genre de construction” (149). The use of the words “mention expresse de ce genre” creates a connection between Vitruvius’ words and the cavea at Orange. Key here is that other than the differences between the Greek and Latin theatres, Vitruvius did not differentiate between genres, or types of theatres. Nevertheless, Millin links Vitruvius’ words to the monument by suggesting that the latter makes reference to this type of theatre (one with a semi-circular section where the seating is situated). The difficulty is that using Millin’s reasoning, all Roman theatres are “de ce genre” because they all have, to some extent, semi-circular seating arrangements. At work here is a very basic mode of authentication — a circular one — whereby Vitruvius is appropriated in order to reinforce Millin’s (and la Pise’s) fanciful depiction. From this point on, Millin uses the present tense in referring to his own schematic drawing (figure 4.9).

Note that Millin uses different lines to show cavea remnants, seating limits and so on. Note also the concentrically-drawn lines depicting the seats; the regularity of these lines renders a

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427 Aubin-Louis Millin *Voyage dans les départemens du midi de la France – Tome II* (Paris: l’Imprimerie Impériale, 1807). While I use Millin and others in my reading of the literature, I do not purport that they are the only references to the monument. They are, however, typical.

428 Millin devotes some 22 pages to Orange.

429 The reference is made in footnote 1, page 149.
feel of accuracy and they will re-appear throughout future renditions of the cavea. What is especially impressive about the sketch is that Millin is able to draw it in spite of the approximately one hundred medieval houses covering the space! Obviously he is providing a hypothetical drawing based on his research and no-one would assume that it is a precise replication. And knowing that terrain checking would have been physically limited by the houses, the reader must presume that Millin would have resorted to whatever texts that would have existed. However, like the terrain access, the texts too are limited and Millin only had two or three main sources: la Pise's earlier work, Sangallo's treatise (which Millin did not mention) and the description contained within the De Architectura's Book V. Millin includes two of the references and they provide the reader with assurance that the depiction is accurate. Referencing Vitruvius' Book V, the same reader would have found it reassuring that Millin's concentric lines “fit” the geometrically-bound model of the De Architectura. This in spite of the fact that Millin's illustration does not, for example, provide a centre point that would offer the reader a partial opportunity to check the interpretation. In the end, Millin's drawing is schematic at best. And like la Pise's earlier rendition, it remains for later scholars to study and register it within their imaginations.

Just a few years after Millin's work, another history appears that includes the theatre of Orange. In his Histoire de la ville d'Orange et ses Antiquités, M. de Gasparin recalls in

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430 The lower parts of the scaenae building are also occupied by boutiques and as well, the bâtiment de scène itself is used as a prison. That a prison occupies the bâtiment de scène is confirmed within the municipal archives; a municipal record entry of 1824 states that “Le Conseil souligne que la prison qui est dans l'enceinte du Théâtre et dont l'installation est défectueuse devrait être au plus tôt transférée ailleurs.” See Raphaël Massé Annales d'Orange (Orange, 1950), p. 30.


432 I shall discuss Vitruvius' Latin theatre model in detail below.

433 Towards the end of his Orange entry, Millin suggests that the houses and prison should be removed: “Ce seroit rendre un service réel aux arts et à l'humanité, que de chercher un autre logement pour les prisonniers, et de détruire ces misérables masures, dont on dédommageroit facilement les propriétaires” (151). The suggestion to demolish the buildings would be recalled by his contemporaries; the reference to a “service to humanity” would be echoed by UNESCO a century later.

what will become a familiar modus, the writers\textsuperscript{435} and theatres\textsuperscript{436} of Antiquity. His text continues in la Pise’s and Millin’s footsteps,\textsuperscript{437} summarizing the narratives of the two and offering his own plan of the theatre (figure 4.10). His plan seems remarkably similar to Millin’s illustration. Note that in this drawing there are sections of the cavea that are drawn as dark outlines as if they are in place, with dotted lines continuing their trajectories presumably depicting hypothetical foundations and other lines that extend beyond the darker outlines; the whole certainly gives the impression of an accurate distinction between what is found on the ground and what is assumed. Again, however, there are dozens of houses standing within the cavea. How does de Gasparin arrive at this particular rendition of the remnants?

For one thing, he recalls the drawing of Millin and the latter’s use of a recent engraving by

\textsuperscript{435} He mentions Strabo, for instance; see p. 68.
\textsuperscript{436} The theatres at Delos, Syracuse, Sparta, Athens, and others are enumerated; see p. 73.
\textsuperscript{437} De Gasparin references la Pise on pages 65 and 101; Millin is noted on page 102 in footnote 14.
Maffei,\textsuperscript{438} noting that their renderings are erroneous in terms of interior proportions (102). It is odd that he signals the “error” because it is almost certain that he very directly extrapolated from Millin’s work. The two are remarkably close and the lines of Millin in fact appear to have been replicated. Considering the two diagrams, one is left to wonder if de Gasparin undertook to correct the proportion “errors” at all. He does not tell us. Regardless, de Gasparin’s chronicle is valuable in that it describes “in detail” the remains of the scaenae and some of the foundations along the cavea slope. What is also significant is that with de Gasparin’s book, we have the formalizing of previous knowledge as “accurate”. The textual and visual account summarizes the previous versions and adds to them in what is the beginning of a cumulative process of knowledge production. It is perhaps partly for this reason that de Gasparin’s book remained as the texte-de-base for subsequent researchers; it was re-published as recently as 1988.

\textsuperscript{438} Maffei had written an earlier account on \textit{Les Antiquités de France}.
The summarized histories provided by de Gasparin and especially his echoing of the call for déblaiements and house removals by Millin and others, such as the architect Auguste Caristie and the Société Académique d’Orange, had a significant impact upon the decision makers of the city. From the Annales d’Orange\textsuperscript{439} we see that in 1824 the municipal council is deliberating on whether or not it should allow for the continuation of the “dégagement du théâtre”; obviously the work to clear the cavea has been underway for some time. In 1824, local legislation is enacted to provide funding for the “travaux coûteux de démolition, de déblaiement et de consolidation”\textsuperscript{440} as tons of earth are removed from around the one- hundred or so houses.\textsuperscript{441}

In 1825, Les Monuments Historiques began substantial clearing work and local and state authorities continue to approve financial appropriations well into the 1830s. Within the city’s archives we find interesting notes regarding some of the work. Pierre Renaux, the architecte départementale, who is responsible for portions of the project,\textsuperscript{442} describes the type, costs and location of the work. Renaux had worked with Caristie\textsuperscript{443} and in his 1830s papers, there is what appears to be a contract determining the tasks to be carried out by a sub-contractor.\textsuperscript{444} Before listing the work per se, he gives an impression of the importance of the déblaiements, noting that “tous les habitants d’Orange de tout age et de tout sèxe” that want work will be hired.\textsuperscript{445} Obviously a significant undertaking is underway, with the objectives of uncovering the ruin and ultimately supplying the local museum with artifacts.\textsuperscript{446} A summary estimate of costs is also provided and eight “conditions” are enumerated, ranging from the way by which

\textsuperscript{439} See Raphaël Massé Annales d’Orange (Orange, 1950), notice 43 Bis, 22 Septembre, 1824, p. 30.
\textsuperscript{440} Massé, notice 43 Bis (footnote), 22 Septembre, 1824, p. 31.
\textsuperscript{441} This information is contained in a footnote within another of the 1824 entries of the Annales d’Orange; the note reads: “N.B.- A cette époque, l’intérieur du Théâtre était couvert de maisons, une centaine...” p. 30.
\textsuperscript{442} Renaux is architecte de département de Vaucluse at least until 1841. He is replaced by Constant Dufeu.
\textsuperscript{443} Durand, p. 164.
\textsuperscript{444} P. Renaux “Déblaiements Au Théâtre Antique d’Orange” in Archives Municipales d’Orange, Manuscript M/N 217, 1830, pp. 2-3.
\textsuperscript{445} Renaux, p. 1.
\textsuperscript{446} Renaux, p. 3.
the significant amount of debris is to be removed from the site, to the authority of the foreman. An important set of entries is contained within the 1832 notes.

Within his instructions, Renaux remarks that “Les tailleurs de pierres et maçons employés” are to re-work the large blocks -- “les blocs antiques” -- that are found amid the ruins. Further, he instructs that a certain wall should be restituted.447 And in referring to the loose blocs, Renaux stipulates that “lorsque leur position aura été reconnue et constatée par l’architecte les blocs qui [gèneront] pour le travail seront enlevés et déposés dans l’endroit qui sera indiqué à l’entrepreneur”.448 Apparently blocs are being removed for repositioning at a later time. Renaux intends to re-place the stones and from at least this point onwards, the déblaiement work is inextricably linked to the notion of putting things “back in their place”. In this case, Renaux is referring to an area parallel to the frons scaenae and the scaenae wall itself. However, he is also supervising the work throughout the cavea and it is no leap of imagination to assume that the construction work is taking place wherever he deems it necessary. That masons are employed to do “archaeological” work begs the question: exactly what is being re-built in the cavea neighborhood?

As part of the manuscript, a single, un-numbered page provides Renaux’s vision of the theatre (figure 4.11). The drawing page contains notes and is intended to accompany the instructions. From it we can see that the positioning of seats, stairs and so on has been more or less ascertained by Renaux. Recall, once again, that there remain dozens of houses in the space; the figure is hypothetical. He probably undertook some textual research to complement his archaeological explorations and this may have influenced the drawing. It is probable that the work of Millin, la Pise and de Gasparin was consulted, although he does not tell us. Certain is that there is one feature on his sketch that is not contained within the earlier drawings: Scribbled along the upper part of the sketch is a label that says “Grande Gallerie Couverte” (figure 4.11a). If the others did not allude to the feature

447 Renaux, pp. 1-2.
448 Renaux, p. 2.
Figure 4.11 – The Theater at Orange – Renaux, 1832

Figure 4.11a – The Theater at Orange – Renaux, 1832, detail
in their renderings, and if the site's topographical features do not support this architectural component, then where does Renaux get the impression that a large open gallery was built upon the upper cavea?

One source that was certainly available to Renaux mentions a gallery in that section of the theatre: the *De Architectura*. In his Book V, Vitruvius writes about a gallery in his general description on colonnades and walkways (V, 9.9). I shall return to the theater of Vitruvius in a moment.

As with all of the information regarding the early work on the theater at Orange, the extent to which physical reconstruction is undertaken during the early part of the nineteenth century remains blurred. By the early nineteenth century, the only drawings generated by local erudites are either personal imaginaries such as la Pise's illustration, or imaginative interpretations probably based to some extent on Vitruvius' text, as with Renaux's diagram. The earth removal and bloc replacement work accelerates in the 1830s as some twenty-five houses are demolished within the cavea neighborhood. The Mayor secures a further 10,000 francs for the work in May of 1833 and the removal of thousands of cubic meters of earth — *du cube* — attracts a great deal of attention to the city and especially its theater.

One of the important individuals drawn to the rediscovery of the theater is Prosper Mérimée. In 1834 Mérimée was named the successor of Vitet, the first *inspecteur général des monuments historiques*. This coincides with the publication of Mérimée's *Notes d'un*
voyage dans le Midi de la France. The attention and authority that Mérimée gains ensures the popularity of his book. In this way, his major work on the Midi’s influence becomes far-reaching within the archaeological and architectural circles of France. Basing himself in Avignon, he prepares his Notes and chooses Orange as a first regional stop. His theater reflections are detailed, incorporating prior readings and observations. The research includes the work of Renaux. He describes the ruins and he records that the frons scaenae is relatively intact — “mieux conservé” (114). At the same time, he notes that the seats are poorly conserved (112) and he highlights the progress in déblaiements and the expropriation and removal of houses which is by then ongoing (113). He underscores that the remains that were thought to be beneath the same houses have suffered important degradations and thus hints that what he observes may not necessarily be in keeping with the representations of others. He seems surprised and offers no drawing to complement his commentary.

One of the final passages in Mérimée’s Orange entry echoes Millin and de Gasparin: “Si l’on ne s’empresse d’y faire de grandes réparations, la France ne possédera pas long-temps encore ce monument presque unique dans son espèce” (113). The book does not offer a reconstruction of the theater. What it does do, however, is draw a great deal of attention to it. The Notes d’un voyage dans le Midi de la France is influential and the four-volume book becomes a guide and reference manual for subsequent historians and architect-archaeologists of the region. As inspecteur général des monuments historiques and especially later as responsable des travaux, Mérimée would be a key proponent of the construction work at the theater.

Meanwhile, in a set of letters from the Sous-préfecture d’Orange to its mayor, the Sous-prefect acknowledges a 2,000 franc grant from the Musée d’Avignon for more earth-clearing

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453 Prosper Mérimée Notes d’un voyage dans le Midi de la France (Paris, 1835).
The successive calls for vacating the cavea neighborhood are not met without resistance: While silent within the literature, inhabitants fight expropriation. Auguste Caristie characterizes the state of affairs during his time as chargé de travaux:

...Il était donc très urgent de remédier à cet état de choses. Sur les instances des autorités locales, le gouvernement, dans sa sollicitude éclairée, a ordonné le déblaiement de l’édifice et accordé les fonds nécessaires pour acquérir et opérer la démolition des constructions injurieuses qui couvraient ces précieux restes de l’art antique.

Dès 1836 on a procédé, par voie amiable, à l’acquisition de plusieurs maisons; mais les exigences de divers propriétaires ont paralyssé les efforts de l’autorité locale. Dans le silence de la loi au sujet de ces maisons, la Société académique d’Orange a pensé qu’il fallait recourir à l’autorité législative pour faire assimiler aux habitants d’utilité publique les divers monuments ou reste de monuments qui existent sur le sol français.

Une loi a été rendu à ce sujet : les acquisitions, les travaux de démolition, de déblaiement et de consolidation, ont pu s’en suivre.

Caristie, 1856, 42

Evidently, recourse to local bylaws does not suffice and legislative action is required to remove the homes from the area. The focus on the complete obliteration of any medieval trace is puzzling, given the nineteenth century obsession with monuments of the period. In a footnote, Caristie later quotes the opinion of M. Dupin ainé, an erudite consulted on the subject of expropriation:

... ceux qui se sont ainsi logés dans les monuments publics, comme les rats et les oiseaux de proie, n’ont pu acquérir aucun droit par prescription:

1° Parce que ces monuments étaient évidemment du domaine public, qui autrefois était imprescriptible;

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454 Archives Municipales d’Orange -- Manuscript Series M/N; letters dated January 30, 1838; March 13, 1838; April 23, 1838; May 11, 1838 and May 15(?), 1838. The letters acknowledge the receipt of the grant and also the eventual return of the sum to the Avignon museum. The reason for the return is not clear.
2° Parce que, si une possession a jamais été de mauvaise foi, c’est celle qui s’établit dans l’intérieur d’un cirque, ou sur le proscenium d’un théâtre, quand des ruines gigantesques sont là pour réclamer sans cesse en faveur de leur origine et de leur destination: Titulus perpetuo clamat.

Caristie, 1856, 42, footnote 2 (italics in text)

Thus he proclaims that the state has perpetual title to such monuments. In an 1847 municipal record, we see that gradually the houses continue to be removed from within and around the theater.455

Two processes happen concurrently: as houses are expropriated and removed, so too are tons of earth. The result is what amounts to the re-shaping of the local topography according to the instructions of site foremen and the imagination of project architects. Where the latter get their inspiration is thus crucial and lies within the textual and illustrative works discussed above. At the same time, travel literature highlights the monument and its notoriety increases with a further set of written accounts typically focusing on comparisons with like sites, allusion to classical writers, and some sort of textual or visual representation. The importance of the cavea takes precedence over medieval structures and the vernacular, and as the small houses are removed, a reverse quarrying process appears to happen whereby blocs and cobbles initially removed from the cavea to build the houses are kept for re-installation at a later date. Key is that the re-use of the stones and the subsequent earth terrassements are not necessarily part of a hap-hazard exercise; during Renaux’s time and beyond, the foremen “know” where specific elements should be located.456 The whimsical illustration of la Pise and the geometrically regulated drawings of Millin and de Gasparin are repeatedly referenced by travel and “academic” writers, reinforcing and supporting a certain imaginary of the

455 See Raphaël Massé Annales d’Orange (Orange, 1950), notice 110, 11 Juillet, 1847, p. 51.
456 Renaux dies and is replaced by Constant Dufeu.
cavea. And all along, site supervisors work, presumably with the premise that stones are to be re-placed in their “original” positions, as dictated by the site architect.

AUGUSTE CARISTIE’S THEATRE

One of the early nineteenth century proponents of the excavation and consolidation work has already been mentioned: Auguste Caristie. Caristie was a noted architect, having won the Grand Prix de Rome in 1813 and having been involved with the theater at least since 1820. Caristie had spent time studying Roman monuments, producing measured drawings and a commentary on the archaeological excavations at the Roman Forum. By the time he inherits the project as director of works in 1835, he has clear classical intentions. Through a close reading of his Monuments Antiques Orange - Arc de Triomphe et Théâtre (Paris, 1856) we get an appreciation for the magnitude of the work being carried out, as well as a feel for its interpretation.

If previous researchers had only alluded to other classical theaters, Caristie would provide lists of them (52-60), complete with discussions of theatre features that he felt his examples shared with the Orange monument (80-84). Similarly, he would provide a list of ancient experts -- authorities like Pliny (37) and Pausanias (33). It is with his drawings, however, that he would present a most convincing argument on the theater’s reconstruction.

Caristie begins the theater section of his thesis with a discussion of les théâtres Antiques. He describes them and eventually provides a comparative study. As in Vitruvius’ book,

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458 In his Monuments Antiques Orange – Arc de Triomphe et Théâtre – Publiés sous les auspices de S. E. M. le Ministre de l’État (Paris: 1856), Auguste Caristie tells the reader in footnote 1 that “En 1820, étant sur le toit de la maison qui etait adossée à cette partie de l’édifice, il m’a été possible de mesurer et de dessiner cette corniche avec facilité”; he is studying the theatre in detail.
459 See his Plan et Coupe d’une partie du Forum Romain et des monuments sur la voie sacré indiquant les fouilles qui ont été faites dans cette partie de Rome. Depuis l’an 1809 jusqu’en 1819 (Paris: Imprimerie Didot L’Ainé, 1830).
authority is gained through the naming of examples and authorities. Comparative studies can be useful in that they help bring similarities and anomalies to light. Difficulties arise, however, because the elements under comparison are chosen by the narrator; the similarities and differences can be readily modulated -- consciously and unconsciously -- in order to render a desired truth. With Caristie’s comparisons, it is especially difficult to assess how and why he selects certain details while omitting others. In his comparison with the theater at Herculaneum, for instance, Caristie writes that the two theaters share a number of similar features (81) yet does not tell the reader what these are. The whole moves towards the eventual comparison of the Orange theater with Vitruvius’ Latin and Greek theaters.

Certain is Caristies’ dependence on the De Architectura, he uses the translation of Perrault (37). Thus far I have only alluded to Vitruvius’ description; here I need to pause and detour to Vitruvius’ Book V, where the instructions for the design of his Latin theatre are delivered. Vitruvius instructs that as soon as the market has been sited, the best location possible should be chosen for the theatre (V, 3.1). If a suitable topography is not within the immediate surroundings, foundations and substructures must be erected for the cavea. The cavea forms the first and main part of the structure, while the orchestra forms a second important space. These are the two spaces I am most concerned with in this discussion. A third space consists of the scaenae (V, 3.3). In terms of the spatial plan and design of the theatre, the orchestra is the defining entity. First, a circle designating the orchestra is drawn (figure 4.12). Inside the circle, four triangles are placed, equilateral and equidistant from each

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460 See for example, pp. 33 (footnote 1), 34, 35, 36, 37 (Perrault), 39, 45, 45 (footnote 3), 46 and 51 (footnote 1) in his Monuments Antiques Orange – Arc de Triomphe et Théâtre – Publiés sous les auspices de S. E. M. le Ministre de l’État (Paris: 1856).

461 Readers of Vitruvius will be tempted to say that Vitruvius’ section on the Roman theatre -- aside from the temple -- is the most detailed of his instructions and that because of this, recourse to it for related-related instructions is substantiated. The same readers might point out that it is in the Greek writings relating to the theatre that Vitruvius sees the first written discussions on architecture and his related tenets are thus likely to be accurate. Vitruvius does indeed consider the comments of Agatharchus (5th century B.C.) on Aeschylus' (525-456 B.C.) use of the stage, as the birth of architectural theory-related discourse (VII, preface. 11). To him, it is the statements of the former that influenced Anaxagoras (500-428 B.C.) and Democritus (460-370 B.C.) to reflect on stage, light, perspective and corresponding theatrical illusion (VII, preface. 11). This does not, however, suggest that Vitruvius’ model is universally applicable. We have seen in chapter 2 that Vitruvius has many objectives in mind and deliberately leaves his models generalized.
other, touching the inner circumference of the circle at twelve points (V, 6.1). Vitruvius stresses that it is important that the base of one of the triangles be perpendicular to the axis of the desired structure. The base of this first triangle, in this case line A-B, is the line designating the *scaenae frons*, or the short front wall of the *scaenae*. Behind the *scaenae frons* is to be situated the *postscenaem*, or the set of rooms designated for actors, storage and theatre-related fitments. A second line (C-D), parallel to the first, is drawn through the middle of the orchestra, forming the *proscaenium*, or forward limit of the *pulpitum*. This defines the basic limits of the orchestra, the *scaenae frons* and the theatre axis (line G-J) (V, 6.1). The diameter line of the circle is dotted by the twelve points of the triangles. Points C, D, E, I, F, H and G reflects the positions of the entrances into the *cavea*, dividing the seats into six radial *cunei*, or wedge-shaped seating sections (V, 6.2). The *cunei* are further divided into two tiers each, separated by open horizontal corridors, or *praecintia*. In the higher tier, additional sets of stairs are placed, for more efficient access, halfway between the lower *cunei* stairs. The precise number of *praecintia* relates to the height of the structure.

The other inner triangle points, A, B, K, L and J, are used to identify the main *scaenae* features. The *valva regia*, or main royal entranceway into the *scaenae* space from the *porticus postscenaem*, are determined by the line through J and is opposite the *regia*, or central doorway, halfway through line A-B along G-J. The points where the lines formed by the sides of the triangles at H-L and F-K intersect line A-B and indicate the *hospitalia*, or secondary *scaenae* entrances. The tangent lines to points C and D designate the location of the side entrances from the *versurae* (V, 6.8). *Bisellia* occupy a section of the orchestra, somewhat complicating the limits of this space (V, 6.3). Further notes on the *additus maximi*, or passages in the wings to the inner *cavea*, as well as the positions of the *periaktoi*, the machines that operated the *scaenae* scenery were also included in Book V (2-8). Heights are discussed in the same Book (V, 6.1-9).  

462 In terms of overall dimensions and heights, Vitruvius notes that the *scaenae’s* length is to be double the diameter of the orchestra and to reach from the front of the *scaenae frons* (line A-B) to the line stretching through C-D. The *scaenae* is thus one fourth the diameter of the orchestra in depth (V, 6.1-9). Along the upper tier of seats is to be constructed a *porticus*, with its roof at the same height as the *scaenae* (V, 6.4).
Thus is the Latin theatre as prescribed by Vitruvius in his Book V. He spends a great deal more time describing the Roman theatre than the Greek theatre; paradoxically, we know that he spent more time observing Greek examples which he describes fairly briefly (V, 7.1-2). I will return to the theater tenets of Vitruvius, but for now, suffice it to say that this detailed set of instructions is completely schematic. The figure generated from the words is the most accurate drawing that can be developed using the words of Vitruvius (Sear, 1990, 251; Isler, 1987, 142). With this highly generalized ideal then, it is easy to see how it is possible to "fit" into it a great many -- if not all -- classical theaters.

Similar dimension-controlling arrangements are stipulated for the theatre's overall height, where Vitruvius mentions, for example, that the area of the theatre is to be organized so that if a line is drawn touching the lowest part of the top rows, it will also touch the front angles of all rows (V, 3.4; 6.3-5). The pulpium is to be five feet high, complete with a podium rising above its surface. The podium's height is to be one-twelfth the orchestra's diameter, with columns rising to a height equal to one-quarter of the diameter of the orchestra (V, 6.6). Vitruvius describes the scaenae height in some detail, yet interestingly he writes nothing regarding the niches making up the scaenae frons. Height-related proportions for the entablatures making up the three levels of the stage building are also provided in Book V (6.6).

He also defines the porticus postscenam in the same Book.
So broad are the tenets in fact that Vitruvius tells the reader that the design features should be made to suit the site. I stress this point because when an example is matched to the depiction in the *De Architectura*, it immediately becomes quite impossible to argue against it. They always fit in terms of geometrical arrangement or spatial delimitation. So when in the same discussion Caristie states that Vitruvius' prescription for the *scaenae* wall is aligned with the *mur de scène* at Orange, the comparison is completely redundant; the alignment holds for just about all theaters. This particular comment of Caristie's offers no real insight into the design of this example and while he concludes that the theater's *pulpitum* position more closely approximates Vitruvius' Greek theater, little is clarified regarding the actual features of the monument. In other words, a close physical survey of the *pulpitum*’s features would have probably rendered more information than the comparative analysis. Except for one thing: The comparative narrative has the intrinsic quality of rendering a great deal of perceived erudition, authority, acuracy to the work. By the time Caristie has evoked the ancient texts, the list of classical authorities, the plethora of theater examples located in remote areas, and of course, Vitruvius’ treatise, the reader becomes convinced of the value, and plausibility of what is to follow.

After the background and introductory presentation, Caristie introduces his own drawings, carefully presented within a set of meticulously detailed *gravures*. Consider his engraving of the site (figure 4.13). In this perspective we find houses still standing in the lower *cavea*, with the upper *cavea* appearing completely cleared. The only thing remaining in the perspective’s foreground are layered levels of earth. Recall that this drawing is being presented after decades of earthworks has taken place and that by then, the local topography would *de facto* reflect the specific shape of a *cavea* -- the one anticipated by site supervisors and *architectes-en-charge*, regardless of what it may have been like in the distant past. It cannot be proven that the directors of the earth removal work deliberately “carved” a specific form into the hillside, thus accentuating the contours of whatever *cavea* would have been originally built. However, in a later historical photograph I will show that the earth was not necessarily cleared to the surface of the bedrock.

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do not argue that this was not a *cavea* in the first place; I am highlighting that the decision to leave (and especially remove) amounts of earth would have resulted in the alteration of any future posited reconstruction. Caristie’s drawing conflicts a bit with his site plan (figure 4.14). On the site plan are lot delineations, presumably outlining parcels still privately held (shaded), as well as areas that have been cleared (in lighter tone). The dominance of the dark lines suggest that they represent real, albeit ruined, theatre components. In the next rendering (figure 4.15) the lot lines are removed, with the topography and ruins completely outlined as Caristie apparently observes them. There is of course no way of checking Caristie’s portrayal of field remains. While he does mention that sections are missing,465 these are not readily identified and some of the lines may represent re-built walls. We simply do not know; assuming that the lines in his survey are accurately depicting observable ruins and are in turn relatively well surveyed, we can see that Caristie is to some extent extrapolating and adding built remains by the time he gets to the theatre plan. Regardless, the lines are at best *traces* of what would have been remaining masonry foundations. The *cavea* lines are regularized and compass-drawn. Very faint lines in the early plan presume what

Figure 4.14 – Site Plan - Remains

Caristie, 1856, plate XXXIII; dmm

Figure 4.15 – The Theater at Orange – Early Plan

Caristie, 1856, plate XXXIII; dmm
would otherwise be an uneven topography and a relatively non-existent architecture. They are, in fact, equivalent to the regulating triangles of Vitruvius’ Latin theatre and Caristie makes full use of the latter’s schema. As drawn, the architecture becomes very “real”. Considering Caristie’s comments on missing sections; it is surprising that the cavea tracing can be so accurately provided. He writes:

En 1835, avant les travaux de déblaiement, non-seulement tout l’intérieur de l’édifice était couvert de maisons, mais des constructions avaient été adossées extérieurement aux parties latérales, où des mutilations et l’envahissement s’étaient étendus jusque dans les dépendances de postscenium [sic], et des maisons couvraient la surface des grandes salles placées à ses extrémités; partout les occupants avaient sapé les murs pour agrandir les localités qu’ils avaient usurpées.

Dans de certains endroits, les murs avaient été percés de part en part; dans d’autre, leur épaisseur avait été diminuée des deux tiers.

Caristie, 1856, 41-42 (italics in text)

The basic plan, then, is at least partly a figment of Caristie’s imagination. I say “partly” for this figure, but what follows is much more problematic. Compare Figures 4.16 and 4.17. I emphasize that by the time Caristie produces the first drawings (depicting a ruinous theater), decades of déblaiements and building component repositioning have gone by. We can see from a painting of the theater (entitled “État actuel”) that even decades later, only faint traces of the cavea remain (figure 4.18). That aside, and assuming that his drawings are state-of-the-ruin portrayals, the leap from the field drawings to the restitution is gigantic. There is an upper portico akin to Renaux’s supposition and responding to Vitruvius’ instructions. There is an outer porch situated to the north; archaeological remains and architectural scars point to a space having been there, although there is no evidence for its construction as shown. Finally, there is a detailed set of
Figure 4.16 – Caristie: Theatre Remains

Caristie, 1856, plate XXXI; dmm

Figure 4.17 – Caristie: Theatre Reconstruction

Caristie, 1856, plate XLV; dmm
three seating levels; the connections between the cavea and the scaenae wall are invented; the presence of bedrock suggests that the seating as shown is completely erroneous.

In addition to the major alterations, Caristie proposes a solution to the vela and vela-mast arrangement, as well as a reconstructed upper wall section for the versurae, or the basiliques, as they are still referred to (figure 4.19). The difficulties with the vela system reconstruction are numerous: Aside from the fact that the post-holes within the upper portico are fictitious, those located along the higher extremities of the rear cavea wall have not actually been situated by Caristie. More problematic is that the double sockets inserted along the upper section of the north facade of the scaenae wall are, as Caristie himself notices, misaligned in such a way that they could not have served as supports for masts (figure 4.20). A pseudo-cornice located between the upper and lower sockets in fact protrudes too far outwards for a mast to pass through the upper socket and reach the lower socket. Further, the holes of the upper and lower sockets do not always align with those of the pseudo-cornice. It is possible
that the mid-level cornice acted as a mast strengthener in an early theater, re-built at some point unknown to us today. Caristie cleverly omits masts running through the more than two-dozen central sockets; that is because the pseudo-cornice is here not pierced, rendering it impossible for masts to have been installed the way they are shown along the wall’s outer eastern and western areas. And while cabling would have been involved in the initial design of the *vela* and its rigging, Caristie’s proposal to stretch cables across the entire *cavea* with the use of wooden (?) trusses shown in the same figure is questionable at best. In thumbnail drawings contained within the *Description détaillée du théâtre* section of his book, Caristie
outlines details of his post-hole/vela system solution (figure 4.21).\textsuperscript{466} Odd is the insertion of the vela system reconstruction within his section dealing specifically with the description of the theatre; the reader might be tempted to assume that what Caristie discusses is based on some set of observable facts.

The corrective proposal for the upper versurae walls also seems born out of Caristie’ imagination. While there are downward sloping lines along the inner faces of the upper versurae walls, the suggestion of a sloped roof truss remains problematic. It is possible that Caristie has based his supposition on la Pise’s illustration; the latter’s drawing does have sloping roof lines. The versurae, like the rest of the theater, were utilized for a number of purposes within the theater’s lifespan; the markings along the upper versurae may be remnants of one or more of these uses and it is difficult to accept all of the scars along its surfaces as belonging to a single moment in time. There are a host of questionable features that go beyond my purposes here: assorted statuary, wall decoration, a wooden (?) roof above the pulpitum, and so on. Some of these details are founded in observable remains; most have their origin in Caristie’s penmanship. I think that the point should be clear by now that the interpretation of the remains by Caristie during the first half of the nineteenth century are mired with his imagination, based on other like-monuments of Antiquity, readings of the De Architectura, and very liberal interpretation of the terrain.

Finally, consider Caristie’s “final” site layout (figure 4.22).\textsuperscript{467} Here the details provided in the earlier drawings come together completely. After his long series of drawings and explanatory notes, Caristie outlines the complete theater, now contextualized within its broader site. He includes the previously discussed portico and a more elaborate porticus post

\textsuperscript{466} Attempts at understanding the way such trusses may have functioned are still underway. See P. Milner “Further studies of the Roman theatre at Orange – A progress report for Dr. M. Woehl” in Technology Note, number TN-00/1, (unpublished), September, 2000.

\textsuperscript{467} This is the plan, it would seem, that Pierre Gros turns to in the Introduction of his theatre discussion in his L'Architecture Romaine du début du IIIe siècle av. J.-C. à la fin du Haut-Empire (Paris, Les manuels d’art et d’archéologie antiques, 1996), p. 272.
Figure 4.21 – *Vela* Rigging Components - Reconstruction

Caristie, 1856, p. 76, figures 29, 30 and 31

Figure 4.22 – The Theater of Orange – “Final” Plan

Caristie, 1856, plate XLIX; dmm
scaenam as well as a highly improbable cirque along the western reaches of the site. Note the cavea which is now completely illustrated: Some 31 rows of seats are shown, in three horizontal sections, arranged within four lower and eight upper cunei, with corresponding stairways separating each. A row of 32 postholes surrounds the upper cavea, located on the inside of what is presumably an upper portico that is accessed at six points. The whole is perfectly aligned and "fits" the topographic realities and architectural potential of the site; the rear double wall is respected, the slope appears to have been taken into consideration, and so on. More significant perhaps is that the whole also "fits" within Vitruvius' schema. Not surprising, given that the architectural and topographical features have been slowly adapted to each other for some fifty years.

With the work of Caristie, we have the formalization of a hypothetical reconstruction of the theater at Orange. Through his work as director of dégagements from 1835 to 1856 and especially through his publication of detailed engravings and study, he convinces his readers that his rendition is that of a "real" monument. He pulls together the previous documentation of the theater and examples from Antiquity on the one hand, while connecting on the other the intricacies of his etchings to the vividness of the topoi residing within the imagination in order to achieve this implicit goal.

ACCEPTING the ARGUMENT

Present-day readers will think of Caristies' book as just that -- a book containing a hypothetical reconstruction. The publication, however, does not operate independently. Just

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The purposes of the spaces adjoining the related continue to be elusive; I here leave them out of the discussion, although it should be clear that Caristie's reconstruction is highly speculative at best.
after its completion, a man who has already been mentioned in relation to Mérimée and Les Monuments Historiques is working on a report of Caristie’s work; Vitet, the first inspecteur général des monuments historiques has taken interest in the theater. In a detailed compte rendu to the Journal des Savants Vitet completely endorses Caristie’s project and echoes his ideas, stressing the acceptance of the work. In a style that has by now become familiar, Vitet begins his report with a list of classical theaters, making the point that no other theater is as important as that at Orange. The only significant difference between Vitet and his predecessors is that his list is longer, with some sixty-seven theaters enumerated. He is evidently basing his assessment of theaters on bâtiments de scène because in the same paragraph he laments the condition of the Orange cavea:

... la partie semi-circulaire destinée au public, ce que nous appellerions aujourd’hui la sale de spectacle proprement dite, n’est plus qu’un amas de ruines, rien ne subsiste des étages supérieurs, et, si les premiers rangs n’ont pas été détruits c’est qu’ils sont assis sur le roc.

Archives Municipales d’Orange, Manuscript T.A. 20, 1859a, p. 1

That said, he reiterates the importance of the monument:

Est-il besoin d’insister sur le prix inestimable d’un pareil monument? Mettez de côté sa valeur archéologique, oubliez qu’il est peut-être unique au monde et qu’il sert à éclaircir un des points les plus obscures, les plus énigmatiques de l’architecture des anciens; il n’en restera pas moins au premier rang par le grandiose des proportions, la beauté de l’appareil, les dimensions des matériaux, la fermeté du style. Chaque

469 Recall that Mérimée had succeeded Vitet as inspecteur général des monuments historiques in 1834.
470 Archives Municipales d’Orange – Manuscript T. A. 20: Ludovic Vitet Compte rendu de l’ouvrage de M. Caristie sur les monuments d’Orange, 1859(a). This manuscript is almost identical to a section of a two-part journal article published in the same year in the Journal des Savants, June-July, 1859(b), pp. 325-36 and 430-43; it is possible that the handwritten manuscript is not of Vitet’s hand and is a transcription of the article. While I here use the manuscript as reference, the words in the manuscript are the same as those of the article.
471 Archives Municipales d’Orange – Manuscript T. A. 20: Ludovic Vitet Compte rendu de l’ouvrage de M. Caristie sur les monuments d’Orange, 1859a. p. 1. I will come back to Vitet in chapter 4; his feelings about the related, it would seem, fit well within the ideology of the time.
fois qu’il nous est arrivé de voir et de mesurer des yeux cette immense façade, notre surprise a été plus grande. L’étonnement s’accroît quand on a la mémoire encore fraiche des monuments de l’Italie, car il existe même à Rome, qu’une seule œuvre de main romaine don’t la grandeur soit plus imposante encore, c’est à savoir le Colysée. Après ce géant des amphithéâtres on peut placer hardiment le théâtre d’Orange. Et c’est dans une chétive petite ville qu’on rencontre ce colosse! Contraste étrange qui ajoute encore, si c’est possible, à la grandeur de l’édifice.

Archives Municipales d’Orange, Manuscript T.A. 20, 1859a, p. 2

Note the memory-related comment — “L’étonnement s’accroît quand on a la mémoire encore fraiche des monuments de l’Italie, car il existe même à Rome, qu’une seule œuvre de main romaine don’t la grandeur soit plus imposante encore, c’est à savoir le Colysée”. If the reader of Vitet’s report has difficulty creating a mental image of the cavea at Orange, the examples will undoubtedly help to fill-in the gaps. The earlier list of theaters has been surpassed by the memory of not a theater, but the Coliseum. Now that the theater of Orange has been accepted within the grouping of other “great” classical theaters, its cavea “exists”; the hypothetical model provided by Caristie is merely its confirmation. And now that the greatness of the Coliseum has been evoked, the scale and importance of the theater of Orange is established; it is the largest and there is no equivalent. Vitet is beginning to set the tone for an argument for physical reconstruction. But a further element of confidence is required to solidify the argument. After comparative discussions of some of the listed theaters, a detailed description of the remains, the recalling of a variety of authorities, Vitet evokes the De Architectura in his discussion of stage machinery.472

... Vitruve lui-même a soin de nous déromper en indiquant quelle place occupaient ces machines et quel en était le nombre. Il y en avait trios en tout dans chaque théâtre...

Archives Municipales d’Orange, Manuscript T.A. 20, 1859a, p. 10

472 He develops a similar argument in his “De quelques moulages d’après l’antique exposés à l’école des Beaux-Arts” in Journal des Savants, juin, 1861(b), pp. 376-86.
The recalling of Vitruvius continues as the work of Caristie is praised. Consider Vitet’s comment regarding the roof:

M. Caristie, sans se perdre en vaines conjectures, sans agiter la question de savoir s’il a existé hord des Gaules des théâtres dont la scène fut couverte, s’attache seulement au monument qu’il étudie; il y voit la trace d’un toit, et aussitôt il cherche à se rendre compte de l’effet que ce toit devait produire, des moyens mis en usage pour l’établir et le consolider, et à quelles conditions il pouvait garantir la scène sans que, d’aucun point de la salle et sur aucun rang de gradins, la vue du théâtre en fut interceptée. Cette question de la couverture de proscenium lui inspire une dissertation pleine d’intérêt et très-concluante, à notre avis.

Archives Municipales d’Orange, Manuscript T.A. 20, 1859a, p. 6

Somewhat paradoxically, while Vitet readily accepts Caristie’s hypothetical solution, he states that some of these are “conjectures”:

...Non-seulement il expose ses conjectures, mais il réalise dans une restauration graphique où sont indiqués tous les détails de la charpente…

Archives Municipales d’Orange, Manuscript T.A. 20, 1859a, p. 6

Perhaps he is not yet entirely comfortable with the way Caristie has presented the project and before concluding, he inserts a short discourse on imagination:

Plus les peuples ont d’imagination et de fraîcheur d’esprit, moins ils demandent à leur théâtre un système de décors rigoureusement imitative. Voyez les enfants, ils se figurent ce qu’ils veulent voir; ils transforment tout à plaisir; un bâton sur l’épaule, et les voilà soldats; un bâton qu’ils
If the reader is not, by then, convinced that Caristie’s decoration reconstruction should be accepted, the reference to some sort of duty to imagine helps: Vitet says that just as the imagination of children can work to transform baton-holding into an imaginary cavalry scene, so too can it -- the imagination -- accept the decor of the theater. Vitet is linking the imagination of the reader to the arguments and drawings provided by Caristie in what appears to be an invitation to interpret the latter in the same way a child would transform a baton into a riffle. This is highly significant; there is a clear acknowledgement of the links between some of the components of the hypothetical solution of Caristie and the interpreter’s imagination. With this notion accepted, it becomes easy to persuade the reader that the reconstruction is indeed plausible. After the digression on the child’s imagination, Vitet writes: “Est-il besoin d’insister plus longtemps pour démontrer à nos lecteurs en quelle estime il faut tenir et les magnifiques restes du théâtre d’Orange, et l’ouvrage de M. Caristie qui les reproduit si bien.”

He then suggests that along with archaeological observation and historical and literary studies, more work of Caristie’s type has to be undertaken to better understand ruins.

The report ends with a reference to Millin, who, you will recall, had whimsically described the cavea and first called for the removal of the hundred or so houses sited within. By Vitet’s time, most of the homes are gone -- [g]râce à une heureuse application du principe de l’expropriation” and in an “... inappreciable service rendu à la science...” (1859a, 25) and the cavea is now ready to be re-constituted. Reflecting his influence, Vitet’s Journal des
Savants article is reprinted three years later in the Gazette des Beaux Arts’ first issue. The clean illustration he includes speaks of the cavea’s transformation since the engravings of the earlier part of the century (figure 4.23).

A short time after Vitet drafted his report, another architect was working on the theater and preparing another important study. Until then, the references to Vitruvius are specific, although not dominant within the Orange literature. G. Legrand, however, in his Recherches sur la scène antique justifié par l'étude du théâtre d'Orange, takes on the design of the theater and connects it, explicitly and directly, to the De Architectura.

After the usual recalling of the ancients and a summario of the Latin theater of Vitruvius, Legrand commends Caristie (14) and then writes this most significant passage:

La disposition de la scène pendant la représentation nous parait avoir été peu étudiée jusqu'ici; les éléments matériels de cette étude n'existent plus et les données que les auteurs anciens ont laissées à ce sujet, se réduisent à quelques phrases peu explicites du Quatrième livre de Vitruve, auxquelles les commentateurs ont, peut-être donné un peu trop d'élasticité.

Pour ne pas nous laisser entrainer dans la même voie, veuillez, Messieurs, nous accompagner dans une excursion au théâtre d'Orange, pour faire ensemble, Vitruve à la main, l'application du texte au monument lui même.

Legrand manuscript, n.d., p. 14

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476 Ludovic Vitet “Monuments antiques de la Ville d'Orange” in Gazette des Beaux Arts, première série, 1861(a), pp. 297-310.
477 G. Legrand Recherches sur la scène antique justifié par l'étude du théâtre d'Orange, undated manuscript, Archives d'Orange, manuscript with no apparent inventory number. I base the post-Vitet/Caristie date on the fact that Legrand refers to Vitet's 1859(b) report (footnote a, p. 40) and to Caristie's 1859 publication (footnote b, p. 14); they are the latest works he references.
478 Legrand uses the 1673 and 1680 French translations by Perrault; see manuscript p. 3, footnote b.
Thus Legrand proposes an excursion to the theater of Orange with the *De Architectura* in hand. With some 25 pages interspersed with dozens of links between the general tenets of Vitruvius -- he provides a sketch of Vitruvius’ Latin theatre -- and the specific features of the Orange monument, he concludes that “Le théâtre d’Orange est là pour justifier les conjectures du doute ... [missing word in text] ... du XVième siècle, et démontrer qu’il n’y a point d’erreur dans le texte de Vitruve” (44). So circular has the argument become that the theater, built at least one hundred years after Vitruvius drafted his treatise was now used to show that the first century B.C. author was correct.

On Caristie’s work, Legrand simply states that “Nous n’avons pas la témérité de vouloir décrire cette admirable ruine; c’est une tache qui vient d’être si fidèlement rempli par Caristie qu’il n’est désormais plus possible de rien ajouter à l’oeuvre consciencieuse de ce savant architecte” (14). To Legrand, the authority of Caristie is as solid as Vitruvius’ and there is

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479 Note the similarity between Vitet’s and Caristie’s earlier drawing of 1856.
nothing to add to it. When other architects Louis Rogniat, Paul Blondel and M. Daument, undertake studies of the same monument, it is Caristie’s text and engravings that persist.

CONSTRUCTING the THEATRE

From 1877 to 1883, Daumet, architecte attaché à la Commission Supérieur des Monuments Historiques supervises substantial reconstruction work in the lower partitions of the western areas. As of 1882, the Formigés -- father and son -- take on the reconstruction project; the municipal government is keen on facilitating live spectacles within the space and the two architects hurriedly begin to rebuild the seats. The two lower sets of seats as well as many of their supporting structures are constructed and we can see some of the progress with a first horizontal gradins section partly in place in an 1880’s engraving (figure 4.24). I include an earlier 1830s engraving for comparison (figure 4.25).

In the earlier part of the twentieth century, the son, Jules Formigé, builds the eastern section of the corridor leading to the inner cavea as well as a variety of features belonging to the scaenae wall and other components. By the time Louis Chatelain writes his book for the Bibliothèque des Hautes Études in 1908, Caristie is fully accepted as an authority on Orange antiquities and his book serves as model; in turn, the physically reconstructed areas re-confirm his “theorized” theater. In a sense, with the emphasis on ancient sources as authorities, Chatelain’s book continues with what by the early twentieth century has become a tradition -- an invented one -- of including references, not necessarily to support

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480 Correspondence from Louis Rogniat to the Mayor of Lyon, dated January 23, 1883; Archives de Lyon document 4j4 wp25.
481 References to Caristie-as-authority abound; see for example Camille Saint-Saëns Décors de Théâtre Dans l’Antiquité romaine (Paris: L. Baschet, 1886).
Figure 4.24 – The Theater of Orange – 1860s (?)

Figure 4.25 – The Theater of Orange – 1835-39
particular views or arguments, but to render a feel of authority to the narrative. And as with
his nineteenth century predecessors, Chatelain reverts to most of the earlier studies and he
devotes a complete chapter on the theater with Caristie as his primary source.

Chatelain’s theater section is descriptive and comparative, looking at, for instance, the
different dimensions given by the various previous researchers. Throughout his chapter, the
implication is that this is the best preserved monument of its type. Chatelain writes: “Le
théâtre d’Aspende, en Asie Mineure, est le seul qui soit à comparer avec celui d’Orange pour
son excellente conservation” (98, footnote 2). Chatelain does not necessarily advance new
perspectives, but he does hint at the extent to which the theater is being constructed
according to Caristie’s hypothetical drawings. In a passage discussing building materials, he
notes:

Il importe de signaler l’exactitude minutieuse de la
restauration du monument ; pour celui-ci comme pour l’arc.
Caristie n’a employé que les pierres dont les carrières, encore
exploitées, avaient été mises à contribution par les Romains.

Telles furent les réparations exécutées sur les plans de
Caristie. Elles permettent d’apprécier le talent dont a fait
preuve cet architecte, sa vaste érudition archéologique, son
respect de l’œuvre originale, et la longue ténacité avec
laquelle, sans se laisser rebutter, il a surmonté des difficultés
sans nombre. Si estimable à tous égards que soit sa
restauration de l’arc, on peut à bon droit penser que sa
restauration du théâtre est pour lui un titre de gloire encore
plus durable.

A ces réparations essentielles, des subventions de
l’État ont permis d’ajouter la reconstruction des gradins et des
murs latéraux…

Chatelain, 1908, 94

The passage is probably the first to clearly connect the reconstruction efforts to the drawings
of Caristie. The fact that the builders employ stones from the same quarries as those used by

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485 Among others not included in this discussion, de Gasparin is footnoted throughout, la Pise is referenced
on p. 119, Mérimée on p. 90, 91 and 96, and Renaux on p. 92. Caristie is evoked throughout the book.
the Romans seems to make the reconstruction more “Roman”. The whole of Chatelain’s argument in favor of the Caristie restitution is extremely circular, at first stating that Caristie’s drawings are used as guides for the reconstruction, then inferring that the rebuilt monument reflects the original one; the only record of the “original” one is the hypothetically drawn model by Caristie in the first place. Another few lines show that Caristie’s illustrations have become the base-plans, albeit acknowledged as hypothetical:

Le nombre exact des gradins de ce théâtre ne nous est connu en rien: on peut, à titre d’indication plausible, mais purement hypothétique, se reporter au plan imaginé de tous points par Caristie. Cinq rangs de gradins seuls avaient été mis à découvert: Caristie, dans sa reconstruction de l’intérieur du théâtre, indique sept (?) gradins dans la seconde praecinctio; une troisième en aurait contenu deux (?) ; enfin un portique...

Chatelain, 1908, 103; (punctuation and italics in text)

Near the end of the chapter, Chatelain presents a comparison between les théâtres modernes and les théâtres antiques. For the théâtre antique, his physical example is the Orange theater; his textual authority is the De Architectura. The physical and textual become representative of the same theater of Antiquity and become inextricably linked within Chatelain’s book.

As Vitet, Daumet, Chatelain and others are studying and writing about the monument, the Formigés continue with their building activities. At the same time, Jules Formigé publishes a number of related articles. Consider Formigé’s Remarques diverses sur les théâtres

486 Among others, Jules Formigé publishes a set of articles related to the monuments of Orange in the Bulletin des Antiquaires de France (1924, 25, 26, 27 29) and L’Académie des Inscriptions et Belles-Lettres (1914, 16, 17, 33).
Romains à propos de ceux d'Arles et d'Orange.\textsuperscript{487} The 65 page report is detailed and combines a plethora of references to Vitruvius with details of classical theaters to provide hypotheses for the missing architectural components of the theatre at Orange. Using this methodology, Formigé confirms most of Caristie’s postulated model and fills-in some of the missing details. Note that he often reverts to the theater at Arles for comparative discussion and to “explain” his proposal rationales; the two to him share unique features. This no doubt has something to do with the fact that he is also in charge of the ongoing reconstruction of Arles’ theater.

Formigé begins his cavea section with an interesting comment, writing: “Il y a lieu de remarquer qu’on ne trouve en aucun cas une parfaite application des tracés donnés par Vitruve : le demi-cercle n’est jamais exact. Quelquefois il est légèrement incomplet : à Arles et à Orange, il dépasse un peu la demi-circonférence, en fer à cheval, comme dans les théâtres grecs…” (6-7). Is it possible that Formigé realizes that the re-construction is not akin to Vitruvius’ tenets? Perhaps; he does not say so. When he gets to the seats and their dimensions, he immediately reverts to Vitruvius and tells the reader that Orange’s theater is within the latter’s averages. Within the same passages, it is interesting that when Formigé does not turn to Vitruvius, he uses examples of other classical theaters, close ones like that at Arles, or distant ones like at Pompeii and so on. No comment is offered in his pages that is not supported by either Vitruvius or an example and in the end, the reader simply cannot argue -- for or against -- the theoretic of Formigé.

The construction and consolidation work continues well into the 1950s and 60s, when the inner passageways underneath the cavea seats are rebuilt due to construction problems arising from the workmanship of the earlier part of the twentieth century. In the end, the cavea is very much like that of Vitruvius’. The problem, and perhaps this is what Formigé was alluding to in his early comment, is that the new cavea does not fit the architecture of the


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scaenae building. Figures 4.26 and 4.27 highlight the connection points between the seats and versurae. The seating clearly does not align with the topographic and architectural realities of this visible section and the re-builders never completed the work. It would seem then, that the nineteenth and twentieth century builders and designers left out an important detail when re-presenting the cavea. Equally interesting is that Vitruvius is silent regarding the connection points and angles.

Through a cumulative set of depictions -- textual, visual and imaginative -- an ensemble monumental inscribed onto the liste du Patrimoine mondial, of a valeur universelle, protected au benefice de l'humanité has been constructed. With earth-clearing, the re-shaping of the terrain took place, with déblaiements, blocks and cobbles were safeguarded for re-installation, with public interest, the expropriation of houses was facilitated, and with remaniements, consolidation and mise-en-valeur were enabled. Throughout, the referencing of a variety of drawings that go back to the imaginary classical theater of la Pise and perhaps Sangallo ensured that the foremen worked towards a particular plan -- a plan not necessarily drawn according to some original design, but traced from the instructions borne out of the classical architectural imaginations of individuals far removed from Antiquity. The whole, of course, was fuelled at each stage by increasing and inextricably woven references to the De Architectura, whose broad instructions permitted a circular mode of authentication that provided “proof” for the schemas.

Filling-in the gaps between topographic features and architectural entities, however, clearly
Figure 4.26 – The Theater of Orange – Seat-\textit{Versurae} Connection - east
Figure 4.27 – The Theater of Orange – Seat-\textit{Versurae} Connection - west
does not result in an accurate reconstruction; it results in a new design that smoothes away sets of details related to, in this case, first century A.D. culture, craft and site. The design becomes topographically idyllic, geometrically corrected and architecturally adjusted. In this case, it is not surprising that the reconstruction by Caristie is akin to Vitruvius' tenets; the former spent a great deal of time studying the latter and justifying the authoritative nature of the *De Architectura* before presenting the reconstruction and connecting it to the older treatise. Before undertaking the Orange work, Caristie had traveled to Rome and studied its monuments as well as the *De Architectura*; recall that Caristie had been a pensionnaire at the École Française de Rome. The illustrations provided by his predecessors -- those he accessed as he carried out his research -- can be traced in part to la Pise's drawing. And the corrections that he imposed on his theater can be traced back to Vitruvius' Book V, including, among other features, the upper portico, the even *cavea* curvature and the single *auditus maximus* entrances next to the *pulpitum*.

CHAPTER CONCLUSION

Prior to the Revolution, erudites popularized the collecting and cataloguing of artifacts and antiquities. Caylus, among many others, led the way in familiarizing the populace with "learned interpretation" through collecting (or at least viewing). The Revolutionaries tapped into the notion that histories could be written using scripted museum galleries to instruct the viewers. Lenoir's museum was the template for such an endeavor but the listing of monuments of "significance" would also operate within the same objective. The *patrimoine révolutionnaire* in fact maintained an illusionary sense of the era, where the past, present and even future melded into one set of principles. From these initial ways of organizing and representing knowledge, French\textsuperscript{488} sensibility emerged, dominated by a museum sacredness and an identification of universal interests in high culture -- *le bon goût* -- for the national

\textsuperscript{488} The occupants of the *cavea* may not, quite obviously, have shared in this sensibility.
cause (Poulot, 1996). Habits of acceptance thus emerged, whereby the post-Revolution population came to readily accept whatever meaning was attached to monuments.  

In the south, classical monuments formed part of the restoration debate in spite of having for the most part disappeared. The ideas of Viollet-le-Duc (la restauration) prevailed as architects from Les Monuments Historiques, generated drawings and as archaeologists produced archaeological knowledge. This was the case in Orange, where each new architect, archaeologist or researcher looked to predecessors and Vitruvius in presenting the monument. Almost all of the “learned” proposals of the reconstructed theatre included consideration for Vitruvius’ theatre prescriptions; a closer look at the immediate terrain would have revealed that the proposals were for the most part inadequate. The completely unquestioned reverential leaning towards l’archéologie scientifique and the official sanctioning of the site added to the authenticating process. The whole was mediated through modes of authentication involving cumulative studies of specific monuments, textual references and drawings.

With the study of classical monuments, the tendency is still to revert to comparative studies and to “authoritative” textual references like the De Architectura. At the same time, classical archaeology has -- and continues to -- direct its attention to déblayage, remaniements, consolidations and in time, la sauvegarde. The latter efforts leave one with the impression and assurance that what is observed and preserved is genuine when in fact, these are simply steps in the same restauration that Viollet-le-Duc was advocating. In the end, the monument serves as confirmation for the text, and the text re-confirms the monument.

I have used the theater of Orange, but others, like that at Arles, were also reconstructed in a similar fashion. Throughout, the De Architectura was mined for any hint -- most often non-specific and highly generalized -- of like features that might correspond to the monument.

489 I here generalize and am aware that there was opposition; local groups fought expropriation and other (political) groups railed against symbols as portrayed in monuments.

490 I have dealt with the methodology of classical archaeology in Interlude II.
under study. Through the "proofs" that all of these provided, the *De Architectura* took on further authoritative weight. In time, a veritable body of knowledge was established: The more the ruined monument was studied, the more Vitruvius, among other theoretical buttresses, was quoted. In other words, as the body of related research literature cumulated, so too did its evocation in hypothetical reconstructions. The result of this particular knowledge production was a set of architectural constructions that were at best "Vitruvius-based" and not necessarily "site-based". And the trend continues: In a relatively recent (1984-85) proposal for more restitution work on the Orange theater, the architect writes:

> Il serait intéressant que par une concertation entre les réalisateurs du XXe siècle et les spécialistes de monuments, des mises en scène, respectant les lois que consignait Vitruve, apportent une dimension complémentaire à ces spectacles. C'est dans cette optique que sera envisagée la troisième dimension conceptuelle des interventions à proposer.

Dominique Ronsseray, 1984-85, 72

Thus the movement of Vitruvius' treatise to France and its subsequent role within the nineteenth and twentieth century production of archaeological knowledge has, and continues to have, significant impact on the reconstruction of classical monuments. The process is not limited to the nineteenth century as there are ongoing reconstructions, smaller in scale, such as the *remaniements* of the theater at Saint-Bertrand-de-Comminges. The habit is persistent: While on the one hand intellectuals -- archaeologists, architects, historians and so on -- agree that there are difficulties with the reconstructions, they on the other hand seem to participate in a wider process that involves local and state authorities. This is part of the process involved in the example I discussed in Interlude II; to go back to Latour, the whole is closely tied to the process of "scientification". And at the same time, the whole is closely linked to local economies and national identities, notions I will develop in the following chapter.
CHAPTER 5 – Endings: Classical Productions

"New material and spiritual needs, new ideas and modes of procedure arise both within and beyond the traditional limits, and finally they run together to form a new architectural synthesis that is completely different from the old one."

Leonardo Benevolo, 1977

INTRODUCTION

The installation of monuments in order to commemorate events or people is not a new idea. The Greeks and Romans did this, as did the Egyptians, Mesopotamians and so many others. Similarly, the transformation of buildings into artifacts to remind individuals of the past is a long-standing tradition. In the Roman world, the whole was linked to *patrimonium* -- the inheritance (and obligation to maintain this inheritance) of cultural goods -- and in France, eventually, to *patrimoine* -- the inheritance of cultural material. Thus the present-day habit of building, rebuilding and refurbishing in order to remind people of their heritage has precedent: In Rome, as I have pointed out in the first sections of Chapter 2, this has been done at least since Republican times, and in France, as outlined in the early sections of Chapters 3 and 4, the practice has been ongoing for hundreds of years.

The notion of memorializing through the built landscape, however, is much more complex than the commemorative obligations linked to *patrimonium* and *patrimoine*. In France, there has been a trend, beginning at least since the Revolution, but moreso during the twentieth century, of commemorating an increasing number of events, people and moments through monuments. And while until relatively recently, the main purpose of monuments was to act as reminders of what individuals already knew, monuments can now be intended to inform people of things that they may not necessarily be familiar with. Further, the act of commemoration through monuments can now take place before there is even anything to be
reminded about. This is particularly prevalent in France where the rush to commemorate -- l’inscription à la mémoire -- has accelerated. At the same time, it seems as if classical vocabularies, and whatever they are meant to represent, have taken on increased reverential significance: When affixed to a classical monument, an identification plaque readily connects almost any event to the “collateral of esteem” that classical architecture possesses. As I here summarize, conclude and fill-in some gaps, I will touch upon some of the issues related to patrimoine and its connection to classical monuments.

5.1 ON PATRIMOINE, MONUMENTS and MEMORY

One thing is certain: France is the country with the longest continuous history in terms of centralized governments in Europe; many of its administrative systems, for instance, go back to the early twelfth century. And perhaps partly for this reason the notion of “classical” has specific significance whereby, as Jacques Le Goff (1996) highlights, classical “often refers to the imposition of ideological and political controls” (21). Thus, classical languages, rhetorical tradition and classical architectural form continue to have enormous weight attached to them.

Choay (2001) refers to a process of “classicising”, whereby “interest in the vestiges of the present as such focuses on the edifices and artworks of classical antiquity, to the exclusion of any other era” (27). This seems obvious for the Quattrocentro and to me it is still prevalent. Beyond the Quattrocentro, the idea of “the classical as image” prevailed, whereby illustrating landscapes through evocative and emotive imagery instilled a certain notion of the past as being somewhat “better” than the present. Vitruvius had textually done this in his treatise, repeatedly calling attention to “the old ways”, as did the humanist architects of the Renaissance. In addition to the collecting and classifying activities of the

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492 From my personal experience in the field -- both actively and passively -- I can attest to the fact that when on “classical” (Gallo-roman) sites, medieval constructions are most often cleared, destructed and removed from the site in order to bring to light the classical structure(s) that may lie beneath. The practice appears “normal” and “acceptable”. See my second Interlude.
"expert collectors", with the invention of engraving and replication techniques, the widespread delivery of a certain "view" of Antiquity would be assured. Caylus' later work, as I have shown, was important in this regard.

During the Enlightenment, new disciplines -- such as geology and historiography -- emerged. So too did the published works of Gibbons in 1776-78 and those I referenced earlier of Piranesi and Winkelmann. In France, Le Roy's book, Les plus beaux monuments de la grèce (Paris, 1770) became an instant classic. By measuring, studying and documenting, French érudits were imposing a certain order onto Greece (and others in the Mediterranean). By the time of the French Revolution, engraving and printing complemented the earlier well-established traditions of measuring, comparing and correcting in such a way as to enshrine (within the French imagination), all-things-classical. In the early sections of Chapter 4, I discussed the processes through which objects and monuments were organized (and re-organized) during and after the Revolution. "Heritage" was in this way defined by the state as it listed monuments. With Lenoir's museum (as well as others), the organizing of events along a temporal continuum was formalized and institutionalized.

Perhaps more significantly, the museum allowed for the acknowledgement of other cultures as having been part of France's past. The first museums recalled "origins" while displaying royal collections and church objects as "works of art". The displays related to the appealing notion of cultural "progression" and scholars and artists were completely consumed as a new pride in France's "origins" emerged. By the end of the eighteenth century, the museum had become central to the scripting of cultural imagery, whereby it not only determined "beauty", but it also defined "reality" itself. Significant is that the two were consistently oriented towards Antiquity. Classification and the re-ordering of objects allowed for the correcting and realignment of what may or may not have been congruent with the desired narrative.

befitting a “progressive” society. The result was a very special and unique patrimoine. So intense in fact was the pride in classical origins that in the very early nineteenth century, “experts” were dispatched to Italy with instructions to amass and forward any object that they deemed representative of the “patrimony’s past” (Poulot, 1996).

Prior to the Revolution, there had been a vacuum left by the oppressed (and thus disappearing) academies and institutions; the Revolution co-opted the emptied intellectual imagination and filled it with a new narrative. The cabinets curieux served as a funnel through which the narrative would be loaded onto the collective. In short, the Revolution gave rise to a “logical” array of grands hommes, monuments and objects, many of which were being imported from Italy -- again, a patrimoine going right back to classical times.494 While the museum was installed as a fiction, the ready acceptance of the curator as arbitrator of temporal location without context is what enabled this fiction to establish itself within the French mindset.

After the Revolution, with the popularity of archaeology and the establishing of Les Monuments Historiques, the earlier notions of classification and temporal placement were reinforced. F. Guizot’s projet patrimoniale, his Essais sur l’histoire de France (Paris: Ladrangé, 1836) was widely accepted and embraced; the three main tenets of his work reflect the state of affairs in terms of monuments: classement, recensement et dessin érudit (classification, listing and learned drawing). The result was a solid memory-history narrative. Key is that from the Revolution onwards, patrimoine was a learned process, whereby the museum, the list, Les Monuments Historiques and the state sanctioned archaeology all narrated a completely new history; in short, the state apparatus became adept at the process of reformulating histories.

494 Thus during the late eighteenth and early nineteenth century, the idea of patrimoine as reinforcer of social unity and bond between the new regime and the populace prevailed.
At the same time, the debate over conservation and restoration was taking place. During the nineteenth century, Viollet-le-Duc’s *Dictionnaire du mobilier* (Paris, 1863) appeared, as did the presentation techniques developed for the 1851 *Exposition universelle* in Paris. What is significant is that Viollet-le-Duc’s (as well as other publications), and the exhibition (as well as other exhibitions) worked hand in hand within the state-developed pedagogical mode; new forms of visual presentation would educate the public about its “past” (Bann, 1996, 40). And the didactic idea was not limited to “exposition”; it was also linked to geographical and historical projects that affixed a particular set of geographical and historical imaginations within the collective.

The notion of “classical” as we know it today goes back at least to the humanists of the late fourteenth and fifteenth centuries where classical rhetoric was revived and installed as a guide for new disciplines including architecture and archaeology. During the same centuries, the focus of the humanists (of France and Italy) ensured that a classical past would be part of the collective’s view of itself; this has been well established by, among others, Weiss (1988) and Wittkower (1949). The early studies of monuments in the south of France by architects like Giuliano de Sangallo, and the exodus from Rome by erudites such as Fra Giacondo established a basis for the “textualization” of classical architecture in France. Vitruve’s book was firmly established as the template of classical architecture. The links between classical texts and classical archaeology, in its various forms — exploration, siting, looting, learning and so on — have become inextricable.

Elsewhere the conversation related to monuments (and heritage) was fixed upon the various ways of determining “value”. There was Ruskin, whom I have already discussed, but later, Alois Reigl (1928), in a brilliant article, enumerated the various means through which monuments could be assessed. “Intentional” and “unintentional” monuments, for example, differentiated between monuments built for specific commemorative purposes and those which had become commemorative for a variety of reasons. At the same time, he wrote about “historical” value, whereby the temporal element was by far the most dominant trait; endurance was the qualifier. Other values — “memorial”, “historical” and “age” value, were designated by Reigl. The main thing about the writings outside of France, however, was that the monument was not necessarily attached to a historical narrative; it was seen as something representative of a single (or set) of individual moments.

This in spite of Viollet-le-Duc’s anti-classical stance.
The act of remembering can certainly be seen as an activity which can be individual, social and historically constructed. This is related to Vidal de la Blache's *genres de vie*, where the decisions made by individuals -- and the collective -- are what establish ways of life and *de facto*, ways of remembering. Maurice Halbwachs (1990, 1995), in his various studies has made this abundantly clear, writing "...that the mind reconstructs its memories under the pressure of society" (1995, 51). The act of constructing a monument is also a social and historical activity. Memory becomes objectified through the connection of an object to a person, event or moment. As we attach particular meanings to specific things, "ranging from land to artifacts and bodies", the act of remembering becomes inextricably linked to the thing (Rowlands, 1996, 8). Another important thought that Halbwachs passed on to us is that tradition ends where history begins (Boyer, 1994). This is related to Nora's thoughts that I will get to in a moment: as soon as history-as-a-discipline establishes itself as narrator of the past, then traditions (and memories) begin to correspondingly disappear.

The re-visiting and re-creation of forgotten events is something which, to Rowlands (1996), is an intrinsic activity of the western collective (8-9). In a sense, this is akin to Benjamin's work on images as possessing magical powers. To me at least, the "magic" of these powers has a lot to do with on the one hand, the imaginative capabilities of memory, and on the other, the rather sudden glimpses of memorialized vignettes that appear, often prompted - although not always consciously -- by particular objects or cues.

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498 I would argue that "non-western" or non-European societies also partake in this type of activity; oral histories, for example, are exactly that: they are reconstructions of past activities and events.
499 He wrote about this in his letters to Gershom Scholem, alluding to "magical powers" (Scholem, 1981). On Halbwachs and Benjamin, there is a fundamental difference in the way they perceived urban landscapes: Halbwachs believed that city spaces were relatively unchanging; this, to him, was the collective memory imbedded within the city's built form. Benjamin felt that the new, nineteenth century city focus on displaying (such as with photographs) took away tradition because memory was replaced by the documentation processes. For a discussion on the two, see Christine Boyer *The City of Collective Memory - Its Historical Imagery and Architectural Entertainments* (Cambridge and London: MIT Press, 1994).
There is a very close relationship between the employment of a “thing” in order to cue memory and connect the present to the past. Interestingly, however, these things eventually take on a history of their own. This is why many monuments come to have meanings completely detached from their initial purposes; along the way, the collective has somehow forgotten -- or perhaps been re-instructed in this regard -- on the meaning of certain examples. When there is sudden change (through Revolution or sudden social upheaval, for instance), there is a vacuum created within the collective memory; meaning attached to individual monuments can at those precise moments, readily be altered. Through naming or description through inscription, for example, the monument readily takes the place of living memory.

Anytime there is tension with regards to creating new images and garnishing the support of the collective, the state generates monuments and ceremonies to commemorate moments (Jackson, 1980, 92). Historicism thus installs a false continuum of historical narration, transforming the collective memory. By amassing vast amounts of minutia, historicism dislocates memory and dismisses the imagination.

Michel Foucault (1998) and many others have made it clear that the nineteenth century was perhaps overly concerned -- obsessed really -- with history. And it is certain, as Soja (1989) points out, that this obsession did not end at the turn of the century (10); the way history has been and continues to be written through the rediscovery and rebuilding of antiquities in the nineteenth and twentieth centuries is a great example of this. And perhaps nowhere else is this more prevalent than in France, where the state continues to promote, finance, and in many ways invent “culture”, “heritage” and patrimoine. It would seem that France has lost much of its influence in terms of being a world power and a certain doubt has been instilled, along with, I would contend, a corresponding loss of confidence as a world

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501 I recognize that other processes (laws, for example) can be activated in attempting to get people to forget about previous meanings of monuments.

power. The void would be reason enough to emphasize monument sponsorship -- especially classical monuments -- and redefinitions of heritage. These are political strategies aimed at triggering certain reactions.

Heritage is difficult to define and it is, as I shall point out in a moment, very closely linked to Pierre Nora’s notion of *lieux* as well as the French meaning of *patrimoine*. It is the set of objects and places, as well as less tangible items such as family histories that are passed down (Lowenthal, 1994). This becomes interesting when we consider that prior to the French Revolution, heritage -- the objects, the land, and so on -- belonged strictly to the elite. This changed of course and now heritage seems to be used to perpetually re-define individuals, families, communities and nations. Through the acquisition of objects, then, it is possible to invent heritage. Here it is useful to recall the dispatching of individuals to Italy to collect artifacts deemed representative of France’s heritage. To me, the same process continues with the re-construction of classical monuments.

Heritage is akin to history in that it brings together, reorganizes and then redefines the past through objects or ideas that become representative of a certain past. The problem with heritage, however, is that it ultimately conflicts with history. I think that Heritage depends on feelings like nostalgia and pride; a possessed object is only heritage if it has some exclusive meaning to the holder. The element of faith -- one has to believe in the importance of the object -- is key. History, on the other hand, is “scientific” in that it relies on “facts” as established along temporal lines. History relies on reasoned empirical analysis. The former is social; the latter is scientific. To work as a unifying force, heritage has to be fully accepted by those within the collective. In France, the notion of heritage relies almost completely on the idea that if one is not French, one cannot possibly understand what it is like to be French. This brings me to Pierre Nora.
Nora (1996, 1989, 1984) contends that *lieux* replace *milieux*, spaces within which memory is part of daily life, because *milieux* have virtually disappeared. The latter are very close to La Blache's *genre de vie* experiences. The difficulty with Nora's *lieux*, however, is that they can in effect be anything: From a built monument to the signature of a notable -- or less notable -- person (1996, xvii). To Nora, there is no more social-memory and this is why he introduces what he feels is a new form of historical documentation. In a sense, he is right in saying that there is no social-memory left in France; the historical narrative, as I have pointed out, has been so altered and manipulated that now, as this same process seems to accelerate, there is the feeling that cultural reference points are disappearing. The essays that form part of Nora’s undertaking (there are one-hundred and fifty of them) are all brilliant pieces of historical writing. They recount “historical events”, however, in much the same manner as any other historical undertaking. In other words, they are narrated from the viewpoint of individuals and are within the same historical tradition that Nora critiques.

I highlight Nora here because his project does stress a sense of urgency in France, where the idea of a disappearing *patrimoine* is linked to a lament over lost ways of life -- perhaps this is connected to a loss of the *genres de vie* that La Blache was writing about. There is a collective tension, whereby the notion of “the old ways” is constantly evoked. While the habit of constantly looking to a better past used to belong to nostalgic seniors, it is now part of the lived experience of the younger generations. I believe that this is directly related to the acceleration of the production, narration and transmission of historical (and other forms of) knowledge. And it is in turn reflected in the construction of historical and classical landscapes.

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503 Nora’s *lieux* are basically anything that, either through the volition of the collective, of by virtue of its survival over time, which is also due to the will of the collective, has become a symbolic element for the collective.

504 The success of Nora's edited essays attests to this, as does the French state's ongoing project documenting hundreds of thousands of hours of voice recordings of personal recollections.
History as discipline does more than collect and record memories on behalf of the collective; among other things, it seeks to remind the collective of what has been -- or is about to be -- forgotten. However, the historian can readily insert points into the narrative that have little to do with actual memory and more to do with new memories. This seems obvious. In France, a country which is used to having “glorious” memories, there seems to have been relatively little to celebrate since the first World War. This depends on one’s perspective, of course, yet judging from the rhetorical questioning the raison d’être of “les jours du patrimoine”, the search for something to celebrate certainly persists. Thus the emphasis on amplifying memorable moments of the past; it should be no wonder that there is such a re-invigorated interest in the display of monuments.

But the interest in rebuilding monuments under the scope of restoration and preservation rhetoric is much more than about lamenting the past (and certainly more than about the tourism industry); it is about a new interpretation of history.505 The reality is that we need, as a collective, memories. Without these, we would not be able to learn or to aim at the future. In France, where part of the collective’s self-esteem has been lost, heritage becomes quite important.

Changes in the way we occupy space and new economies have created a perceived urgent need and refocus towards “heritage”. During the early 1960s, new heritage zones were created in France as the state seemed to recognize that the collective conscience was willing to accept a set of preserved landscapes seeded with monuments and ruins, all scripting “accurate” narratives. These landscapes have taken the shape of parques archéologiques or zones historiques, encapsulating “new” memories. And like the keeper of objects in the eighteenth and nineteenth centuries, the state has appropriated the classical monument within the same memorial narrative. Memory and remembering have taken on different levels of

505 Certainly the heritage industry now capitalizes on this, just like the state has in France since the Revolution.
importance as change accelerates and the “cult of new beginnings”, to use Gillis’ (1994) words, emerges (8). It should not be surprising that Budé (Collection des presses universitaires de France), the most important publisher of classical literature in France, has been working on a new translation of Vitruvius.

5.2 DISSERTATION CONCLUSION

When I first became interested in Vitruvius and classical monuments, it was as a student discovering classical architecture and archaeology. I found it absolutely fascinating that from a few bits of material, a complete building could be reconstituted. I found it even more intriguing that by looking up the appropriate chapter in the De Architectura, one could feel confident on having found relative proof for reconstructions. However, I also found it puzzling, even dubious, that from one book, so many monuments could be restored. This was not, to me, a pattern book; and the built landscape was not, to me, made up of a single set of types replicated throughout the classical world. I do not think that this is particularly striking, but what is striking is that there is still a tendency to look to Vitruvius’ treatise for “proof”.

The present-day impetus for the latter is connected to what I talked about in the previous section: memory, history, heritage and ultimately, the notion of patrimoine. In the rush to produce a vaster set of classical monuments, the De Architectura, the only complete textual reference to classical architecture, is called upon to support reconstruction schemes. In Chapter 2, I spent considerable time highlighting that the treatise of Vitruvius was based on the observations and desires of one man at a specific moment in time. Among others reasons, he wrote the text in order to elevate his profession to the status of the Liberal Arts, all-the-while steering the architectus (of his time) towards a particular brand of architecture -- his Architectura. Within the books, Vitruvius used a host of memory devices and generalized models that enabled the reader to readily conceptualize specific notions. He did not,
however, provide correspondingly specific models. In this way, the architect (of his time) could take the descriptions, prescriptions and carry out design work according to site peculiarities, regional differences and the generalized instructions.

Because of the looseness with which the treatise’s precepts were delivered (exemplified by the fact that illustrations directly related to buildings were not included), the text has been, and continues to be, correspondingly loosely interpreted. This worked well for Renaissance architects who were able to alter it according to the post-Vitruvius monuments that they were observing. Similarly, it suited later archaeologists and architects who were keen on studying monument remnants sited throughout the Mediterranean. As the treatise of Vitruvius made its way from Italy to France during the sixteenth century, it was on the one hand fitted to the (classical) architecture of France, while on the other, readily adapted within the study of ruins. This is what I discovered with my study of the Gardet and Bertin translation. Eventually, the habit of turning to Vitruvius was adapted to such an extent that it practically became invisible, with architects and archaeologists turning to it with little thought as to its contextual validity. This is probably why we see so few explicit references to its use; it is only by retracing field notes that the extent to which it was used, even relatively lately, can be assessed. In my section on the theatre of Orange, while I left out some of the players, the traces are clear: All of the architects and archaeologists whose notes I was able to examine and study turned to the treatise for guidance. This continues to appeal to some disciplinary practitioners in their quests to understand monuments and convince others of the validity of their “hypotheticals”. And so it can still be adopted within the reconstruction strategies of today.

The difficulty today is that the more we re-build, whether it be for basic cultural consumption or within grander state agendas, the recourse to producing related bodies of knowledge to justify architectural plans remains. The understanding of classical architecture within the context of history, heritage and memory must be met by a corresponding comprehension of its formal, typological and social nature; Vitruvius’ words, as I have stressed, do not
necessarily depict a material architecture. Vitruvius' architect lived within an urban setting that was highly dynamic and not necessarily readily interpreted. And while Republican spaces derived from a need for function, efficiency, beauty and representation, they were not necessarily or completely redesigned each time they were re-used; they were often modified to suit. In other words, notions related to specific and ideal spaces were most probably stored within the minds of the multifaceted designers to be shaped according to particular sets of pre-existing cultural and built conditions as well as geographical settings. And to these, the craftspeople would have added personal interpretations. Today the problems arise when architects and archaeologists, eager to convince themselves and others of their theoretic, forget that we simply do not know what memories resided in the mind of Roman architects.
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