ON THE RUINS
OF BABEL

Architectural Metaphor in German Thought

Daniel **Purdy**

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Daniel L. Purdy

For Bettina

The story of Babel is usually told backwards—the many languages spoken around the tower were not a punishment, they were a delight. Any construction site in the world is filled with men who speak differently from one another, yet they always manage to understand each other after a few days together. If a great king calls a large workforce together, it will surely include men from different corners of his kingdom. Upon first hearing them speak, an outsider might imagine that they had no means of understanding one another, but this is clearly the opinion of someone immersed in just one language, someone like a priest, who spends all his days reading the scriptures of his one holy language. In the practical world of moving heavy stones and raising broad foundations, all languages are understood by everyone. In a flash the man lifting a wide, awkward bundle into a cart understands what the driver is telling him. The crane operator knows what the laborers below him need lifted. He hears them speaking and without worry picks up the right object. The words rise up to him like a song he understands but cannot write down. Only the priest who comes to visit the site, to judge the tower and the king who commands its construction, is confused. Only he hears chaos. And so when the king dies, and the work is left undone, the priest tells the story from the outside as if the many languages flowing into one another were a mark of sin, rather than a wonder.

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On the Ruins of Babel

Introduction

The compact between buildings and their inhabitants has long been ruled by the fantasy that houses have, at least on an abstract level, the formal appearance of human beings. The classical tradition, defined by Vitruvius and elaborated from the Renaissance onward, stressed the comparison in order to establish a canon of beauty in buildings and bodies—both were meant to be smooth, symmetrical, and balanced in their proportions and the distribution of their working parts. Modern, industrial buildings do not always adhere to this ancient canon, for today the bond between buildings and humans has become even more complex, often ignoring the composition of the body as an organic whole. The old terms have become words to describe not just flesh and bones, but also states of mind. Hence over the centuries, architectural discourse has produced some of the most important metaphors to represent the inner life of humans. "Ground," "structure," "support," and "balance" describe emotional relations as much as they do the construction of buildings. The proliferation of architectural terms beyond the already broad range of Renaissance cosmology, and their infiltration into the psychological and epistemological language of modern consciousness, have meant that buildings have come to mirror our inner states so completely and so quietly that we are hard put to separate our own identities from theirs. More than once have the construction, occupation, and demolition of a building been understood in terms parallel to the life of a person. Indeed, as Mark Wigley remarks, the trauma of watching the World Trade

Center collapse was due in part to this imaginary association: "This sense that our buildings are our witnesses depends on a kind of kinship between body and building. Not only should buildings protect and last longer than bodies, they must be themselves a kind of body: a surrogate body, a super-body with a face, a facade that watches us."[1] The mythic repercussions of the World Trade Center's destruction stem from this empathetic identification between buildings and humans. In this book, I explain how this analogy flows in two directions: not only are buildings often designed to appear human, but subjectivity is often described in the language of architecture.

The tradition of describing inner states with architectural terms can be traced back to the New Testament, where parables in the Gospels and images in Paul's epistles encouraged the believer to compare his own faith with a house of prayer. Christianity taught explicitly that faith in the Trinity replaced the Old Testament concern for building the temple in Jerusalem. In this book, I seek to demonstrate that modern philosophers, beginning with Descartes and Leibniz, running through Kant, Goethe, and Hegel, and finally settling on Freud and Benjamin, provided further, more detailed, secular formulations of architectural subjectivity. This book will also show that the borrowings between architecture and philosophy moved not just from one discourse to the other but were an interchange, so that what one discipline gave to the other was later reapplied to the donor discourse as a seemingly external validation of its own terms. As the first chapters argue, eighteenth-century philosophy's reliance on architecture to describe inner life came full circle as these new structures of subjectivity were incorporated into the Enlightenment's empathy-driven theories of architectural good taste.

A comparative study of architecture and the humanities is necessary to chart the ebb and flow of these central metaphors. Both philosophy and architecture share the comparison between bodies and buildings as a point of reflection on their own methodologies. They each reinforce their own conventions with the rules of the other. Philosophy admires the practical necessities of architecture as a guide for eliminating spurious argumentation, while designers often look to the humanities to justify their own experiments. The body/building metaphor had the dual quality of providing a stable reference for both fields, even as each side of the analogy developed new means of redrawing the comparison. Bodies, of course, grow old, become ill, and fall apart. The metaphysical assumptions implicit in antiquity's idealized body were radically altered in the eighteenth century. As anatomists debated the more specialized features of the internal organs, their new scientific claims modified the stability of the body as a known reference point for architecture. Architecture, mathematics, the biological sciences, and eventually psychology shared

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1. Mark Wigley, "Insecurity by Design," in *Bewitched, Bothered, and Bewildered: Spatial Emotion in Contemporary Art and Architecture,* ed. Heike Munder and Adam Budak (Zurich and Gdansk: Migros Museum für Gegenwartskunst & Laznia Centre for Contemporary Art, 2003), 47.

terms such as "structure" and "function" as they developed, leaving open rich comparisons between buildings, organs, and the psyche by focusing attention on specific operations within the body.[2] All these disciplines have at times described the object of their investigation as an entity composed of structures that are classified according to their specific functions. The ease with which these abstract terms were applied to bodily organs, modern technological houses, and eventually the unconscious shows how the metaphor's suggestive influence extended in many directions, and not just from nature to architecture, as the ancient texts suggest.

This book makes a case for practicing interdisciplinary scholarship by unraveling the eighteenth-century debate over architecture's boundaries. Despite official claims to support interdisciplinary work, academic research is still evaluated according to the internal guidelines of well-defined and defended disciplines. The aspiration to step over disciplinary limitations and the problems that confront those who cross over them has its own long history. As regards architecture, the Vitruvian tradition was attractive precisely because it insisted that the architect be educated in many fields of study. As that tradition declined in the early eighteenth century, architecture became a contested field, one to which radically different methodologies and interests laid claim. Of course, the question of what subjects academies should teach architects is as old as the discipline itself, and the principal terms of the field have been rewritten many times since Vitruvius presented his famous list of topics that an architect should master. Architecture remains an interdisciplinary venture, operating between competing authorities. This indeterminacy in terms of fields of study, coupled with the need to mediate between different social institutions–clients, colleagues, workers, academia, and the public—has the ironic result that the central disagreements regarding what constitutes architecture as a field reemerge regularly over the course of centuries.

The Enlightenment's struggle to define the discipline has become a problem for anyone writing between architecture and philosophy again in the twenty-first century. Working across scholarly domains was once an ideal among the humanistic liberal arts, as well as the critical lever for Foucault's discourse analysis. Many architectural theorists today presume that traditional continental philosophy has no serious interest in architecture, other than to discuss buildings as the lowest rung in a hierarchy of art forms. This book demonstrates that classical and medieval architecture had a profound impact on German idealism. Contemporary theorists in American universities often overlook these rich historical interactions. Recent theorists have insisted that German thinkers denigrated architecture's status in the arts even as they borrowed some of its key terms. By claiming that philosophers, such as Kant and Hegel, repressed their debt to philosophy, deconstructive criticism has had the ironic effect of closing off further investigation of the many links

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2. Ute Poerschke, "Funktion als Gestaltungsbegriff: Eine Untersuchung des Funktionsbegriff in architekturtheoretischen Texten" (PhD diss., University of Cottbus, 2005).

between the two discourses. It is now accepted as a matter of fact that continental philosophy disparaged architecture. This claim, made notably in Mark Wigley's *Architecture of Deconstruction,* has unexpectedly put an end to scholarship connecting idealism with architecture.[3] Contemporary architectural theory has too hastily accepted Wigley's claim that Kant, and by implication German philosophers after him, thought little of the field. My work counters this assumption to argue that the elaborate architectonic that Kant developed in the *Critique of Pure Reason* constitutes a first attempt to present architecture as the coordination of systems. Kant's epistemology shares much with the postwar corporate organicism Reinhold Martin describes as an architectural totality that conducts organizational patterns through communication networks.[4] I seek to expand on Wigley's initial insight that Kant, and others, borrowed from the architectural tradition, with the added proviso that this debt was taken on cheerfully and without any attempt to disguise it. German thinkers turned to architectural theory and history in detail, so that their engagement went far beyond using the well-worn metaphor of laying a foundation for thought. Architectural discourse in all its complexity became an inspiration for and an example of critical reflection. As a technological discourse that frames the arts and its audience, architecture operated within philosophical writing primarily as a method, and then secondarily as an aesthetic object. As the recent work of Susan Bernstein and Claudia Brodsky demonstrates, there is more than one route between the different arenas; all of our efforts conjoin to open a dialogue that has languished with the "demise" of theory.[5]

This book is written with two architectural reverberations in mind: the reconstruction of Berlin *Mitte* and the destruction of the World Trade Center. Just naming these two events already suggests an interpretation: does one refer to the Berlin Wall falling in the same sentence as the Twin Towers, thereby swiping away the political contexts that separate the two? These two demolitions and subsequent reconstructions have their own very particular meanings. The lengthy debate over how to rebuild Berlin and the shock of the Towers' attack showed how strongly people can identify themselves with buildings that only a short while before they had taken for granted (New York) or never imagined would reappear (Berlin). I want to explore these connections not only in terms of cultural studies or media theory, but also to show that the connections between architecture and human identity permeated even the most abstract German philosophy, and that these links were not just the effect of media saturation or political ideology. In order to bring all

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3. Mark Wigley, *The Architecture of Deconstruction: Derrida's Haunt* (Cambridge, MA: MIT Press, 1993).

4. Reinhold Martin, *The Organizational Complex: Architecture, Media, and Corporate Space* (Cambridge, MA: MIT Press, 2003), 4.

5. Susan Bernstein, *Housing Problems: Writing and Architecture in Goethe, Walpole, Freud and Heidegger* (Stanford, CA: Stanford University Press, 2008); Claudia Brodsky, *In the Place of Language: Literature and the Architecture of the Referent* (New York: Fordham University Press, 2009).

these elements together the book starts its close readings with Kant's epistemology and ends with Benjamin's "Work of Art in the Age of Mechanical Reproduction," so as to trace the connection between buildings and humans on multiple levels: as a procedure of inquiry in one Enlightenment definition of reason, in the methodological organization of scientific knowledge, in the storage and recollection of personal memories, in artistic self-creation, in architecture's ability to constitute political identity, and finally in the modernist critique of how all these elements are combined in German culture as *Bildung,* a tradition that, despite all efforts to the contrary, informs both Bauhaus modernism and its contemporary critics in Berlin.

The debates over how to rebuild Berlin *Mitte* show clearly that the question of whether architecture exists as an autonomous art can still be explosive. Through the 1990s, all Germany argued over whether the historic center of the new capital should have a strict zoning regulation that guaranteed a uniform Prussian style of classical building, or whether Berlin finally had the chance to build skyscrapers and experimental structures that would distinguish the city. The Berlin traditionalists aligned themselves against both the legacy of modernist glass and steel construction, and the contemporary avant-garde by insisting that architects were not autonomous artists like painters or poets but should build as guild members in a local tradition. The traditionalists criticized what they considered the revolutionary desire of modernist architecture to alter consciousness through design. Their presumption was that Bauhaus and its descendants were the first to connect building form with the thoughts of inhabitants.

I argue, in response to this antimodernist critique, that the traditional German notion of consciousness, as defined by the nineteenth-century cult of *Bildung,* was from its inception indebted to architecture. Consciousness as explained by the Enlightenment and idealism was arranged architectonically; thus to accuse Bauhaus modernism of violating traditional notions of individualism ignored the longstanding interconnection between thought and architecture. One might argue about how to shape the mind through building, but it is certainly not the case that the twentieth century invented the belief that consciousness was subject to architectural design. To even consider thoughts as a coherent rational order requires recourse to architectural terminology inherited from antiquity, sharpened by the memory arts, and given an intensely private turn at the end of the eighteenth century. Out of the emotive architectural aesthetics formulated by the early Enlightenment, Kant, Goethe, and Hegel, among others, developed theories of consciousness that relied on architectural language to define their key terms. Today, we use the term "structure" to define or critique culture without pondering its architectural connotations. *On the Ruins of Babel* presents a few key instances of how such building blocks entered into the modern discourse of the self.

At the center of this discursive intersection stands the figure of the architect as an autonomous artist—rivaling the Creator, in Goethe's youthful formulation. As he wrote himself into existence, Goethe turned to buildings he admired and the

architects he credited with their design. Architecture was a paternal legacy against which he could rage and from which he could steal in order to describe himself as a freestanding artist. It was precisely against the localized guild mentality so important to Berlin traditionalists in the 1990s that the young Goethe rebelled. The autonomous *Bildungsbürger,* however much he may have been transformed during the nineteenth century, was built upon the notion that he was the architect of his own identity, able to redefine traditional norms according to his own aesthetic vision. As the chapter on Hegel will show, it is precisely this idealist principle that Daniel Libeskind and other avant-garde architects were refused in the Berlin debates.

In theoretical terms, all the chapters in this book explicate how German thinkers use spatial terms to describe temporal development: the self-correction of rational systems through critique (Kant), the education of the aesthetic subject (Goethe), the historical embodiment of communal action (Hegel), the layering of mythic and psychical forces in an archeological site (Benjamin). In every case the concrete terminology of architecture is deployed to represent dynamic change. The trope that gives this book its title—"building on the ruins of earlier systems"—posits a spatial representation for intellectual rivalries that unfold over time. Perhaps the most famous version of this spatial fantasy belongs to Freud for his description of the unconscious as possessing all the ruins of Rome as simultaneously complete, an open defiance of the proposition that two things cannot simultaneously occupy the same space. Freud folds the great and small events of a lifetime, or several millennia, into a single space, which we too often reify as a place in the mind. Freud's image of Rome restored informs Benjamin's own archeology of urban space, an excavation that avoids monuments to concentrate on the minor places within a city, where ordinary life occurs.

For most other thinkers, Babel is a worry and an attraction. Kant equates the tower with the vast palaces and churches of baroque absolutism. Instead of building with endless expense and pretension, he advocates an epistemologically modest, bourgeois house. Goethe, on the other hand, admires the idea of Babel implied by the Strasbourg cathedral, and Hegel agrees that Gothic towers recapture the sculptural monumentality of Babylonian ziggurats from centuries before. Benjamin prefers to excavate the unconscious as a failed monument to subjectivity. He is the least enamored of Babel and sees Bauhaus modernism as its antithesis. Benjamin appreciates Kant's aversion to reconstructing Babel once more, but his identification is with a different class than the one Kant proposes. Unlike Kant, Benjamin does not call for a house, with space for domestic life and business; instead he juxtaposes the confined spaces of the urban workers to the tourists' identification with famous monuments. In *One-Way Street* it is the bourgeoisie whom Benjamin sees as the towering builders, whose edifices need dynamiting. Benjamin adapts the master/slave dialectic Hegel develops in his theorization of Babel, so the construction and office workers are the real benefactors of the monumental, for

they develop a communal consciousness as laborers quite opposed to the isolation of self-aggrandizing monarchs.

Benjamin's distinction applies directly to the World Trade Center. Before the attack, the buildings had become invisible to most New Yorkers. They stood largely unnoticed. Not only was it not a pretty site, just a little too monolithic to engender sentiment, but Manhattanites were generally trained not to stare up at skyscrapers for fear that they might be mistaken as tourists. Uptown you might have a chance view of the Towers, but only from someone else's window, rarely your own. Downtown the buildings were so unbelievably tall that they formed a blind spot in the sky. One might have enjoyed a view of them from Brooklyn or New Jersey, but even then one had the guilty sense that this was something really reserved for visitors. If New Yorkers could take in the Towers from a distance it was with the quiet agreement that even though we thought they really were impressive, we were not going to discuss how much we liked seeing them from the Brooklyn promenade. If ordinary New Yorkers did occasionally look at the Towers, then, it was from the inside, when they accompanied guests to the top. Unless you worked there, the Towers did not seem to have an interior. Instead they were a platform for viewing the rest of the city, or they were two obelisks caught by the eye only from a distance. Until the attacks, they were solid blocks, very similar to Hegel's description of Babylonian architecture. The earliest obelisks and towers, he suggests, were structures that had no practical function other than serving as a focal point for a nation to define itself, a feat that the Twin Towers have performed negatively, as an afterimage, following their destruction.

Babel has always been invoked when discussing New York skyscrapers, and Babel was very much what the Berlin Senate sought to avoid in *Mitte*. In relation to the Berlin debates, Kant could be drawn to the side of the critical reconstructionists, for the *Critique of Pure Reason* warns against building a vast, overbudgeted metaphysical tower and recommends instead the construction of comfortable, livable middle-class housing. Goethe could be drawn to the opposite side for his celebration of the architect as an autonomous artist with the freedom to create Babel, to rival God, to build fictions, to follow poetic inspiration, and thereby to defy the city fathers. Hegel understood the communal importance of architecture, as an expression of social unity. Benjamin clearly sympathized with the modernist aspirations to radically rebuild the stone blocks of the nineteenth century. If Benjamin was an opponent of anything, it was the structures of his parents. His impatience with the architecture of that generation is pertinent today as Berlin has striven to rebuild *Mitte* with the Wilhelminian *Bürgertum* as its model. The houses Benjamin so ardently wanted to demolish are precisely the structures the Senat held forth as the paragons of a Berlin architectural tradition. The hard Prussian facades that sealed off the spacious interiors of the economic elite are just what Benjamin hoped modernism would replace. He celebrated glass architecture in defiance of the *Altbau* apartments now so beloved. This contradiction is brought

out massively and ironically in Kollhoff's Leibniz Kolonnade set down on Walter Benjamin Platz.

If we focus on one of the star architects of the early modern period, Claude Perrault, the problem that shaped the Berlin debate appears in a new guise. However, the question for both eras remains, what ability does the architect have to critique the cultural representations that reinforce political power? In Perrault's work, we find this problem expressed as the contradiction between his rigorously classical design of the Louvre facade and his scientific dissection of the Vitruvian tradition. The solution for Perrault lay in playing the role of the courtier who assumes the rhetorical manner appropriate for the particular situation, whether as an experimental scientist writing an academic treatise or as a monarchical adviser negotiating a massive construction project. Another version of the problem reappears in Kant's interrogation of architecture's aesthetic standing: Can architects remove themselves from the expectations of practical utility in order to design solely on the basis of beauty? What is aesthetic autonomy for a building? Far from disparaging architecture, these questions show the discipline as riven in two: between the proposition that an architect creates as an independent thinker and the idea that he creates as a technical engineer responding to a client's needs. Kant solves the contradiction by recognizing the multivalent judgments we can make about all things. Like flowers, buildings have a practical purpose, which can be suspended when making an aesthetic judgment. A building can be beautiful even as it is warm and dry; the key for Kant lies in appreciating the difference between the two types of judgment. Chapter 2 details the historical background to this debate, making clear that while Kant did not invent the dilemma, his solution was so much more complex than most, that it is still often misunderstood.

For Goethe the dilemma Perrault faced became a practical question: how can the artist free himself from social obligations? Unlike Kant, Goethe never hesitates regarding architecture's aesthetic standing; the key for him is to see the art and look past the business. Two exemplary architects help Goethe define his own struggle for autonomy: Erwin of Strasbourg and Andrea Palladio. Early in his poetic career, Goethe configures Erwin as the independent thinker who rivals God as a creator and defies the church hierarchy with his sublime Gothic facade. Decades later, after he has fled the Weimar court for the anonymous creativity of Italy, Goethe sees Palladio as an even more successful example of how an artist maneuvers between the precedence of tradition, the pull of clients' money, and his personal artistic vision. Goethe finds in Palladio a great artist who managed to reconfigure classical style within his own fictions of antiquity, while serving the practical demands of a career, noble families, and the Venetian state. A few decades later, Hegel develops an architectural version of his famous master/slave dialectic, wherein he argues that monuments are given distinct new and autonomous meanings by the people who construct them. The communal identity of a building separates itself from the egotistical motives of the monarch who first initiated a building. What the *Bauherr*

intends and how the populace understands a building are two distinct levels of meaning that develop during the course of construction and the eventual use of a building. Benjamin implicitly follows Hegel's master/slave dialectic when he famously states in his "Work of Art" essay that buildings are either perceived visually by tourists, who see with the detached aesthetic gaze of kings and princes, or touched bodily by those who live and work within them. When Benjamin reiterates Sigfried Giedion's claim that modern architecture began with hidden technical construction in the nineteenth century, he is revisiting the same debate over whether architecture is an art or a science. Like Kant, Benjamin presumes that the fight was won by the engineers. Yet in a complete rejection of Kantian aesthetics, for Benjamin autonomy in modern architecture means an escape from beauty, a release from the ornate burdens of tradition. Still, the two thinkers share an inclination to deploy architectural terminology to describe interior consciousness. The slow absorption of building metaphors into philosophies of consciousness indicates that what appears in the eighteenth century as a debate over the aesthetic status of architecture has become by the twentieth century a critique of the categories that define subjectivity. The oppositions that were at first confined to the architectural profession became arguments about the emotional states, the unconscious, memory, and all the categories that seem to hold our thoughts together.

The current scholarship states that with the decline of the five classical orders there emerged a new standard of architectural criticism, namely, aesthetic judgments that focused upon the emotional reaction a building produced in the observer.[6] The cosmology that united the body with the larger environment, through a series of correspondences that were aligned with the soul and the universal unity of all things, shifted slowly into an aesthetic that also drew together diverse relations but did so by claiming that the connections originated in the sensations of the subject, rather than in the objective order of the universe. Whereas earlier thinkers might have "recognized" the cosmological relations between the human body and the larger world, the eighteenth-century critic "felt" them, and then began to reflect on the status of this feeling. Anthony Vidler links this new emotional mode of criticism with the earlier Vitruvian comparison between the body and the ideal building: "Beginning in the eighteenth century, there emerged a second and more extended form of bodily projection in architecture, initially defined by the aesthetics of the sublime. Here, the building no longer simply represented a part or whole of the body but was rather seen as objectifying the various *states* of the body, physical and mental."[7] I wish to argue, however, that this is only part of the

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6. Klaus Jan Philipp writes about "a new system of perceiving architecture, which appeals exclusively to the sensual perception of buildings and the emotional states that are derived from this perception." Klaus Jan Philipp, *Um 1800: Architekturtheorie und Architekturkritik in Deutschland zwischen 1790 und 1810* (Stuttgart: Axel Menges, 1997), 15.

7. Anthony Vidler, *The Architectural Uncanny: Essays in the Modern Unhomely* (Cambridge, MA: MIT Press, 1992), 71.

picture, for as the eighteenth century allowed buildings to influence feelings, the discourse of emotions adopted architectural metaphors to explain itself. In a sense the direction of the metaphor had changed. If the Renaissance claimed that the ideal building was supposed to be organized like a human body, then in the eighteenth century this relationship turned back toward the subject, so that it became increasingly "structured" like a building. The great classical assertion that a building should be designed so that it imitated the symmetrical form of the human body slowly reversed its course. However, by the time the metaphor began its movement away from buildings and back onto the human, the terms that had once guided antiquity and the Renaissance had also shifted considerably. No longer was the naked athletic body the standard for understanding the organization of buildings. Instead it was the sensitive, highly literary faculty of judgment that ruled over architectural discourse, and so when the flow of metaphorical comparison doubled back, suggesting that architectural categories could explain humans, the Olympian athlete was not the ideal all Europeans strove to embody; instead philosophy was more concerned with the sensitive, moral subject. The ancient encounter between buildings and bodies had shifted so that now one could detect comparisons between architecture and theories of consciousness, spirit, and the like. Architecture became a means to define both the subject and its expression, the work of art. Of course the original analogy still held sway over aesthetics, and buildings were still designed and admired for their human proportions—indeed this second tendency to analyze the human in architectural terms was only confirmed by the older metaphorical usage. Thinkers such as Kant and Goethe presumed that the first connotation fostered the second.

While many architectural historians have noted that eighteenth-century aesthetics judges buildings according to a new standard based on "taste," I add the point that this entails a mapping of architecture back onto the aesthetic subject. Not only did architecture receive the judgment of the tasteful observer; one could also say that architectural theory in the eighteenth century helped constitute the subject that rendered its judgment. Just as emotions defined what was great and beautiful in architecture, so the canon of Renaissance theory defined what was most moral, beautiful, and true about the individual. *Bildung* was as much a matter of knowing beauty as allowing beauty to work upon oneself.

Jens Bisky remarks that in the eighteenth century the subjective reception of buildings became more important than the rules of proportion and the orders of columns. Yet one can suggest that the eighteenth century's heightened sensitivity to the emotions that a facade inspired also shows that the old rules of architecture had helped shape those very same emotions. Bisky observes: "The turn to the individual building with its irreducible uniqueness corresponded to a new attentiveness to the effects of architecture. As the rules became questionable, subjective experience advanced in previously unimaginable ways to become the basis for judgment. The concern for emotional effects, impressions, fantasies, and ideas eventually

suppressed and transformed the canonical rules of proportion upon which the Vitruvian orders of columns rested."[8] Bisky writes as if subjective feelings were themselves shaped independently of the Vitruvian rules, as if they were different from or even incompatible with the classical rules, as if feelings and rules had very separate origins. Indeed, with the decline of the rules' legitimacy, "subjective experience advanced" until it became the authority for making judgments about architecture. This account of the triumph of feeling over the canon of orders presumes that the emotional responses observers had to buildings were independent from architectural convention. However, as we shall see, time and again when writers describe their feelings about a building, they include terms taken from the classical canon. Goethe explains that at first sight the Strasbourg Muenster seemed a monstrosity, but then after reflection he came to recognize its proportion and symmetry.[9] Of all the possible reactions an emotionally sensitive critic might have, why settle on harmony, proportion, and symmetry to describe a building? The suspicion arises that the observer is not as free from the classical tradition as he might wish, certainly not as independent as the young Goethe claimed. The possibility arises that the classical terms have been incorporated into the language of subjectivity, so that the feelings have taken on the order of architecture.

The established historical position states that aesthetics, as the practice in which a self-reflective subject judges objects according to a standard of taste, emerged just as the cosmology, which posited a correspondence between art and the universe, declined. If we were inclined to read history in terms of ruptures, the decline of the Vitruvian tradition would belong to the radical break with the classical episteme Foucault describes. The emergence of a subjective aesthetic for evaluating architectural beauty would likewise correspond to the discourse networks of romanticism Friedrich Kittler presents. However, in preindustrial architecture, historical transformations are not nearly as radical as epistemological shifts in philosophy, poetry, or the natural sciences. Unlike older scientific or economic theories, classical architecture never vanished; its authority certainly diminished, yet its forms persist to this day. Rather than suggesting a shift from one episteme to the next, could one not consider the ways in which the "declining" cosmology reinforced the "emerging" subjectivity? How did the subjective judgment of the tasteful critic take on the rules and orders of cosmological thinking? We might find that internal feelings, subjectivity at its most intimate, were arranged according to the very same rules of proportion and harmony that emotions were supposed to have supplanted. Rather than one episteme replacing the other, we might find that the older

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8. Jens Bisky, *Poesie der Baukunst: Architekturästhetik von Winckelmann bis Boisserée* (Weimar: Hermann Böhlaus Nachfolger, 2000), 5.

9. This city, which for centuries has been both at the center of European power and on its internal borders, has several orthographical variations. Goethe uses the spelling Strassburg for the name of this city on the Rhine. I use the spelling Strasbourg throughout.

teleological order, which perceived correspondences between different corners of the cosmos, such as between the proportions of a beautiful building and those of the solar system, was folded into the discourse on aesthetics, so that the language of feelings invoked by the sight of the stars or a villa overlooking a river relied on many of the same terms as the older cosmology, only the agents had been changed. Instead of a divine being as the source for order in nature or architecture, aesthetic criticism now wrote about the perceiving subject, which found patterns in the emotions created by the outside world. Eighteenth-century spectators spoke and wrote about harmony while standing before a building, but it makes a great difference whether that sense of balanced peacefulness belonged to the building or to its observer. The French critic Marc-Antoine Laugier tried, for example, to strike a balance between the two possibilities without realizing the contradiction he engendered. After evaluating buildings according to the only standard he still considered acceptable, namely, his emotional response, he concluded that "absolute beauty is inherent in architecture independent of mental habit and human prejudice."[10] In Goethe's more radical formulation, the cosmological model of divine architecture is folded into the subject, so that the terms once used to describe the universe are now invoked by the emotionally sensitive person to describe himself. "I look in myself and see a universe"—this line from *The Sorrows of Young Werther* speaks directly to the application of cosmological terms to interiority.

The encounter between observer and building meant that the onlooker allowed himself to be impressed by the facade he was contemplating. The building imposed itself on the viewer and then was judged from within the subject's emotions. It is easy to interpret this phenomenological interaction in narcissistic terms—the viewer sees his own interior projected onto the external structure. However, we might also consider that prolonged engagement with architecture and its theoretical literature would leave its mark on the subject. The viewer's identification with the building was not a closed circuit in which the same subjectivity was reflected back as had been projected outward. Identification also allows for a mimetic relation, so that the viewer becomes like the building. The self discovered in the building thus becomes restructured in architectural terms. The facade is not just a purely polished mirror that disappears around the reflected image it contains. Rather, it reconfigures the romantic self that stands before it.

Goethe writes about how he is reshaped by architecture, forced to reconsider his own understanding. At its most interesting, architecture redefines the subject it houses. This is true in every one of Goethe's famous moments before buildings—in Strasbourg at the cathedral, in northern Italy as he discovers Palladio, in Rome as he absorbs the metropolis, and in Paestum as he sees "authentic" Greek architecture for the first time. In each moment, it is the buildings that induce a shift

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10. Marc-Antoine Laugier, *An Essay on Architecture,* trans. Wolfgang Herrmann and Anni Herrmann (Los Angeles: Hennessey & Ingalls, 1977), 3.

in Goethe's self-understanding. The entire process may ultimately be narcissistic, buildings may serve as nothing more than backdrops to Goethe's personal education, but they are forces that shift the flow of thought. A building shatters the protective barriers that nestle the narcissistic self.

For much of the eighteenth century, there existed a similarity between the effort to read buildings as possessing character and the physiognomic attempts to read faces as revelations of personality. Without a doubt the classical tradition had always encouraged such interpretations, yet its approach had focused on the body's frozen features—the expressionless face, the outstretched limbs. Ever since Vitruvius had compared the Doric, Ionic, and Corinthian orders with specific body types, physiognomy had belonged to an architectural classification, although these were limited variations compared to the vast range of descriptors one could apply to human bodies. Greg Lynn alludes to Foucault's *Discipline and Punish* when he summarizes the uniformity of the classical norm: "The paradigmatic body is both docile and static; its particularities of culture, history, race, development, and degeneration are repressed in favor of a general model."[11] Starting with Perrault, these typological comparisons were given greater nuance, so that a wider range of complex, and often poetic, emotions could be derived from the appearance of buildings. At the same time though, the language of classical architecture organized these emotions. Moral sentiments were characterized in terms that had long been associated with architecture. Thus the neat correspondence between a building and the emotions it produced in passersby was made possible by the fact that those emotions were themselves already made intelligible by the categories of architectural theory. When Goethe compares self-education (*Bildung*) to an architect's renovation of his own house, when Kant organizes the a priori categories as an architectural plan, we can begin to suspect that the relationship between architectural theory and the modern subject was not one-sided. Architecture became one of the techniques of defining, never mind regulating, the self. Classical treatises aided in the arrangement of the interior life as if the subject were organized like building, with spaces that contained different qualities that were set in a hierarchy, top to bottom. The deliberate transformation of individual consciousness through architecture may not have been made explicit until the twentieth century, when modernism made such a change part of its ideological agenda, but this relationship was already implicit; indeed modernism's agenda of reform and education was predicated upon the eighteenth century's correspondence between architectural theory and subjecthood. The terminology that Walter Gropius and Le Corbusier adopted to describe the manner in which modern buildings would mold the people who lived within was derived from the reformist tendencies of the eighteenth century.

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11. Greg Lynn, "Multiplicities and Inorganic Bodies," in *Folds, Bodies, and Blobs: Collected Essays* (Brussels: La Lettre Volée, 2004), 37.

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The Decline of the Classical Orders

Architecture's place among the fine arts came undone at the end of the seventeenth century. First in France, and then across Europe, critics began to wonder whether architecture was still related to painting and sculpture, the two genres traditionally most closely associated with grand buildings, or whether it should be counted as a technological field, imbued more with the lessons of mathematics and engineering. This uncertainty had been initiated in Paris by a skeptical review of Renaissance theories of beauty in building. In 1683 Claude Perrault's careful reading of the classical treatises questioned whether the proportions of the columnal orders—Doric, Ionic, Corinthian, Composite, and Tuscan—really did correspond to other mathematical relations in the cosmos, such as the ratios that produced musical tones in string instruments.[1] The perceived correspondence between architectural rules and musical notes had long reinforced the belief that the universe itself was organized according to a divine mathematic order. Yet, as Rudolf Wittkower notes, "With the rise of the new science the synthesis which

1. Joseph Rykwert, *The First Moderns: The Architects of the Eighteenth Century* (Cambridge, MA: MIT Press, 1980), 33–39; Wolfgang Herrmann, *The Theory of Claude Perrault* (London: A. Zwemmer, 1973); Claude Perrault, *Ordonnance for the Five Kinds of Columns after the Method of the Ancients,* trans. Indra Kagis McEwen and intro. Alberto Pérez-Gómez (Santa Monica: Getty Center for the History of Art and the Humanities, 1993).

held microcosm and macrocosm together, that all-pervading order and harmony in which thinkers had believed from Pythagoras' days to the 16th and 17th centuries, began to disintegrate."[2] By the middle of the eighteenth century, Edmund Burke even questioned the more basic proposition, also espoused by Vitruvius, that the proportions that defined beautiful architecture were modeled on the human body. Burke gave perhaps the boldest dismissal of Renaissance claims: "I know that it has been said long since, and echoes backward and forward from one writer to another a thousand times, that the proportions of buildings have been taken from those of the human body.... But it appears very clearly to me, that the human figure never supplied the architect with any of his ideas."[3] Burke's 1757 statement is symptomatic of the crisis in architectural theory.[4] He acknowledges that the body/building analogy had been affirmed for centuries, yet he feels empowered to dismiss the claim simply because he does not perceive the relation. A Renaissance architect would have scorned an Englishman who held nothing more than his own opinion up against established tradition, but a new modern insistence that knowledge must be confirmed by empirical demonstrations and that beauty was necessarily subject to the whims of personal taste made Burke's rude statement typical of the times. The force of Burke's essay lay in its sharp negative attitude toward theories of beauty. He was much more accomplished at tearing down the older cosmological theory of beauty than developing his own. When he sought to define beauty's general qualities, the vigor of his argument weakened considerably. In the end, Burke's rules of beauty practically excluded architecture, for he considered beauty to be a property of objects that were small, smooth, and delicate and made no show of their own strength.[5]

While the five orders of columns lost their authority over the course of the eighteenth century, they did so slowly. The architectural historian Jens Bisky refers to a "turn away from Vitruvianism" that began with Johann Joachim Winckelmann's 1759 essay on Sicilian temples.[6] Even during the French Revolution, there was no sudden rupture within architecture.[7] Instead there is a growing awareness stretching across the eighteenth century that the classical treatises were insufficiently critical of their own rules of beauty, that they failed to justify *why* a particular design was beautiful. Antoine Picon characterizes the transition as "the exhaustion

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2. Rudolf Wittkower, *Architectural Principles in the Age of Humanism* (New York: Norton, 1971), 143.

3. Edmund Burke, *A Philosophical Enquiry into the Sublime and Beautiful* (London: Penguin, 1998), 135–136.

4. Wittkower does not refer to a crisis; however, he does treat Burke as representative of English aesthetics at midcentury. Rudolf Wittkower, "Classical Theory and Eighteenth-Century Sensibility," in *Palladio and Palladianism* (New York: George Braziller, 1974), 200.

5. Burke, *Philosophical Enquiry,* 151.

6. Jens Bisky, *Poesie der Baukunst: Architekturästhetik von Winckelmann bis Boisserée* (Weimar: Hermann Böhlaus Nachfolger, 2000), 11.

7. Wittkower, "Classical Theory and Eighteenth-Century Sensibility," 195.

of … architectural theory inherited from the *Grand Siècle*."[8] Johann Georg Sulzer, the author of *A General Theory of the Beautiful Arts* (1751–1754), criticized the general lack of aesthetic reflection in the works of Andrea Palladio, Vincenzo Scamozzi, Il Vignola, Claude Perrault, and Nicolaus Goldmann: "It is almost a universal failure of these works, that they contain too little general investigation into taste and the various forms of beauty."[9] As the canon's metaphysical legitimacy eroded, French architectural writers found a more polemical tone.[10] Marc-Antoine Laugier, for example, understood that the older rules no longer guided contemporary builders, yet rather than develop a different, entirely new canon of forms, he proposed an altered aesthetic understanding of the older system. Buildings were no longer judged according to a code of measurement but by the effect they produced on a spectator. In his study of German architectural discourse in the eighteenth century, Ulrich Schütte uses the term *Wirkungsaesthetik* (reception aesthetics) to describe this new mode of architectural reception in the late eighteenth century. Goethe's 1772 "On German Architecture" and Laugier's *Essay on Architecture* sought to ground the value of architecture in the subject's spectatorial relationship with buildings. Both writers assess buildings in terms of the emotional affect they produced in a person contemplating them. Beauty is thus understood as dependent upon a viewer's judgment rather than on the properties inherent to the object, a thesis that Kant would develop in a more rational direction in his *Critique of Judgment*.

Already in 1683, the Sun King's architect, Claude Perrault, took a decisive step away from the Renaissance tradition in his *Treatise of the Five Orders in Architecture*.[11] Histories of eighteenth-century architecture usually begin with his treatise.[12] A European-wide controversy emerged when François Blondel defended the established conventions within the French Academy against Perrault's criticisms.[13] Scandal could hardly have been Perrault's intention, for he wrote his own treatise only after having already provided a scholarly translation and commentary on the source of all tradition, Vitruvius's *Ten Books on Architecture*. As much as Perrault questions the cosmology of Renaissance architectural theory, he preserves its key

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8. Antoine Picon, *French Architects and Engineers in the Age of Enlightenment,* trans. Martin Thom (Cambridge: Cambridge University Press, 1992), 1.

9. Quoted in Ulrich Schütte, *Ordnung und Verzierung: Untersuchungen zur deutschsprachigen Architekturtheorie des 18. Jahrhunderts* (Braunschweig: Vieweg, 1986), 26.

10. Antonio Hernandez, "Französische Architekturtheorie von Briseux bis Ledoux," in *Revolutionsarchitektur: Klassische Beiträge zu einer unklassischen Architektur,* ed. Klaus Jan Philipp (Braunschweig: Vieweg, 1990), 87.

11. Claude Perrault, *A Treatise of the Five Orders in Architecture,* trans. John James, 2nd ed. (London, 1722); the most modern English translation is *Ordonnance for the Five Kinds of Columns,* trans. McEwen and intro. Pérez-Gómez (1993).

12. Rykwert, *First Moderns,* 22; Caroline van Eck, *Organicism in Nineteenth-Century Architecture: An Inquiry into Its Theoretical and Philosophical Background* (Amsterdam: Architectura & Natura Press, 1994), 84.

13. Antoine Picon provides a sympathetic portrayal of the debate. Antoine Picon, *French Architects and Engineers,* 26–34.

terms. Indeed, the history of classical architecture is noteworthy for the persistence of its central design features even in the midst of epistemological reversals. Perrault might have cast doubt on the mathematical and musical ontology of the orders, however he continued to defend them as a necessary component of all architecture. While he presents a scientific evaluation of the Platonism implicit in Renaissance treatises, he bends over backward to preserve some universal standard. As Robin Middleton notes, "Perrault was in no way intent upon rejecting the authority of classical architecture or the primacy of the orders as the embodiment of the highest standards of beauty and artistic expression. He aimed rather to subject them to new rules of assessment."[14] Hanno-Walter Kruft, likewise insists that Perrault intended no assault on classical values: "Perrault's concern is not to abolish the concept of proportion but to make it less absolute."[15] The trouble was that once Perrault's skepticism had been put in print, the critical evaluation of earlier treatises began in earnest, with implications beyond Perrault's expectations. Walter Kambartel states flatly that Perrault feared the license that his critique of the canon might permit, hence his writing maneuvers between scientific dismissals of basic assumptions to diplomatic recommendations to preserve traditional concepts.[16] Within the Vitruvian tradition, "license" referred to the conscious disavowal of inherited rules in favor of more fantastical designs, and by all accounts Perrault was asked to translate Vitruvius as a response to baroque excesses. However, skepticism's gravest threat would have been its potential disregard of royal architecture in general. If Perrault too severely undermined the proposition that Vitruvian buildings reflected the natural order, then one might fear that magnificent buildings as a potent symbol of Louis XIV's royal authority might also be questioned. Given how assiduously Louis XIV reinforced his might through grand building schemes, an all-too-aggressive critique of the Roman tradition might well have been interpreted as a challenge to the present king as well. In this regard Perrault follows the example of Descartes, who also deployed architectural methods in his critical philosophy, and who, we shall show, also shied away from the strong political implications of his architectural thinking.

Despite his fame among architects, most of Perrault's life was devoted to medical research. A varied career was not unusual in the late seventeenth-century "Republic of Letters," where intellectuals moved within a range of subjects. Like many of his contemporaries, Perrault distinguished his own writing from that of the Scholastics, who were chastised for making narrow distinctions in their overly respectful commentaries on established texts. Late seventeenth-century critics

14. Robin Middleton, introduction to *The Genius of Architecture,* by Nicolas Le Camus de Mézières (Santa Monica: Getty Center for the History of Art and the Humanities, 1992), 19.

15. Hanno-Walter Kruft, *A History of Architectural Theory from Vitruvius to the Present* (New York: Princeton Architectural Press, 1994), 135.

16. Walter Kambartel, *Symmetrie und Schönheit: Über mögliche Voraussetzungen des neueren Kunstbewusstseins in der Architekturtheorie Claude Perraults* (Munich: Wilhelm Fink, 1972), 29.

perceived themselves as livelier, wittier, and more engaged in debate than older savants. They were more concerned with the personalities of the public writer, with maintaining a position in a debate, than with the specialized knowledge of ancient texts. The period has been described as the golden age of essays, commentaries, and translations.[17]

Perrault was originally trained as a doctor.[18] In 1642 he passed his doctorate and established a medical practice. As a member of the medical faculty at the University of Paris, he lectured on physiology and pathology. In 1666 he was accepted into the Académie des Sciences, where he conducted biological investigations, and was also involved in the Academy's compilation of all newly invented machines. He died in 1688 at the age of seventy-five, having contracted an infection while performing a dissection on a camel. Alberto Pérez-Gómez connects Perrault's medical research to his sharp comments about the architectural tradition, for he quite explicitly compares architects' veneration of antiquity with Scholasticism's unquestioning adherence to the works of Aristotle.[19] While trouncing medieval commentaries has long been a chestnut of Enlightenment self-celebration, we should not underestimate just how much ancient sources still defined scientific knowledge at the end of the seventeenth century. Even in his reports about animal anatomy, Perrault felt obliged to respond to ancient sources. In detailing his autopsy of a lion, for example, he mentions that the claws do not have cases as Pliny claims but are retractable just as Plutarch and Solinus observe.[20] However much scientific research was Perrault's lifetime occupation, he was known throughout Europe for the controversy surrounding his architectural commentaries, and famous for his Louvre design. Contrary to the classical ideal of proportion, the three arenas—academic science, scholarly commentary, and public design—could not be seamlessly integrated with one another.

Perrault's cautious approach needs to be placed within the context of seventeenth-century French censorship. His brother served as secretary to Louis XIV's minister Jean-Baptiste Colbert. As he consolidated the authority of the central state, Colbert had inherited from his ministerial predecessors the inclination to restrict the circulation of academic histories of the French monarchy. Perrault surely grasped that a complete dismissal of grand architecture could easily be perceived as an assault on the monarchy, from both within and without the government. The case of Pierre Bayle, a Huguenot professor of philosophy forced to flee to Rotterdam, was but one example of an academic whose philological commentaries on the

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17. Patrick Lambe, "Critics and Sceptics in the Seventeenth-Century Republic of Letters," *Harvard Theological Review* 81 (1988): 277–281.

18. For a biography of Perrault, see Herrmann, *Theory of Claude Perrault,* 1–30.

19. Alberto Pérez-Gómez, *Architecture and the Crisis of Modern Science* (Cambridge, MA: MIT Press, 1983), 18–36.

20. Claude Perrault, *Memoirs for a Natural History of Animals: Containing the Anatomical Descriptions of Several Creatures Dissected by the Royal Academy of Science in Paris* (London: Alex Pitfield, 1688), 3.

Old Testament or Roman history brought severe chastisement.[21] Perrault's cautious maneuverings reflect the tension that runs throughout the Enlightenment, the problem of the critical intellectual's relation to the absolute state. Architects were in the same bind as philosophy professors, perhaps even more so, for they sought the direct patronage of rulers. Perrault's career as commentator had to mesh with his place as an architect for the Louvre.[22] More than theorists, architects are directly dependent on power. Frederic Jameson's point that "of all the arts, architecture is the closest constitutively to the economic, with which…it has a virtually unmediated relationship," applies just as strongly to the precapitalist society of patronage and feudal distinctions.[23] Indeed, Theodor Adorno has argued that the domination of absolutist patrons over architects was probably more thoroughgoing than within modern bureaucratic states.[24] Perrault was supremely adept at compromise, as demonstrated by his ability to win the Louvre competition. After the baroque design of Bernini was abandoned because of its lack of cohesion and its failure to consider the royal need for security, Perrault outmaneuvered other Parisian contenders. Emil Kaufmann described the Louvre design as "the Perrault compromise," and much the same may be said of his writing, a balance between rational inspection of convention and its reiteration as a French monarchical style.[25]

Perrault's most striking claim was that no empirical correspondence existed between the proportions of the architectural orders and musical tones.[26] Vitruvius, and those Renaissance theorists guided by him, had maintained that the ratios of columns and spaces in the most successful buildings were organized to correspond to differences in the pitch of musical tones. The harmony of a building's elements was directly analogous to musical harmonies. The relationship between the length and width of a room matched the different tones, measured by octaves and fifths, that were produced by a musical chord played at different lengths. Even to the untrained ear, musical harmony sounded delightful; so, too, it was argued, a harmoniously arranged building pleased the eye. In both cases the observer and the listener might not understand the technical rules that underlay the relationship of

21. Jacob Soll, "Empirical History and the Transformation of Political Criticism in France from Bodin to Bayle," *Journal of the History of Ideas,* 2003, 297–316.

22. A great deal has been written about the debate over whether Perrault deserves sole credit for the Louvre design. Regardless of whether the question of attribution is resolved, little doubt remains that Claude Perrault was very closely connected to the royal decision. Christopher Tadgell argues indeed that the absence of a denial from Colbert, who could very easily have dismissed the claim, indicates that Perrault was the architect responsible. Christopher Tadgell, "Claude Perrault, François La Vau, and the Louvre Colonnade," *Burlington Magazine* 122 (1980): 326–337.

23. Frederic Jameson, *Postmodernism or, The Cultural Logic of Late Capitalism* (Durham, NC: Duke University Press, 1991), 5.

24. Theodor Adorno, "Culture and Administration," in *The Culture Industry* (London: Routledge, 1991), 115.

25. Emil Kaufmann, *Architecture in the Age of Reason* (Cambridge, MA: Harvard University Press 1955), 127.

26. Rykwert, *First Moderns,* 35–36, relates Perrault's arguments with contemporary theories on acoustics.

notes to each other, or of spatial forms, yet for the Renaissance thinkers, these rules were part of larger correspondences in the order of the universe. Beautiful buildings conformed to natural laws, and thus architecture could be understood as a science. Perrault, however, noted quite simply that all the authorities from Vitruvius to Scamozzi gave different ratios for the orders. Palladio's measurements for the Ionic were not the same as Alberti's, and so on. If the proportions of the different orders of columns were truly based on musical tones, there could be no variation in the proportions of Doric, Ionic, and Corinthian columns.

Perrault's skepticism developed from his critical comparison of authoritative texts. The more books one reads, the more the certainty of each treatise is undermined by another, equally canonical work. By the end of the sixteenth century, Vitruvian theory was understood as a coherent unity; thus its major thinkers could all be read as expounding a single truth, yet their specific calculations, Perrault noted, varied considerably. Despite this critical approach to reading treatises, Perrault's philological questions were not intended to thoroughly delegitimate the architectural orders, for, in his own treatise, he goes on to recapitulate them. As a careful interpretation of Perrault's own *Treatise of the Five Orders in Architecture* can show, he wrote within the classical tradition while exposing it as just that—a convention of inherited standards of beauty, and not a science based on natural law.

Perrault's method was based not only on empirical observation. His inclination to read treatises against each other has much in common with theological criticism. In the seventeenth century, critical commentaries on the Bible divided the divergent religious groups of the Reformation. However, as the religious wars came to an end in France, critical practices were no longer set in one particular denominational camp but drew instead on broader debates regarding the primacy of reason or revelation in Christian teaching. Reinhart Koselleck has argued that as interpretive methods removed themselves from the dogmatic battles of competing churches, philological critique began to assume a position above the partisan claims of one group or another.[27] Similarly, Perrault sets himself over the different versions of Vitruvian classicism, while at the same time turning one against the other. The force of his argument arises from his clear articulation of the contradictions between treatises. At points, Perrault approaches the ideal that Kant and Descartes admired in architectural thinking: that of an engineer who tests a proposition based on empirical knowledge rather than traditional authority. Indeed, Perrault's tone anticipates the even more radical arguments of the English Enlightenment, for when he dismisses beauty's ontological claims he comes close to Hume's critique of religion:

Neither the Imitation of Nature, nor Reason, nor good Sense, are then the Foundations of those Beauties, which we see in the Proportion, Order and Disposition of the

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27. Reinhart Koselleck, *Critique and Crisis: Enlightenment and the Pathogenesis of Modern Society* (Oxford: Berg, 1988), 106–108.

Part of a Column; and it is impossible to assign any other Cause of their Agreeableness, than Custom.[28]

Likewise, his arguments test the assertions of architectural theory against experience, as when, in order to dispute the musicological understanding of architectural harmony, he invokes Vitruvius's famous rule that a beautiful house is organized with the same sense of proportions as the human body. A human face can be beautiful, Perrault argues, not because it has particular proportions, but because its features embody grace, their smooth modifications are gentle even when the person expresses very different emotions. If the human body, and by implication the face, are the standard for architectural beauty, Perrault implies that beauty can vary significantly as to its exact shape and dimensions, but it is their relation to each other, as well as over time and in differing circumstances, that constitutes beauty:

> The Beauty of a Building is so far like that of a humane Body, that it consists not so much in the exactness of one certain Proportion, or Conformity of Size, which the Parts have one with the other, as in the Grace of the Form, which is nothing else but its agreeable Modification, upon which, an excellent and perfect Beauty may be found, without strictly observing this very kind of proportion.[29]

Grace is of course a much less precise term than the mathematical principles of Renaissance theory, for it leaves open the possibility of wide and even unexpected variations in beauty, and perhaps more importantly it implies a spiritual quality apart from the material shapes of a facade.

Perrault set one classically derived metaphor against the other. The fixed relationship between architectural drawings and musical pitches is called into question by the comparison between the human body and buildings. He points out that there is no single type of body, rather a great variety, and they have a surprising ability to please even in their unconventional form. Perrault invokes the metaphor without positing a universal, abstract anatomy that all humans share. Bodies are beautiful not because all eyes and ears are set at opposite sides of the face, but because their particular variations spur our aesthetic judgment. By emphasizing the differences between faces, he shifts the standard of beauty from surface geometry and proportion to the ineluctable quality of grace, which is discerned more through taste than measurement. In Perrault's argument there is no longer a single human face. We cannot speak of "the face" as if its appearance were constant and universally the same. Instead faces change shape, expressing different emotions. If one were to allow the classical metaphor to continue to influence architectural opinion, then Perrault's physiognomic account of emotionally fluid faces allows for the possibility of

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28. Perrault, *Treatise of the Five Orders,* viii.
29. Ibid., i.

many different modes of architectural expression. Just as faces represent different emotions, so do buildings show varying facades. From Perrault's emotionalized face, architectural discourse will develop the notion that buildings elicit emotions in those that look at their facades. The step from Perrault's critique of the Renaissance metaphor to the later claim that all buildings show a characteristic expression was not very great. How one perceives the beautiful face or facade, and how one responds to it sensually, Perrault argued, count for more than the accurate estimation of distances and ratios. While Renaissance theory certainly understood that beauty is intuited long before it is understood in philosophical terms as a series of harmonious relationships, Perrault claimed that Renaissance thinking mistakenly presumed that certain laws of proportion underlay any naive appreciation of loveliness.

Like later eighteenth-century theorists, Perrault refrains from defining absolute beauty. Instead, for "beauty" he substitutes "grace," which he defines as a smooth modification of form. He opens the door for a radical relativization of beauty when he postulates two forms, positive and arbitrary. The positive is least well defined: it consists of building qualities that every observer can agree are beautiful, such as the use of very fine marble. Positive beauty does not concern proportion as outlined by architectural treatises on the orders; instead it depends on qualities that are immediately visible, such as the grandeur of a building or the precision of its construction. Of the Vitruvian qualities, Perrault counts two types of proportion among the positive beauties. One consists in the proportional relationship of the parts to the whole, their integration into a coherent entity. The second is symmetry—the balanced correspondence of parts in terms of size, number, disposition, and order. Indeed, these two types of proportion become the primary terms in eighteenth-century aesthetics, not just for buildings but in other genres as well.

Having barely sketched out the qualities of positive beauty, Perrault describes arbitrary beauty as the passing fancies of a society, the ruling elite's preferences of a given moment. Perrault lays out the distinction between positive and arbitrary beauty in an effort to explain why classical architecture has been valued over centuries. Rather than assert some eternal quality in ancient styles, Perrault acknowledges that architects tend to overvalue tradition. In a gesture that sounds strikingly like the skeptical unmasking of self-love undertaken by French moralists such as La Rochefoucauld, Perrault strikes at his own profession by arguing that it treats antiquity as the embodiment of a mysterious truth, as a fetish, when in fact this presentation is but a ploy to bolster its own standing.[30] Likewise, the legends told by Vitruvius and other ancient authors about how the various orders came into being cannot serve as a foundation for their further use. At bottom, Perrault states that the architectural orders were created out of nothing more than whim and chance,

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30. Henry C. Clark, *La Rochefoucauld and the Language of Unmasking in Seventeenth-Century France* (Geneva: Droz, 1994), 130–136.

a position that the first great Renaissance theorist, Alberti, had explicitly rejected as ignorant.[31] Having pointed out the false ideology of the architectural profession, Perrault does not posit some radical alternative. He is writing after all a summary of the five architectural orders. His critique of the classical episteme is meant to serve as nothing more than a preface to the handbook that reiterates the rules of proportion in their many variations. The real possibility exists that Perrault's and his readers' preference for classical forms arises from nothing more than an arbitrary convention favored by public opinion and the ruling elite. Fashion and pride are powerful reasons to adore classical architecture. Perrault openly acknowledges the awkwardness of dismantling all claims to universal and naturally grounded rules of beauty while presenting them as standards for all to follow.[32] Perrault's paradox runs far beyond the deconstructive moment of his preface; it permeates all eighteenth-century efforts to replace the Renaissance science of beauty with an aesthetics of taste. How does one define taste such that it does not devolve into mere fashion? On what basis can beauty be called universal? What value makes tradition worth preserving and emulating? How can personal perception be reconciled with a canonical history or art?

Later in the eighteenth century, Perrault's distinction between positive and arbitrary beauty manifested itself in the debate between aesthetics based on an anthropological history of human culture and aesthetics grounded in a universal standard of judgment. In the context of the German Enlightenment, this division reappeared in the differences between Kant and Herder's aesthetic understanding. Herder, while an ardent admirer of classical Greece, was nevertheless capable of arguing that beauty was understood differently depending on the culture within which a judgment was made. Kant had spent most of his philosophical career doubtful that aesthetic judgments could ever have an a priori basis, because for the young Kant, as for many English empiricists of the time, aesthetic judgments were determined by the sensual experience of individuals. According to this line of reasoning, there was no rational basis for asserting that a thing was universally acknowledged to

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31. Perrault, *Treatise of the Five Orders,* xv: "No reason can be found…they have no other Foundation than Chance, and the Humour of the Workmen, who sought for no reason to guide them in the Determination of those things, the Preciseness of which, was of no Importance." Alberti anticipated this argument: "Yet some would disagree who maintain that beauty, and indeed every aspect of building, is judged by relative and variable criteria, and that the forms of buildings should vary according to individual taste and must not be bound by any rules of art. A common fault, this, among the ignorant." Leon Battista Alberti, *On the Art of Building in Ten Books,* trans. Joseph Rykwert, Neil Leach, and Robert Tavernor (Cambridge, MA: MIT Press, 1988), 157.

32. Both Herrmann and Pérez-Gómez note that the term *paradoxe* in seventeenth-century French would have been understood as meaning "unorthodox." The difference in meaning has important implications for Perrault's argument. If he is "unorthodox" in his argument, then he can be seen as a man of science arguing against tradition and authority. If he is understood as presenting a "paradox" in the contemporary sense—a contradiction in logic—then he would seem to be acknowledging his own divided commitment to critique and respect for the architectural tradition. It would seem simplistic to accept that *paradoxe* meant only "unorthodox" and had nothing of a logical connotation. It is more likely that both meanings are at play in Perrault's usage: his critical arguments have split his allegiances.

be beautiful. Only at the end of his career, with the *Critique of Judgment,* did Kant find what he considered a rational basis for universal aesthetic judgments. Both the empiricist and transcendental sought to explain the basis for "good taste": was it a universally recognized judgment, or was it dependent on personal whim or at best social consensus?

By discrediting the Renaissance cosmology of architecture, Perrault lays the ground for the eighteenth-century application of "good taste" to the judgment of architectural beauty. The architect is a man whose discerning judgment supersedes other more superficial and flawed assessments of beauty. Eighteenth-century aesthetics devotes considerable effort to defining just what constituted a judgment of taste, yet the one presupposition that all critics of taste agreed upon was that, when presented as an aesthetic judgment, it was distinct from and superior to fashionable opinion. Already in Perrault we can recognize the aspirations and inadequacies of this position. While noting the many variations among manuals on the orders, Perrault claims that there are buildings that all architects can agree are beautiful. He acknowledges the variety of personal judgments but ultimately, like so many aestheticians after him, also wants to believe that beauty exists in a universally recognizable form. To accept that beauty is often only a matter of custom, as Perrault quite clearly argues in his preface, amounts to a thorough delegitimation of classical beauty. The resolution of this tension is attempted by employing the term "taste," which incorporates both the sensual and the popular at one end along with art historical connoisseurship and artistic genius at the other. Taste was an elastic term that made it possible in theory to incorporate the increasingly diverse claims on beauty. Perrault recognizes that as a standard of rational judgment "good taste" is quite unstable. Given his claim that much of what gets held up as beautiful is nothing more than the arbitrary opinion of a given society, how does one distinguish between fashionable opinion and a higher aesthetic sense? What separates a technically sound building from a highly decorated one? At what point does engineering overlap with universal beauty to the exclusion of popular opinion? Perrault's critical arguments have introduced the possibility that the architectural orders are the product of historical opinion and slavish devotion to tradition, with only an unrecognizable sliver of mechanical necessity as their justification.

The radical implications of Perrault's distinction become obvious after the era of taste-driven aesthetics. The risks in his critique become clearer if we take the unhistoricist step of drawing a comparison with Charles Baudelaire's celebration of fashion in *The Painter of Modern Life.*[33] More than just a century and a half separates Baudelaire and Perrault, and yet it is only in the nineteenth century that Perrault's arbitrary beauty receives a committed proponent. When Baudelaire argues that "beauty is always and inevitably a double composition," he does so in order

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33. Charles Baudelaire, *The Painter of Modern Life* (New York: Phaidon, 1995), 3.

to celebrate the "relative, circumstantial element," namely, fashion.[34] He defines modernity as that half of all art engaged in "the ephemeral, the fugitive, [and] the contingent." The other side of beauty he quite flatly concedes to classicism, for he states that half of all art concerns "the eternal and the immutable."[35] For modernist sensibilities, Baudelaire seems to concede too much to the older aesthetic, yet he adopts Perrault's distinction in order to elevate the arbitrary, historically contingent moment in beauty. Fashion wants to believe in eternal beauty. The classical is regularly invoked by the ephemeral. Fashion insists that certain moments are transcendent, that a particular style is forever gorgeous. Similarly the eternal beauty of a Greek sculpture has to be convincingly lovely in the present, without any historicizing, antiquarian explanations. Apollo has to be fascinating without footnotes; hence the eternal ideal has to appeal even in the tumult of contemporary taste. Ultimately, Baudelaire accentuates this dialectic in order to move away from the rigid ideology classicism had become, yet his deployment of Perrault's distinction shows just how close the architect came to enunciating a modernist position. Baudelaire breezily accepts a distinction that Perrault struggles to articulate and that his contemporaries found intolerable or absurd. For classical aesthetics there is no possibility of splitting the difference. Instead the aesthetics of taste becomes the means of integrating the eternal with the fashionable.

The discrepancies between Perrault's criticisms of architectural epistemology, his continued devotion to the classical canon of beauty, and his successful design for the Louvre point to tensions particular to architectural discourse. Throughout the reception of Perrault's work, there remains a distinction between the practice or craft of building design and its philosophical rationalizations.[36] Perrault can dispute the cosmological assumptions of Renaissance architecture, but he was widely understood to have affirmed the tradition through his design work. Eighteenth-century critics tried to reconcile the neoclassical rigor of the Louvre with the skepticism of Perrault's commentary on the orders. For many, the problem was understood as a question about which medium should have precedence, the treatise or the building. Early modern architects were already confronting the problem that architecture existed not only as an object but also as a media representation. With Perrault, readers and spectators were challenged to resolve the difference between critical theory and architectural execution. Laugier, himself no more than a scholar and theorist, gives preference to Perrault's architectural accomplishment: "A beautiful building speaks eloquently for its architect. In his writings M. Perrault is at most a scholar; the Colonnade of the Louvre makes him a great man."[37] In his

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34. Baudelaire, "Beauty, Fashion, and Happiness," in *Painter of Modern Life,* 3.

35. Baudelaire, "Modernity," in *Painter of Modern Life,* 13.

36. Herrmann, *Theory of Claude Perrault,* 138 ff., shows the incredulity with which Perrault's critique was met in the eighteenth century.

37. Marc-Antoine Laugier, *An Essay on Architecture,* trans. Wolfgang Herrmann and Anni Herrmann (Los Angeles: Hennessey & Ingalls, 1977), 8.

summary of the debate between Perrault and Blondel, Jacques-Germain Soufflot expresses dismay at the motivations behind scholarly debate:

> It would be difficult to understand how two architects who have such opposite views on an essential part of their art have created things of equal beauty if one did not know that scholars have sometimes, in fact much too often, the bad habit of not wanting to retract what they have advanced even though they sense inside that they were wrong, consequently they act on principles contrary to what they have declared.[38]

Soufflot's remark highlights a feature often noted in French courtly discourse: the discrepancy between what one says and what one believes. Regardless of his standing within the Parisian scholarly world as an experimenting doctor, Perrault's critique of the orders was not read simply as the act of a committed scientist; it was understood as a sign of a divided self, unable to reconcile his scholarly statements with his artistic accomplishments. Decades after Perrault's views were first made public, both Laugier and Soufflot were struck by the discrepancy between Perrault's critique of the Renaissance and his successful, highly restrained classical design for the east wing of the Louvre. In order to reconcile the difference, they interpret Perrault from the point of view of courtiers who always make a distinction between statements and intentions. The theoretical debate is neither dismissed as false nor accepted at face value; it is instead read as a struggle for prominence.

This tendency to read on two levels, always juxtaposing the interior and the exterior, is particularly appropriate for architects and especially in the case of Perrault, whose most important architectural accomplishment was the design of a palace facade. Soufflot and Laugier presume that Perrault's criticisms of the classical orders are statements made in the fury of scholarly debate and that his real belief in classicism can be read from the walls of the Louvre. This preference for the work of art is itself an arbitrary distinction. One might ask: Why does a building more truly express an architect's opinion than a theoretical statement? Why not presume that Perrault was speaking sincerely in his treatise and acting astutely in his design?

These questions must unsettle Pérez-Gómez's reading of Perrault as a man of science who applied the critical methods of biology and physics to architecture. At least to his contemporaries, Perrault was understood as divided between sympathies. Furthermore, this division occurred not only when he moved between disciplines, from empirical science to classical architecture; it reemerged with the field of architecture as well. One might ask whether a similar division arose in Perrault's scientific writing. Those who celebrate him as a scientist who brought

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38. Quoted in Étienne-Louis Boullée, *Architecture: Essai sur l'art,* ed. Jean-Marie Pérouse de Montclos (Paris: Hermann, 1968), 52.

critical thinking to architecture do not consider this possibility.[39] For them the scientific method is a coherent and consistent order, not one interlaced with old and new ideas, biases, and insights. Perrault's writing exposes the forces that pull on architecture as a field. As Soufflot suggests, there is a considerable difference between a scholar writing for the Academy and the same man serving on a three-person committee empowered to design a wing of the central palace of Europe's most powerful monarch. How one thinks may indeed vary in those two contexts. There is no one arena free from political considerations. The Academy is no less charged with questions of prestige and advancement, but these factors are altered quite substantially when designing a palace. Perrault himself acknowledged that the orders were appropriate for two kinds of structures: magnificent buildings and stage scenery. Later writers would give Perrault's clause a twist by noting that the palaces were often more artificial than theaters. Enlightenment irony aside, the seventeenth century understood grandiosity as an instrument of the state. Tremendous palaces were a means of demonstrating the overwhelming power of the monarch. A great public building gave the populace visual assurances of state authority and the strict application of the law. Renaissance treatises had guided the construction of triumphal arches since the sixteenth century.[40] By the reign of Louis XIV, the orders as defined by Serlio were codified as the visual representation of power. Given the political necessities of demonstrating the king's ancient legitimacy and his supreme authority, it should seem not at all surprising that Perrault would not introduce his skepticism into the Louvre design. If Louis XIV's ministry was at all inclined toward criticizing architecture treatises, it was with an interest in asserting French preeminence over Italian models, not in questioning the codification of power in classical iconography.[41]

The pressure on an architect to operate within the economic and political necessities of his patron adds an additional rupture to the methodological problems within his *Ordonnance*. In Perrault's preface there emerges a division between the claims of scientific knowledge and aesthetic judgment. His critique of Renaissance theory operates on a philosophical level distinct from beauty. Perrault can disprove Renaissance assertions about the cosmological import of proportions in building, but he cannot undo his own conviction that the rules of proportion are at least the basis for building beautifully. Even when Perrault seems willing to accept that his aesthetic conviction is no more than custom, he cannot abandon the belief

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39. Pérez-Gómez, introduction to *Ordonnance of the Five Kinds of Columns,* 1: "Perrault's concern was to place architecture, already well established within the European tradition of *disegno* (design as a liberal art), into the framework of the new scientific mentality inaugurated by Galileo and René Descartes."

40. Roy Strong, *Splendor at Court: Renaissance Spectacle and the Theater of Power* (Boston: Houghton Mifflin, 1973), 65–73.

41. Rykwert, *First Moderns,* 25–31, provides a compelling account of the politics behind the Louvre project.

that beauty has a "universal" quality, a positive aspect that every architect, that is, every academically trained expert, would acknowledge. These tensions—between scientific knowledge and aesthetic judgment, and then within aesthetics between rationalist and anthropological standards of judgment—pervade not just Perrault's preface but also much of the eighteenth century. Furthermore, as architecture splits itself between science and art, the troublesome question arises of whether an architect can work as a critical intellectual as well as a servant of the state. German architectural theory emerges in the eighteenth century as an attempt to answer this question.

Science or Art? Architecture's Place within the Disciplines

By the second half of the eighteenth century the decline of Vitruvian convention had become an urgent topic. The extravagant ornamentation on the facades of princely buildings, styles we would today call baroque and rococo, were debated in aesthetic terms, but with a clear understanding that, given the monarchical state's reliance on ostentatious displays of its overwhelming power, more was at stake. To question the grandiose appearance of princely edifices was to indirectly challenge the existing political order. As architecture became a subject for the wider public sphere, the broad spectrum of people excluded from the inner life of the court, official architecture was increasingly interpreted in terms of its facade. As modest scribes and academics began to write about their rulers' residences, the public side of a building became the site of political and aesthetic contention. The new questions reflected the social standing of the eighteenth-century critics, namely, outsiders. How should one read a building? What message did a building convey through its many small symbols? How did these signs hang together? Not only did the proliferation of such questions suggest the vantage point of the pedestrian spectator; it also suggested that the old rules for how to understand a building no longer formed a consensus.[1] That palatial ornaments were no longer directly tied

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1. Ulrich Schütte, *Ordnung und Verzierung: Untersuchungen zur deutschsprachigen Architekturtheorie des 18. Jahrhunderts* (Braunschweig: Vieweg, 1986), 134. Helmut Pfotenhauer, "Klassizismus und

to a single style of column but had become independent signifiers was a further indication, to critics of the rococo, that the traditional language of architecture was no longer a shared convention. Admittedly, Michelangelo and Palladio had been accused of failing to observe the proper relation between ornament and the orders, yet the Enlightenment critique of decorations raised new implications, for it was connected to the broader project of providing a rational justification for social institutions.[2] Perrault's suggestion that a historical epoch's understanding of beauty might merely reflect the fashionable opinions of the time became a nagging problem for the Enlightenment. The specter of fashion haunted architectural criticism. The varying "solutions" to the problem fostered more general critical reflection into the Renaissance treatises' failure to explain the philosophical status of architecture as a discipline. The debate over ornament was itself a screen that reflected and deflected from the problem of how to legitimate architecture within an Enlightenment epistemology that separated the natural sciences, metaphysics, and the arts into isolated disciplines, each requiring their own justification. As Sabine Schneider has argued, to ask the question of whether ornaments were an essential component of architecture was to already acknowledge the decline of tradition.[3] While surely exaggerating more than a little, Francis Christoph de Scheyb claimed that architecture was in a crisis brought on by its obsession with the fashionably new, by which he meant the importation of French decorations. The virtues of Greek and Roman construction had been abandoned, Scheyb argued, in favor of trifling inventions, which merely showed off the architect's playfulness.[4] A similar complaint had already arisen eleven years earlier from Friedrich August Krubsacius, who had objected to the German tendency to import architectural fashions from Paris. Both writers were expressing the anxiety that Perrault's skepticism had become the reality. For Krubsacius, Perrault's critique was no longer a matter of hypothetical speculation, but an accurate description of the architectural practice at midcentury. The classical link between buildings and bodies had been distorted and reduced to a rococo delight in *maquillage.* While a little makeup and a handful of jewels can enhance an already beautiful face, pouring on the powder and smothering a body with jewels will do nothing if that figure is inherently ugly. The same, Krubsacius thundered, applies to architecture. A few ornaments will elevate an attractive building; piling

Ornament: Die italienischen Verzierung in der deutschen Kunstdiskussion des 18. Jahrhunderts," in *"Italien in Germanien": Deutsche Italien-Rezeption von 1750–1850,* ed. Frank-Rutger Hausmann (Tübingen: Gunter Narr, 1996), 37–63; for the difference between German and French rococo debates, see Mario-Andreas Lüttichau, *Die deutsche Ornamentkritik im 18. Jahrhundert* (Hildesheim: Olms, 1983), 18–21.

    2. Lüttichau, *Die deutsche Ornamentkritik,* 13.

    3. Sabine M. Schneider, "Zwischen Klassizismus und Autonomieästhetik der Modern: Die Ornamentdebatte um 1800 und die Autonomisierung des Ornaments," *Zeitschrift für Kunstgeschichte* 63 (2000): 353.

    4. Francis Christoph de Scheyb (Koremons), *Natur und Kunst in Gemälden, Bildhauereyen, Gebäuden und Kupferstichen,* zweyter Theil (Leipzig: Fried. Gotth. Jacobäern, 1770), 413.

them on will only degrade an already unattractive structure.[5] Krubsacius reiterated Vitruvius's somewhat notorious complaints against "unnatural" wall decorations. The former's position implied that all buildings had a basic form that emerged when they were stripped of all decorations:

> Buildings could be made much nobler if they were to have no, or as little as possible, ornamentation. For they have their essential beauty and do not require any foreign additions. And therefore one calls all ornamentation, nonessential decoration.[6]

Whereas Krubsacius advocated a general principle of refusing "unnatural" decoration as a cure for fashion in architecture, Scheyb argued that architects needed further training in mathematics. The ancients, he claimed, were far better versed in the material necessity of building, while contemporary architects left construction to the master masons. The return to Greek and Roman design required a thorough understanding of mechanics. Herein lies one of the main responses to the decline of the Renaissance orders: a turn toward applied mathematics. Although Scheyb presents engineering as a revival of the classical tradition, many Enlightenment critics understood that the Renaissance treatises had never concerned themselves much with the pragmatics of construction. Indeed, for much of the Enlightenment, the advocacy of engineering principles in architecture was more than an angry response to rococo frivolity; it constituted a broad critique of the social hierarchy implicit in the classical orders. This new position claimed that architecture, when divorced from the few ostentatious structures required by the elite, should not concern itself with beauty or any other aesthetic category but instead should respond to the utilitarian requirements of governance, fortification, commerce, manufacturing, housing, and agriculture. In these domains, the classical treatises and the example of ancient buildings provided little guidance. Thus architects should concern themselves foremostly with designs that served contemporary needs, without recourse to the orders.

From the middle of the eighteenth century onward, there appeared a wave of journals, collections, pamphlets, archives, and anthologies discussing the mechanical principles of architecture.[7] In the last decades of the century, readers could turn to the *Allgemeines Magazin fur die bürgerliche Baukunst* (General Magazine for Civil Architecture), as well as the *Sammlung nützlicher Aufsätze die Baukunst betreffen* (Collection of Useful Essays concerning Architecture). The contents of the *Allgemeines Magazin* presented an Enlightenment program that emphasized

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5. Friedrich August Krubsacius, *Gedanken von dem Ursprunge, Wachsthume und Verfalle der Verzierungen in den schönen Künsten* (Leipzig: Bernhard Christian Breitkopf, 1759), 33–35.

6. Ibid., 33.

7. Klaus Jan Philipp, *Um 1800: Architekturtheorie und Architekturkritik in Deutschland zwischen 1790 und 1810* (Stuttgart: Axel Menges, 1997), 35.

independent observation, critical judgment, and technological innovation at the expense of classical treatises.[8] The journal struck a modernist tone when it insisted on weeding out anything built on the crumpling ground of tradition so as to expose its errors: "to remove everything that smacks of superstition and that is built on the moldy foundations of genealogy and imitation; to stimulate explanation, independent thought, observation, judgment, and invention, to report on errors and to improve imperfections."[9]

A second reaction to the perceived irrelevance of the orders was an entirely new architectural aesthetic, one that did not rely on the authority of tradition so much as the judgments of the tasteful individual. Here the rococo was criticized merely as inferior taste, as opposed to unstable engineering. This approach understood the building as expressing a character that elicited an emotional response within the spectator. Marc-Antoine Laugier had already cautiously proposed the method, and Nicolas Le Camus de Mézières's *Genius of Architecture* presented detailed, sensual descriptions of the rooms distributed through a grand palace. In 1789, Gottfried Huth published a German translation of Mézières's work in his *Allgemeines Magazin,* along with a reprint of Goethe's "On German Architecture" and excerpts of Weinling's letters from Rome. A few years earlier an anonymous work spelled out a similar thesis, recognizable from its title: *Untersuchungen über den Charakter der Gebäude: Über die Verbindung der Baukunst mit den schönen Künsten und über die Wirkungen, welche durch dieselben hervorgebracht werden sollen* (Investigations into the Character of Buildings: On the Connection between Architecture and the Fine Arts and the Effects Which It Should Bring Out through Them).[10] As the century closed, descriptive writing about buildings became much more important than laying down general principles.[11] This new teaching went beyond the Renaissance notion that a building should be appropriate to its owner and its purpose.[12] Starting in the mid-1700s, and then becoming prolific around 1800, a new manner of architectural writing emerged, one that focused directly on individual buildings in order

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8. Ibid., 36.

9. Gottfried Huth, ed., *Allgemeines Magazin für die bürgerliche Baukunst* (Weimar: Carl Ludolp Hoffmanns Witwe und Erben, 1789), 3.

10. This striking treatise has not received a broad reception, even though most scholars who discuss it agree on its remarkable arguments. Jens Bisky asserts that it could well be the most important architectural theory treatise of the German Enlightenment. Jens Bisky, *Poesie der Baukunst: Architekturästhetik von Winckelmann bis Boisserée* (Weimar: Hermann Böhlaus Nachfolger, 2000), 101. Ulrich Schütte provides a thorough appreciation as well in "Aufklärung, Empfindsamkeit und die Krise der Architektur um 1800: Zu den 'Untersuchungen über den Charakter der Gebäude' von 1785," *IDEA: Jahrbuch der Hamburger Kunsthalle* 8 (1989): 57–74.

11. Sylvia Lavin, "Re-reading the Encyclopedia: Architectural Theory and the Formation of the Public in Late Eighteenth-Century France," *Journal of the Society of Architectural Historians* 53 (June 1994): 184–185.

12. Marc Grigona and Juliana Maxim show how the late eighteenth-century understanding of "character" developed from the earlier notion of "convenance," namely, a building's appropriate representation of the inhabitant's rank. Marc Grigona and Juliana Maxim, "Convenance, Caractère, and the Public Sphere," *Journal of Architectural Education* 49.1 (1995): 29–37.

to understand their particular rationality and beauty.[13] The singular structure was newly valued for its distinctiveness. Writers were increasingly driven to reflect upon their own impressions, rather than test the building's adherence to an established code.[14] This new criticism did not slip immediately into subjectivism, for in the first French formulations of the mid-1700s writers felt compelled to defend their taste before the general public. Jens Bisky makes the important point that aesthetic reactions to architecture were composed in order to elicit literary and scholarly discussion. Klaus Jan Philipp argues that the eighteenth century saw the first architectural debates that went beyond a narrow circle of professionals and patrons to address a general audience.[15] The critical public sphere thus provided a context for personal reflections. The expectation that a building should not only display a social status but also appeal to the senses meant that architectural judgments were often articulated as matters of public concern, not just personal, biographical curiosities.[16] These texts were arranged rhetorically as challenges to debate, as well as personal exercises in recollecting the site. Even now, urban architecture, when seen by everyone, can generate intense polemics. The democratization of architectural aesthetics in the eighteenth century allowed for deliberations about buildings based on judgments that were both socially representative and deeply personal. Buildings no longer required an expert to interpret the facade's icons; instead they were read more diffusely for their "character."[17] The hierarchy of buildings spelled out in Renaissance treatises became less important.[18] Only if a building invoked a feeling of monumentality would it be associated with the highest state authority. It was not enough to display its rank; a building had to make you feel that the architect was inspired by noble sentiments when he built it.[19] The anonymous *Investigations into the Character of Buildings* interpreted the silhouettes of houses in much the same manner as Lavater's physiognomic studies.[20] This physiognomic approach complemented the broader Enlightenment critique of ornament and courtly

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13. Philipp, *Um 1800,* 15, centers the new perceptual mode of architectural criticism in the decade before and after the turn of the nineteenth century; however, he readily acknowledges the importance of French authors from the midcentury. Rather than fixing on 1800, I would argue that the new architectural criticism emerged slowly as part of aesthetic's expansion as a serious philosophical discipline.

14. Jens Bisky, *Poesie der Baukunst,* 5, suggests a direct correlation between the decline of Vitruvianism and the emergence of subjective description.

15. Philipp, *Um 1800,* 28.

16. Bisky, *Poesie der Baukunst,* 17.

17. Schütte, "Aufklärung," 60.

18. Philipp, *Um 1800,* 16.

19. Friedrich Meinert, *Zeichenbuch für Baukünstler und Bauhandwerker* (Leipzig: Friedrich August Lev, 1801), 4: 154.

20. Hanno-Walter Kruft points out that the *Investigations* was open to many of the same mocking criticisms Lichtenberg aimed at Lavater's physiognomic interpretations; see his "Einführung" to *Untersuchungen über den Charakter der Gebäude: Über die Verbindung der Baukunst mit den schönen Künsten und über die Wirkungen, welche durch dieselben hervorgebracht werden sollen* (repr., Nördlingen: Alfons Uhl, 1986), xxi-xxii.

fashion.[21] The ontology of the architectural profile favored the clear, single line that traced the overall shape of the building against any features that would be added later to fill in its profile.[22] *Investigations* presented the architect as an autonomous thinker, who critically examined his own discipline to understand how it could most effectively generate strong emotions in spectators, while balancing the client's expectations ("der Eigensinn des Bauherrn") with the budget's constraints.[23] Architecture was defined as a plastic art that stirred the imagination. This ability to inspire onlookers to feel strongly about a building and to fantasize about its purpose depended on the building's "character."

Goethe's essay on the Strasbourg cathedral marked a first radical turn away from public convention and into an alienated, highly subjective reading of a building. *Investigations* follows suit, as it displays a familiarity with Goethe's celebration of the Strasbourg cathedral and prepares the ground for E. T. A. Hoffmann's fantastic houses. The anonymous author of *Investigations* claimed that if they read more literature, architects would better understand how art generates affections in an audience. Robin Middleton has shown that the first French treatises on architectural character coupled buildings with rhetorical convention but in short time expanded the analogy beyond oratory to include music, drama, poetry, and landscape painting.[24] Renaissance architecture has always accepted a comparison with the orderliness of Latin rhetoric; however, the eighteenth-century fascination with the role of imagination in literature raised the possibility of architecture as a transposition of fiction.[25] The difference between the two modes is brought out in the following examples. Milizia still holds to the classical analogy between a well-ordered building and the proper placement of words in oratory:

> The value of architecture consists neither in piling stones up on each other in great masses nor in throwing together a multitude of decorations. The materials in

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21. When Norbert Elias argues that the layout of apartments in a Parisian *hôtel particulier* characterized the marriage arrangements of the French nobility, he is providing an updated version of an Enlightenment method of interpreting architecture. Rather than finding an emotion or a virtue in the design of a house, Elias correlates architectural order with institutional power relations. His classical study of courtly architecture, with its room-by-room analysis, recapitulates Mézières's *Genius of Architecture* in sociological terms. Tellingly, he uses the same phrases as those current in the eighteenth century: "You can characterize the position of man and woman in this society no more clearly than by referring to the equal but completely separate arrangement of their private apartments." Norbert Elias, *Die höfische Gesellschaft* (Darmstadt: Luchterhand, 1969), 79.

22. Schneider, "Zwischen Klassizismus und Autonomieästhetik," 344.

23. *Untersuchungen,* 4, 7.

24. Robin Middleton, introduction to *The Genius of Architecture,* by Nicolas Le Camus de Mézières (Santa Monica: Getty Center for the History of Art and the Humanities, 1992), 25–30.

25. A German translation of Vignola compares the arrangement of words in oratory with the orderly placement of elements in a building: "The structures (*Glieder*) are in architecture what the letters are in writing and rhetoric. In the same manner, the many variations produce countless words in different languages." J. Bar. de Vignola, *Ausführliche Anleitung zu der ganzen civil Baukunst,* trans. Sr. A. C. C. Daviler, commented upon by L. C. Sturm (Amsterdam: Huguetan, 1699), 5.

architecture (*Baukunst*) are like the words in a speech, which on their own make very little or no impression, and can be poorly organized; if they are set together artfully and delivered with emphasis, then they inspire and sweep up with a limitless force. Even with an unexceptional speech, a great poet can inspire in a pleasant and lively manner and say common things with dignity and respect. Just so can an architect use clever instructions to give the cheapest material prestige, whereas the ignorant can irritate with the most expensive.[26]

Investigations, on the other hand, has already shifted beyond the question of order to concentrate on the aesthetic effect produced by the building and the poem:

The architect will acquire no small advantage from reading the poets. For poetry (*Dichtkunst*) has the advantage of firing the imagination, and the following essay will show its importance for the architect. Guided by certain taste, he will transform a country house into an idyll, a palace into an epic, and a temple into a hymn.[27]

The widened analogy between fiction's pull on the reader and a building's ability to inspire passion raised the problem of how to regulate the uncontrolled, subjective freedom of the imagination.[28] By the end of the eighteenth century it was clear that the impassioned reader would readily project his or her private feelings onto external objects. This narcissistic loop was not fixed onto dark forests and rough mountains alone but applied to buildings as well.[29] This new intimate criticism placed the building in an emotional circuit with the viewer, so that the structure became both a screen onto which feelings were directed and a source for the viewer's poetic inspiration. In this second instance, the building appeared as an alien other, a cipher that compelled the viewer to search for an idea that made the structure intelligible.

Not surprisingly, professional architects distanced themselves from imaginary interpretations of buildings, thereby reinforcing the division between aesthetic and technical definitions of the field. An early German review of Mézières's *Genius of Architecture* provided an ironic listing of all the rooms in a building that might not give off a pleasing impression. The reviewer made clear that he could not adopt the sentimental tone that coursed through the book's metaphysical approach to architecture.[30] Similarly, Friedrich Christian Schmidt questioned how useful emotional

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26. Francesco Milizia, *Grundsätze der bürgerlichen Baukunst* (Leipzig: Schwickertschen Verlag, 1784), 4.

27. *Untersuchungen,* 14.

28. Ibid., 17–18.

29. Carsten Lange, *Architekturen der Psyche: Raumdarstellung in der Literatur der Romantik* (Würzburg: Königshausen & Neumann, 2007), 39.

30. *Göttingische Anzeigen von gelehrten Sachen,* 1783, 782 (http://gdz.sub.uni-goettingen.de/); Philipp, *Um 1800,* 38.

responses to a building's character were for the design process.[31] Sounding like a character from Hoffmann, he directly addresses the romantic view that architecture shares poetry's capacity to generate illusion. Architecture can become a poetic art that occupies the imagination, Schmidt acknowledges, yet these pictures disappear when one is awoken from the sweet dream. As soon as one tries to draw the images seen during the hallucination, difficulties emerge. Add economic calculation, and it becomes clear that idealized buildings are a luxury beyond the income of the regular citizen. When it comes time to design a plan, Schmidt finds the advice given by *Investigations into the Character of Buildings* far too general. The three volumes of his massive *Der bürgerliche Baumeister* (Bourgeois Builder) provided detailed plans for housing a professional urban class that often needed to place a warehouse or workshop near its living quarters but could also often afford a summer home. Schmidt had little room for reverie.

Treatises that focused on technique and economics in architecture reinforced the aim of property owners and the state to increase agricultural productivity and to more effectively exploit natural resources while protecting the terrain from incursion.[32] They gave precedence to the engineer and the artillery officer, whereas writings that explored emotional reactions to buildings treated the architect as a reflective and historically conscious artist. The difference between these two positions manifested itself in the eighteenth century as a debate over whether architecture was a fine art or a practical science. The early modern literature on architecture worried constantly about this question. No author could presume to speak about architecture without taking a position, however vague, on this central obsession. The debate concerned the education of architects, their employment with the state, and their standing within the court and the military. With the first emergence of industrial technology, architects in the eighteenth century were being given new responsibilities that had not been foreseen by earlier writers.[33] Architecture began to separate its own professional standards from allied fields, such as painting and sculpture. This required securing a distinct professional identity, even as the terms of the discipline were in flux.[34]

31. Friedrich Christian Schmidt, *Der bürgerliche Baumeister, oder Versuch eines Unterrichtes für Baulustige* (Gotha, 1797), 85 (http://digi.ub.uni-heidelberg.de/diglit/schmidt1797); Schütte, "Aufklärung," 57.

32. Horst Ossenberg, *Haus + Hof im Sprach- und Kulturraum Alemannien und Schwaben von der Stein- bis zur Neuzeit* (Norderstedt: Books on Demand, 2004), 147–152.

33. Marlies Lammert provides a distinctly Marxist interpretation of the crisis in architecture as arising first at the turn of the nineteenth century with the emergence of a capitalist economy. Setting aside the question of economic causation, Lammert provides a compelling description of the changes in architectural discourse. Marlies Lammert, "Zu Problemen der klassizistischen Architekturentwicklung," in *Studien zur deutschen Kunst und Architektur um 1800* (Dresden: Verlag der Kunst, 1981), 53–78.

34. Rand Carter, "Die Ausbildung der jungen Architektengeneration in den 30er Jahren des 19. Jahrhunderts in Europa," in *Mythos Bauakademie: Die Schinkelsche Bauakademie und ihre Bedeutung für die Mitte Berlins,* ed. Frank Augustin (Berlin: Verlag für Bauwesen, 1997), 38.

The uncertainty over architecture's definition, however, also stretched back to the first treatise in the field. How were Vitruvius's three terms—*firmitas, utilitas, venustas*—to be understood? Did they constitute a scale of importance? Did solidity matter more than beauty? Could a building even be considered architecture without beauty? Did the three terms mark the elevation of construction from practical necessity to art? Architectural treatises from Vitruvius on have struggled against the insinuation that architecture is a profession that does not require higher intellectual or artistic skills. The anxiety that architects are no more than elevated masons runs through many of the most important treatises in the field, well into the present.[35] Werner Oechslin cites Adolf Loos's quip that "an architect is a bricklayer who has learned Latin" to illustrate the worry that has beset architects since Alberti.[36] Vitruvius's vaunting insistence that the architect be educated in diverse fields responds to this concern. Within architectural writing, this debate did not attempt to define art or engineering. Most critics simply presumed that all art was mimetic, raising the obvious question: how could architecture be said to represent the world? The arguments against including architecture among the fine arts included a deliberate denial of beauty as the first concern in building. Whatever the uncertainty concerning buildings' artistic standing might have been, the matter was worse for gardeners, for landscape architects saw themselves in an even less professionalized state than their structure-building brothers.[37]

The eighteenth-century commentators usually did not formulate theories of their respective disciplines; instead they simply stated their allegiance to one side of the question or the other. The lack of any definitive attempt to address the question let the debate run on unresolved. Marc-Antoine Laugier, who had a wide reception in Germany, sought to introduce aesthetic terms to the debate. He equated the architect with genius and the Enlightenment; however, he also sought ultimately to bind both into a system of rules for building. Goethe's writing about the architect radicalized Laugier's formulation of him as an inspired genius. Laugier adapts Vitruvius's characterization of the architect's education by insisting that architecture be understood as a liberal, rather than a mechanical, art. Whereas medieval and early modern writers elevated architecture into the intellectual arts by emphasizing the importance of mathematics in design, Laugier predicates the artistic character of architecture not on geometry but upon judgments of taste, for which the elusive "genius" serves as the definitive term. Hence he insists right off: "It needs perhaps as much genius, *esprit* and taste to become a great architect as is needed for a first-rate painter or poet." Laugier's defense of architecture is nevertheless

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35. Even in the 1920s, German treatises revisited the debate; see Hermann Sörgel, *Architektur-Ästhetik* (Munich: Piloty & Loehle, 1921), 124.

36. Werner Oechslin, "…even if Architecture is dependent on Mathematics…," *Daidalos* 18 (15 December 1985): 31.

37. Chandra Mukerji, *Territorial Ambitions and the Gardens of Versailles* (Cambridge: Cambridge University Press, 1997), 41.

divided between the technical and the aesthetic. Having coupled the architect with the established arts, he points to the real figure of concern for the architect—the mechanical laborer. The architect may be almost as inspired as a painter, but one thing he certainly is not—a mechanical laborer: "It would be a great mistake to believe that in architecture only mechanics are involved, that it is confined to digging out foundations and raising walls, all according to rules which, becoming routine, only require eyes accustomed to judge a plumb line and hands fit to handle a trowel."[38] The differences between the mechanical and the liberal, or free, arts parallel other oppositions. In distinguishing between construction and design, Laugier emphasizes the chaos of a construction site and contrasts it with the precision and proportion of the completed building. Hulking piles of bricks stand in contrast to the abstraction of design. Matter is shapeless and somewhat threatening without the architect. To make matters worse, the disorder of building is further associated with popular opinion. Ordinary people think noise and dust are all that make a building, whereas only a few notice the bold genius involved. Construction chaos is but the outer appearance of the profession; one must penetrate the field in order to understand its principles. With his emphasis on chaos, noise, shapeless matter, and fearful machinery and the contrasting penetration that brings light to the few, Laugier presents a secretive language of architecture that led Joseph Rykwert to link him with the Freemasons.[39] Yet ultimately, Laugier intends to explain architecture according to terms recognizable to anyone who understands its basic principles. Laugier's architect bears order and light, thereby repeating the Creation in Genesis. His correspondence between architect and the divine creator carries with it the tone of older cosmological accounts of architecture as a second-order creation that follows the harmonious order of the universe.

Antoine Picon warns against overestimating the opposition between architects and engineers, and indeed architects in the eighteenth century had little opportunity to specialize; they were obliged to build a variety of structures, and thus to practice the mathematical, mechanical, and sometimes aesthetic judgments that went into building bridges, fortifications, villas, public offices, palaces, urban houses, and agricultural facilities.[40] The distinction between a great house and a fortress was blurry through much of the early modern period.[41] French architects in the seventeenth century were still designing *chateaux* according to military principles; and this tendency was even stronger in Germany, where the memory of the Thirty Years' War was omnipresent. Yet the terms of the debate were not

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38. Marc-Antoine Laugier, *An Essay on Architecture,* trans. Wolfgang Herrmann and Anni Herrmann (Los Angeles: Hennessey & Ingalls, 1977), 7.

39. Joseph Rykwert, *The First Moderns: The Architects of the Eighteenth Century* (Cambridge, MA: MIT Press, 1980).

40. Antoine Picon, *French Architects and Engineers in the Age of Enlightenment,* trans. Martin Thom (Cambridge: Cambridge University Press, 1992), 2.

41. Mukerji, *Territorial Ambitions,* 41.

mutually exclusive; it seemed plausible for many writers to insist on the impor-
tance of practical, nonornamental architecture, while also asking critically how a
new standard for judging architectural beauty could be found. Huth's *Allgemeines
Magazin* covered "the manual crafts, physical materials, and economics, as well
as philosophy and the aesthetics of architecture, or the rational and beautiful modes
of building."[42] Christian Stieglitz, in his widely read encyclopedia of architecture,
includes nuanced discussions of the aesthetic impact of beautiful buildings even as
he maintains that the discipline is at heart a practical science.[43]

The argument in favor of science was always in the same breath a critique of the
orders and of baroque notions of beauty. Even those who, such as Stieglitz, did not
consider mimesis the only basis for aesthetics, begrudgingly conceded that archi-
tecture was less well loved because of its inability to represent human action or na-
ture. Although Stieglitz insists that architecture belongs to the mechanical arts, he
acknowledges that it aspires to the fine arts through the emotions great structures
call forth. Buildings, he allows, can represent human conditions. A temple thus be-
comes a picture of the sacred, a palace shows greatness and wealth, an urban house
shows sociability and domestic bliss, a rural one suggests calm and freedom, while a
peasant hut represents poverty.[44] Architecture signifies conditions rather than fluid
relationships. Stieglitz associates these static conditions with the ancient tendency to
compare architecture with rhetorical styles—the manner of speaking must be ap-
propriate to the occasion—which he interprets as reflecting a building's character.
This psychological signified brings architecture into the eighteenth-century inter-
est in physiognomy. Buildings, like faces, can be interpreted to understand the hid-
den private interior. This physiognomic mode of interpreting facades still has the
restrictive function that rules of decorum, or appropriateness, would have had for
the Renaissance. The relationship between character and form obliges the architect
to design a building so as to preserve a correspondence between the social standing
of the inhabitants and the facade.[45] Physiognomy functions here as a guideline for
the architect, because the pedestrian will presumably interpret the building as if
it were a face that reveals an interior state of mind. This physiognomic approach
preserves the ancient link between rhetoric and architecture, between body and
building, within a bourgeois concern for discerning the moral character of contem-
porary buildings, and an aesthetic desire to interpret the past.

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42. Huth, *Allgemeines Magazin,* 13.
43. Christian Ludwig Stieglitz, *Encyklopedie der bürgerlichen Baukunst,* 5 vols. (Leipzig: Caspar
Fritsch, 1792–1794).
44. Ibid., 1: 167.
45. Ibid., 2: 395: "The architect, as a man of taste, will consequently know how to give purposive-
ness as well as all possible beauty to his work of art. He will know exactly the limits he has to observe
when planning or decorating a building, so as not to exceed them. He will understand the building's
mission and will never lose sight of its character."

The presumed correspondence between facade and character enables the traveler to grasp the quiet nobility of Greek temples. Thus Stieglitz applies Winckelmann's famous characterization of Greek sculpture to argue that the uniformity of a temple reflects the simplicity of its innermost idea: "The quiet grandeur of a building will be brought out by its uniformity. A building should have only a few large and important projections, and its profile must remain simple."[46] Architecture, Stieglitz argues, can bear more uniformity than other art forms, which depend on alterations in shape, tone, and color to produce their effects. The aesthetic character of a building lies not in the expressiveness of its details but in the way in which its form distinguishes it from other buildings. A style does not correspond to a specific content, rather it makes distinctions. Thus Stieglitz can argue that he prefers the sublime masses of Greek temples over the decorative beauty of Roman edifices. Like other neoclassicists of the late eighteenth century, he adapts the tradition's general standards, such as harmony and symmetry, while leaving behind many small details, in order to posit an architectonic correspondence between the form of the building's design and the content of the architect's spirit.[47] If a concern for mimetic correspondence remains in Stieglitz's argument, then it can be found again in the relationship between the architect's thought and the building's appearance.

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The classical orders had long belonged to the repertoire of symbolic forms legitimating monarchical and feudal domination, so that when the Enlightenment questioned the philosophical justification for the orders, it opened the door to economic and semiotic critiques of the established order. Both engineers and aesthetes agreed that the classical Renaissance treatises from Alberti onward presented designs intended primarily for the aristocracy. Architecture had long been the interest of the ruling elite, and thus artists and publishers alike appealed to princely clients. In the eighteenth century, bourgeois critics pointed out that the vast majority of construction projects were never mentioned in the great pattern books. Enlightenment writers challenged the classical tradition in its broadest sense. Eighteenth-century writers called attention to the type of building that had not been deemed worthy of attention. Like Sigfried Giedion, who claimed that modern industrial architecture had an unseen history in the nineteenth century, Enlightenment critics wrote about the lineage of bourgeois construction that existed outside the text of classical treatises.[48] Both modernists and Enlightenment critics mobilized a mode of building that had been denigrated by official classicism as ugly, low-class, and practical. Both eighteenth- and early

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46. Stieglitz, *Encyklopedie der bürgerlichen Baukunst,* 2: 472.
47. Ibid., 2: 470.
48. See chapter 10 for a discussion of Giedion.

twentieth-century revisionists insisted on the existence of a secret, subterranean history of building. Functional building did not need to be invented; it was already happening throughout society. Without drawing art historical distinctions between styles of epochs, these deliberately simpleminded, or commonsensical, critics insisted that academic architects needed to write about housing for the urban classes who were engaged in manufacturing, trade, or administration. Johann David Steingruber notes in 1765 that although many books have been written on architecture, "most are about the houses of great men. . . . No one has written about bourgeois buildings and their special requirements, always nothing but the designs of French masters."[49] Johann Georg Leopold in his *Oeconomischen Civilbaukunst* (Economical Civil Architecture) of 1759 asked planners for economical, inexpensive rural buildings that were comfortable, long lasting, and a bargain. As a rule, Leopold argued, most architects had no knowledge of such things, for they were considered too poor and lowly for the eyes of the great.[50] Johann Georg Sulzer writes in his *General Theory of the Beautiful Arts* of 1792: "Those who write about architecture fail to instruct on the construction of good living quarters, because they are focused mainly on the palaces and public buildings."[51] Christian Ludwig Stieglitz explains in the same year that his *Encyklopedie der bürgerlichen Baukunst* (Encyclopedia of Civil Architecture) addresses a need ignored by previous treatises.[52] Stieglitz, like other Enlightenment writers, associates architectural theory, particularly any discussion of aesthetics, with the canonical orders. He places his encyclopedia somewhere between these treatises and technical manuals on carpentry, mining, hydraulics, road building, and windmill construction. Stieglitz promises to mediate between the ancient, elite rules of beauty and the technical skills of economical buildings. Anthony Vidler notes that the French encyclopedists had similarly concluded that " 'High Architecture' with its orders and attributes" had ignored utilitarian buildings. However, because the encyclopedists did not elaborate a bourgeois mode of architecture, Vidler shifts his analyses to prints in the *Encyklopedie* that depict machines and manufacturing techniques. These prints have an implicit architecture, he argues; however, he does not mention the more explicit Enlightenment criticisms of High Architecture's lack of concern with manufacturing. Vidler's reliance on close interpretations of the *Encyklopedie* prints does not bring out just how directly Enlightenment architects questioned the classical treatises. Vidler's point had indeed already been made within the Enlightenment.[53]

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49. Quoted in Schütte, *Ordnung und Verzierung,* 19.
50. Ossenberg, *Haus + Hof,* 152.
51. Quoted in Schütte, *Ordnung und Verzierung,* 20.
52. Stieglitz, *Encyklopedie der bürgerlichen Baukunst,* 1: iii.
53. Anthony Vidler, *The Writing of the Walls: Architectural Theory in the Late Enlightenment* (Princeton, NJ: Princeton Architectural Press, 1987), 24.

The criticism that architects took an excessive interest in aristocratic structures belongs to the larger Enlightenment critique of courtly culture.[54] The complaints against elite architecture use many of the same tropes as eighteenth-century criticisms of luxury consumption, fashion, and aristocratic culture: that it was wasteful, dependent on foreign examples, unoriginal, ostentatious, ugly in its overornamentation, distortive of true harmonic relations, and excessively feminine. Carl Freiherr von Bothmer took an ironically stalwart tone when he complained that German builders tended to imitate more than those in most any other nation in Europe.[55] German builders, he argued, were so eager to demonstrate their good taste that they imitated Italian and French designs without considering whether they addressed the practical needs of those who lived within. The complaint that Germans imitated rather than thought about their own needs was a common gesture in Enlightenment polemics. Already in 1687, the popular Enlightenment philosopher Thomasius had written a pamphlet entitled *Von der Nachahmung der Franzosen.* The complaint against foreign models was less concerned with asserting a nationalist identity than with disputing the status of architectural authority. Bothmer, for example, does not adopt the young Goethe's position of celebrating the Gothic as a distinctly German style. More practically minded, Bothmer simply ridicules the desire to build Italianate buildings that cannot withstand a German winter. His ironic voice puts him outside the serious, tradition-bound tone of most architectural treatises. Given his advocacy of buildings never much included in serious treatises, Bothmer can only write as someone who does not belong to the architectural profession. Thus he characterizes the established tradition as simply obsessed or as having a mania, rather than engaging in specific arguments. He diagnoses "Symmetromanie" as the embarrassing tendency to make everything appear symmetrical on paper. When he invokes an architectural forebear, it is Uncle Toby in *Tristam Shandy.* Ever the ironist, Bothmer acknowledges that his own plans for bourgeois apartment houses may wind up as useful to the reading public as Uncle Toby's fortification. Yet Bothmer's ironic disavowals of a highly complex tradition are not simply the sign of its diminishing status among architectural theorists. Bothmer does not engage the tradition even to the degree that Perrault does in his critiques, for he is addressing a different, wider audience than Perrault, who was still writing for an elite cognoscenti in Paris. Bothmer is writing instead for an ever-increasing German reading public that has just begun to develop an interest

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54. Curiously, Marxist histories can underrate the critical dimension of Enlightenment architectural theory. The argument runs as follows: because Germany did not have a capitalist bourgeoisie in the eighteenth century, architects were loyal to the feudal class. While architects are always beholden to the ruling class, the eighteenth century was far more critical of the elite building culture than such excellent scholars as Marlies Lammert have acknowledged. See her otherwise richly sourced *David Gilly, Ein Baumeister des deutschen Klassizismus* (Berlin: Akademie Verlag, 1964).

55. Carl Freiherr von Bothmer, *Betrachtungen und Einfälle über die Bauart der Privatgebäude in Teutschland* (Augsburg: Conrad Heinrich Stage, 1779), 5.

in architectural matters. For educated, yet provincially dispersed members of the German *Bildungsbürgertum,* the rules of proportion inherited from Palladio and Vignola came across as increasingly irrelevant and of course a bit intimidating. Bothmer has something of the know-nothingism of the healthy bourgeois, albeit in the context of the Enlightenment drive to eliminate prejudice and to encourage independent thought. His book was meant to serve as a "refutation of certain prejudices and false regulations in our manner of building."[56] Dismissing prejudice, according to Bothmer, meant devaluing the Renaissance tradition, and its esteem for antiquity. Bothmer and others were writing for an educated, nonaristocratic class that had never made the grand tour but had encountered instead only regional examples of classical buildings.

Friedrich Christian Schmidt argues that concentration on aristocratic structures demonstrates that the discipline of architecture had not yet developed, at least in Germany, into a full-fledged autonomous discipline.[57] For centuries, ecclesiastical buildings were the only places where *Baukunst* was practiced. Only occasionally did a nobleman rebuild his *feste Burg* into an elegant *Schloß.* Even when the nobility did construct elegant palaces, there was little need for an architect; most historical sources refer to a master mason as the director of construction.[58] Even in Italy, architecture was not a distinct field of knowledge, Schmidt argues. The great geniuses began their careers as painters and sculptors. Masons and carpenters had little hope of raising themselves. In other words, architecture was not a field one could study in order to then enter into the practice of building design. Ordinary civil architecture was thoroughly ignored as a result of this separation between artistic geniuses who received their patronage from above and craftsmen with only a guild education.[59] Schmidt wrote his treatise in the hope that it could be actualized by a new class of city planners, who were interested in restructuring the tight spaces of northern cities. He understood bourgeois architecture, with its concentration on utility and the efficient use of space, as belonging to the long-standing urban regulation of space practiced since the Middle Ages by town councils. Thus he directly addresses the dangers of narrow construction in cites. Fires, he acknowledges, can have the unintended effect of clearing space, so that they might be more rationally organized, yet they are also a threat that urban architects need to consider

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56. Ibid.
57. Schmidt, *Der bürgerliche Baumeister,* 4.
58. Modern architectural historians in Germany concur: "With the exception of extraordinarily large building projects, the regular construction trade operated as it always had, according to convention, guided by tradition, and without critical reflection. The planning and execution of a construction project followed general conventions, rules of thumb, and common experience. This can be read—in the few cases that were set in writing—in the exemplar books of the individual trades that were composed without any scientific aspirations." Reinhart Strecke, *Anfänge und Innovation der preußischen Bauverwaltung, von David Gilly zu Karl Friedrich Schinkel* (Cologne: Böhlau Verlag, 2000), 9.
59. Schmidt, *Der bürgerliche Baumeister,* 4.

explicitly.[60] Restrictions should thus be set on the design of individual houses. Schmidt clearly understands architecture as operating within the regulation of city planning. Buildings should not too closely reflect the identity of their occupants through the use of allegorical figures on the facade, because in every city houses are bought and sold as property, rather than kept as dynastic seats. Within fifty years, the correspondence between facade and inhabitants is thus lost.[61] Schmidt implies that the various ornaments provided by the five orders become a confusing system of signs when used on urban, civilian houses. Schmidt places himself within the train of Perrault's critique of absolute classical beauty. Because beauty is so thoroughly subjective, restrictions should be placed on how property owners decorate their houses. City planners should consider the appearance of an entire street, rather than allow arbitrary variations between houses. For Schmidt, the absence of an absolute standard of beauty required cities to consider the practical purposes of houses rather than their conformity to a universal standard.[62]

The political implications of fostering bourgeois construction in opposition to the classical tradition become most evident in the writing of the Hamburg mathematics professor Johann Georg Büsch. Büsch begins his *Praktische Darstellung der Bauwissenschaft* (Practical Presentation of the Building Science) by distinguishing bourgeois architecture from those monuments built by despots to celebrate their own names.[63] By despots he means those ancient rulers, presumably Roman emperors, who built great palaces, but the slippage, the presumed misunderstanding that he means rulers of his own age, who of course seek to build in emulation of antiquity, would not have been far from the minds of his readers. To make his political critique of architecture more explicit, Büsch delivers an analysis of Dresden's most famous baroque structures as overladen with ostentatious ornament that serves no practical end: "The magnificent August built in and around Dresden at an unspeakable expense. It is true that the ignorant stare in amazement at these buildings, for on the whole their layout was far more regular than one had been used to seeing in a princely German palace. However, nothing is as useless as their many bright decorations. The molding goes on forever. Almost no front is completed, and no one thought is ever followed through."[64] Büsch approves of Krubsacius's

60. Ibid., 5.

61. Ibid., 137.

62. Ibid., 138. The anonymous reviewer of Schmidt's book repeated the terms of the French debate by pointing to certain Berlin buildings that everyone could agree were beautiful, thus confirming the existence of a universal, though undefined, standard of architecture. Huth, *Allgemeines Magazin,* vol. 1, pt. 2, 318.

63. "No work of art, such as despots of antiquity built to give themselves an immortal name, belongs to what we understand as civil architecture." Johann Georg Büsch, *Praktische Darstellung der Bauwissenschaft, erster band welcher die bürgerliche Baukunst enthält* (Hamburg: Benjamin Gottlob Hoffmann, 1793), 1. The series title is *Versuch einer Mathematik zum nutzen und Vergnügen des bürgerlichen Lebens, dritten Teils, erster Band.*

64. Büsch, *Praktische Darstellung der Bauwissenschaft,* 33.

critical pamphlets about Dresden architecture. About August the Strong's palace, "Der Zwinger," Büsch writes that the facade looks more like a stage decoration for the theater than a building that has some stated purpose. An ordinary pedestrian would certainly be impressed by its symmetrical organization, yet it is the many colorful decorations that are most offensive, precisely because they fail the test of bourgeois architecture, namely, they have no serious purpose ("ernsthafte Zwecke"). The building does not sustain a serious thought; rather, the many swirling decorations imply a skittish mind that moves from one distraction to the next: "Good taste pauses upon seeing the Zwinger and is inclined to accept the buildings as theater decorations, and as such to enjoy them. However, when one realizes that they are supposed to have a serious purpose, then the least critical judgment one can make is that they are built in a tolerable neo-neo-Gothic style."[65] Büsch does not confine his criticisms of the baroque to Germany; he is equally hard on Blenheim and the many country houses displayed in Colen Campbell's *Vitruvius Britannicus.*[66]

Büsch discusses beauty in architecture only at the end of his work, because, he argues, other writers have devoted too much attention to aesthetics. Many books promise to give practical guides to building, and instead all one finds are lectures about beauty and even then only in terms of the five orders.[67] In a sense, Büsch is adapting the Vitruvian standard of architectural concerns—solidity, commodity and beauty—by emphasizing the first two qualities over the last. Aesthetic debates, he implies, have overrun more fundamental concerns. François Blondel dealt almost exclusively with beauty in his *Cours d'architecture,* never addressing in detail the first two categories. Similarly, the French mathematician Sebastian Le Clerc moves directly to the orders, because, he states, enough other writers have discussed the mechanics and materials of construction.[68] In part this lack of theoretical commentary on the practice of building reflects the slow rate of technological change in premodern construction, as well as the professional distinction between architects and masons, who built according to their traditional practices, independent of architects' plans. Le Clerc sums up seventeenth-century architectural thinking by somewhat contradictorily stating that a description of proper construction technique does not belong to his professional concerns and that any reader concerned about these questions can consult Vitruvius, Palladio, Vignola, and any number of other treatises.[69] Francis de Scheyb warned that this architectural disregard of building technique results in buildings collapsing and killing their inhabitants. Architects instead need to be trained so as to supervise and instruct their workers in the most scientific techniques, rather than allowing them to carry on local traditions

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65. Ibid.
66. Ibid., 37.
67. Ibid., 304.
68. Le Clerc's work appears in German as *Abhandlung der Bau-Kunst mit nützlichen Anmerkungen und Betrachtungen* (Nuremberg: Christoph Weigel, 1759).
69. Le Clerc, *Abhandlung der Bau-Kunst,* preface.

that have no mathematical rationale.[70] When specific types of construction were forced to respond to technological innovation, such as in fortifications, which underwent a tremendous change during the seventeenth century, these were broken off from the central architectural discourse. Huth makes a point of stating that his journal will not examine mining, fortifications, or shipbuilding, thereby making clear that these fields once might have been part of the architect's training.[71] By way of contrast, a century earlier, the *Baumeister* Johann Gregor Memhardt had diverse obligations in his service to the Great Elector, Friedrich Wilhelm. Memhardt was responsible for designing and overseeing the construction of all the ruler's public structures, ranging from military defenses (on every kind of terrain) to the entire Berlin suburb of Friedrichswerder, where Memhardt also eventually served as mayor.[72] However, by the end of the eighteenth century these fields were well understood as distinct specializations:

> On account of the multiplicity and differing nature of objects onto which architecture extends itself, it came to pass that this art with all its branches could not be the concern of a single mind; rather, one had to confine oneself to the study and exercise of individual parts, which were broad enough already to sufficiently occupy the genius and industry of any artist.[73]

The Enlightenment manuals invoked the Vitruvian standard of building in order to deemphasize the importance of decorative beauty. Vitruvius is of course the first textual source for the canonization of the architectural orders, yet his statement that all construction must have the qualities of *firmitas* (durability), *utilitas* (comfort), and *venustas* (beauty) was interpreted as a hierarchy of value. *Firmitas* was both literally and morally the foundation for the other two values. While the Latin terms received a variety of translations into German, *firmitas* was consistently associated with solidity, firmness, and secure ground: features that were of course important to a building's foundation, but that also had moral and epistemological connotations. When coupled with *utilitas,* Vitruvius's first two terms were set apart from the last. Beauty (*venustas*) was always listed last, as if it were to be found only after the first two qualities had been satisfied.[74] Aesthetic effect was reserved for

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70. Scheyb, *Natur und Kunst,* 425.
71. Huth, *Allgemeines Magazin,* 12.
72. Strecke, *Anfänge und Innovation,* 7.
73. Christian Gottlieb Hirt, *Anfangsgründe der schönen Baukunst* (Breslau: Hamberger, 1804), 10–11.
74. Schütte notes in *Ordnung und Verzierung,* 25: "In the second half of the century the first two categories are increasingly mentioned as essential, whereas the last is not. Already in 1751 Succov speaks of 'comfort and strength as essential to completion and which can be augmented through the addition of beauty.' Mönnich names the first two as 'essential qualities of a good building.' By 1800 these thoughts have led to the definition of a particular architectonic beauty that is severed from the fine arts in the strict sense."

only a handful of buildings. The debate increasingly led to a discussion wherein one of the three categories would be treated as forming a discipline distinct from the other two. The division was played out from both directions. In his review of Sulzer's *General Theory of the Beautiful Arts* Krubsacius concedes that there are scientific concerns, such as the mathematic calculation of pressure, strength, and building costs or the application of lime to bricks, which do not belong in an aesthetic treatise; nevertheless he objects to Sulzer's treatment of architecture as primarily a matter of taste formation.[75] The slipperiness of invoking Vitruvius was made manifest when Friedrich Meinert argued that both *firmitas* and *utilitas* were essential qualities, and only beauty was inessential to a building.[76] Meinert was careful not to set the terms in opposition to one another. Convenience amounted to satisfying the inhabitant's needs without undermining the building's solidity. Addressing the wants of the client fell, accordingly, well within the Vitruvian terms. Beauty was likewise compatible with *firmitas,* because an orderly structure was necessary for a solid foundation, and *firmitas* was likewise the most basic form of beauty in architecture. Meinert treated the Vitruvian categories quite literally as blocks that could be built upon one another. Stieglitz argued for a hierarchical relation between the Vitruvian three, because without *firmitas* the other two qualities would be meaningless: "Solidity is the essential part of a building, without which it can provide no utility, without which beauty and comfort would be meaningless."[77] The general tendency for German critics was to refuse Perrault's suggestion that beauty could arbitrarily be based on whim or fashion. When a building was beautiful, it fulfilled essential and universal terms.[78] That it also appealed to personal taste was secondary to its universally recognizable beauty. Perrault had also distinguished between objective and contingent forms of beauty; however, his inclination had been to explain stylistic differences in beauty as a product of shifting social conventions. German critics allowed for subjective inclinations but were slow to postulate an anthropology of architectural beauty.

As Philipp points out, by the end of the century, the Enlightenment criticism of grand building by baroque princes was invoked by advocates of the new Prussian Bauakademie. Johann Albrecht Eytelwein argued in 1799 that students were too often trained with the assumption that architecture was a fine art, which led them to neglect the practical mechanics of construction: "The architect often received his education in such a manner that he viewed architecture as an object of the beautiful

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75. F. A. Krubsacius, review of *Allgemeine Theorie der schönen Künste,* vol. 1, by J. G. Sulzer, *Allgemeine deutsche Bibliothek* 22.1 (1774): 36.

76. Meinert, *Zeichenbuch für Baukünstler und Bauhandwerker,* 152: "Every building has essential and contingent qualities. Essential qualities are those without which the building could not exist as a building, and these are solidity and comfort; contingent qualities are those without which a building could exist, which however contribute to the completion of its purpose, and these are order and beauty."

77. Stieglitz, *Encyklopedie der bürgerlichen Baukunst,* 1: 23.

78. Schütte, "Aufklärung," 31.

arts, and without concern for the mechanical. He held it beneath his dignity if he had to enter into the details of a building's execution, without which it is of course impossible to plan and construct a purposeful building."[79] Heinrich August Riedel distinguished the Prussian academy from older schools that were known only for teaching students to sketch and lending them a taste for ostentatious buildings.[80] Eytelwein's arguments for the academy in Berlin were multifaceted. Not only did he note that practical *Baumeister* neglected aesthetics; he also warned that a third group, namely, scholars and theorists, applied mathematical principles without concern for the site. The tensions between these three groups remained unresolved and contributed little to construction projects, leading each group instead to hold the others in contempt.[81]

Büsch had already claimed that nine out of ten buildings did not require or inspire any discussion of beauty. If they were built cleanly and comfortably, then they fulfilled their task.[82] The Prussian architect David Gilly began his manual on agricultural construction by alluding to the Vitruvian categories but then concluded flatly that beauty was not relevant in this context: "Beauty in the actual sense of the word belongs however only to buildings of the higher class, and it is enough to lend country and business buildings a pleasant appearance."[83] The bourgeois Enlightenment understanding of *firmitas, utilitas,* and *venustas* devalued aesthetics as a distraction from fulfilling the first two categories. Krubsacius criticized Sulzer for discussing architecture only in terms of beauty, and not treating the other two Vitruvian terms: "He explains architecture only insofar as good taste has a role in it; and he excludes the scientific knowledge, which the architect must draw from mathematics, along with mechanics. I would wish that he had written as much about proportion and solidity as he had about beauty."[84] For Krubsacius the scientific aspects of architecture were derived from mathematics and mechanics. Practical concerns such as the calculation of force and weight, and accounting and budgeting for materials, as well as the techniques used by masons, were inevitably of little concern for theorists of architectural beauty.

Many eighteenth-century manuals take a pragmatic approach to explaining the orders. Rather than sort through the discrepancies between the orders as presented by Vitruvius, the Renaissance masters, and the remaining ruins from antiquity, these authors state quite simply that they are following the rules set down by one particular predecessor. Leonard Sturm notes the many differences between Italian

79. Johann Albrecht Eytelwein, "Nachricht von der Errichtunng der Königlichen Bauakademie zu Berlin," in *Sammlung nützlicher Aufsätze und Nachrichten, die Baukunst betreffend* 2 (1799): 28.

80. Philipp, *Um 1800,* 50.

81. Ibid.

82. Büsch, *Praktische Darstellung der Bauwissenschaft,* 304.

83. David Gilly, *Handbuch der Land-Bau-Kunst* (Braunschweig: Friedrich Vieweh, 1805), pt. 1, 7.

84. Krubsacius, review of *Allgemeine Theorie,* by Sulzer, *Allgemeine deutsche Bibliothek* 22.1 (1774): 35.

and Roman texts, as well as the difficulty of deciding between them and correcting their mathematical errors. As a solution he presents Nicolaus Goldmann as the writer who most clearly works through the many differences.[85] Christian Gottlieb Hirt simply reiterates Vignola's justifications for the columns without acknowledgment. Those aspects of Vignola's argument that no longer sound plausible, such as the importance of understanding musical harmonies in constructing columns, are dropped, and the remainder of the classical text is carried on. Other writers justify their reiteration of canonical texts on more practical grounds. Franz Ludwig von Cancrin, who wrote a manual at the end of a long career as a practicing architect, admits that he has always used the proportions found in Suckow's books for all his building.[86] The lack of integration between the orders and the design of buildings is reflected in the pragmatic approach taken by German authors in the eighteenth century. The more abstract questions of a building's overall proportions and how the sections of the building held together were not considered as part of the classical tradition. Nor were the orders evaluated critically as a historical tradition. For German authors it was enough to follow one consistent set of proportions, handed down by a renowned predecessor; it was not necessary to compare the different accounts of the orders in order to find the single most harmonic arrangement. Eighteenth-century German writers sought to convey knowledge of the columns as a system, a code for which the elements need to be recognized and distinguished from one another. For them the orders do not embody a correspondence between building and universe, as they did for Renaissance designers. Rather than criticize the orders, many manuals take a textbook approach to conveying them as nothing more than a set of conventions—Doric, Ionic, Corinthian—to be recognized by the architecturally literate observer. Understanding the proportions of columns is no longer seen as a committed intellectual endeavor to recreating the ideal beautiful buildings of antiquity. Palladio's treatise demonstrates a profound interest in learning the proportions of ancient buildings. Eighteenth-century manuals present the orders almost as grammatical rules to be learned by rote. The eighteenth-century call for aesthetic criticism sought to engage builders in a debate about the shape and design of buildings. Rather than repeat established patterns, Sulzer and others sought a more abstract reflection on how to design. Of course the pressures to continue in the established norms were great. Both construction guilds and elite clients were invested in replicating the various local adaptations of the canonical tradition, a point Krubsacius makes in his 1774 review of Sulzer's book for the *Allgemeinen deutschen Bibliothek*. He points out that the progressive social reforms of Enlightenment architecture are stymied by local tradition: "He [Sulzer] would

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85. Leonard Christoph Sturm, *Vollständige Anweisung, alle Arten von regularen Pracht-Gebäuden nach gewissen Reguln zu erfinden, auszutheilen und auszuzieren* (Augsburg: Wolffens, 1754), preface.
86. Franz Ludwig von Cancrin, *Grundlehren der bürgerlichen Baukunst* (Gotha: Ettinger, 1792), preface.

like for an architect to use this fundamental knowledge to guide inhabitants to a better condition for their houses and to an improved and more rational lifestyle. If only an architect had such authority and did not have to follow the expectations of the client and the local statutes. Anyone anywhere in the German Reich, or even just in Lower Saxony, who wants to build a new house outside the usual conventions will not make any progress."[87]

Enlightenment manuals argued that architectural students, and by implication, the general public, needed to be educated not only in the five orders of columns, but in the practical necessities that comprised the first two Vitruvian categories. The suspicion of aesthetic considerations was reinforced by the architectural claim that a building's beauty was primarily an effect of ornamentation that was added to a building's facade as a final gesture. Ornaments were in a sense sprinkled onto an already standing structure in order to lend it a more pleasing appearance. The danger was that too much ornamentation, as it was commonly argued against the baroque and rococo, distracted and even undermined a building's solidity and practicality. At the very least, classically derived ornamentation hid a building's practical character from the general public. The general question of whether architecture belonged to the mechanical or the fine arts was often answered by invoking the first two Vitruvian qualities. Johann Gottfried Grohmann writes: "The first and highest purpose of architecture, however, is the satisfaction of necessities, namely, providing protection against weather and criminals, and to provide a comfortable abode." This leads him to conclude: "Architecture is thus not to be counted among the beautiful arts but among the mechanical."[88]

German bourgeois architectural manuals sought to revive the first two Vitruvian categories as the long-neglected basis for the last. In general the requirement to integrate the three elements had become less important to architectural theory. In his account of Jacques-François Blondel's theory, Emil Kaufmann notes the dogmatic slumber into which the Vitruvian phrase had fallen among French theorists.[89] In the German Enlightenment, however, the terms are so pervasive that they mediate between distinct discourses. Kant's three critiques form a Vitruvian sequence, Stieglitz notes; for example, *firmitas* (translated into German as *Festigkeit*) is the essential quality of any building, without which it can have no useful purpose, nor provide beauty or comfort. The second category, which he translates as *Bequemlichkeit,* Stieglitz compares to the moral virtue of a person.[90] Beauty stands as the last quality in the sequence; a building might be secure and comfortable without making any impression on the imagination or the senses. Enlightenment critics of

87. Philipp, *Um 1800,* 224 n. 307.

88. Johann Gottfried Grohmann, *Handwörterbuch über die bürgerliche Baukunst und schöne Gartenkunst* (Leipzig: Adam Friedrich Böhme, 1804), 137.

89. Emil Kaufmann, *Architecture in the Age of Reason: Baroque and Post-Baroque in England, Italy, and France* (Cambridge, MA: Harvard University Press, 1955), 132.

90. Stieglitz, *Encyklopedie der bürgerlichen Baukunst,* 1: 83.

the orders presented the Vitruvian qualities as a hierarchy that left beauty as the least common and most dependent quality. Stieglitz shares with other writers the presumption that only certain buildings "rise" to the level of art, that the vast majority of buildings need simply not fall over and serve their inhabitants. Ultimately, though, architecture must remain among the mechanical arts, because its inherent purpose is not to delight the viewer with lovely shapes but to satisfy the needs for shelter and protection.[91]

Claude Perrault's distinction between essential and arbitrary beauty reemerges as a general argument against decoration. Perrault's understanding of essential beauty was grounded in a building's material qualities—he gives the example of high-quality marble as an essential beauty. Stieglitz adopts Perrault's distinction, though with different contents. Like so many other eighteenth-century theorists, he readily accepts the abstract formulations that require a building to be symmetrical, to be appropriate to its purpose, to be well formed, for the parts to compose a whole consisting of simple elements that alternate. To this dense summary of the classical qualities he adds the orders as essential to the beauty of a building. He is far less radical than Perrault, who suggested that almost all beauty was fashion-driven. Stieglitz, reiterating well-versed Enlightenment arguments, leaves only ornamentation as a secondary form of beauty.[92] Stieglitz certainly did not use Perrault's distinction as a strong lever against the classical orders. He reduced the importance of beauty in architecture through a sequence of distinctions that resulted in a more pragmatic classicism. Perrault argued that the orders should be deployed either for temples, palaces, and public buildings or as backdrops for theatrical performances. This is the reverse of the bourgeois critique, yet it reinforces the later Enlightenment argument, for Perrault was highly critical of any effort to make universal claims for the orders.

This reinterpretation of Vitruvius amounted to a decisive and at times unsubtle rejection of the Renaissance understanding of proportion and symmetry. The danger, according to the critique of ornamentation, was that beauty would counter a building's practical purpose. Milizia, whose work was translated from Italian into German in 1784, remarked: "Because architecture is the daughter of necessity, its beauty cannot defy this character. Everything must appear to be necessary. It would be a mistake if the desire to please exposed itself. Art is embarrassed when she is uncovered; thus everything that is mere ornament is a mistake."[93] Ornamentation within this pragmatic position was to have a semiotic function. Scheyb observed: "Ornaments usually have the function of showing a building's use as well as the class and dignity of its owner."[94] Vitruvius had himself argued against unnatural

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91. Ibid., 5: 69.
92. Ibid., 1: 84.
93. Milizia, *Grundsätze der bürgerlichen Baukunst,* 29.
94. Scheyb, *Natur und Kunst,* 457.

decorations, and the most radical eighteenth-century critics extended his arguments. Writing against the baroque splendor of Dresden, Krubsacius maintained that buildings ought not have ornaments on their facades that did not exist in nature.[95] Bourgeois architecture argues that general principles of construction need to be formulated in place of an education in the five orders. The first usual recommendation was more instruction in mathematics, less in drawing columns.[96] Rather than leaving construction techniques to the master masons, architects should study mechanics so that they can oversee the work site.[97]

The question of how to define the discipline persists despite the thoroughly technological orientation of modern architecture. With the first revolutionary assaults against nineteenth-century historicism the debate between engineers and artists reemerged. The German philosophical adaptation of architectural theory always worked in response to the debates among architects.

Kant's understanding of architecture arises from the Enlightenment claim that the field should be understood as a practical science, one that required knowledge of mechanics and mathematics. He learned architecture via military fortifications, a field that was changing especially rapidly as a result of advances in technology. Defensive structures had been an interest of philosophers since at least Descartes, who used examples from military architecture. Picon has argued that engineering emerged as a distinct mode of knowledge and training as the absolute state more thoroughly asserted its control over the landscape. Bridges and roads were the engineers' concerns out of military necessity. The ease with which Kant switched from architectural to geographic metaphors reveals an engineer's concern to master the structuring of space, dispersed across an extended territory.[98]

Goethe on the other hand was interested in architecture for its aesthetic impression on the viewer. Both Goethe and Kant were responding to the traditions that arose as the Renaissance order declined. Goethe argues against Laugier only because his aesthetic is more subjective and thus more removed from all considerations of construction and engineering. Even after he has read the major treatises and has been involved in Weimar building projects, Goethe holds to the view that architecture should be understood as an experience upon which one reflects, and out of which one develops an understanding of art and the past.

Benjamin read the high modernist celebration of industrial engineers by Sigfried Giedion and the Bauhaus masters as proof that architecture had liberated itself from aesthetics. The following chapters will show how German theorists studied architecture in order to adapt the discipline's practices to their own epistemological projects.

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95. Krubsacius, *Gedanken,* 40.
96. Scheyb, *Natur und Kunst,* 425.
97. Ibid.
98. Picon, *French Architects and Engineers,* 105.

3

Architecture in Kant's Thought: The Metaphor's Genealogy

The Tower of Babel figures in Western philosophy as the first metaphysical interpretation of architecture. However, the legend has not always been understood as a cautionary tale, as it commonly is today. In the early modern period, the tale was not understood always in terms of punishment so much as an affirmation of the correspondence between grand architecture and monarchical authority. Ulrike Wegener argues that Pieter Bruegel's paintings (in Vienna and Rotterdam) of the Tower, for all its detailed representation of construction techniques, ultimately glorified the project as one worthy of a great ruler.[1] Indeed, this baroque adaptation of the Genesis myth motivates Enlightenment thinkers such as Immanuel Kant to reintroduce the more critical, perhaps more Protestant, reading of the story into philosophy. Babel becomes an attractive metaphor with which to critique both metaphysics and absolutist power. The eighteenth century establishes the modern correspondence between epistemological critique and the earlier Protestant understanding of the tale as a moral/political lesson about the hubris of oversized state planning.

Kant introduces Babel to the *Critique of Pure Reason* at a telling point, just as he intends to survey his entire argument, as a caution against assuming too high

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1. Ulrike Wegener, *Die Faszination des Masslosen: Der Turmbau zu Babel von Pieter Bruegel bis Athanasius Kircher* (Hildesheim: Olms Verlag, 1995).

a vantage point. These general overviews typically occur in the several opening statements, interspersed throughout the *Critique,* that precede new sections. In the preface to the last section, the "Transcendental Doctrine of Method," Kant asks: what if we saw the sum of all knowledge, derived from pure and speculative reason, as a house? In order to explore this possibility, he presents the architecture comparison explicitly as a fable of philosophy, drawing out the ways in which the work of building corresponds to thinking. Kant develops the comparison slowly, in steps. The opening sentence suggests that the architecture metaphor has an almost ornamental relation to philosophical thought: "If we look upon the sum of all knowledge of pure speculative reason as an edifice for which we have at least the idea within ourselves…" (Wenn ich den Inbegriff aller Erkenntnis der reinen und spekulativen Vernunft wie ein Gebäude ansehe, dazu wir wenigstens die Idee in uns haben…).[2] In that case, he continues, the first portion of the *Critique of Pure Reason,* the transcendental deduction of the categories and all that comes with it, have provided the tools for construction, as well as the specifications of the building's dimensions and structural integrity. The analogy between systematic knowledge and a building makes sense only because we have the Idea of a house already in mind. This Idea then corresponds to the plan of the *Critique of Pure Reason.* Over seven hundred pages into the *Critique,* the reader presumably can perceive the outline of the knowable, where the limits of reason lie, without having yet acquired specific conceptual knowledge of the world. Kant never tires of reminding readers that the analysis of pure understanding does not constitute knowledge of the physical world. The Idea of the philosophical house alludes to the plan or drawing, intellectual acts that under ideal circumstances precede construction. As he will emphasize in his discussion of the "architectonic," ideas have the very specific function of organizing knowledge without themselves being knowledge. Kant's point here remains simple: if the sum of all speculative reason is a house, this house also has a plan in the form of an Idea. If the sum of all knowledge may appear to be organized as a house, this occurs only because knowledge and buildings are defined in advance by the operation of formal understanding, in the form of either a priori categories or architectural plans.

What manner of building do Kant's plans allow? Kant explains that while it might have been desirable to build a tower that reaches to the heavens, the material means allowed by his epistemology allows only for the construction of a simple dwelling, spacious and high enough to oversee the field of human experience, but no further. Kant's phrasing, "whether we had considered a tower that would reach to the heavens…" (ob wir einen Turm im Sinne hatten, der bis an den Himmel reichen sollte…), mimics Luther's translation of the Babel story in Genesis 11:4: "Laßt uns eine Stadt und einen Turm bauen, dessen Spitze bis an den Himmel

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2. Kant, *Critique of Pure Reason,* 573 [A707/B735]; Kant, *Kritik der reinen Vernunft,* 759.

reiche, damit wir uns einen Namen machen."[3] The Tower of Babel is both an accomplishment and a sign. It does not merely represent metaphysical speculation; it seeks to literally place the human at the same level as the divine. The construction of the Tower parallels the compilation of a metaphysical system, which Kant claims to have demonstrated is untenable.

The manner in which Kant puts forward the proposition, "If I look at the sum of all speculative knowledge as if it were a house," implies that this comparison has until this point in the text not been made explicit. Are we supposed to be surprised by this comparison? Perhaps now that Kant has drawn our attention to the analogy, we ought to turn back to find it in his earlier writing, as well as in the first and, by general opinion, most important section of the *Critique of Pure Reason.* As it turns out, the comparison between architecture and metaphysics permeates Kant's early writing, as well as the writing of his forebears. By positing the comparison here in the *Critique,* Kant is refuting his own earlier use of the metaphor. Indeed, when Kant suggests that we might have had a tower in mind when we began, he acknowledges that in fact for most of his academic career he himself sought very deliberately to build a system that would demonstrate the existence of God. Most notably, in a 1762 essay Kant compares gathering scientific data proving God's existence to the construction of a massive building: "What I am hereby delivering is the evidentiary foundation for a demonstration, exhaustively collected building materials…whose useful pieces will serve…to complete the building." (Was ich hier liefere, ist auch nur der Beweisgrund zu einer Demonstration, ein mühsam gesammeltes Baugeräte…um aus dessen brauchbaren Stücken…das Gebäude zu vollfuhren.)[4] Already he refers to the need for a foundation and the process of thinking as a collecting of materials. Ultimately, he promises "a building of not insignificant excellence" (ein Gebäude von nicht geringer Vortrefflichkeit).[5] In this early essay we find many of the architectural terms that are later redeployed in the first *Critique,* where the bourgeois house replaces the tower. The later retelling of the Babel legend includes an autobiographical reference to Kant's own turn away from metaphysical speculation to epistemological analysis. This later self-conscious fable ends nevertheless with Kant having laid the groundwork for a more modest house. By drawing attention to the importance of architectural terms for his thinking Kant introduces a new technical term, the "architectonic" of reason. If one can posit an analogy between philosophy and architecture, then why not elaborate the metaphor so that it becomes its own distinct theoretical term. The "architectonic" is more than a metaphor, yet Kant's retelling of the Babel story shows that the very intelligibility of an "architectonic" depends upon this simple comparison.

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3. Kant, *Kritik der reinen Vernunft,* 759 [A707/B735]; the English translation is my own.
4. Immanuel Kant, "Der einzig mögliche Beweisgrund zu einer Demonstration des Dasein Gottes," in *Gesammelte Schriften,* 2: 622.
5. Kant, "Der einzig mögliche Beweisgrund," 2: 623.

According to Kant's version of the Babel legend, the Tower remains unfinished for three reasons. First, not enough building material exists in order to raise a tower to the heavens, which amounts to an allegory of Kant's claim that conceptual knowledge requires the confirmation of empirical experience. The material of sense perception does not reach to the heavens; we do not have sensory intuitions of a divine being. Second, the confusion of languages results in every worker devising his own plan for a tower and building it in his own style. The confusion of tongues corresponds to the many competing metaphysical systems, each aspiring to outbuild the other, with the result that the project of reaching the heavens never progresses.

Finally, Kant states that his venture at construction follows a plan, as opposed to the blind project of an endless undertaking that will exhaust our capacities (*Vermögen*). Here he draws an analogy between the unfinished tower of metaphysics and princely ambitions for great palaces and country manors.[6] The difference between the drawn-out princely tower and the practical bourgeois house corresponds to Kant's important general distinction between accumulated and articulated knowledge, which we will examine in the next chapter.

In addition to his epistemological distinction, Kant also enters into the Enlightenment critique of baroque architecture. Leibniz established the parallel between cosmology and princely architecture when he described the harmonious universe that the divine architect created as a "beau palais." Leibniz's optimism led him to use many superlative adjectives to describe life in the divine palace of God's creation as far exceeding the minimal requirements of basic existence. Courtly splendor provides Leibniz with symbols of divine goodness.[7] On the other hand, Kant's preference for small structures that fulfill specific needs reiterates the argument many eighteenth-century German architectural manuals had made against traditional treatises, namely, that they focused only on representational buildings while making no effort to give architectural form to the economic needs of the urban bourgeoisie or the large-scale farmer. Kant characterizes his philosophy as following a plan that will not exceed the capital available for construction and that proceeds within the existing constraints to satisfy practical needs. When Kant stresses the modest building expenses of his philosophical undertaking he is writing as an eighteenth-century bourgeois participating in a market economy, just as Adorno describes.[8] Georg Lukács once claimed Kant's critical philosophy reflected capitalist rationality; hence it should come as no surprise that when discussing budgets and building,

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6. Ludwig Martin Träger refers in his 1770 *Metaphysik* to "Planmacher" who "gleich politischen Projectendenkern, Entwürfe ersannen, welche weder sie noch andere auszuführen vermogten" (17–18).

7. Vanessa Albus, *Weltbild und Metapher: Untersuchungen zur Philosophie im 18. Jahrhundert* (Würzburg: Königshausen & Neumann, 2001), 150.

8. Theodor Adorno, *Kants 'Kritik der reinen Vernunft'* (1959), ed. Rolf Tiedemann (Frankfurt: Suhrkamp, 1995), 45–47.

Kant applies accounting metaphors.[9] However, his allusions to bookkeeping are also in keeping with the advice Palladio gives in the opening of his *Four Books of Architecture* to draw up a plan and to take account of expenses before proceeding with construction.[10] As Vitruvius and later Renaissance theorists note, major construction projects require that the architect have expertise in accounting and "resource management." Of course, Palladio and his contemporaries were themselves closely allied with the urban nobility's expansion into rural agriculture. The importance of market reasoning for architectural planning is already apparent in Palladio's own work.[11] Yet we ought not read Kant's discussion of planning and budgeting solely in terms of the later development of industrial capitalism, for these qualities were also taken as indications of rational perfection more generally. Leibniz, for example, ascribes similar attributes to God as the architect of the universe.

> One is able to say, therefore, that he who acts perfectly is like an excellent Geometer who knows how to find the best construction for a problem; like a good architect who utilizes his location and the funds destined for the building in the most advantageous manner, leaving nothing which shocks or which does not display that beauty of which it is capable; like a good householder who employs his property in such a way that there shall be nothing uncultivated or sterile; like a clever machinist who makes his production in the least difficult way possible; and like an intelligent author who encloses the most of reality in the least possible compass.[12]

Even as he praises economy, Leibniz piles on the illustrations, thereby creating a correspondence between divergent disciplines, all of which are guided by rational calculation. Leibniz's parallels do not reinforce an ideological history as much as they point to the finite limitations of material relations. Kant's and Leibniz's insertion of economic calculation within their building metaphors is not merely an indication of nascent capitalism; rather it calls attention to a tension architects face in almost all societies as soon as they wish to build: how to maneuver between

9. Georg Lukács, "History and Class Consciousness," in *History and Class Consciousness,* trans. Rodney Livingstone (Cambridge, MA: MIT Press, 1986), 110 ff.

10. "When those several particulars have been duly examined upon the model or draught, then an exact calculation ought to be made of the whole expence, and a timely provision made of the money, and of those materials that shall seem most necessary, to the end that nothing may be wanting, or prevent the compleating of the work." Andrea Palladio, *The Four Books of Architecture,* trans. Isaac Ware (London: Isaac Ware, 1738; repr., New York: Dover, 1965), 1.

11. For an analysis of sixteenth-century Italian villas that draws explicitly on Adorno, see Reinhard Bentmann and Michael Müller, *Die Villa als Herrschaftsarchitektur: Versuch einer kunst- und sozialgeschichtlichen Analyse,* 2nd ed. (Hamburg: Europaische Europäische Verlagsanstalt, 1992). Denis Cosgrove, *The Palladian Landscape* (University Park, PA: Penn State University Press, 1993), 46–48, and James S. Ackermann, *The Villa: Form and Ideology of Country Houses* (Princeton, NJ: Princeton University Press, 1990), have provided economic accounts of classical villa architecture.

12. Gottfried Wilhelm Leibniz, *Discourse on Metaphysics,* trans. George Montgomery (LaSalle, IL: Open Court Publishing, 1902), 8–9.

design and cost. The question exists for Leibniz as a rational problem to be solved elegantly, one that even God considered as he designed the universe. Budgetary constraints hardly applied to God, Leibniz concedes: "It is true that nothing costs God anything."[13] Nevertheless, God is a perfectly rational entity, Leibniz argues, and therefore he created the universe in the simplest manner possible.

Epistemological critique, architectural planning, and bourgeois bookkeeping converge when Kant ascribes imperial baroque qualities to speculative thought. He describes metaphysics as a grand palace, or better still as an elaborate costume to be worn at court. Taking stock of his own critical efforts, he states that only when speculative philosophy is allowed to make empirical assertions does it display "the full splendor" (die ganze Pracht) and "the proud pretensions of reason, when it strives to extend its domain beyond all limits of experience" (die glänzenden Anmaßungen der ihr Gebiete über alle Grenzen der Erfahrung erweiternden Vernunft).[14] Kant claims to have exposed (*entkleidet*) the weakness of speculation by presenting only its most basic formulations with a deliberately dry writing style. The Tower of Babel, and speculative metaphysics by implication, fail to achieve their ends because they did not first develop a plan that detailed what was possible and what could not be completed.

The foundations of metaphysics crack because they are not laid out according to a plan. Far from wanting to reestablish philosophy on first principles, Kant wanted to demonstrate the futility of laying foundations for a new metaphysics.[15] His notebook, written around the time he composed the *Critique,* calls into question the entire enterprise of laying a foundation for philosophy. Once the metaphor has been turned on its head, once the foundation has been shown to lie on a swamp, then the entire method of establishing a secure ground from which one can rationally derive the structure of the universe is thrown into doubt:

> The foundation has not been examined. What was taken to be the foundation were really just the first stones that had been laid and that had slowly sunk into the marshy ground. This meant that the method had to be treated as suspect and therefore the source had to be sought in the subject.

> Der Grund ist nicht untersucht. Was man für den Grund hielte, waren die ersten Steine, die man legte und die in einem sumpfigten Grund langsam versunken. Dieses nöthigt, die Methoden in Verdacht zu ziehen und die Quellen im Subject zu untersuchen.[16]

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13. Ibid., 9.

14. Kant, *Critique of Pure Reason,* 422; Kant, *Kritik der reinen Vernunft,* 565 [A463/B491].

15. Manfred Riedel, *Urteilskraft und Vernunft: Kants ursprüngliche Fragestellung* (Frankfurt: Suhrkamp, 1989), 16–17: "Das System der a priori begründenden Vernunft ist die Umgestaltung der Transzendentalphilosophie der 'Alten', d.i. der überlieferten 'ersten' Philosophie, zum Lehrgebäude einer *metaphysica generalis,* die da Apriori mit dem Begründungsprinzipien des Wissens verwechselt."

16. Immanuel Kant, "Handschriftlicher Nachlaß," in *Gesammelte Schriften,* 18: 79 (no. 5072).

Yet the *Critique of Pure Reason* concerns itself foremostly with the plan for affirmative knowledge, rather than "just" critiquing other systems of thought. If Kant accepts the impossibility of a rationalist metaphysics, does he consider the Tower as the defining figure of philosophical architecture? Even as he regards the futility of metaphysics, he recommends a more modest, more modern proposal, an architecture on a more modest scale. If we return to Kant's analogy between the sum of all speculative knowledge and architecture, then the *Critique* lays out a plan for a stable dwelling that meets the needs of its inhabitants, instead of presenting a blindly conceived project based on speculative whim and headed toward bankruptcy:

> At present, however, we are concerned not so much with the materials as with the plan; and inasmuch as we have been warned not to venture at random upon a blind project which may be altogether beyond our capacities, and yet cannot well abstain from building a secure home for ourselves, we must plan our building in conformity with the material which is given to us, and which is also at the same time appropriate to our needs.

> Jetzt ist es und nicht sowohl um die Materialien, als vielmehr um den Plan zu tun, un indem wir gewarnt sind, es nicht auf einen beliebigen blinden Entwurf, der vielleicht unser ganzes Vermögen übersteigen könnte, zu wagen, gleichwohl doch von der Errichtung eines festen Wohnsitzes nicht wohl abstehen können, den Anschlag zu einem Gebäude in Verhältnis auf den Vorrat, der uns gegeben und zugleich unserem Bedürfnis angemessen ist, zu machen.[17]

As much as one might relate Kant's imagery to Heidegger's account of dwelling, his rejection of grandiose construction in favor of a modest residence reflects the critical positions of architectural discourse in the Enlightenment. Kant would on occasion tease out the political implications of his philosophical metaphors: for example, when he compared dogmatic reasoning to tyrannical government. Here too the house metaphor presages Kant's hidden scorn for palaces in the *Critique of Judgment*,[18] even as it presents a more rationalist version of Goethe's *Hütte* in "Prometheus." The rejection of the divine comes through in Kant's refusal to undertake the construction of yet another Tower of Babel. Rather than concern himself with the heavens, the enlightened philosopher tends his needs on earth, based on experience rather than speculative philosophy. This does not mean a return to the primitive hut of Rousseau and Laugier, but it does entail a calculated, planned construction.

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17. Kant, *Critique of Pure Reason,* 573; Kant, *Kritik der reinen Vernunft,* 759 [A707/B736].
18. Immanuel Kant, *Critique of Judgment,* trans. J. H. Bernard (New York: Hafner Press, 1951), §2, p. 38.

Architecture as Epistemology

If we can say that Kant sought to establish boundaries between different forms of judgment so as to distinguish scientific knowledge, morality, and beauty from one another while also excluding metaphysical speculation, then the many architectural terms in the *Critique of Pure Reason* reinforce, buttress, and support this undertaking. From the very beginning of his critique, when he compares speculative metaphysics to a house that collapses upon itself because the upper stories have been built beyond the weight its foundation could bear, Kant intertwines epistemology with architecture. When he presents an architectural model and an engineering demonstration for why it is necessary to define the limits of judgment, he imports the language and methods of architecture into philosophical reasoning, a move that continues to define Kant scholarship.[19] According to Kant's usage in the *Critique of Pure Reason,* the collapse of a house is comparable to the effect of criticism on a flawed thesis. The weight of a system compares to gravity's pull on a building, which sometimes is given an extra shove by an outsider who lobs a cannonball (or sarcastic essay) at the structure. By defining the limits of judgment, Kant presumes that his construction will be less likely to be knocked over. It has less exposure and is not as tall as its predecessors. This is the first principle of fortification in the baroque era: to show less of a target to the attacking enemy. Instead of raising high walls around a city, one builds sloping barriers that allow artillery fire to ricochet over the fortress rather than smashing directly against a perpendicular wall.[20] The language of fortification was readily translated into the debates between and against philosophical systems. The rapid advances that military architecture had undergone in the seventeenth century made the engineer who builds according to mechanical and mathematical principles an exemplar of critical thought. As a young professor, Kant enjoyed lecturing on fortification and spent years teaching Russian officers mathematics. He would certainly have understood the lessons of urban defense in the era of artillery. Chandra Mukerji has shown that the geometrical reasoning of artillery warfare pervaded the material culture of the French court.[21] When Louis XIV's greatest general, Sebastien de Vauban, laid out the newest, most successful rules of siege craft and defense, an entire century felt compelled

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19. The interdependence of epistemology and spatial metaphors persists in John Zammito's characterization of the Kantian project: "What Kant feared above all was the intrusion of aesthetic criteria into the domain of rigorous inquiry, the collapse of *cognitio philosophica* not merely into *cognitio historica* but into 'beautiful science,' a mannerism without warrant or worth." John Zammito, *Kant, Herder, and the Birth of Anthropology* (Chicago: University of Chicago Press, 2002), 262.

20. Christopher Duffy, *The Fortress in the Age of Vauban and Frederick the Great, 1660–1789* (London: Routledge, 1985), 1.

21. Chandra Mukerji argues that the formality of French gardens represented not only an application of Cartesian logic to land but also the application of military principles of fortification. Geometry was important in both cases—leading back to Descartes. The predominance of mathematics manifested itself in practical, engineering terms. The interlocking systems and fortifications, the triangulation of artillery fire, and the cartographic arrangement of political boundaries were all techniques deployed in

to follow his example.[22] The success of Vauban's campaigns, his restructuring of the French military, and the creation of an engineering corps with the first school specifically for this branch of the military made the mathematical and architectural techniques of fortification more than a specialized science.[23] In Vauban's simple definition of a fortress we can detect not only a model for philosophical critique, but also the basic design for the integrated system, whose parts all relate to an organic whole.[24] Long after his wars had been fought, Vauban's reputation as having defined a new art of siege warfare was well known in Germany.[25]

Even in its civilian version, the architectural metaphor acquires its sense of urgency (how to avoid collapse) by borrowing from the logic of necessity specific to engineering. The analogy between houses and systems transfers the tectonic dynamic of construction into epistemology. Gravity, which engineers need always factor into their calculations as dead weight, operates as the hidden force within Kant's building metaphor. Architectural design provided Kant with an example of abstract thinking that was grounded in empirical reality. The architect, unlike the speculative metaphysician, could not indulge in sweeping abstract formulations that literally would not stand. Kant, and Descartes before him, understood architectural design as an engagement between artistry and functionality. Their sense of design was not at all palatial; instead they centered on mathematically complex military fortifications. When civilian building was included in their analogies, they preferred the ordinary bourgeois house, with its concern for family and business, over the expansive projects of absolutist rulers. The architect, as philosophers liked to think of him, was obligated by the design and construction process to mediate between the abstract and the actual. Tellingly, it was exactly this coherence

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royal gardens, as a celebration of French prowess in those military fields. Chandra Mukerji, *Territorial Ambitions and the Gardens of Versailles* (Cambridge: Cambridge University Press, 1997).

22. Duffy, *Fortress,* 13–16, provides a quick overview of the many German treatises on military engineering written in the decades around 1700 in response to French victories in the Low Countries.

23. One example of the intellectual repercussions of fortifications science was the treatise *Architectura hydraulica* written by Bernard Forest de Belidor (1697–1761), an instructor at the school for military engineers. The work was translated in 1743 into German with a preface by Christian Wolff, who emphasized the work's theoretical importance. Andreas Kahlow, "Von Belidor bis Gilly: Ingenieure zwischen Theorie und Praxis," in *Vom Schönen und Nützlichen: David Gilly (1748–1808)* (Potsdam: Fachhochschule; Brandenburg: Stiftung Preussische Schlösser und Gärten Berlin, 1998), 29.

24. "Military fortresses are enclosed by ramparts and built according to certain rules, which result in all their separate parts covering one another. These parts are large masses, the virtue of which lies in their solidarity and disposition. Their strength varies with the quality of their construction and the number and quality of the troops defending them. It is this art and the way it is used that decides the worth of fortifications: if you ignore one or the other of these factors the majority of the fortresses upon which the security of the kingdom depends will not offer a quarter of the resistance that you might expect from them if you understood defense better. Without this small measure of science brought to bear upon the problem it is impossible that they not succumb whether through defects or other causes." Sebastien LePrestre de Vauban, *A Manual of Siegecraft and Fortification,* trans. George A. Rothrock (Ann Arbor: University of Michigan Press, 1968), 138.

25. Max Jähns, *Geschichte der Kriegswissenschaften vornehmlich in Deutschland* (Munich: Oldenbourg, 1889; repr., New York: Johnson, 1965), 1403.

between engineering and design that was coming apart in the eighteenth century. As outside observers, philosophers would borrow concepts that were just beginning to be criticized from within the profession; thus the conflicts within eighteenth-century architectural discourse reappear within Kant's work. Kant was no different from other eighteenth-century Germans who understood the Vitruvian categories *firmitas, utilitas,* and *venustas* as a hierarchical sequence in which solidity preceded practicality and beauty. By a remarkable, unconscious logic that closely follows Vitruvius's dictate, Kant's three *Critiques* stand in much the same relation to another: epistemology, ethics, aesthetics.

If we are to take Kant's figurative language seriously, then we ought to heed Tassilo Eichberger's insistence that we read Kant in relation to the history of architectural theory.[26] Architectural metaphors were not merely reflections or illustrations of abstract thought; they provided the sense of urgency that guides critical reflection.[27] Just how closely the history of modern criticism follows the contours of architectural developments becomes obvious when we compare Kant with Galileo Galilei. Already in the sixteenth century, Galileo deployed the image of the over-built palace to describe the Aristotelian account of the cosmos. In his "Dialogue concerning Two Chief World Systems," an opponent to Copernicus's astronomical model is dismissed as having built a magnificent palace on weak foundations, a turn of phrase Kant would reuse often in the *Critique of Pure Reason.* Galileo's spokesperson remarks of his enemies:

> I pity him no less than I would a fine gentleman who, having built a magnificent palace at great trouble and expense, employed hundreds and hundreds of artisans, and then beholding it threatened with ruin because of poor foundations, should attempt in order to avoid the grief of seeing the walls destroyed, adorned as they are with so many lovely murals; or the columns fall, which sustain the superb galleries, or the gilded beams, or the doors spoiled, or the pediments and the marble cornices, brought in at so much expense—should attempt, I say, to prevent the collapse with chains, props, iron buttresses and shores.[28]

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26. Tassilo Eichberger, *Kants Architektur der Vernunft: Zur methodenleitenden Metaphorik der Kritik der reinen Vernunft* (Freiburg [Breisgau]: Alber, 1999), 43.

27. Recent works that pursue the architectural in Kant include Claudia Brodsky, "Architecture and Architectonics: The Art of Reason in Kant's *Critique," The Princeton Review,* 1988, 103–117; Susan Bernstein, "Goethe's Architectonic *Bildung* and Buildings in Classical Weimar," *MLN* 114.5 (1999): 1014–1036; Teruaki Takahashi, "'Bau' und 'Gerüst' als Metaphern bei Lessing, Kant und Hamann," in *Johann Georg Hamann und die Krise der Aufklärung,* ed. Bernhard Gajek and Albert Meier (Frankfurt: Peter Lang, 1990), 461–489; Willi Goetschel, "Architektur und Wohnlichkeit: Das alternative Moment in Kants Vernunftbegriff," in *Randfiguren: Spinoza-Inspirationen; Festgabe für Manfred Walther,* ed. Felicitas Englisch, Manfred Lauermann, and Maria-Brigitta Schröder (Hannover: Wehrhahn Verlag, 2005), 40–53.

28. Quoted in Susan Rosa, "Seventeenth-Century Catholic Polemic and the Rise of Cultural Rationalism: An Example from the Empire," *Journal of the History of Ideas* 57 (1996): 87.

Galileo's metaphor draws a direct analogy between Christian metaphysics and a richly decorated mansion, a comparison that the Prussian Enlightenment would turn against baroque courtly architecture and the state that sponsored it. Kant would have appreciated Galileo's image, as it shows how even the most monumental structures are prone to collapse, and he would have developed his own anti-metaphysical arguments within its tectonic logic. Architecture, with its methodical concern to solve a building's engineering flaws, provided a compelling discourse to describe the structure of an argument, as well as its temporal dimension, namely, a theory's ability to survive critique and forgetfulness. Kant's profound allegiance to physics, as the progressive science that brought about the most obvious advances in human understanding of the world, would have led him to appreciate the moral narrative implicit in Galileo's analogy.

This book will examine several key intersections where philosophy borrowed from and commented upon architectural debates. While Rudolf Wittkower's famous examination of villas built by Andrea Palladio demonstrated that Renaissance humanism relied upon Platonic cosmologies, few studies trace the importance Italian architectural treatises had for later philosophy. The tendency to this day is for architects to borrow from philosophers, whether Plato or Deleuze. The flow in the opposite direction is largely unexamined, though plainly visible for those who seek to trace the connections. Far from repressing his debt to architecture, Kant openly declares his reliance on its terminology. Like the natural sciences, and physics in particular, architecture has long provided philosophers with a method for constructing complex arguments. This is particularly the case for preindustrial society, in which civilian architectural practices had changed little. Eighteenth-century manuals still referred their readers to Vitruvius for the basics in bricklaying and road building. The major architectural innovations were to be found in nautical engineering and fortification construction, two fields Vitruvius still includes under the responsibilities of the architect, but which by the sixteenth century were becoming specializations. Enlightenment readers followed the advances in military architecture as avidly as they did developments in the natural sciences. A careful reading of the architectural references in Kant's *Critique of Pure Reason* makes clear that construction procedures were a model for the organization of his epistemology.

Given the importance of these figures, various questions arise: What manner of architecture does Kant have in mind? What does his conception say about the organization of knowledge? How can architecture or perhaps the figure of the architect, as it is defined by the Enlightenment, express a unity that philosophy cannot? Does architecture of knowledge replace some other image of unity? Is there a connection between architectonics and God, the architect of the world? Are we reentering the competition between human creator and divine that is so explicit in Goethe's Sturm-und-Drang celebration of the Strasbourg cathedral? Does the materiality of the metaphor, its invocation of bricks and mortar, plans and work crews, work against metaphysical speculation?

We can isolate three modes in which architecture appears in Kant's philosophical writing.[29] The most diffuse and perhaps most complex references to architecture are the passages in his writing where Kant deploys architectural metaphors.[30] These involve allusions to ruins, foundations, edifices, ornamentation, the labor of construction, and the collapse of buildings, among others. These references are far too important and too carefully thought through, both in the history of philosophy and in Kant's writing, particularly in the *Critique of Pure Reason,* to be considered unself-conscious.[31] Indeed by tracing the shifting connotations of the building metaphors, we can map the changes in Kant's metaphysics. They are not mere reflections of systematic thinking; rather, through their own internal logic these metaphors help define his method. Derrida's warning against reading metaphors as modes of expression for philosophical ideas is well worth heeding.[32] To take metaphors in Kant seriously requires us to look past his own aversion to the use of illustrations and examples in philosophical writing. Architectural images in Kant's writing serve both functions: they appear as rhetorical flourishes outside the frame of systematic argumentation (as clever indulgences, as winks within the profession), yet their force extends beyond this limitation. Architectural metaphors defy the boundaries of systematic writing even as they justify the need for well-defined limits. They provide a compelling reason for Kant to define the boundaries of knowledge. While the harms of metaphysical meandering may not seem urgent, the architect's practical need to keep the roof from falling down is readily understood. Through their own practical necessity, the metaphors present an argument for introducing limits to philosophical speculation. Because these metaphors serve as justifications, they most frequently appear in the prefaces of Kant's work. They are placed outside, at the threshold of, serious philosophical discourse, but they aid in defining the inside and outside of the main argument. They lend their own apparently undeniable urgency to epistemology.

This book will thus argue against Hegel's claim that there is no serious philosophy in introductions, only mythology.[33] As Kant returns repeatedly to the same

29. Diane Morgan provides the most extensive English-language analysis of Kant's architectural terminology in *Kant Trouble: The Obscurities of the Enlightened* (London: Routledge, 2000). My study shares many of the same interests as Morgan's excellent reading of Kant.

30. Metaphors in Kant have received some limited attention over the last century; see David Tarbel, "The Fabric of Metaphor in Kant's *Critique of Pure Reason," Journal of the History of Philosophy* 6 (1968): 257–270; Stephen Palmquist, *Kant's System of Perspective: An Architectonic Interpretation of the Critical Philosophy* (Lanham, MD: University Press of America, 1993), 17–21; Willi Goetschel, *Kant als Schriftsteller* (Vienna: Passagen, 1990); Arnold Kawalewski, "Die verschiedenen Arbeitsformen der Philosophie und ihre Bewertung bei Kant," in *Immanuel Kant: Festschrift zur zweiten Jahrhundertfeier seines Geburtstages,* ed. Albertus University, Königsberg (Leipzig: Dieterische Verlag, 1924); H. Ernst Fischer, *Kants Stil in der Kritik der reinen Vernunft* (Berlin: Reuther & Reichard, 1907); Gottlieb Söhngen, *Analogie und Metapher: Kleine Philosophie und Theologie der Sprache* (Munich: Karl Alber, 1962), 64–70.

31. For works specifically dedicated to architectural metaphors in Kant, see Eichberger, *Kants Architektur.*

32. Jacques Derrida, "White Mythology: Metaphor in the Text of Philosophy," in *Margins of Philosophy,* trans. Alan Bass (Chicago: Chicago University Press, 1982), 223.

33. Paraphrased by Jacques Derrida, "Chora," in *Chora L Works,* trans. Ian McCloud, ed. Jeffrey Kipnis and Thomas Leeger (New York: Monacelli Press, 1997), 23.

metaphors over the course of his long writing career, he deploys them differently. With each new application of the building trope, Kant's altered philosophical priorities become apparent. He often deploys architectural figures in ways that undermine their twenty-first-century meanings. For example, while buildings are commonly understood as symbols of stability, Kant stresses that large houses are continually threatened with collapse.[34] Every upward construction strains against downward pressures, and Kant, from his first essays on, reiterates that criticism is a constant challenge to any house philosophy raises. He was far too enamored of Newtonian physics not to understand that forces press against each other in every construction. The metaphors of elevation and collapse in the early writings bring out a quality that persists into the late, canonical Kant, namely, that of arguments pressing critically against each other. Alluding to the same quality, Heidegger also used a force-filled image to describe Kant as a thinker, still wrestling with his arguments.[35] Architecture allowed Kant to provide a spatial image for the temporal process of intellectual development. The house in Kant is not static; it withstands pressures even as it seems to stand still. Collapse and reconstruction are the temporal aspects of any construction. Kant incorporates just this process of change into the supposedly stable image of philosophy as a foundation and an edifice. The classical analogy between buildings and bodies only reinforced the awareness of architecture's precariousness. If bodies could decay and die, so, too, could buildings. Filarette, the fifteenth-century architect, was surely not alone when he compared the death of buildings to the demise of the human body.[36]

Architectural metaphors have the Janus face Reinhart Koselleck used to describe the double reference of long-lived historical terms. They point backward in time to meanings that today are not readily recognized and require elucidation in order to even be understood, and they refer forward in the sense that their meanings are readily grasped and in many cases so widely accepted that they are orientation markers of future meanings.[37] The architecture metaphor has this double quality. On the one hand, any references to the design of the world were

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34. Willi Goetschel argues that Kant's use of spatial and geographical metaphors refers to a synthetic unity of knowledge that is not easily described: "Metaphor produces a synthesis that anticipates, on the level of imagery, the synthesis of reflection.... Their importance derives from their functions as a unity." Goetschel, *Kant als Schriftsteller,* 132–133. The architectural metaphor is used exactly in Kant's discussion about the unity of knowledge to represent a coherent whole. Architecture presents an image of wholeness, order that lends meaning to the discourse of philosophy. I wish to augment Goetschel's thesis to show that building metaphors also raise the possibility of a system's collapse, the failure of knowledge to adequately account for itself and its object.

35. Martin Heidegger, *Kant und das Problem der Metaphysik* (Bonn: Friedrich Cohen, 1929), 64.

36. After reviewing the many Roman palaces that have disappeared, Filarette states simply: "It is clear that by being killed or by not eating, one dies; so do buildings. You can say, one eats and even so one dies. The building also must decline through time just as one dies sooner than another or has better or poorer health.... The building also declines more or less rapidly according to the goodness of the material and also according to the sign or planet under which it was built." Filarette, *Treatise on Architecture,* trans. John R. Spencer (New Haven, CT: Yale University Press, 1965), 14.

37. Reinhart Koselleck, "Einleitung," in *Geschichtliche Grundbegriffe* (Stuttgart: Ernst Klett, 1972), xv.

understood as an allusion to a cosmology organized by a divine creator, and on the other, architectural references gave modern philosophy a material, technological tone that was deliberately antimetaphysical. In Kant's writing we can see how these two meanings compete with each other. Allusions to philosophy's house refer to the divine architect as well as the mechanical engineer. Metaphysical allusions to God are the most common form in which architecture appears in philosophy, but even the young, still quite cosmological Kant follows Galileo in deploying architecture as a critical term intended to deride speculative philosophy. The construction of a grand palace signifies an open-ended process with many risks. Kant characterizes his sometimes cautious epistemology as providing merely a first sketch of a larger plan; other times he claims to have merely delivered the tools for further construction. From his first essay to the end of the third *Critique,* we can trace a complex development in which Kant is constantly rewriting these figures.

The second important mode of deploying architecture is certainly metaphorical as well; however, it functions as a technical philosophical term: the architectonic of knowledge. Unlike the other metaphorical references to architecture, the architectonic is supposed to represent secure knowledge. If buildings are signs of instability, the architectonic posits the ideal of mastering all knowledge. With this term, Kant is no longer alluding directly to the building of a house; rather, he invokes concepts from classical architectural theory to describe the systematic integration of all sciences toward the highest end of humanity. The architectonic arrangement of knowledge articulates individual fields of knowledge into a coherent whole. This arrangement is strictly an ideal; it entails no statement about the nature of the world. Instead it involves the rational reorganization of disparate sciences into a single higher unity. Generally, in the *Critique of Pure Reason,* the architectural metaphor implies a rounded-off conclusion, an end to speculation, a warning against its excesses, a physical limit, a boundary that also serves to focus thought. Kant does not claim that knowledge of the world is organized into a single system that reflects the ontological order of the universe. Nevertheless, the term "architectonic" sounds like a cosmological statement about the unity of all things within the mind of God; hence one might suspect that Kant's use of the term in the first and third *Critiques* revives an earlier manner of thinking. To the extent that the architectonic of the first and third *Critiques* is a thorough rewriting of earlier cosmological claims, this suspicion is warranted. Certainly, his contemporaries could be well inclined toward cosmological thinking. Johann Gottfried Herder, Kant's student from his precritical period, explicitly organizes the cosmos under God the architect in his late work, *Adrastea.* However, the important point lies in how the architectonic belongs to Kant's transcendental philosophy. Rather than preserving cosmology, it hearkens back to an early Greek understanding of philosophical wisdom. Kant posits his architectonic as a return to Socratic reflection in an age of specialized knowledge. The architectonic entails the claim that no individual science should be organized without reference to the whole of human existence. By insisting on an architectonic

arrangement of knowledge, Kant intends to link modern scientific rationality with the oldest philosophical questions, about what it means to be human. Classical architectural theory, most importantly, Vitruvius, provides Kant with a model for describing the integration of knowledge toward human ends. Contrary to the fable Derrida retells, wherein metaphors are likened to old coins whose imprint has been worn away, I would argue that metaphors are often reminted as they are set in a new context.[38] Rather than rubbing away the specifics of architectural theory so that its details are no longer visible, Kant rewrites architectural terminology. Far from arranging metaphysics as a house, Kant applies categories such as synthesis, harmony, integration, and symmetry to describe the possible organization of rational information, an index of an encyclopedia.[39]

The Critique of Judgment is Kant's third arena for treating architecture. Here buildings become the object of aesthetic and utilitarian judgment, rather than serving as a trope within philosophical discourse. Kant writes briefly about actual buildings, but in such a manner that connoisseurs have felt that he does not do them justice. Most importantly, he raises the question of whether buildings or gardens could be considered beautiful according to disinterested judgment. The role of architecture in defining aesthetics becomes clear when Kant begins a crucial stage of the *Critique of Judgment* by asking whether one would judge a building to be a work of art at all. This critical stance toward the discipline has vexed more than a few. In *The Architecture of Deconstruction* Mark Wigley expressed a long-standing objection to Kant's treatment of architecture in his aesthetics.[40] For Wigley, as well as for Heinz Quitzsch, Kant underrates the artistic value of architecture.[41] This objection began circulating almost immediately after the *Critique of Judgment*'s publication. In a 1798 essay, Karl Heydenreich alluded to certain architects' displeasure with Kant's formulations. He noted that architects might well have taken offense at Kant's questions concerning the aesthetic status of their discipline, but then explains how buildings can be the objects of aesthetic judgment.[42] Heydenreich went on to argue that architecture had much the same status as the arabesque within the Kantian schema.

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38. Derrida, "White Mythology," 210–213.

39. The fable comparing the circulation of old metaphors turned into philosophical concepts to old coins that have had all distinguishing features rubbed off does not account for the operation of concepts in their new context. As Derrida points out, the fable presumes that coins circulate from one economy to another without any fundamental change in their use. Refunctionalization, itself a well-worn metaphor, would better describe the deliberate application of one discourse to another. Architectural terms in epistemology have a very different reference than they do in Renaissance building manuals.

40. "The *Critique* [*of Judgment*] attempts to subordinate architecture precisely because it is so indebted to it." Mark Wigley, *The Architecture of Deconstruction: Derrida's Haunt* (Cambridge, MA: MIT Press, 1993), 14.

41. Heinz Quitzsch, "Tektonik und Bekleidungstheorie: Zu einer architekturtheoretischen Fragestellung in der ersten Hälfte des 19. Jahrhunderts," in *Mythos Bauakademie: Die Schinkelsche Bauakademie und ihre Bedeutung für die Mitte Berlins,* ed. Frank Augustin (Berlin: Verlag für Bauwesen, 1997), 65.

42. K. H. Heydenreich, "Neuer Begrif der Baukunst als schönen Kunst," *Deutsches Museum,* 1798: 160.

Central to the deconstructive uncovering of architecture in Kant is the claim that epistemology has a particular interest in refusing to recognize its own indebtedness. Wigley accuses philosophers of disparaging architecture. This charge helps him then read Kant and the rest of philosophy (as if this were a mere functional operation) to find moments in those philosophers' works where architecture is, after all, treated as a valued discourse.[43] The claim that Kant hides his debt to architecture centers precisely on those passages in the *Critique of Judgment* in which he asks whether a building fits the definition of autonomous beauty. Rather than resenting Kant's investigation into the aesthetic character of architecture, one might turn to the architectural discourse, in the twentieth century and before, to see how hotly contested the discipline's self-understanding was. Whether architects were artists or engineers was a problem not only for high modernist critics such as Sigfried Giedion; it was an issue also for Alberti and most anyone who read him after the fifteenth century. Was the architect a glorified bricklayer or a visionary? Did he solve complex mechanical problems with mathematical insight, or did he decorate the homes of the powerful? Was the architect a master of many sciences or a dilettante? Quite frankly, architecture has itself never been secure in its aesthetic standing. If philosophers waver in their use of architectural terms, they do so not only because of their own epistemological concerns, but also because architects themselves have often proudly refused the aesthetic label. If Kant hesitates to include architecture with poetry, painting, and music, his indecision, for it really is nothing more, reflects the uncertain definition architects have given themselves.

The real philosophical issue, however, does not concern Kant's personal opinions about architecture. When Kant raises the question of architecture's status within aesthetics, he implicitly addresses age-old questions about how to constitute the field of architecture and its position within the arts. The third *Critique* stands in the middle of this long debate. Kant is neither its source nor its conclusion; nevertheless, the third *Critique* is an important articulation of autonomy aesthetics that sought to explain how Vitruvius's three categories relate to each other. To what extent can utility, comfort, and beauty be integrated? For Kant the extent to which architecture belongs to the arts is answered by determining just how autonomous beauty in architecture is distinct from the other two Vitruvian categories.[44]

Kant's references in the *Critique of Judgment* to specific art forms are admittedly idiosyncratic. That he addresses architecture at all is surprising given how unsystematically he discusses the various genres. The *Critique* is intended, after all, as an epistemology of aesthetic judgments: Are they subjective or universal? Do

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43. Diane Morgan, on the other hand, does not postulate a suppression of architectural terms in Kant.

44. The Vitruvian categories are useful not because they provide an eternally valid definition of architecture's responsibilities, but because they have been deployed repeatedly in very different ways since the Renaissance. The terms were certainly familiar to Enlightenment architectural critics.

they have a moral or scientific content, etc.? Thus Kant provides specific examples only by way of discussing the rational basis for making judgments. Architecture is singled out, not as an art object to be interpreted, but in order to distinguish between aesthetics and utility. Kant does not exclude buildings from being considered beautiful, but their complex investments in style and practicality make them appropriate for formulating a difference between aesthetic contemplation and other modes of apprehending objects. Buildings are far more intensely drawn into the very problems that motivated the claim to autonomy. The *Critique of Judgment* differs from Renaissance treatises after Serlio because it is not prescribing rules for creating art, whereas architectural manuals, according to the common Enlightenment criticism, presented complex design definitions, without explaining the basis for making such statements.

By separating the concern for utility from the judgments of beauty, Kant is holding separate two propositions that had long been held in combination with a third—moral goodness. Kant's entire project is to distinguish between these forms of reason, for their combination when applied to nature had served as a teleological proof of God's existence. By insisting on the autonomy of art from claims of knowledge, personal interest, or moral good, Kant is refusing, among other things, the claims of cosmological unity in Renaissance thought. However, Kant does not preclude the possibility that a thing might be judged under several different rubrics. Thus it is possible for a house to be functional, secure, and a comfort to its residents while also appearing beautiful. Kant's main point is that these two modes of judgment be separated from one another. He insists on separating forms of judgment in order to avoid precisely the cosmological unity asserted by earlier metaphysics, such as Renaissance Platonism.

Kant does include buildings in the list of plausible objects of beauty. When he makes the point that judgments of beauty cannot be demonstrated through rational argumentation in the manner of scientific propositions, he list houses as among those things that one could judge to be beautiful. Indeed Kant's point is that tasteful individuals do not let someone else decide whether something is beautiful or not; rather, they insist on viewing it for themselves. If someone calls a house beautiful, we would not agree or disagree until we had seen it for ourselves: "We cannot press [upon others] by the aid of any reasons or fundamental propositions our judgment that a coat, a house or a flower is beautiful." (Ob ein Kleid, ein Haus eine Blume schön sei: dazu läßt man sich sein Urteil durch keine Gründe oder Grundsätze *beschwätzen*.)[45] Similarly, we would not let some philosophical principle determine for us whether a dress was beautiful. The three examples Kant uses to make this point—a dress, a house, a flower—all have a distinctly practical purpose in addition to potentially being beautiful. Contrary to Wigley's presentation of the

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45. Immanuel Kant, *Critique of Judgment,* trans. J. H. Bernard (New York: Hafner Press, 1951), §8, p. 50; Kant, *Kritik der Urteilskraft,* ed. Wilhelm Weischedel (Frankfurt: Suhrkamp, 1974), §8, p. 130.

third *Critique* as a work that defines a canon of art, Kant makes clear that aesthetic judgments are not proscribed by universally valid propositions.[46] He insists instead that they always rely upon the subjective contemplation of the object. Only after a judgment has been formulated by the subject, does it take on a universal quality, but then never as a truth statement. Aesthetic assertions speak with a universal voice, even though they are grounded in subjective contemplation. This tension between the universal tone of aesthetics and its origins in individual viewing is for Kant one of the reasons why aesthetic judgments cannot have a proscriptive character.

The seventeenth-century architectural theorist Claude Perrault assumed the existence of certain works that all tasteful individuals would agree are beautiful, yet he understood, as well as any other critic, that opinions on art vary and are open to intense debate. The entire eighteenth-century discussion of taste is weighted with the problem of how to resolve these differences of opinion. For Kant to grant that judgments of taste impute universal assent does not mean that they are in any objective sense validly so.[47] The very nature of aesthetic judgment precludes the existence of a definitive list of which objects are art and which are not. Kant's *Critique* leaves open the question of a thing's aesthetic status. This makes his system particularly flexible, not only in terms of practical forms such as architecture and fashion, but also in terms of the further development of artistic media. Despite his own neoclassical preferences, Kant's description of aesthetic judgment does not preclude film, photography, performance pieces, or modernist painting. The more fundamental criticism of the third *Critique* is its presumption that beauty is the defining feature of art.

The Baroque Palace of Metaphysics

Kant's critical philosophy is the distillation of lifelong revisions. The house metaphor displays this writerly process. Far from presenting an eternal statement on foundations of knowledge, the philosophical house represents thought as it rethinks itself. In this sense Kant shares with Goethe the figure of the subject as a building under renovation. Quite the opposite of a monument, the philosophical self is constantly under pressure. Will it stand on its own or collapse under the weight of its ambitions? Will it be knocked over by some outside force? Furthermore, it was not always clear when a building was complete; indeed the large ones are always under renovation. The Empire State Building may have a smooth, coherent exterior, but inside there are, at any given moment, many floors being torn out and rearranged.

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46. "There can be no objective rule of taste which shall determine by means of concepts what is beautiful. For every judgement from this source is aesthetical; i.e. the feeling of the subject, and not a concept of the object, is its determining ground. To seek for a principle of taste which shall furnish, by means of definite concepts, a universal criterion of the beautiful is fruitless trouble, because what is sought is impossible and self-contradictory." Kant, *Critique of Judgment,* §17, p. 68.

47. Kant, *Critique of Judgment,* §8, pp. 50–51.

From cathedrals to palaces, the early modern world knew many construction projects that extended for decades, if not centuries.

Buildings are not permanently complete, nor are philosophical systems. Through much of Kant's first *Critique* we see thoughts still being refined. There is no finality to Kant's argument, just as a large building always requires further work. Because Kant is aware that individual sections of the first *Critique* still required elaboration, he asks that the plan be viewed as a whole. Construction is ongoing throughout the *Critique;* if there is anything lasting in Kant's opinion, he would claim it is the overall layout, yet a more modernist position would state that Kant's legacy lies in his insistence on always tearing down and rebuilding. He does not emphasize the laying of permanent foundations so much as the examination of what are purported to be secure foundations, in order to find the inevitable flaws and limits. The *Critique* undergoes revision, rephrasing, reworking. Arguments are reiterated, stated more than once.

Kant's early career involved many changes in argument, and repeated attempts to prove the existence of God, only to be replaced with a different, sharper argument that also failed. Over the course of Kant's career the architectural metaphor undergoes several transformations, much like the rest of his thought. In the early essays, Kant uses architectural terminology as ontological description. The "Bau" of the universe is God's creation. Kant starts in the tradition of Leibniz and Wolff wherein architecture serves ontology. By the first *Critique,* his architectural allusions reverse their direction so as to emphasize the weakness of this tradition. Philosophical speculation is likened to the Tower of Babel. Architectural concepts, such as the integrated unity of a beautiful building, are transformed, so that they no longer describe the harmony of God's universe so much as the activity of philosophical thought. Kant follows the trend of many other eighteenth-century German writers in that he adapts architectural terms to describe subjectivity. Kant still maintains the need for foundations in thought. In that sense he has not given up Descartes' project to ground thought in secure principles. Similarly, he sets these foundations in thought, rather than in the universe. His metaphors emphasize the manner in which thought turns against itself. Writing to Herder years after they had last seen each other, Kant reaches for the building metaphor to explain that he no longer holds the same views as when Herder studied under him: "As far as I am concerned because I am not caught up on any one opinion, I treat them with a profound indifference, my own and those of others. I turn the whole building/ structure over several times and view it from all sorts of viewpoints, in order to find the one from which I can sketch the truth. Since we have parted, I have in many regards found a place for new insights." (Was mich betrift da ich an nichts hänge und mit einer tiefen Gleichgültigkeit gegen meine oder anderer Meinungen das gantze Gebäude ofters umkehre und aus allerley Gesichtspunkten betrachte umzuletzt etwa deniegen zu treffen woraus ich hoffen kan es nach der Wahrheit zu zeichnen, so habe ich seitdem wir getrennt seyn in vielen Stücken anderen Einsichten

Platz gegeben.)[48] The two sides of the architectural profession—the qualities of the engineer and the designer—are joined here as a single professional ideal for philosophical critique. Thought is represented literally as a model that can be picked up and turned all directions so that its construction might be examined. The engineer/philosopher dismantles the building with the goal of ultimately sketching a more truthful one. Architectural practice provides a two-step method for philosophy. First, the activity of critical thinking is likened to the engineer roaming over a building to examine its structural flaws. Kant describes himself as having a deep indifference—or disinterestedness (*eine Gleichgültigkeit*), to use another, more potent, philosophical term—a lack of feeling, or even a certain apathy toward his own arguments. This lack of care, this coldness toward his own writing, mimics the attitude of the structural engineer or natural scientist who tests the soundness of a building or a hypothesis, without concern for the feelings of its author. Kant is distinguishing himself from *Schwärmer,* enthusiasts who are convinced of their truthfulness because of their own intense feelings. The detached Kant invests less in his own philosophical positions than in his ability to examine them. Descartes likewise claims to take an engineer's attitude toward his own metaphysical beliefs.

Kant alludes to a second aspect of the building profession: the architect who solves existing flaws by sketching alternatives out in his mind and on paper. Drawing represents thinking about a problem in its entirety. The distance between a few hasty lines on paper and a detailed representation of a building's many parts is great, yet for Kant the architectural drawing signifies systematic philosophy's attempt to represent the conditions for certain knowledge. The ability of a plan or drawing to demonstrate had a special appeal for Kant, for he often referred to the sketch or plan of his philosophy as that aspect that would remain even after the particulars had been criticized. Inevitably a tension arises between the drawing that represents the whole and the engineering work of building, or, in other words, the *Critique*'s epistemological goal of explaining how a priori synthetic judgments are possible, and the specific arguments of Kant's deduction.

The question of examining and constructing foundations for philosophy is so familiar that Kant even makes a little joke of it. As he sets out to explain his understanding of the term "a priori," he gives the curious example of a man who digs underneath the foundations of his house. Common opinion, Kant writes, would say that the man should have known a priori that the house would have fallen on him, once he had dug it out [B2]. Kant goes on to point out that in fact this assumption that the man should have known his house would fall is not pure a priori knowledge, because the effects of gravity are taught only by experience. Kant goes on to explain that his investigation is concerned with pure a priori judgments, which are independent from all experience. Philosophers like to choose amusing illustrations

48. Kant to Herder, 9 May 1767, in *Gesammelte Schriften* (Berlin: Walter de Gruyter, 1980), 10: 74.

when arguing a broader point, and here Kant is alluding to Descartes, who also uses the house metaphor to describe his method of doubt. Having dismissed all beliefs so that he might examine them critically, Descartes likens himself to a man who needs to live somewhere while he pulls down and then rebuilds his house.[49] The little joke is of course on Kant himself, for he is certainly the man who has already more than once undermined his philosophical foundation. This wry example in the introduction to the *Critique* has Kant presenting himself to the reader as a philosopher, much like Descartes, who is about to pull down his house. And indeed, Kant, like the man in his example, knows from experience what happens when foundations are stripped away, because his entire career has entailed repeated examinations of his most cherished assumptions.

The prefaces and the introductions to the two editions of the *Critique* are points wherein Kant aligns architectural metaphors against speculative thought. A third related passage comes at the beginning of what according to the book's layout is the *Critique*'s second half, the transcendental doctrine of method. In each case, Kant uses the moment of introduction to indulge in architectural metaphors that circumscribe his project. In the preface and in the introduction to the *Critique,* Kant repeats the same metaphors in order to explain the inevitable conflict between the desire for speculative knowledge and the critical scruples of epistemology. These very abstract metaphors resurface as allegories of Babel in the transcendental doctrine of method.

In the preface to the first edition of the *Critique of Pure Reason* [AVIII-AX], Kant offers a cautionary lesson in philosophical history. He recounts how philosophy has tried many times to solve certain irresistible problems by engaging in speculation, only to find that each time the answers fail to prove reliable:

> Human reason has this peculiar fate that in one species of its knowledge it is burdened by questions which, as prescribed by the very nature of reason itself, it is not able to ignore, but which, as transcending all its powers, it is also not able to answer.[50]

In this rounded paradox lie two tendencies in Kant's philosophy: the desire to provide metaphysical answers, and the refusal to speculate. The tension between these two inclinations is so great that interpreters have often chosen one over the other. Loyal Kant scholars burrow into the minutiae of the first *Critique* to explain the

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49. Descartes, "Discourse on Method," in *Selected Philosophical Writings,* trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch (Cambridge: Cambridge University Press, 1988), pt. 3, p. 31: "Now, before starting to rebuild your house, it is not enough simply to pull it down, to make provision for materials and architects (or else train yourself in architecture), and to have carefully drawn up the plans; you must also provide yourself with some other place where you can live comfortably while building is in progress."

50. Immanuel Kant, *Critique of Pure Reason,* trans. Norman Kemp Smith (New York: St. Martin's Press, 1965), 7.

various limitations imposed on philosophy, while speculative thinkers ranging from Fichte to Heidegger use Kant as a springboard to a new articulation of ultimate answers.[51] Kant interpretation should neither scholasticize the details of his system nor sweep past his epistemological scruples. Kant explains how thought can be dynamic and yet stand still, because speculation and critique press against each other to form a stasis that is hardly stable.

Kant works within what he considers an inevitably paradoxical condition of thought. Rather than harp on the failings of philosophers, he insists that no one is to blame for the many cycles of assertion and retraction followed by another round with a new approach. The situation has a fatalistic character. Kant shifts between stating that it is the "besondere Schicksal" (particular fate) of reason to be burdened with concerns it cannot dismiss, and claiming that the nature of reason is to ask questions that it cannot answer. Either way, philosophy is caught in a contradiction: it demands what it cannot give and must always do so. Kant here is preparing the reader for an antinomy, for two equally valid propositions. First, metaphysics is unavoidable; there is no end to grand questioning.[52] Secondly, speculating about ultimate ends is futile. Unlike the sciences and mathematics, there has been no advance in metaphysical insight, there has been no corpus of knowledge accepted by a community of scholars. Metaphysics repeatedly fails to provide what it most fervently seeks to prove. Kant describes this paradox as if it were a process of impulsive construction followed by renovation, a method that does not follow a plan so much as an urge. A glance at the quote in the original German shows architectural terms built into his characterization of metaphysics. English readers are so accustomed to philosophical "structures" that they do not perceive "the building" (*das Gebäude*), from which the abstract term is derived:

> It is, indeed, the common fate of human reason to complete its speculative structures as speedily as may be, and only afterwards to enquire whether the foundations are reliable.

> Es ist aber ein gewöhnliches Schicksal der menschlichen Vernunft in der Spekulation, ihr Gebäude so früh, wie möglich fertig zu machen, und hintennach allererst zu untersuchen, ob auch der Grund dazu gut gelegt sei. [A5/B9][53]

These additional *Grundsätze* extend beyond experience; they extend beyond the limits of experience [A4/B7]. The architectural metaphor assumes a topographical

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51. Dieter Henrich places Heidegger in relation to post-Kantian idealist speculation. Dieter Henrich, "On the Unity of Subjectivity," trans. Guenter Zoeller, in *The Unity of Reason,* ed. Richard L. Velkely (Cambridge, MA: Harvard University Press, 1994), 40.

52. Those who claim to be radical skeptics, or who are just uninterested in metaphysics, Kant will argue, are prone to fall into the very formulations they claim to doubt.

53. Kant, *Critique of Pure Reason,* 47; Kant, *Kritik der reinen Vernunft,* ed. Jens Timmermann (Hamburg: Felix Meiner, 1998), 54.

tone as Kant moves from architectural to territorial language to describe an episte-mology concerned with defining the limits of thought. Whether topographical or architectural, the result of using overextended foundations is the collapse of philos-ophy into darkness and confusion. The preface to the first edition states: "But by this procedure human reason precipitates itself into darkness and contradictions." (Da-durch aber stürzt sie sich in Dunkelheit und Widersprüche" [AVIII].)[54] The verb "sich stürtzt" is a reflexive form of the more direct "stürtzen"—a biblical-sounding word that invokes the fall of man, or Satan being hurled into hell. "Stürzen" en-tails a fall from a great height, the kind of punishment usurpers or charlatans re-ceive when they have lost their precarious grip. It is a word that implies heavenly retribution. But by employing the reflexive form "sich stürzen," Kant takes the di-vine judge out of the scenario. Philosophy brings about its own fall, for, as Kant states, the collapse of metaphysical palaces inevitably leads back to an investigation of the foundations of philosophy to uncover the hidden errors that must lie in the ground: "There must be…concealed errors." (irgendwo verborgene Irtümer zum Grunde liegen müssen [AVIII].)[55] Somewhere there must lie errors, but philoso-phy does not know where to locate that place with its hidden flaws, Kant writes, because it does not rely on the "Probierstein" (philosopher's stone) of experience. The metaphor of the ground rests then on another figure, the alchemic touchstone used to distinguish gold from other alloys, truth from falsehood. Kant traces out a narrative of philosophical building, from the laying of foundations, the raising of a building, its extension on questionable foundations, to the collapse of the edifice, followed by the reexamination of the foundations. This rise and fall of metaphysics might serve as a parable of philosophical history, but, as we shall see, Kant does not position himself outside the cycle. Indeed, the tale can be understood as recounting Kant's own career. Scholars trend to distinguish between the precritical Kant, who wrote essays explaining the cosmology of the natural universe in order to reconcile it with a divine being, and the world-famous Kant, who reversed his position at age fifty-six with the publication of the *Critique of Pure Reason.* Kant disavowed much of his early work and discouraged its publication, which is all the more reason why one might imagine that the tale of speculative philosophy's collapse presented in the preface to the *Critique of Pure Reason* recounts Kant's own failures.

Edifices are always threatened with collapse; they are not unproblematic and secure. The construction of a foundation always entails the danger that it will fail to support the building raised upon it. Architecture for Kant is not the metaphor of certainty; it represents instead the threatened future of all philosophical claims, the possibility that a series of arguments will be proven wrong, that great effort has been expended on a hopeless line of thought. With the house metaphor comes the ruin, the destruction of a system of thought, and then again with collapse there

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54. Kant, *Critique of Pure Reason,* 7; Kant, *Kritik der reinen Vernunft,* 5.
55. Kant, *Critique of Pure Reason,* 7; Kant, *Kritik der reinen Vernunft,* 5.

emerges again the potential for rebuilding, or at least reapplying portions of the collapsed structure for another purpose; as in Rome, ruins are carted off for a new purpose. Kant characterizes his own rearrangement of Scholastic logic in these terms. Foundations are necessary for stability, and philosophical systems promise secure terms, but Kant reiterates that the house of philosophy is always subject to critical re-construction. Kant spells out the cyclical movement of construction and critique quite clearly in his lecture notes when he explains the difference between the hypothetical constructions of mathematics and the systems of philosophy: "The philosopher can also play the artist, though his work does not last as long as the mathematician's. For even when the philosopher believes he has raised his build-ing rather artfully, someone will come along, who is even more artful and knock it over." (Der Philosoph kann auch einen Künstler vorstellen, allein sein Werk ist nicht so dauerhaft als das Mathematikers. Wenn der Philosoph sein Gebäude recht künstlich aufgerichtet zu haben glaubt, so kommt ein anderer, der noch künstli-cher ist, und wirft es um.)[56]

The *Critique of Pure Reason* sets out to find a means past this paradoxical situa-tion. Kant addresses the tension between the desire for complete answers and the tendency to challenge any one explanation in the section entitled "The Antimony of Pure Reason" [A474/B502] through allusions to the story of Babel. In his re-telling of the architectural fable, he refers to a skepticism that continually under-mines every effort at total knowledge. Implicit within the antinomy is a narration of construction and demolition. First comes the natural inclination to explain all existence, a habit that Kant explicitly connects to building: "Human reason is by nature architectonic. That is to say, it regards all our knowledge as belonging to a possible system." (Die menschliche Vernunft ist ihrer Natur nach architektonisch, d.i. sie betrachtet alle Erkenntnisse als gehörig zu einem möglichen System.)[57] The critical attitude, which insists that all knowledge have a basis in empirical reality, undermines the *construction* of a system: "But the propositions of the antithesis are of such a kind that they render the completion of the edifice of knowledge quite im-possible." (Die Sätze der Antithesis sind aber von der Art, daß sie die Vollendung eines Gebäudes von Erkenntnissen unmöglich machen.)[58] Whatever foundation a system of thought uses in order to develop its all-encompassing interpretation of the world is shown to have an older, and thus more fundamental, predecessor. Skepticism, according to Kant, points to an endless chain of original moments, each preceding the other. At no point does skepticism allow systematic thought to rest on the true foundation of all knowledge; thus it prevents the completion of the architectonic project: "Since therefore, the antithesis thus refuses to admit first or as a beginning anything that could serve as a foundation for building, a complete

56. Immanuel Kant, "Philosophische Enzyklopädie," in *Gesammelte Schriften,* 29: 7.
57. Kant, *Critique of Pure Reason,* 429; Kant, *Kritik der reinen Vernunft,* 574 [A474/B502].
58. Kant, *Critique of Pure Reason,* 429; Kant, *Kritik der reinen Vernunft,* 574–575 [A474/B502].

edifice of knowledge is, on such assumptions, altogether impossible." (Da also die Antithesis nirgend eine Erstes einräumt, und keinen Anfang, der schlechthin zum Grunde des Baues dienen könnte, so ist ein vollständiges Gebäude der Erkenntnis, bei dergleichen Voraussetzungen, gänzlich unmöglich.)[59] In a tangled invocation of German military history, he aligns skepticism with the mercenary armies of the Thirty Years' War—willing to turn against any institution, loyal to none. On the second page of the preface to the *Critique of Pure Reason,* Kant recounts a short history of modern metaphysics. He writes that initially metaphysics was practiced so despotically that it created a barbaric state of war, a reference to the Reformation and the Thirty Years' War, which brought particular devastation to Prussia. Extending the military theme, Kant describes skeptics as nomads who despise all permanent dwelling. Kant twice uses the term *anbauen,* which refers to both building and farming ("die allen beständigen Anbau des Bodens verabscheuen") [AIX].[60] Because these nomads were few in number, Kant writes, they could not prevent attempts to rebuild metaphysics. These new efforts were undertaken as if to rebuild Babel after its fall. Kant writes that these new metaphysical systems were not carried out according to a single plan in a single voice [AIX].[61] The many examples that Hans Vaihinger lists in his commentary on the *Critique* make clear that for Kant philosophical discourse was readily understood in military terms.[62] The integration of these war references with architectural allusions suggests that systems are required to withstand assault from competitors as well as their own weight.[63] Inherent in Kant's structural metaphors is the imposition of a limit, a wall dividing the sanctioned from the inadmissible, coupled with the awareness that all such boundaries are subject to demolition. The instability of the architectural figure in Kant's writing is augmented by the military terms that are brought to bear against his philosophical house.

The first preface to the *Critique of Pure Reason* elaborates an almost tragic tale of thought's rise and fall, a movement that again in the second edition Kant refers to as "das Stehen und Fallen der Metaphysik" (the stability or collapse of metaphysics)

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59. Kant, *Critique of Pure Reason,* 429–430; Kant, *Kritik der reinen Vernunft,* 575 [A475/B503].

60. The standard English translation refers to "the *sceptics,* a species of nomads, despising all settled modes of life." Kant, *Critique of Pure Reason,* 8.

61. Vaihinger connects this passage to the later, more detailed discussion of Babel. Hans Vaihinger, *Commentar zu Kants 'Kritik der reinen Vernunft'* (1881; repr., New York: Garland Publishing, 1976), 1: 95.

62. Vaihinger, *Commentar,* 1: 86.

63. Goetschel argues that military metaphors in Kant have a satirical quality, wherein Kant somewhat mockingly compares philosophical debate to the anachronism of feudal conflict. Willi Goetschel, *Constituting Critique: Kant's Writing as Critical Practice,* trans. Eric Schwab (Durham, NC: Duke University Press, 1994), 126. Certainly Kant does emphasize the *folly* of both military and metaphysical conflict, and his concept of reason, especially in his political essay, does strive to put an end to both types of warfare; however, Kant is never so grandiose as to claim that his work would accomplish this goal. His allusions to war do not exclude the possibility that his own work will become embroiled in one.

[B19].[64] At first, the preface presents a story so abstract one can barely visualize its setting. Instead of beginning with specific characters or concepts, Kant describes the rise of human reason in terms that imply comparisons with both the construction of a tall building and flight, whether of a bird or a mythical figure such as Icarus.[65] These two metaphors, construction and flight, reappear through the first *Critique* to represent the activity of thought quite simply as the tendency to climb upward and then fall precipitously. Later, in the introduction, Kant seems to move between the dove and the building as representations of speculative thought [A4–5/ B7–8]. Still, we should not be too quick to define the metaphor in Kant's opening. The indefiniteness of the terms lends the opening passage the mythic aura of Genesis 1. Kant resists using specific metaphors to make his argument. He does not immediately present allegorical characters with readily identifiable qualities, nor does he draw analogies in the manner of a fable; instead Kant portrays thought as movement without any fixed identity.[66] What interests Kant initially is the cyclical dynamic of thought, which he presents as an upward movement, followed by a sudden drop. Metaphysics has remained "in so vacillating a state of uncertainty and contradiction" (in einem so schwankenden Zustande der Ungewißheit und Widersprüche).[67]

The first hint of a substantive analogy, with which the reader is meant to visualize the movement of human reason, comes in the opening sentence when Kant states that philosophy begins with foundational principles: "Sie fängt von Grund-sätzen an."[68] Here we have the first tangible image, the first metaphor of the *Critique* coupled with the first concept that is itself the concept of a first principle.[69] This is the first mentioning of first things in philosophy. Thus Kant begins by stating that philosophy always has a beginning, which in this case he compares to the foundation of a building. The German word *Grund* means, of course, "reason," in the sense of an explanation, but it also refers to the ground, as in the surface of the earth, as well as to a building's foundation. In the *Critique of Judgment,* Kant directly addresses the visual image implicit in the term: "Our language is full of indirect presentations of this sort, in which the expression does not contain the proper schema for the concept, but merely a symbol for reflection Thus the words *ground*

64. The standard English translation skips the spatial and structural dimension of Kant's language: "the success or failure of metaphysics." Kant, *Critique of Pure Reason,* 55.

65. Tarbel, "Fabric of Metaphor," 257–259, notes that Kant deploys an image of a dove rising in the air to represent abstract thought.

66. Kant provides a similar account of speculative philosophy soaring over its foundations in experience, in which he stresses that his own dry formulations strip off (*entkleidet*) the sensuality that gives metaphysics its greatest appeal. Kant, *Kritik der reinen Vernunft,* 565 [A463/B491].

67. Kant, *Critique of Pure Reason,* 55; Kant, *Kritik der reinen Vernunft,* 73 [B19].

68. Kant, *Kritik der reinen Vernunft,* 5 [AVII].

69. Derrida makes a rule of this expectation. See Jacques Derrida, "Die weiße Mythologie: Die Metapher im philosophischen Text," in *Rundgänge der Philosophie,* ed. Peter Engelmann (Vienna: Passagen Verlag, 1988), 206.

(support, basis),...and countless others are not schematical but symbolical hypotyposes and expressions for concepts, not by means of direct intuition but only by analogy with it."[70] The intrusion of such metaphors in Kant's own writing has been recognized from the earliest. In his 1797 commentaries, Georg Mellin reiterates that Kant used the term *Grund* in its specialized meaning of substituting an architectural term for an abstract principle.[71]

Despite the fact that Kant himself calls attention to the imagery implicit within the term, the metaphor of the *Grund* has been forgotten and rediscovered several times since the late eighteenth century. In *Kant and the Problem of Metaphysics,* Heidegger compares the practice of critique to the formulation of a plan. He makes the important distinction between the construction of a building and its initial planning through sketches and diagrams. The *Critique of Pure Reason* corresponds to the plan for organizing knowledge; it does not claim to be that knowledge. This, for Heidegger and for Kant, is an important distinction between metaphysics, which is associated with a house, and critical reflection upon the conditions for thought—a Kantian would say epistemology, Heidegger would insist on a distinction between ontology and epistemology. By comparing metaphysics with an enormous building, Kant and Heidegger are referring to the claim that philosophy used to make, namely, to explain the inner meaning of the universe in its entirety. The young Kant was very much engaged in seeking a philosophical explanation for the natural sciences. Only with his turn to critical epistemology does he reevaluate his earlier claims to universal knowledge. Heidegger and the critical Kant eschew the house metaphor in favor of the architectural sketch or plan, which outlines the conditions and the organization of rational thought, while leaving the construction of knowledge to the sciences.

Derrida mentions Kant's reflections on building metaphors in "White Mythology: Metaphor in the Text of Philosophy" but provides no immediate commentary.[72] Critics such as the architectural theorist Mark Wigley have followed up on Derrida's reference and traced it back to Heidegger.[73] The process of finding and forgetting is central to the critical practice of revealing Kant's reliance on the architectural metaphor. Wigley writes as if Heidegger had been the first to hint at the importance of the foundational metaphor, and then proceeds to rely on Heidegger's reading of Kant to deconstruct the first *Critique*. (Relying on Heidegger to understand Kant

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70. Kant, *Critique of Judgment,* 198; "Unsere Sprache ist voll von dergleichen indirekten Darstellungen, nach einer Analogie, wodurch der Ausdruck nicht das eigentliche Schema für den Begriff, sondern bloß ein Symbol für die Reflexion enthält. So sind die Wörter *Grund* (Stütze, Basis)...und unzählige andere nicht schematische, sondern symbolische Hypotosen, und Ausdrücke für Begriffe nicht vermittelst einer direkten Anschauung, sondern nur einer Analogie mit derselben" (Kant, *Kritik der Urteilskraft,* 296).

71. Georg Samuel Albert Mellin, *Enzyklopädisches Wörterbuch der kritischen Philosophie* (Aalen: Scientia Verlag, 1970), 3: 166.

72. Derrida, "White Mythology," 224 n. 26.

73. Wigley, *Architecture of Deconstruction*.

is a little like taking Jung's word on Freud.) For Wigley the architectural metaphor seems a revelation, a secret buried in Kant's writing for a twofold purpose: to provide a paradigmatic "foundation" for philosophy as the science that grounds knowledge, which is then covered up for fear of displaying philosophy's debt to architecture. Yet Theodor Adorno in his lectures on Kant's *Critique* treats the importance of "foundations" as a long-standing concern for philosophical thinking. There has been a tendency, Adorno argues, within Western philosophy to not accept arguments until they have been traced back to a foundational principle. Whether Plato and the Ideas or Heidegger and the search for origins, philosophers have presumed, firstly, a correspondence between the capacity to know and the object of knowledge, which leads them, secondly, to expect that all knowledge be formulated in an irreducible form that provides philosophical knowledge a stable identity over time. Over the course of his elaboration on Kant's epistemology, Adorno places Kant within this tradition of a *Fundierungswahn* (foundational delusion).[74]

The difference between Kant's concern for epistemology and Heidegger's insistence on reading Kant as the basis for his ontology becomes clear when we compare the metaphors both philosophers rely upon to define their projects. Most importantly, the architectural metaphor in Kant implies a limit to the operation of reason; it has an implied epistemological character. By insisting on a foundation to a tower, Kant suggests that there are practical restraints, physical limits, to how far philosophy might build.[75] Because the limits implied by the foundation are only implied, not formulated explicitly as a rule, Heidegger feels free to supplant one metaphor with another. In his method of *Ursprungsenthüllung* (uncovering the origin), Heidegger abandons the architectural model just at the point where Kant would insist it is most relevant, that is, at the synthesis of *Verstand* and *Sinnlichkeit*.[76] Heidegger invokes the architectonic of knowledge, a term Kant uses to postulate a metaknowledge about all knowledge, because it is one of those moments in Kant's system where reference is made to what is for one reason or another unknowable beyond the capacity of critical reason. Heidegger wishes to use the term "architectonic" as a springboard for his own ontological project, but where Kant would define a conclusion to speculative thought Heidegger commences, and thus he switches from the architectural metaphor to other naturalistic, open-ended terms such as *Quelle* (spring) and *Stamm* (branch). The architectural metaphor, the tower that can be built only as high as its foundation allows, has a built-in understanding of limit, whereas the suggestion that philosophy search for a *Quelle,* as in finding the source of a river in a mountain

74. Theodor W. Adorno, *Kants 'Kritik der reinen Vernunft'* (1959), ed. Rolf Tiedemann (Frankfurt: Suhrkamp, 1995), Nachgelassene Schriften, sec. 4: Vorlesungen, 4: 30–31, 84–85.

75. "The architectonic critique is concerned with determining boundaries, deciding what belongs to the faculties of reason and understanding and what does not. Critique finds an ideal partner in architecture. The latter is also traditionally seen as a sensible discipline. It is tied to the realisable." Morgan, *Kant Trouble,* 34.

76. Heidegger, *Kant und das Problem der Metaphysik,* 36–39.

stream, suggests roving across a natural landscape. The limit to thought that the natural world suggests exists outside the *Quelle* metaphor. Each metaphor, to the extent that it contains its own spatial order, also implies an outside to its own operation. The spring that is the source for philosophy is not produced by philosophy; rather, it is given to reason by some external, that is, infinite, source. Unexamined and implicit in the metaphor that philosophy search for a *Quelle* is the natural world, which Heidegger does not, at least in the Kant book, bring to the fore.

One metaphor will imply another, so that a reference to the *Grund* will encourage another related analogy. However, any one metaphor will suggest many different associations. Heidegger broadens the spatial setting implied by the *Grund* image through his evocation of a natural landscape through figures such as *Quelle* or *Holzweg.* While Kant deploys geographical references throughout the *Critique,* his rhetoric tends to value methodologies over environments. To the extent that Renaissance building techniques provide Kant with a procedure for thought, he will construct a string of analogies that circle around architectural theory. From *Grund* he will not necessarily turn to other environmental analogies but instead will remain within the architectural discipline, so that the foundation metaphor begets a reference to the building plans and drawings that guides construction. Particularly in his epistemology, Kant's metaphors are guided more by a disciplinary logic than by a spatial or visual matrix.

When, in the section "The Architectonic of Pure Reason," Kant refers to the two branches of knowledge, *Verstand* and *Sinnlichkeit,* he also postulates the existence of a universal root of human knowledge ("die allgemeine Wurzel unserer Erkenntniskraft") but makes the point that his system explicitly does not speculate on its nature:

> We shall content ourselves here with the completion of our task, namely, merely to outline the *architectonic* of all knowledge arising from *pure reason;* and in doing so we shall begin from the point at which the common root of our faculty of knowledge divides and throws out two stems, one of which is reason. By reason I here understand the whole higher faculty of knowledge, and am therefore contrasting the rational with the empirical.

> Wir begnügen uns hier mit der Vollendung unseres Geschäftes, nämlich die Architektonik aller Erkenntnis aus reiner Vernunft zu entwerfen, und fangen nur von dem Punkte an, wo sich die allgemeine Wurzel unserer Erkenntniskraft teilt und zwei Stämme auswirft, deren einer Vernunft ist. Ich verstehe hier aber unter Vernunft das ganze obere Erkenntnisvermögen, und setze also das Rationale dem Empirischen entgegen.[77]

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77. Kant, *Critique of Pure Reason,* 655; Kant, *Kritik der reinen Vernunft,* 863 [A835/B863].

Three times Kant refers to a point, a place, a specific location, as the starting point and the limit of his system. For Heidegger, though, the importance of *this* place is that it exists as one location in a larger context. Similarly, a division of two branches suggests the larger organic unit of a tree. Kant picks the point where he stops and starts, but Heidegger finds it more interesting that the tree metaphor implies the existence of more, a root that in this case is a natural analogy to a foundation. Kant calls the limit of his system its *Architektonik,* again drawing attention to the constructedness of reason's order. Heidegger, on the other hand, wants to look beyond the architectonic to the more natural, and for some reason therefore more preferable, "root" that lies beyond the architectonic. Thus Heidegger reads the mixed metaphors of Kant's conclusion as a means of commencing his own ontological investigation. In the hierarchy of Heidegger's metaphorical reasoning the roots of the tree go beyond the architectural. Kant seems to resist the logic of the tree metaphor by insisting that his investigation stops where the two branches of *Verstand* and *Sinnlichkeit* separate. Trees and buildings are themselves analogous: both move upward, both have a hold on the ground that prevents them from toppling, both can be divided into constituent parts. If the logic of the architectural metaphor with its emphasis on secure foundations is applied to the tree, then one might expect that critical philosophy would search out the roots of the tree just as it secures the foundations of the building. However, Kant does not align the tree and the building; the foundation is not equivalent to the root. Instead he arbitrarily stops his reflections where two branches come apart, thereby suggesting that the rest of the tree, trunk and root, is not open to critical thinking. To demonstrate the disjointed relation of the two metaphors, he calls the point where *Verstand* and *Sinnlichkeit* divide the architectonic of knowledge, and then proceeds to unfold the architectural metaphor of a unity constituted by separate parts. Thinking within the tree metaphor inclines one to search for the root, whereas the architectural comparison produces its own conclusion. Heidegger notes both metaphors but supplants the house of philosophy with the tree.[78] He insists that Kant by his use of the tree implies the existence of a root more fundamental than the foundation provided by the architectonic of knowledge. Heidegger's concern is to uncover thought that exists prior to the foundations of metaphysics, an interest that Kant explains without recourse to naturalistic terms. For Kant the search for that which lies below and before philosophy leads to the ruins of an earlier philosophy. Thus the technical excavations of the philosopher engineer often become an archeological investigation. Kant often makes the point that any given system is built on the ruins of its buried predecessors.

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78. Heidegger chooses sides in the "Genesis and Structure" debate, which Derrida credits Husserl with trying to avoid. If Husserl does not commit himself to defend one position systematically, Kant makes an explicit point of restraining himself (and his system) in pursuing either beyond a self-imposed limit. See Jacques Derrida, "'Genesis and Structure' and Phenomenology," in *Writing and Difference,* trans. Alan Bass (Chicago: University of Chicago Press, 1978), 154–168.

Because he relies primarily on Heidegger's reading of Kant, Mark Wigley focuses his argument on the ground/edifice metaphor. The implication is that the foundation metaphor is the most important of all the architectural metaphors. However, Kant does not confine himself to a critical discussion of foundations in philosophy. He deploys a series of architectural references so that one glides into another. Before long it becomes clear that in Kant's writing the metaphors translate into each other; behind one lies another. Architectural allusions turn into geographical references, which in turn can be translated into the imagery of birds in flight. Kant does not stop his string of associations with the ground/edifice metaphor.[79] As we shall see, it becomes difficult to isolate his images from the metaphors that surround them, in the text and in the imagination of the reader. Even when he does discuss the ground of philosophical knowledge, he elaborates his contention through recourse to another architectural principle, one inherited from Renaissance classicism, namely, the integration of parts into a whole. When writing about the architectonic of all knowledge, the ground metaphor translates into the architectonic whole, the organic unity composed of interlocking parts. Thus the ground turns into the Idea of the whole, which is the most abstract, least "firm," least empirical aspect of his argument.

No doubt the ground metaphor seems compelling because it has the "flavor" of empiricism. The foundation of Kantian epistemology corresponds to the empirical intuition. According to the logic of the analogy, the "foundation" of knowledge would be human perception. Scientific truth would be built upon the appearance of things in the world to us—ordinary, mundane perceptions. The ground metaphor would thus seem to be aligned with the empirical. The tectonic appeal of the foundation seems so intuitive because it is so childlike, a lesson everyone learns with building blocks and that baroque architects occasionally misapplied on a grand scale. However, toward the end of the *Critique of Pure Reason,* Kant explains that there is yet something beyond the ground. In other words, Kant provides a new conception of the ground that reverses the initial empirical associations. In the second half of the *Critique,* the ground no longer suggests the earth, rather it refers to the Idea of the whole, the schema that pulls together perceptions. The ground has become insubstantial, abstract; it is a plan that stands in a complex, hidden relation to perception. The ground is hovering in the air; it is architectonic, a relation of supports that create a whole, a cupola, a vault above, rather than a hole below. Kant moves from one metaphor to the other, flipping the architectural associations on their head, so that the ground becomes the plan, then

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79. Architectural terms in Kant match his geographical analogies closely. Both disciplines seek to "orient" the subject. Helmut Müller-Sievers also stresses the human need for spatial orientation in relation to the opening lines of the *Critique of Pure Reason.* Helmut Müller-Sievers, "Tidings of the Earth: Towards a History of Romantic *Erdkunde,*" in *Rereading Romanticism,* ed. Martha Helfer, Amsterdamer Beiträge zur neueren Germanistik 47 (Amsterdam; Atlanta: Rodopi, 2000), 56–60.

the vault. Paradoxically the ground becomes the height of abstraction. Put simply, architectural metaphors in philosophy do not provide stable concepts. Even a literal reading of Kant, which did not seek to critique but which would simply list off all the times he uses the words "architectonic," "plan," and "foundation," would show that architectural references in Kant's writing do not remained fixed and that the terms shift freely.

Kant's Precursors

The application of architectural terms to idealist thought developed from ancient practices, Jewish, Christian, and Greek. The New Testament attempts to rearticulate the temple in Jerusalem as a term defining the individual's relationship to God. The Pauline epistles already appropriate architecture to describe inner states of consciousness when the apostle deploys the figures of "the temple" and "the church" to define faith. Various Gospel parables and the Christian institution's self-legitimation by way of Christ's reference to the apostle Peter as the rock on which the church would be built all point to the active effort to give spiritual feelings the apparent solidity of architecture.

   The claim that architecture's inspiration for philosophy has remained hidden becomes quite questionable once we recognize that Kant arranges his foundation metaphor in response to earlier, more renowned versions. The concern over building a secure foundation resulting in a strong edifice appears prominently in the New Testament. In 1 Corinthians 3:10–17, Christian faith is compared to a house that withstands assault. Christian faith stands much as a stone structure survives fire:

> According to the grace of God given to me, like a skilled master builder I laid a foundation, and another man is building upon it. For no other foundation can any one lay than that which is laid, which is Jesus Christ. Now if anyone builds on the foundation with gold, silver, precious stones, wood, hay, straw–each man's work will become manifest; for the Day will disclose it, because it will be revealed with fire and the fire will test what sort of work each one has done. If the work which any man has built on the foundation survives, he will receive his reward. If any man's work is burned up, he will suffer loss, though he himself will be saved, but only through fire. Do you not know that you are God's temple and that God's Spirit dwells in you? If anyone destroys God's temple, God will destroy him. For God's temple is holy, and that temple you are.

Whether Paul sought to combine a Christian appropriation of the Judaic temple with Greek architectural thought remains doubtful; nevertheless, an architectural analogy would have been particularly appropriate when addressing the Corinthians. Within the Roman *imperium,* the city had lent its name to the architectural canon. Paul portrays the history of the early church as a construction project that

has already undergone several planning stages. The relationship between the Gospels and Paul's own writings is explained as a direct foundation-edifice relationship. The new urban religious communities and the individual believers are conceived as parts of a larger construction. Paul articulates an early version of the antiornamental dogma that the Enlightenment and modern design have used against facade decorations. The insistence on a strong foundation over ornamentation is augmented by eschatological terms. The fire that tests the structure alludes to the Final Judgment.[80]

Paul's reference to himself as an experienced master builder (*sophos architekton*) allowed later theologians to connect the New Testament with Plato's *Timaeus*. The architect oversees many different operations, conveys orders to the various workers, and, presumably, knows how the final structure will appear. As Genesis indicates, construction sites (ancient and modern) have a confusion of languages and nationalities. By calling himself an architect, Paul is positing a similarity between his own role as a missionary and the direction of a construction site, reinforcing the analogy between the establishment of a Christian community and raising a temple. A long tradition reads the references to a temple as an allusion to the one in Jerusalem, suggesting thus that Christian faith, understood both as a community and as a spiritualized temple within the believer, restores and replaces the destroyed Jewish temple.[81] The exact status of the temple Paul describes has of course led to competing interpretations. Luther's contemporary Philipp Melanchthon, in his commentaries on First Corinthians, noted how fond Paul was of the temple analogy. In a gentle reference to the papacy, Melanchthon posits the temple within as a spiritualization of the cultic rituals practiced within stone temples.[82] Yet another line of analysis understands Paul's references to himself as a master builder as an effort to quell dissent within the Christian community. Certainly the epistle warns strongly against factionalism within the Corinthian church. The architectural metaphor could readily be understood as supporting the later church, as it promoted concord under Paul's leadership.[83] Regardless of the varied ideological implications of the passage, the allusion to architecture set a rich precedent for later speculation. Medieval texts gave a privileged place to the terms derived from 1

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80. Still, fire was also an obvious danger in any ancient, narrowly packed city. The historic city of Corinth had been reduced to ash by the Roman army in 146 B.C. only to be restored as a Roman settlement by Caesar a hundred years later in 27 B.C. At the time of the epistle, the city was a vibrant commercial center replete with construction sites. Wolfgang Schenk, "Korintherbriefe," in *Theologische Realenzyklopädie* (Berlin: Walter de Gruyter, 1990), 19: 624.

81. John Lanci, *A New Temple for Corinth: Rhetorical and Archaeological Approaches to Pauline Imagery* (New York: Peter Lang, 1997), 7–9.

82. Philipp Melanchthon, *Annotations on First Corinthians,* trans. John Patrick Donnelly (Milwaukee: Marquette University Press, 1995), 61.

83. Charles Wannamaker, "A Rhetoric of Power: Ideology and I Corinthians 1–4," in *Paul and the Corinthians: Studies in a Community in Conflict; Essays in Honour of Margaret Thrall,* ed. Trevor J. Burke and J. Keith Elliott (Leiden: Brill, 2003), 131–133.

Corinthians: *aedificium, domus, fabrica, structura,* and *machina* were frequent theological terms defining the church.[84]

Mary Carruthers argues that the New Testament's architectural trope was spiritualized well before the Reformation. She suggests that medieval theologians combined ancient Roman rhetorical mnemonic techniques with Paul's image of the temple within every believer so that the foundation and the edifice images were understood in meditative terms as the faithful Christians' contemplation of God. Hugh of St. Victor's *Didascalicon,* a frequently cited medieval text, presented an already well-established practice wherein the work of construction guided Christian contemplation. He paraphrased Pope Gregory the Great when he advised: "As you are about to build … 'lay first the foundation of history; next, by pursuing the 'typical' meaning, build up a structure in your mind to be a fortress of faith."[85] Medieval meditations on scripture described the reading, elucidation, and explication of the text as requiring the techniques of a master builder. Hugh does not know the distinction between architects and masons in the Renaissance sense; nevertheless, the analogy between building and understanding a text is a recognizable precursor to modern metaphysics. Most importantly, Hugh recognizes a method in the construction of a house that he then applies to thought:

> Take a look at what the mason does. When the foundation has been laid, he stretches out his string in a straight line, he drops his perpendicular, and then, one by one, he lays the diligently polished stones in a row. Then he asks for other stones, and still others.… See now, you have come to your [reading], you are about to construct the spiritual building. Already the foundations of the story have been laid in you: it remains now that you found the bases of the superstructure. You stretch out your cord, you line it up precisely, you place the square stones into the course, and, moving around the course, you lay the track, so to say, of the future walls.[86]

Hugh is providing technical detail to the New Testament trope of the church as a house built upon a rock. As Carruthers argues, the placement of the foundation is an imaginary act, a mental exercise, wherein the monk reading scripture fits passages into his own written work.[87] The reader translates, scrapes and shapes stones to place them together in an edifice. Whereas Hugh's metaphysical building has its foundations in the soul, modern philosophy extended the excavation method to include a broader subjectivity. The mnemonic tradition, with its reliance on an architectural framework within which to organize thought, persisted well into the

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84. Henri de Lubac, *Exégèse médiévale: Les quatre sens de l'écriture* (Paris: Aubier, 1964), 2: 44.

85. Hugh of St. Victor, *The Didascalicon: A Medieval Guide to the Arts,* trans. Jerome Taylor (New York: Columbia University Press, 1961), 138.

86. *Didascalicon* 6:4, quoted in Mary Carruthers, *The Craft of Thought* (Cambridge: Cambridge University Press, 1998), 20.

87. Carruthers, *Craft of Thought,* 20.

eighteenth century. Even as the degree of data to be collected and stored grew tremendously, knowledge in all its various permutations was understood as contained within an architectural space.

René Descartes makes quite explicit that his method based on doubt employs Renaissance building techniques.[88] Critical reason's self-examination operates akin to the excavation of a new foundation. Antonio Negri traces the networks of metaphors, house, path, and fable that stretch between Descartes and the Renaissance.[89] The web of metaphor brings Descartes closer to the humanist world; it reveals the pull of fifteenth-century Italy on modern epistemology and the attempt to organize the sciences according to well-established rational principles. The opening passage of Descartes' *Meditations on First Philosophy* makes explicit a comparison that Leon Battista Alberti, the author of the first Renaissance architectural treatise, might have recognized:

> Some years ago I was struck by the large number of falsehoods that I had accepted as true in my childhood, and by the highly doubtful nature of the whole edifice that I had subsequently based on them. I realized that it was necessary, once in the course of my life, to demolish everything completely and start again right from the foundations if I wanted to establish anything at all in the sciences that was stable and likely to last.[90]

For much of his intellectual career Descartes relied on the architectural analogy to respond to his opponents. In one reply to critics, Descartes writes that his radical doubt and his reliance on cogito, ergo sum was analogous to the laying of a building's foundation:

> Throughout my writings I have made it clear that my method imitates that of the architect. When an architect wants to build a house which is stable on ground where there is sandy topsoil over underlying rock, or clay, or some other firm base, he begins by digging out a set of trenches from which he removes the sand, and anything resting on or mixed in with the sand, so that he can lay his foundations on firm soil. In the same way, I began by taking everything that was doubtful and throwing it out, like sand; and then, when I noticed it was impossible to doubt that a doubting or thinking substance exists, I took this as the bedrock on which I could lay the foundations of my philosophy.[91]

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88. Claudia Brodsky, *Lines of Thought: Discourse, Architectonics, and the Origin of Modern Philosophy* (Durham, NC: Duke University Press, 1996); Abraham Akkerman, "Urban Planning in the Founding of Cartesian Thought," *Philosophy and Geography* 4.2 (2001): 141–167.

89. Antonio Negri, *Political Descartes: Reason, Ideology, and the Bourgeois Project,* trans. Matteo Mandarini and Alberto Toscano (London: Verso, 2006), 35–39.

90. Descartes, "First Meditation," in *Selected Philosophical Writings,* 76.

91. Descartes, *The Philosophical Writings of Descartes,* trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch (Cambridge: Cambridge University Press, 1984), 2: 366 (DV2 OBR ObRp7 ap. 536).

The Vitruvian question of what education properly defines an architect, and the professional rivalries of the construction site, enter Descartes' polemics when he dismisses his critic as "a jobbing bricklayer who, because he wants to be regarded as a professional expert in his town, has a grudge against an architect who happens to be building a chapel in his town, and looks for every opportunity to criticize his work."[92] "Descartes deploys the foundation metaphor in his "Discourse on Method" as a means of differentiating between forms of knowledge. Describing himself as a young man at university, Descartes explains that he preferred philosophy because it was more "fundamental": "As for the other sciences, insofar as they borrow their principles from philosophy, I decided nothing solid could have been built upon such shaky foundations."[93]

Descartes' description of laying bare a foundation mentions many of the details that Alberti spells out in book 3 of *On the Art of Building,* though with a key difference. Alberti warns that only the inexperienced tear away the entire foundation of an old building. Clearing a space entirely is a sign of an architect who cannot read the angles of what lay there before: "[The inexperienced] send in demolition men, wielding their mallets with less restraint than they would against their enemies, to ruin and destroy everything."[94] He counsels architects not to show disrespect toward their ancestors. Roman ruins were an important source of knowledge for fifteenth-century architects.[95] Furthermore, modern architects often cannot finish the grand projects they have begun. Thus they ought to leave old buildings intact. Alberti's advice may be pragmatic, but it also reflects his attitude toward antiquity generally.

Moreover, Alberti's respect for old foundations shows the skill of a practiced courtier who appreciates the danger inherent in advocating their complete removal. It might be tempting to interpret the difference between Alberti's willingness to renovate the old and Descartes' urge to clear it away as marking the turning point at which radical modern thought commences. What Descartes and later philosophers borrow from Alberti is his insistence that the architect carefully examine the ground around an old foundation before proceeding with the new:

> All the more to be blamed are those who, without taking the trouble to seek out a naturally solid piece of ground suitable for bearing the weight of a building, find leftovers of some ancient ruin and rashly use them as the base for a wall of considerable size, without inspecting the dimensions and their state of repair closely enough.[96]

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92. Descartes, *Philosophical Writings,* 2: 366.
93. DV1 DMT ap. 8 p. 115.
94. Leon Battista Alberti, *On the Art of Building in Ten Books,* trans. Joseph Rykwert, Neil Leach, and Robert Tavernor (Cambridge, MA: MIT Press, 1988), 62.
95. James Ackerman, "Architectural Practice in the Italian Renaissance," *Journal of the Society of Architectural Historians* 13.3 (1954): 4.
96. Alberti, *On the Art of Building,* 64.

Despite his inclination to build anew, Descartes, too, finds it necessary to preserve ancient edifices when he considers the political implications of his sweeping method. In the opening to the second section of the "Discourse on Method," Descartes traces the link between war and reconstruction. He begins biographically by describing his travels in Germany during the Thirty Years' War yet soon digresses into contemplation about city planning. Caught in a cold German winter, Descartes shuts himself up in a small room to write. Among his first thoughts is the proposition that a work composed by a single man is usually more perfect than one produced by several. A glance at architecture, he claims, proves the point: "Thus we see that buildings undertaken and completed by a single architect are usually more attractive and better planned than those which several have tried to patch up by adapting old walls built for different purposes."[97] Implicit in the sequence of Descartes' writing—the very fact that Descartes begins with this claim—is the analogy between philosophical reflection and the cohesion of an architectural plan. Descartes presents this first thought as if it were a random one, the first of a stream of ideas without any hierarchy, yet as his reflections on the comparison unfold, it becomes clear that this first statement characterizes his overall method. As Claudia Brodsky notes, "What Descartes *thinks* takes the image of what an architect *does*."[98] His reflections center on the individual's self-investigation, an enterprise undertaken without overt reference to established intellectual or ecclesiastical authority. Descartes presents the proposition of the superiority of a work from a single author as if it came to him in isolation, without mention of a possible source, yet his immediate turn to architecture suggests that Descartes had read treatises on the subject.

By setting his comparisons between architecture and philosophy within the scene of a war in Germany and the coronation of an emperor, Descartes sets in motion a series of correspondences between buildings and governments, both of which were being razed and defended with the greatest energy.[99] He pauses in his argument to discuss the parallels between governments and cities. With the reliance on architectural theory as a philosophical mode of thought comes the critique of the disorderly development of traditional European cities. Alberti and his successors had reiterated the analogy that a grand house was organized as a small city and that a city ought to have the same coherence as a well-designed house. In theoretical terms, the difference between orderly houses and towns was only a matter of scale. When modern thinkers such as Descartes and Goethe have drawn analogies

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97. Descartes, "Discourse on Method," in *Selected Philosophical Writings,* 25.
98. Brodsky, *Lines of Thought,* 32.
99. Timothy Reiss makes the same argument: "Such a context [Descartes' reference to the Thirty Years' War] is of fundamental importance to the *Discourse,* and the implicit goals of an ostensibly 'mere' philosophical method are immediately politicized, through the use of the architecture metaphor." Timothy J. Reiss, "Power, Poetry, and the Resemblance of Nature," in *Mimesis: From Mirror to Method, Augustine to Descartes,* ed. John Lyons and Stephen Nichols (Hanover, NH: University Press of New England, 1982), 222.

between architectural theory and their own educations, they have often used the medieval city as their contrary image, the thing they wish to overcome. Descartes writes: "Ancient cities which have gradually grown from mere villages into large towns are usually ill-proportioned, compared with those orderly towns which planners lay out as they fancy on level ground."[100] When they use architectural metaphors to describe the subject who over time reflects about the conditions for his existence, they often equate this process with city planning, in which the self is laid out according to a disciplined design. The disordered layers of the medieval city offer a striking contrast to the architect's promise of clarity and control.[101]

Recent historians of medieval cities have shown that the disorder of Europe's oldest cities was only apparent.[102] Keith Lilley emphatically rejects the characterization of medieval cities as a random hodgepodge: "Some historians would have us believe that the formation of new urban landscapes outside castles and abbeys was a 'spontaneous' process. In reality, however, these institutional urban landscapes were a product of careful, controlled development overseen by local lords.... The landscapes of these new towns were designed so as to reinforce the political and economic position of the town's lord..., hence the close juxtaposition between the town and its host institution."[103] Lilley writes that modern conceptions about medieval cities are guided by Le Corbusier's critical remarks about their development.[104] However such modernist characterizations were derived from much older lineage. Descartes and the urban planners of the Enlightenment were clear precursors to Corbusier's claim that the medieval city street followed the path a donkey would take across rough terrain. Even if Lilley does not recognize that the negative stereotypes of medieval cities are much older than modernism, it is important to follow his point that the layout of medieval cities was not random but instead reflected the economic and legal pressures that determined the subdivision of plots and the varying scales of construction squeezed together in a society without modern divisions of labor and private life.[105] Many towns were founded during the course of medieval colonial expansion in central Europe and the western British Isles. A newly founded town would have a castle with a residential neighborhood for craftspeople just outside its walls; the ability of the authorities to survey

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100. Descartes, "Discourse on Method," 25.

101. Lewis Mumford uses this passage from Descartes to summarize the mentality that produced the "baroque city." Lewis Mumford, *The City in History* (New York: Harcourt, 1961), 393.

102. The canonical studies are Henri Pirenne, *Medieval Cities: Their Origins and the Revival of Trade,* trans. Frank Halsey (Princeton, NJ: Princeton University Press, 1952); Edith Ennen, *The Medieval Town,* trans. Natalie Fryde (Amsterdam: North Holland Publishing, 1979); for research that augments Pirenne's economic history with an account of how space is occupied symbolically, see Marc Boone, "Urban Space and Political Conflict in Late Medieval Flanders," *Journal of Interdisciplinary History* 32.4 (2002): 621–640, as well as other essays in this special issue.

103. Keith Lilley, *Urban Life in the Middle Ages, 1000–1450* (New York: Palgrave, 2002), 145.

104. Ibid., 18–21.

105. Horst Ossenberg, *Das Bürgerhaus in Oberschwaben* (Tübingen: Ernst Wasmuth, 1979), 17–18.

the populace was assured by the proximity of the fortress, which at the same time impressed the master onto the populace. Commercial developments led later to the laying out of marketplaces and streets at some remove from the castle yet arranged in such a manner that they could be regulated by the lord. Towns would have successive waves of settlers, each assigned a quarter in which to live. The tendency was for new settlers to live in one area rather than be distributed across the city, thereby allowing them to form a cohesive neighborhood within the larger town. What later seemed like random disorder was the result of layering on new inhabitants in increasingly dense towns, coupled with the disappearance of those trades that originally defined a neighborhood.

Descartes writes his criticism of medieval towns at a point when its central structure, the castle, was no longer a valuable military asset. The changes in artillery and the resulting response in fortifications meant that the high-walled castle offered little protection against cannon fire. Since the fifteenth century, the Italians had developed new expansive fortifications, which surrounded the entire town and took up considerable space outside the city limits. When Descartes writes that towns are more attractive when they are laid out by one authority, he is calling for a reenactment of the founding moment, one that frequently occurred between the tenth and thirteenth centuries when a count established a town by recruiting settlers to build near his castle. The new military tactics of the seventeenth century, coupled with the centralization of authority, meant that a castle surrounded by a feudal town no longer provided an effective defense. Descartes, by criticizing the layout of cities, is making an indirect attack on the persistence of feudal orders in an increasingly absolutist state. City planning becomes an indirect means for Descartes to "sweep away" older institutions. The supposed chaos of the medieval city reflects the layers of rights and privileges that confronted the absolutist monarch.

While Descartes praises projects designed by a single author, he is very cautious about the political and social implications of this argument. His complaint against the accumulation of styles in a medieval city could have easily been read as a criticism of the many, often contradictory feudal rights and privileges that legitimated the seventeenth-century state. No monarch was prepared to eliminate tradition, and after praising Sparta because it was founded according to the principles of a single lawmaker, Descartes takes a few cautious steps back. Buildings, and by implication states, are not razed simply to be rebuilt in a more attractive manner. Descartes becomes cautious here because he wishes to limit his architectural metaphors so that they do not apply to politics.[106] To discuss the foundations of thought is one thing; to raze the House of Valois is another thing entirely. Descartes' comments about the well-structured city differ from Thomas More's in *Utopia,* for Descartes refrains from the polemics implicit in the description of a distant, perfect society.

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106. Timothy Reiss makes a similar point in "Power, Poetry, and the Resemblance of Nature," 222.

The radical propositions of More's utopia, where private property is abolished, take clear aim at the suffering produced by the concentration of power in feudal England.[107] More was himself a cautious and diplomatic writer, familiar with the temper of kings, yet Descartes is even more so.[108] To temper any revolutionary architects, he states explicitly that it would be unreasonable for one individual to reform the state by changing its foundations or by dismantling it so as to reconstruct it. Having set limits to the range of his metaphor by loyally and arbitrarily denying any possible political implications, Descartes returns to the epistemological question of individual belief. On the plane of opinion, Descartes allows the analogy between thought and architecture much more range than in politics: "Regarding the opinions to which I had hitherto given credence, I thought that I could not do better than undertake to get rid of them, all at one go, in order to replace them afterwards with better ones, or with the same ones once I had squared them with the standards of reason. I firmly believed that in this way I could succeed in conducting my life much better than if I built only upon old foundations."[109] By removing his architectural analysis from politics onto the self, Descartes replaces one metaphorical connotation with another. If the critical examination of a dynasty and the state was not acceptable, then Descartes extends his architectural method to himself. By dint of having turned away from the house of politics, Descartes asserts a correspondence between subjectivity and architecture. Yet he feels obliged to redirect his metaphor because of the method it implies. If a thing is like a house, then it needs to be examined according to the professional standards of an architect and an engineer. The trouble for Descartes is not that the monarch would object to this analogy, but rather that he would find offense in the application of Descartes' architectural method. The metaphor has a new potency because of the method it suggests, not because of any quality inherent in the image alone. A house alone is not disturbing to the monarchical state; however, a house examined according to the architectural standards Descartes considers relevant would be a political threat to the established order. Given the confidence with which he describes the work of building, one wonders from whence Descartes derives his understanding of architectural practice. Why are the activities of an architect comparable to his own philosophical enterprise? Descartes can compare his method to architecture's because he has a specific norm of architectural thought and action in mind. Implicit within the analogy between architecture and philosophy is a definition of both professions.

Descartes' skeptical use of the building metaphor has a Christian connotation. As much as Descartes was taken as a skeptic of faith, the foundation metaphor

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107. Thomas Nipperdey, "Die Funktion der Utopie im politischen Denken der Neuzeit," in *Gesellschaft, Kultur, Theorie* (Göttingen: Vandenhoeck & Ruprecht, 1976), 77.

108. See Stephen Greenblatt, *Renaissance Self-Fashioning: From More to Shakespeare* (Chicago: University of Chicago Press, 1980), on the tension between service to the state and the secluded thought of a humanist in More's writing.

109. Descartes, "Discourse on Method," 26.

hearkens back to 1 Corinthians as well as to the New Testament parable in which the faithful man builds a house on rock and the frivolous man on sand. This parable along with Christ's reference to the apostle Peter as the rock on which the church is built have had central importance for the Catholic Church. The Reformation aggressively put forth the fortress as a symbol of Protestant faith. Martin Luther rewrote the Forty-Sixth Psalm into the standard hymn of German religious rebellion: "Ein feste Burg ist unser Gott" (A Mighty Fortress Is Our God). Luther's most famous pamphlet against the papacy, *Open Letter to the Christian Nobility* (1520), is structured as an assault on "the three walls of the Romanists" and is saturated with images of fortification and besiegement. The rhetorical equation of fortresses with systems of belief was a familiar legacy after the Reformation with the many sieges of the Thirty Years' War. Fortifications not only protected institutions such as the Catholic Church; they also preserved individual virtue.[110] While the enigmatic term certainly shifted from the early church to the eighteenth century, the ability of the right-thinking persons to resist external force, whether fire, siege, or heresy, was shown to depend on the same architectural terms: solid foundations and walls.

These diverse associations overlap so often in early modern German thought that one cannot be surprised that Kant's engagement with architecture came early in his academic career. Already in his first essays on cosmology he relies upon the terminology of classical architectural theory. Because Kant did not leave a library behind after his death, we cannot reconstruct which books he read with any certainty. However, anecdotal accounts of his early lectures indicate that Kant was well read in military architecture. The first biographical studies on his life refer to his intense interest in the science of fortification, with its allied fields of ballistics, mechanics, and hydraulics; later scholars, however, downplayed the pragmatic aspects of early modern science in order to present Kant as a "purer" thinker.

To find the architecture in Kant, we need to consider the disciplinary definitions of mathematics in the eighteenth century. A hundred years after the fact, Friedrich Schubert directly connected Kant's knowledge of military sciences with his lectures on mathematics.[111] Starting with the 1755 winter semester and continuing for

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110. Erhard Weigel's *Wienerischem Tugend-Spiegel* (1687) has female representations of virtue hovering behind Vienna's newly constructed defenses against Ottoman attack. Ulrich Schütte, "Fortifizierte Tugend, praktische Philosophie, Mathematik und Gedächtniskunst in Erhard Weigels *Wienerischem Tugend-Spiegel* (1687)," in *Seelenmaschinen: Gattungstradition, Funktionen und Leistungsgrenzen der Mnemotechniken vom späten Mittelalter bis zum Beginn der Moderne,* ed. Jörg Jochen Berns and Wolfgang Neuber (Vienna: Böhlau, 2000), 661–673.

111. Friedrich Wilhelm Schubert, *Immanuel Kant's Biographie,* in *Immanuel Kant's Sämmtliche Werke,* ed. Karl Roesenkranz and F. W. Schubert (Leipzig: Leopold Voss, 1842), 35. Emil Arnoldt, who later compiled the extensive catalog of Kant's lectures, mentions Schubert's assertion that Kant lectured on fortifications, but finds no official announcement for a specific lecture on fortifications in the university archive. Arnoldt does not consider that the mathematics lectures, which relied on Wolff's treatise as a textbook, would have readily included discussions of fortifications and architecture. Emil Arnoldt, "Möglichstvollständiges Verzeichnis aller von Kant gehaltenen oder auch nur angekündigten Kollegia," in *Gesammelte Schriften,* ed. Otto Schlöndörffer (Berlin: Bruno Cassirer, 1909), vol. 5.

another ten years, Kant lectured on mathematics using Christian Wolff's works as his textbook. "Wolff's texts," Lisa Shabel notes, "were representative of the state of elementary mathematics when Kant was writing the *Critique*."[112] Like most early modern writers on the subject, Wolff included architecture and fortification as subfields of his treatise on mathematics.[113] Kant's reliance on Wolff for his own mathematics lectures would have made it easy to indulge in considerations of artillery fire and siege defense, two topics that were serious concerns in Prussia. There is also the testimony of a Polish nobleman, Wannowski, who received lessons from Kant during the Russian occupation of Königsberg. He recalled that Kant was particularly attentive to fortifications and military architecture in general, as well as pyrotechnics.[114] Kant may not have risen to the obsessive heights of Uncle Toby in *Tristam Shandy,* yet his interest in fortifications would not have been a strange habit; rather, it would have been one of the hotly discussed topics of the day. Presumably, Kant's knowledge of the military applications for mathematics was more than just passing. When the Russian army occupied Königsberg during the Seven Years' War, the commanding general asked Kant to lecture his officers in mathematics.[115] While we have no information about the content of these lectures, they are certain to have included the same geometry and trigonometry that went into solving such ballistics problems as calculating the trajectory of a cannonball.[116] After the Russians' withdrawal, the returning Prussian general Meyer asked Kant to continue his lessons. Frederick the Great laid much emphasis on educating his officers, and so eventually established a small military academy in Königsberg.[117] For all his domains, he established the Oberbaudepartment, a precursor of the later, more famous Berlin Bauakademie, largely as an economic measure to help rebuild the farms and cities in East Prussia that had been devastated during the war.[118] Kant would have certainly been witness to this construction drive.

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112. Lisa Shabel, "Kant on the 'Symbolic Construction' of Mathematical Concepts," *Studies in the History of Philosophy and Science* 29.4 (1998): 599.

113. Jörg Biesler, *BauKunstKritik: Deutsche Architecturtheorie im 18. Jahrhundert* (Berlin: Reimer, 2005), 62–65. While Biesler's work is the most recent architectural history to discuss Wolff, Biesler provides no additional secondary literature in his commentary.

114. "Auf Fortification und überhaupt Architectura militaris und Pyrotechnie war er sehr aufmerksam." Rudolph Reicke, *Kantiana: Beiträge zu Immanuel Kants Leben und Schriften* (Königsberg: Thomas Theile, 1860), 40. Karl Vorländer describes Wannowski's relation to Kant in *Immanuel Kant: Der Mann und das Werk* (1924; repr., Hamburg: Felix Meiner, 2003), 1: 96.

115. Manfred Kuehn also cites Wannowski in connecting Kant's interest in fortifications with the mathematics lessons he gave Russian officers. Manfred Kuehn, *Kant: A Biography* (Cambridge: Cambridge University Press, 2001), 114.

116. Calculating the trajectory of a heavy object thrown into the air was one of the first lessons of mechanics. J. A. Eytelwein, one of the founders of the Prussian Bauakademie, opens his *Handbuch der Mechanik fester Körper und der Hydraulik* (Berlin: Lagarde, 1801), 18, with such an analysis.

117. Kuehn, *Kant,* 127.

118. Marlies Lammert, "Akten neu gelesen, Oberbaudepartment und Bauakademie um 1800," in *Mythos Bauakademie: Die Schinkelische Bauakademie und ihre Bedeutung für die Mitte Berlins* (Berlin: Verlag für Bauwesen, 1997), 143.

While German translations and commentaries on Vitruvius were widely available in the eighteenth century,[119] the most likely immediate source from which Kant would have acquired the classical tradition was Christian Wolff's multi-volume treatise on mathematics, *Anfangsgründe alle mathematischen Wissenschaften,* which included a two-hundred-page subsection *Anfangs-Gründe der Bau-Kunst.*[120] Because classical treatises were devoted to lengthy discussions of the proper proportions for the orders, architecture was treated as a subfield of mathematics. Wolff indeed provides tables and drawings detailing the specific differences between the orders taken from the well-known German authority, Nicolaus Goldmann, whose *Entwurff dehr Baukunst* appeared in 1663.[121] Wolff's titles employ the foundation metaphor to explain that the treatise provides readers with the basic information. Wolff's work is encyclopedic, a quality Kant would later criticize as a manner of writing that avoids epistemological reflection. While comparing the differences between the most important Renaissance treatises, Wolff summarizes the Vitruvian principles. Like Perrault, Wolff is conscious that the Italian treatises differed on matters of proportions, so to avoid any problems of consistency, he simply picks Goldmann's ratios as his arbitrary standard. Nevertheless, the reader is given enough commentary to become acquainted with the most prominent foreign authors. Vitruvius is mentioned on the first page, though Wolff agrees with Scarmozzi and others that not all of his statements are to be taken at face value. As Wolff's work went through many editions, he incorporated the judgments of Alberti, Palladio, and Vignola into short footnotes, while also making sure to summarize the debate between Perrault and Blondel.[122]

John Zammito has argued that Wolff introduced a mathematical ideal into German philosophy very much in the spirit of Descartes and other seventeenth-century metaphysicians.[123] Wolff begins by pointing out that architecture has not always been considered a science, particularly not as a subsection of mathematics, and thus he makes the case that it should be taught at universities:[124] "Until

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119. Erik Forssman, *Goethezeit: Über die Entstehung des bürgerlichen Kunstverständnisses* (Munich: Deutscher Kunstverlag, 1999), 34–35: "Eine vollstandige Übersetzung ins Deutsche erschien 1548 in Nurnberg unter dem Titel, "Vitruvius Teutsch". Die Baumeister brauchten allerdings die Zehn Bucher oder richtiger 10 Kapitel dieses schwierigen und umstandlichen Textes nicht unbedingt im Original zu lesen: Zahlreiche Exegeten hatten seit dem Cinquecento die wichtigsten und notwendigsten Teile daraus exzerpiert, in faßlicher Form dargestellt und illustriert." For the most recent commentary on *Vitruvius Teutsch,* see Biesler, *BauKunstKritik,* 19–23.

120. Christian Wolff, *Anfangsgründe alle mathematischen Wissenschaften,* in *Gesammelte Werk,* ed. J. E. Hofmann (Hildesheim: Olms, 1973), vol. 12.

121. On Goldmann's singular importance as the first independent German treatise, see Biesler, *BauKunstKritik,* 31–40.

122. The first edition appeared in 1710. The reprinted edition most readily available today is the seventh, which appeared in 1750.

123. Zammito, *Kant, Herder, and the Birth of Anthropology,* 19.

124. Modern historical scholarship confirms the lack of academic training among early modern German builders; see Reinhart Strecke, *Anfänge und Innovation der preußischen Bauverwaltung: Von David Gilly zu Karl Friedrich Schinkel* (Cologne: Böhlau Verlag, 2000), 9: "Von außergewöhnlichen

recently architecture was practiced mostly as a hand craft. For that reason, one hardly wanted to dignify the profession by placing it among the mathematical sciences. And yet, because of her great usefulness in human life, she deserves to be taught properly at academies and to be learned vigorously by youthful students."[125] Presumably Wolff has a German context in mind, for his references to Italian sources suggest that he does not mean to claim that architecture has not been studied scientifically abroad. His opening repeats the move of so many eighteenth-century writers: he presents a nervous justification to treat architecture as a serious academic discipline.

One implication of Wolff's mathematical thought was that all knowledge needed to be organized into systems. Fittingly, he cites the canonical list: "Vitruvius rightfully requires of a competent builder that he demonstrate fundamental knowledge. Until recently few have concerned themselves with this."[126] For Wolff, the intellectual standing of architecture has changed little since Augustan Rome. As was common until the end of the eighteenth century, Vitruvius's work is treated as a handbook for construction technique. When discussing how to cut and cure lumber, Wolff quotes Vitruvius and Alberti before mentioning recent experimental observations made by the Dutch scientist Anton van Leeuwenhoek (1632–1723).[127] The accumulated criticisms of Vitruvius over the centuries did not diminish the sense that architecture existed in a single temporal continuum from Rome to the eighteenth century. Wolff means to elevate the field by incorporating it into mathematics, a strategy also employed by Sebastian Serlio (1475–1554), whom Wolff does not seem to have read, even though a German translation of his *Five Books on Architecture* had already appeared in 1609.[128] Unlike Serlio, Wolff does not provide a detailed account of how architecture integrates itself into mathematics. Whereas Serlio claimed that perspective painting mediated the connection between building and mathematics, for Wolff the mathematical component lay in the rules of proportion for the orders, a position also espoused by Serlio.

Without question Wolff's re-presentation of the classical tradition is imbedded in the politics of building in early modern Germany. More directly than many authors, Wolff points out that the scientific character of architecture serves the client. The architect never stops being a courtier even as he aspires to philosophy. The awkwardness of the relationship between these two roles shows

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Großbauprojekten abgesehen lief der eigentliche Baubetrieb im einzelnen nach wie vor als überkommener, traditionsgeleiteter, unreflektierter Praxisvollzug ab. Planungen und Ausführungen eines Bauwerks folgten im allgemeinen überkommenen Faustregeln und Erfahrungswerten, wie sie—wenn sie überhaupt schriftlich fixiert wurden—in handwerklichen Vorlagewerke ohne wissenschaftlichen Anspruch tradiert wurden."

125. Wolff, *Anfangsgründe,* 303.
126. Ibid.
127. Ibid., 317.
128. Sebastian Serlio, *Von der Architectur, Funff Bücher,* trans. Ludwig König (Basel, 1609).

itself in the syntax of Wolff's explanations. He opens his work with the state-ment "Architecture is a science" (Die Bau-Kunst ist eine Wissenschaft) and then immediately compromises the autonomy of that *Wissenschaft* by stating that a building must completely agree with the purposes of the client, "Der Bau-Herr." When in the next paragraph Wolff again characterizes the architect in Vitruvian terms, he adds an extra clause. The architect is indeed supposed to provide a full, rational account of his building, but "so that the building measures to the inten-tions of the Bau-Herr." Rationality is at the service of the prince. The final judge of a building's purpose remains the client, a statement that could find support in Vitruvius's many appeals to the emperor yet is not made nearly as directly by Alberti or Palladio. Wolff's writing spells out the tension that still defines the debate over architecture's autonomy, whether the architect ought to serve the client first or establish a theoretical agenda independent and critical of existing social relations.

Wolff presents a standard for judging a building that points to Kant's later concept of the architectonic of all knowledge while also giving a pragmatic ac-count of how to interpret a building. Wolff argues that the rules of architecture were discovered and applied to buildings to facilitate rational judgments. He then mediates between the firm belief that buildings are to be designed according to rationally grounded norms devolved from antiquity and the eighteenth-century inclination to judge architecture according to subjective standards. To bridge the gap between these two principles, he argues that judgments of taste are not im-mediately universal; rather, they are grounded in one specific person: the client. In this remarkably baroque maneuver, the prince is the instance that links the classical orders with vagaries of judgment. His judgment is the only one that de-termines how the classical rules are applied. Wolff, unlike Perrault, incorporates absolutist politics into architectural theory. Wolff and Perrault both refer to the power of the court to determine the shape of buildings, but the Frenchman does not affirm the absolute authority of the prince as client to make judgments. Wolff aspires to provide architecture with "proper and sufficient foundations" as a sci-ence, which rests for him not only on the ability of the architect to rationally justify his construction, but also on his ability to satisfy princely purposes. Once past the pragmatics that both compromise and define architectural practice, Wolff elabo-rates the key terms of classical theory by moving sequentially through a version of the Vitruvian categories. He lists off that a building needs to be "fest" (secure, firm), "bequem" (comfortable), "vollkommen" (complete, perfect), and "schön" (beautiful). The term *Vollkommenheit* mediates between comfort and beauty, in the sense that a well-constructed building has fully integrated and thought through components that satisfy the prince and give the appearance of beauty. The circle draws tighter when Wolff defines beauty as the ability to please; thus the perfection of a building lies in its ability to comfort and please the client. Pro-portions in the layout of a building are likewise called beautiful because they are

easily recognized.[129] The notion that a building's elements need to be integrated into a whole can be detected only vaguely in Wolff's theory. The Neoplatonic legacy lingers but is quickly overwhelmed by the presence of the prince as final arbiter. The need to present a beautiful whole is not an end in itself; rather, it justifies the use of ornamentation and other illusions to cover flaws in the building's design. Wolff, of course, warns against excess ornamentation, but only after he has stressed its political necessity. While it is added only after the building has been completed, ornament compels onlookers to take the building seriously. Ornament has for Wolff the same political expediency as other princely spectacles, from executions to feasts: the need to present an easily recognized image of total monarchical domination.

Regardless of how thoroughly he integrated classical theory and absolutist authority, Wolff's treatise would have provided Kant and many other rural Germans with the basic architectural terminology. As much as Kant disagreed with Wolff's explanation of beauty, the work would have given Kant the terminology, which he then used to describe the architectural qualities of metaphysical systems. He would also have found citations from the canonical treatises. In time, Kant evaluated Wolff's own system in precisely these terms. He often referred to Wolff's metaphysics as an absurd construction. In lectures he remarked that Wolff that was not an architectonic thinker: that is, he did not apply the classical principles of symmetry and organic integration to his own system. Wolff may have described classical architectural theory, but unlike Kant he did not apply its categories to his own thought. "Wolff was a speculative and not an architectonic philosopher and leader of reason. Actually he was not a philosopher, but rather a great artist of the human desire for knowledge, as so many people still are." (Wolff war ein speculativer aber nicht ein architectonischer Philosoph und Führer der Vernunft. Er war eigentlich gar kein Philosoph sondern ein großer Künstler vor die Wißbegierde der Menschen so wie es noch viele sind.)[130] As biographers have pointed out many times, the young Kant was himself one of those readers lusting for knowledge, who read everything he could find. Wolff would have been a rich source.

Kant's Debt to Renaissance Architectural Theory

It is relatively easy to see how "der Grund" figures as the central trope for developing a new metaphysics; however, Kant also stresses that the *Critique of Pure Reason* should be understood as a methodological sketch, not scientific knowledge. The

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129. Exact proportions are almost never visible to the eye, and thus Wolff, *Anfangsgründe,* 311, allows that the architect need not be precise in his measurements, so long as the disparities cannot be detected unaided.

130. Kant, "Philosophische Enzyklopädie," 29: 8. Kant makes this remark during his own lectures on philosophical encyclopedia, a subject that he approached with considerable caution, as his opening methodological statements make clear.

drawing, or plan, as it was described in Renaissance architectural treatises, serves Kant as a representation of his epistemological project understood as a whole, which is to say that architecture provides the language of how to conceptualize a discourse through images. Architecture moves between image and discourse; it has a heritage that connects it with both mathematics and philosophical discourse and leads Kant's argument away from the many connotations evoked by the "grounding" of philosophy.

The language of architectural images runs through the *Critique of Pure Reason,* yet to the English reader these references to Italian architectural theory are lost. The Standard English translations mute the architectural references in favor of an even more abstract terminology than even the German text provides. The changes the translation makes are of course telling. Often the German text's explicit reference to a house or building is replaced in the English by the word "structure," lending credence to Mark Wigley's suspicion that structuralism borrows from architecture without acknowledging its debt.[131] Even if the English reader understands that the German word *Wissenschaft* has a broader meaning than the English "science," the following translation from the preface positions the *Critique* more in relation to the natural sciences than to architecture. While distinguishing the *Critique of Pure Reason* from earlier cosmological treatises, Kant writes in the preface to his second edition: "It is a treatise on the method, not a system of the science itself. But at the same time it marks out the whole plan of the science, both as regards its limits and as regards its entire internal structure."[132] As a translation, the English is fair enough, but certain words do get lost in the process: "Sie ist ein Traktat von der Methode, nicht ein System der Wissenschaft selbst; aber sie verzeichnet gleichwohl den ganzen Umriß derselben, so wohl in Ansehung ihrer Grenzen, als auch den ganzen inneren Gliederbau derselben."[133] When Kant refers to "den ganzen Umriß" of his method, the English "whole plan of the science" does not convey the architectural connotation. By promising an *Umriß* Kant alludes to the classical intersection of geometry and architecture. That the *Critique* is understood as an initial outline and not a finished system of knowledge mirrors the requirement that an architect represent his intentions in a drawing before commencing to build. Whereas the architect is required to transform words into an image, Kant here states that his text has the status of a guiding image. The difference between visual demonstrations and linguistic discourse defines for Kant the difference between mathematics and philosophy.[134] The metaphor of an *Umriß* suggests that Kant would provide a spatial representation of a discursive argument, a possibility he excludes through his

131. Wigley, *Architecture of Deconstruction,* 37, 81.
132. Kant, *Critique of Pure Reason,* 25 [BXXIII].
133. Kant, *Kritik der reinen Vernunft,* 25 [BXXIII].
134. Descartes also wrote on the problem of transforming drawing, "taking an intuition of the whole," into discourse; see Brodsky, *Lines of Thought,* 92.

distinction between mathematics and philosophy, but to which he returns during his deduction of the a priori categories. Architecture and mathematics are related in that both entail the visualization of a concept. A triangle, Kant argued famously, can be intuited either through the imagination or on a piece of paper. Geometrical proofs, he argues, proceed through this visualization (*Anschauung*). Most modern critics note that Kant's assertions about mathematics are no longer applicable to non-Euclidean geometry.[135] However, if geometry can today be understood without recourse to spatial perception, classical architecture insisted that an abstract knowledge of geometry was a precondition for reflecting on the construction of a particular space. While the architectural need to make space *anschaulich* might seem foremostly a pragmatic concern not involving concepts of pure understanding, Serlio and his successors did, nevertheless, insist that drawing provided a single geometrically coherent representation of the building process. Thus, when Kant argues he is providing an *Umriß,* he is suggesting, metaphorically, that his text is a visualization of a discursive theory.

The classical tradition defined three types of drawing: a ground plan, a front view, and a perspective view. Kant uses the example of the ground plan and the perspective drawing in separate, distinct passages, suggesting a careful application of the terms to philosophy. Geometry is most aligned to the ground plan; as Werner Oechslin has shown, a tradition of commentaries starting with Daniel Barbaro's 1567 translation tied Vitruvius to a geometrical form of drawing.[136] Kant's references to his philosophy as an *Umriß* link the *Critique* to the simple, clear lines of a ground plan, as it was described in Renaissance theory. His familiarity with this older tradition is made explicit in the *Critique of Judgment* when he states that drawing is the essential feature that relates the plastic arts, including architecture, to one another:

> In painting, sculpture, and in all the formative arts—in architecture and horticulture, so far as they are beautiful arts—the *delineation* is the essential thing; and here it is not what gratifies in sensation but what pleases by means of its form that is fundamental for taste.

> In der Malerei, Bildhauerkunst, ja allen bildended Künsten, in der Baukunst, Gartenkunst, sofern sie schöne Künste sind, ist die *Zeichnung* das Wesentliche, in welcher nicht, was in der Empfindung vergnügt, sondern bloß was durch seine Form gefällt, den Grund aller Anlage.[137]

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135. A recent survey is provided by Johannes Lenhard, "Kants Philosophie der Mathematik und die umstrittene Rolle der Anschauung," *Kant Studien* 97.3 (2006): 302–311. The validity of Kant's proof for transcendental idealism based on the demonstration of an intuition of space has been strongly criticized as inadequate. Lisa Shabel, "Kant's Argument from Geometry," *Journal of the History of Philosophy* 42.2 (2004): 195.

136. Werner Oechslin, "Geometry and Line: The Vitruvian 'Science' of Architectural Drawing," *Daidalos* 1 (1981): 27.

137. Kant, *Critique of Judgment,* p. 61, para. 14; Kant, *Kritik das Urteilskraft,* 141.

The German word *Zeichnung* means not only "a sketch of lines on paper," but its cognate *Zeichen* means "a sign," so that the verb form *zeichnen* means "to show through the drawing of signs." Understood within this definition is the distinction between letters and images. *Zeichen,* by common understanding, refers to almost any sign—a sketch, gesture, sound, or event—that is not a written sign. Kant's usage follows the stricter visual usage of *Zeichnung* to mean "a visual image that is drawn, not painted."

With his discussion of a building's *lineamente,* Alberti provided the most famous presentation of the importance of geometrical drawings for architecture. *Lineamente* has been translated in various ways; however, most agree that the term is related to the lines of a ground plan.[138] Alberti distinguishes between the *lineamente* and the matter of architecture, a distinction that flows well into Kant's distinctions between sensory experience and the categories of reason. Alberti's architectural terminology was reiterated in his rhetorical practice, in that his prose enacts the very same rules of composition that he urges upon architects.[139] Kant, however, does not borrow from Alberti in order to shape his writing; instead he uses the example of the architect as a thinker who composes a plan in advance of construction as a model for his own investigation into the a priori categories that precede all rational cognition. When Alberti states that faults in buildings can be divided into faults of the mind and those of the hand, he lays out a distinction that divides the field of architecture within itself while making it an attractive source for philosophers. Kant adapts Alberti's architecture of the mind for his own epistemology. Alberti's rich discussion of the proper selection, compartition, distribution, and outline of buildings reappears in the *Critique of Pure Reason.*[140] By stating that his philosophy is foremostly an *Umriß,* Kant is working within Alberti's distinction. Furthermore, Kant understands the *Critique of Pure Reason* not as a system of knowledge, that is, as a science with empirical information about the world, but instead as a book that outlines the formal arrangement within thought. The categories give a design to the material of perception.

As difficult as *lineamente* may be to translate, the term most certainly carries the connotation of an architectural drawing, specifically one that does not portray the building in a three-dimensional perspective, but rather in the form of a ground plan.[141] Eighteenth-century manuals written for German architects reiterate the Vitruvian demand that the architect draw skillfully. The leading academies

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138. Alberti, *On the Art of Building,* 422–423.

139. Roy Eriksen, *The Building in the Text: Alberti to Shakespeare and Milton* (University Park, PA: Penn State University Press, 2001), 57–70.

140. "[Faults] of the mind are displaced, dispersed, or confused selection, compartition, distribution and outline." Alberti, *On the Art of Building,* 320.

141. S. Lang, "De Lineamentis: L. B. Alberti's Use of the Technical Term," *Journal of the Warburg and Courtauld Institutes* 28 (1965): 333.

certainly emphasized drawing as the primary skill of an architect.[142] Friedrich Meinert's preface to his *Zeichenbuch für Baukünstler und Bauhandwerker* shows how easily one could translate his admonishments to architecture students into Kant's *Kritik*.[143] Meinert stresses that without knowledge of drawing the ordinary worker is incapable of understanding the project as a whole:

> Even with the best intentions, construction workers are not in a position to undertake and complete their work without flaw, unless they have an accomplished skill in the art of architectonic drawing. Drawing or sketching gives the mason and the carpenter an overview of the entire construction project and not just in parts, and the ability to follow diligently the demands and regulations of the architect (*Baumeister*).

> Ohne Kenntniß der architectonichen Zeichenkunst, sind die Bauhandwerker mit dem besten Willen nicht im Stande, ihre Arbeiten tadelfrei zu unternehmen und zu vollenden. Zeichnen oder Reißen setzt den Maurer und Zimmermann in den Stand, einen Bau nicht nur Theilweise sondern auch im Ganzen zu übersehen, und verschaft denselben die Fähigkeit, den Willen und die Vorschrift des Baumeisters pünktlich zu befolgen.[144]

Meinert's architectural phrases lend themselves readily to Kant's building metaphor. What applies to the builder extends to the epistemologist and the systematic philosopher. The German *architecktonich* stresses the importance of comprehending a project as a whole. Both Meinert and Kant present drawing as the means of creating a plan that can then be followed by others. Like an architect, Kant expected that his initial *Umriß* would guide the work of more matter-bound laborers.

The switch from discursive argumentation to visual demonstration is reinforced by the phrase used in the second preface, "den ganzen inneren Gliederbau" [BXXII], which alludes to the Vitruvian notion that the arrangement of a building's rooms is meant to be symmetrically balanced in the manner of the human body, a quality demonstrated best through a plan or drawing. Deconstructive readings of Kant tend to focus on his use of the term "foundation"; however, Kant's architectural metaphor really posits the plan or the drawing as preceding even the foundation. The foundation metaphor has a rich heritage in modern philosophy,

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142. The Dresden academy under the directorship of Friedrich August Krubsacius divided beginning students into three classes. The first class was for students twelve and older who were intent on learning a craft. They were to be taught geometry. The second class concentrated on painting, which, in addition to geometry, included teaching perspective, chiaroscuro, and the history of ancient architecture. The third class was for architecture students who had completed the previous two levels. They were taught to compose clean, detailed plans and to draw interior and exterior views from models. Klaus Jan Philipp, *Um 1800: Architekturtheorie und Architekturkritik in Deutschland zwischen 1790 und 1810* (Stuttgart: Axel Menges, 1997), 20.

143. Friedrich Meinert, *Zeichenbuch für Baukünstler und Bauhandwerker,* vol. 1 (Leipzig: Friedrich August Lev, 1799).

144. Meinert, *Zeichenbuch,* iii-iv.

commencing with Descartes; however, the key to Kant's critical turn lies in the design that precedes material knowledge. Before the building of knowledge can commence, before even the foundation can be dug out, there exists a plan that shapes knowledge. The architectural drawing is thus ironically a more "foundational" metaphor than the foundation, for it alludes to the categories of pure understanding that organize the rational subject's empirical knowledge of the world. Before the house takes shape, it exists in the mind as an idea, a form without a corresponding intuition.

Later, when he takes up the Tower of Babel, Kant alludes to architectural treatises that emphasize the importance of a coherent plan: "We have been warned not to venture at random upon a blind project." (Wir sind gewarnt…nicht auf einen beliebigen blinden Entwurf…zu wagen.)[145] We are warned not to follow an arbitrary and blindly chosen design. The short phrase "we are warned" in the context of Kant's brief indulgence in explicit architectural metaphor is one of the few moments where a reference is made outside philosophy. The warning to plan before building is one Kant means to take seriously. External references in the *Critique of Pure Reason* are sparse. Hume and Aristotle merit mention. Descartes is never named; only his phrase "cogito, ergo sum" is granted an allusion. Thus the reference to a warning delivered to philosophy from the outside is a brief, but telling moment. Furthermore, Kant accepts it without challenge. Whereas Hume and Aristotle are critically examined, and their arguments reformulated, the advice to plan before building comes across without trouble. Kant accepts the principle in order to proceed with his comparison between thought and construction. That the precise source of this advice is never mentioned should not surprise, but its inclusion in the text indicates that Kant was familiar enough with architectural discourse to summarize one of its admittedly most basic premises. The warning is so well understood that it is reiterated in countless works; indeed, it is the basis for the entire profession of the need to plan ahead, to reflect on construction before laying the first brick, and justifies the difference between construction workers and architects. The conceptualization of the building as an entirety is held up by architecture as the feature that distinguishes the profession. It marks the difference between an architect and a well-trained, ambitious worker. By accepting this warning, Kant acknowledges the parallel between his own epistemology and classical architectural theory, the beginnings of which lie in Vitruvius and Alberti.

Alberti stresses that an experienced architect thinks through a building project in advance. Every aspect of construction should be determined beforehand so that one is not forced later to admit a mistake.[146] He gives the example of Julius Caesar, who had an entire house demolished after completion because he did not approve of its final form. Alberti organizes architecture into two fields: lineament (derived

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145. Kant, *Critique of Pure Reason,* 573; Kant, *Kritik der reinen Vernunft,* 759 [A707/B735].
146. Alberti, *On the Art of Building,* 33.

from the mind) and material (taken from nature). He lists the functions and duties of lineaments as "to prescribe an appropriate place, exact numbers, a proper scale and a graceful order for whole buildings and for each of their constituent parts, so that the whole form and appearance of the building may depend on the lineaments alone."[147] The lineaments precede and predetermine the form of the material building. Composing the lineaments of a building, however, requires no recourse to the material, just as transcendental philosophy precedes empirical knowledge: "It is possible to project whole forms in the mind without recourse to the material, by designating and determining a fixed orientation and conjunction for the various lines and angles. Since that is the case, let lineaments be the precise and correct outline, conceived in the mind, made up of lines and angles, and perfected in the learned intellect and imagination."[148] (Alberti, like Kant, states that both reason and imagination are required to compose the plan that precedes material construction, though imagination is far less well-defined than reason.) That Kant's references to transcendental philosophy as a plan for a whole reiterate Alberti's distinctions is made even more evident by the 1912 German translation of *On the Art of Building,* which translates "lineament" as "Risse."[149] Kant's use of the term *Risse* to describe the *Critique of Pure Reason* should be understood as a deliberate allusion to the distinction that isolates lineaments as a moment of critical reflection preceding construction. This process of raising and demolishing buildings Kant readily compares to the critical process of philosophical discussion. It readily stands as an allegory of Kant's own attempts at demonstrating metaphysical theories that he repeatedly revised. To build a cosmological argument only to have it torn down again later, either by a critic or by oneself, encapsulates the frustration of metaphysics and for Kant becomes a reason to abandon the cosmological theories of his early career. To avoid this embarrassment, Alberti recommends that the architect make drawings as well as build models before commencing, so that every detail might be examined. For Alberti, and then later Kant, the sketch becomes a means of anticipating critique and adjusting for it before one has asserted a principle or built a house. Alberti writes: "I will always commend the time-honored custom, practiced by the best builders, of preparing not only drawings and sketches but also models of wood or any other material. These will enable us to weigh up repeatedly and examine, with the advice of experts, the work as a whole and the individual dimensions of all the parts, and, before continuing any farther, to estimate the likely trouble and expense."[150] Drawing plans and building models compare to epistemology as

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147. Ibid., 7.
148. Ibid.
149. English translators of Alberti have defined "lineament" as "form" (Panofsky), "definition," "plan," and "schematic outlines" (Krautheimer); and the most recent translation renders the term as "lines," "linear characteristics," and "design." See Rykwert's notes on Alberti, *On the Art of Building,* 423.
150. Alberti, *On the Art of Building,* 33–34.

an effort to determine in advance what statements or constructions are possible, and under what conditions they will stand. The ease with which building terms represent theory only reinforces their interchangeability and the readiness to translate architectural language into philosophical.

The point that buildings are thought about before they are constructed was by no means self-evident.[151] Alberti's warning should not be patronizingly accepted as necessary only because it was given in the first architectural treatise written after antiquity. Kant's contemporary the French architectural theorist Étienne-Louis Boullée opens his essay on architecture with a strong argument that architecture is first a reflective practice, and not simply the craft of construction. He distinguishes sharply between the architect and the general contractor when he argues that building is secondary to conceiving a plan for a site: "In order to execute, it is necessary to conceive.…It is this product of the mind, this process of creation, that constitutes architecture." (Il faut concevoir pour effectuer.…C'est cette production de l'esprit, c'est cette création qui constitue l'architecture.)[152] Architectural theorists, like epistemologists, are prone to pause before making an assertion in order to test the conditions under which one can possibly make a statement (or raise a building). This preliminary investigation, which seeks to anticipate critique, is common to both disciplines, and it explains why the *Critique of Pure Reason* insists on its own status as nothing more than a plan or a sketch detailing the conditions of knowledge.

The concept of the whole as derived from architectural theory has several connotations. The architectonic arrangement of knowledge is meant to allow something akin to the perspective of an architectural model. By looking at the unity of knowledge, its purpose might better be understood, and any missing component recognized, as Kant claims. The architectonic has a further quality for Kant, namely, as an abstract level of analysis that overrides failures in the details. In his correspondence, Kant insists that critics should not only concentrate on specific arguments such as the transcendental deduction but should treat the work in its entirety. Clearly this defensive gesture no longer uses the whole in order to anticipate critique, but rather to dismiss it. The Kantian notion does not remained confined to the insight made possible by an architectural plan. Even in Alberti the concept of the integrated unity of a building does not depend only on the plan; rather, it is the plan that allows the architect to perceive the whole. Alberti's

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151. Ackerman states that in the Renaissance "the average palace and church was built from rough plans and a batch of details." Ackerman, "Architectural Practice in the Italian Renaissance," 8. He goes on to argue that, despite the impression given by architectural treatises, in actual practice buildings were designed in stages from the inside out.

152. Helen Rosenau, *Boullée and Visionary Architecture* (New York: Academy, 1976), 83; Étienne-Louis Boullée, *Architecture: Essai sur l'art,* ed. Jean-Marie Pérouse de Montclos (Paris: Hermann, 1969), 49. J.-M. Pérouse de Montclos notes (48 n. 3) that Alberti is the only classical theorist to separate conceptualization and execution so rigorously.

advice to draw the entire project first does not preclude an understanding of a unity that goes far beyond the material form of the building in its completion. The concept of the whole is likely to have had cosmological connotations for Alberti as it had for later philosophers, such as Leibniz. The main point is that the plan allows reflection upon the unity, as a material construction, and perhaps more.

4

How Much Architecture Is in Kant's Architectonic of Pure Reason?

Kant defines the architectonic as the art of philosophical systems.[1] Classical architectural theory, we will show in this chapter, provided Kant with a precise terminology to depict that thought that organizes experience. Unlike the a priori categories, which make possible our comprehension of physical sensations, the ideas that shape architectonics are consciously chosen by philosophy. They do not have the same conditioning function as the categories. The architectonic idea stands outside scientific discourse, but this does not mean that it operates prior to our understanding of the world; rather, it is a last step in a long chain of critical reflection about empirical reality. Kant emphasizes that the architectonic is associated with the highest level of reflection about experience. The architectonic entails the arrangement of sensory data according to a method. The "architectural" quality of system building consists in shaping and designing knowledge according to an idea that was not generated by any individual science but instead is derived from an examination of human existence in its entirety. Architecture provides a

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1. Kant phrases the sentence according to the philosophical convention of providing a definition. Leibniz follows a similar formulation when he commences to explain his understanding of "analysis": "Aside from the wit one has from nature or acquired through exercise, there is another art for finding mediating ideas and that is the art of analysis." G. W. Leibniz, *Neue Abhandlungen über den menchschlichen Verstand,* in *Philosophische Schriften,* ed. Wolf von Engelhardt and Hans Heinz Holz (Frankfurt: Suhrkamp, 1985), 3.2: 253.

technology and a metaphor for the always expanding problem of how to process the vast information generated by the sciences.[2] Among the many implications of Kant's architectonic, it offers a method of data storage and retrieval that supplants the older *ars memorativa*.

The previous chapter linked the stylized metaphors that appear in the prefaces to Kant's *Critique of Pure Reason* with the long history of philosophical borrowings from architecture. The current chapter will discuss metaphors as technical jargon. We will enter into the specific applications of architectural procedure in Kant's arguments. The previous chapter presented a selected history of the building trope; we will now show its operation in Kant's system. This division between Kant's metaphors and his technical language is not meant to reinforce the old prejudice that serious philosophy is never found in the rhetorical prefaces of major works, but only in its internal arguments. Quite to the contrary, we will argue that the architectural figures that characterize the system from the outside permeate its interior as well.

The architectonic is Kant's critical response to the cosmological speculation of his early writing. Whereas once God might have been seen as the architect who designed the universe, Kant argues that philosophy is now responsible for arranging knowledge according to a purpose that arises from its own investigations. The architectonic participates in the tradition that humans form a second creation, which stands apart from and, by the eighteenth century, competes with the divine. Without Promethean fanfare, the architectonic stands in for the creator of the teleological proof. Kant proposes the architectonic as a scientific evaluation of information, the last instance of reflection about the conditions and ends of knowledge, operating outside the work of most direct scientific investigation with the end of arranging knowledge according to human values, or, as Kant refers to them, Ideas.

Kant incorporates architecture and natural sciences into a larger, more abstract understanding of the process wherein rational thought arranges information. It is well understood that the natural sciences are important models for Kant's epistemology. Kant sees the history of science as a movement of expanding and ever more certain knowledge. Natural scientists, as opposed to metaphysicians, develop standards of knowledge, which are generally acceptable, thereby allowing universal agreement on certain theories. Kant maintains that the sciences have made advances in knowledge with much greater certainty than metaphysics. Whereas Kant may have understood the history of science as progressive, just as important was the self-organization that rational thought underwent as it examined its own data. This critical turn in thought, to "survey" or "oversee" its own contents, was not

2. Claus Zittel, "*Mirabilis scientiae fundamenta:* Die Philosophie des jungen Descartes (1619–1628)," in *Seelenmaschinen: Gattungstradition, Funktionen und Leistungsgrenzen der Mnemotechniken vom späten Mittelalter bis zum Beginn der Moderne,* ed. Jörg Jochen Berns and Wolfgang Neuber (Vienna: Böhlau, 2000), 335.

unique to the scientific methods of Kant's era. Architecture as taught in the classical texts also emphasized the need to integrate diverse practices and knowledge. The system of systems entails the unity of diverse knowledge under the roof of a single idea, which stands apart from the individual sciences, and which organizes them for a purpose, a *Zweck,* that lies beyond the mere cataloging of knowledge. Kant distinguishes between ideas, which guide an individual science, and the Idea, which motivates the architectonic arrangement of all sciences together. At its highest degree of articulation, just at the point where rational thought is most careful in examining itself, Kant expects scientific reflection to evaluate how all the different systems of knowledge serve human existence.

While Kant borrowed concepts from classical and Renaissance architectural treatises, his reformulation of these terms was in turn reintegrated into eighteenth-century architectural discourse.[3] In the debate over the need for an architectural academy in Berlin, the founders adopted a distinctly Kantian tone in legitimizing their institution. In his essay "Some Thoughts on the Necessity of Endeavoring to Unify the Various Departments of Architecture in Both Theory and Practice," Friedrich Gilly applies Kant's architectonic perspective within his own discipline. Gilly opens by stating that it is no longer possible for a single architect to master all the knowledge of his profession: "So vast is the range of the several arts and sciences, and so numerous are the fields of action that they encompass, that practitioners, mindful of their own limitations, must for their own sakes restrict themselves to one or another aspect of their chosen subject."[4] Specialization was inevitable given the expansion of the various architectural subfields. Using metaphors already familiar to architects, Gilly argues for a critical integration of these specialized fields: "They may nevertheless, on occasion, profitably adopt a more elevated vantage point and survey the whole, of which their own work is a part, and which endows that work with its characteristic form and purpose."[5] To Prussian intellectuals at the end of

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3. One immediate source for Kant would have been the writings of Francesco Algarotti, the Italian architect, who sojourned at the court of Frederick the Great, and who reiterated a Vitruvian understanding of architecture as the elevated discipline that integrates all others within its design: "Architecture belongs to another order than poetry, painting, and music, all of which have beauty before them. Architecture does not. They need merely keep their eyes open, so as to view the things around them and develop from them a system of imitation. Architecture has to move the spirit upwards and formulate a system based on general concepts that are not visible to the eye. One can say with justice that architecture is to the arts what metaphysics is to the sciences." Francesco Algarotti, *Versuche über die Architectur, Mahlerey und musicalische Opera,* trans. R. E. Raspe (Cassel: Johann Friedrich Hemmerde, 1769), 17. Algarotti proposes that at the most abstract elevation architecture and metaphysics were smoothly compatible because both endeavored to arrange diverse components into a single order. His defense of the Renaissance stands against the sentimental taste that judged buildings emotionally. Within the shifting contours of eighteenth-century architectural discourse, Kant leaned toward this Renaissance lineage, as much for its formal rationality as for its insistence on methodical engineering.

4. Friedrich Gilly, "Some Thoughts on the Necessity of Endeavoring to Unify the Various Departments of Architecture in Both Theory and Practice," in *Essays on Architecture,* trans. David Britt (Santa Monica: Getty Center for the History of the Art and the Humanities, 1994), 165.

5. Ibid.

the eighteenth century, this single vantage point would clearly have been Kantian. While Gilly argued for the establishment of an academy, his argument holds out the possibility that a single individual might master all the fields that the academy taught. For eighteenth-century architects, from Laugier to Gilly, the architectonic vantage point might be assumed by a creative genius, who redefines the field. This supreme perspective has tantalized modern architects ever since. Kant's own epistemological renunciation of any personal claim to architectonic knowledge aside, the possibility that one architect might hold the godlike position of integrating all disciplines within one plan has proven very tempting to the profession.

Articulated Thought; or, The Difference between Worms and Animals

The *Critique of Pure Reason* makes explicit an architectural distinction that appears at several key points in Kant's argument, namely, the difference between the accumulation of material and the articulation of knowledge. Kant returns to this opposition at several important points in the *Critique of Pure Reason.* In many ways it explains his understanding of reason (*Vernunft*) as *nachdenken,* that is, as a reflection that rearranges existing knowledge into a more complex unity.[6] The distinction allows Kant to show how the writing and rewriting of knowledge lead to its systemization. By tracing its sources and implications, we will show the importance of architecture theory for German thought at the end of the eighteenth century. At the same the time we hope to isolate turns of thought that distinguish the eighteenth-century German discussion of *Bildung* while connecting it with earlier efforts to encapsulate antiquity in art. Architecture is a natural medium for defining the literary movement known as German classicism, for even if the Napoleonic wars retarded construction projects in central Europe, the encounter with Roman antiquities was decisive in the formulation of a philosophical and literary program.[7]

Articulation entails a turning of thought back on itself in order to (re)place elements in a distributed relation. To be articulate as a speaker requires that one have the balance and order proper to rhetoric, a science that shares or rather lends many terms to architecture, whether in the ancient or in the deconstructive tradition. A politician must weigh his words as much as an engineer his materials. Both

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6. As he describes how reason inevitably searches for answers to metaphysical questions, Kant inserts *nachdenken* almost as an afterthought, yet his entire procedure, in the *Critique* and through his long writing career, entails a rethinking of what has been thought: "Daher hat die menschliche Vernunft seitdem, daß sie gedacht, oder vielmehr nachgedacht hat, niemals einer Metaphysik entbehren…können" [A842/B870].

7. On the difficulties of defining German classicism, see Dieter Borchmeyer, "What Is Classicism?" in *The Literature of Weimar Classicism,* ed. Simon Richter (Rochester, NY: Camden House, 2005), 45–61.

public speaking and building require reflection on a plan before proceeding, or thinking back over a problem before beginning to solve it. Kant's use of the term "articulation" combines both senses of *nachdenken*: thinking after the fact so as to plan something out in advance. One means of coupling these two, seemingly contradictory gestures is to understand them as part of a continuous learning process. This movement of thinking back on a question in order to plan out a new answer amounts to a rewriting of past efforts in order to start anew. Both Descartes and Kant link this process of thinking with the architect's preparations before building. Certainly Alberti and Palladio emphasize the importance of studying ancient ruins in order to develop new buildings. The journey to Rome belonged to the *nachdenken* of any Renaissance architect, out of which new plans were made. Imitation was not so much the goal as the critical examination and evaluation of how buildings had been put together so as to discover what had made them stand so long, what had made them fall apart, and why they were beautiful. For Kant, as well as Goethe, reflection before articulation was part of the long-term education of the intellectual. Kant's renewed efforts to answer metaphysical questions are summarized as *nachdenken* in order to compose a new plan. The articulation of thought entails renovating existing knowledge, rather than tearing down and rebuilding its foundations as Descartes might. Both Kant and Goethe describe the need to revise the design of their thought rather than to dismantle it. At middle age amid Roman ruins, Goethe describes himself as an architect intent on rearticulating all the characteristics he has accumulated over his life. The turn toward articulation in German thought at the end of the eighteenth century constitutes a methodological alternative to Descartes' sweeping away of the ancient. Even when he recounts the collapse of metaphysics, Kant suggests a more cautious reconstruction.

The architectonic in the *Critique of Pure Reason* explains the value and purpose of composing knowledge as a unity. Kant does not claim that any one would actually possess complete knowledge. He separates the architectonic concern for establishing relationships between disciplines from an encyclopedic desire to know all. In a sense the architectonic section of the *Critique* seeks to explain the rationale for arranging knowledge as a whole. It tells why a plan for indexing and reflecting upon knowledge is necessary, without making explicit the reasons for doing so. Susan Bernstein uses Deleuze's suggestive image of the *pli* to describe articulation as the turn of thought to consider its own material. She observes that the architectonic "marks a fold between induction and deduction, between the technical or rhapsodic gathering of the historical and its recasting as a necessary systems of relations."[8] Bernstein directly links Kant's architectonic with Goethe's notion of *Bildung* as the slowly unfolding organization of the self-conscious subject.

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8. Susan Bernstein, "Goethe's Architectonic *Bildung* and Buildings in Classical Weimar," *MLN* 114.5 (1999): 1014.

Her reading then goes on to question the aesthetic ideologies inherent in both the architectonic and *Bildung*.

One who is resistant to metaphysics may wonder: Why even speculate on how one science relates to another? What is the point of ordering the sciences in the first place? One might suspect that Kant is here reviving an older cosmological (perhaps Leibnizian) architectonic, which posits a harmonious order to the universe created by God. "Architectonic" sounds like a reinvention of older metaphysical thinking: it seems to engage in cosmological speculation about how the universe hangs together. Kant is clearly drawn to such accounts; he often describes how reason (at various levels of his argument) seeks to explain the unity of all experience. The term's previous applications by Gottfried Leibniz and Alexander Baumgarten asserted a universal harmony. A patient reading will show that Kant rearticulates the term, so that by the time he arrives at his conclusion, he has turned the architectonic away from cosmology and toward an ethical, humanist form of pre-Socratic (and early Socratic) *Lebensphilosophie*. Ultimately, Kant will argue that the unity of knowledge enables the individual to critically examine existence. Kant will posit that the sciences should be conceived as a whole so that they may serve humanity. This turn from the widest, most systematic understanding of knowledge to the *Lebensphilosophie* of early Greek thinkers is the *Critique*'s last articulation. The system distinguishes Kant's ethics of knowledge from an array of good intentions. Kant does not elaborate on this last Socratic turn in his argument. As happens in the last sections of the *Critique,* one senses that Kant is quickly sketching out an argument that could take much longer if it had been given the attention that, say, the deduction of the categories received. Still, an unusual connection between systematic thought and moral philosophy appears in the last pages of the architectonic section. In order to understand how Kant turns an ontological principle toward an existential end, we need to recognize the sympathies between his architectonic and ancient theories about building and the education of the architect.

Kant's description of the organic unity of a system of knowledge compares readily with the Vitruvian and Renaissance definitions of a well-proportioned, symmetrically arranged, and thoroughly integrated building. Kant's architectonic combines Vitruvius's long list of faculties required for the architect's education with the organic model of organization. He makes an abstract systematic principle out of Michelangelo's equation of anatomy and architectural education: "There is no question but that architectural members reflect the members of Man, and whoever has not been or is not a good master of the (human) figure and likewise of anatomy cannot understand (anything of them)."[9] Without espousing the existence of a cosmological order, Kant took the step of presuming that all knowledge could be organized anatomically through rational thought. By presuming a unity, Kant

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9. Quoted in James Ackerman, "Architectural Practice in the Italian Renaissance," *Journal of the Society of Architectural Historians* 13.3 (1954): 3.

postulates that is possible to recognize if some piece is missing from the whole.[10] This unity is articulated (*gegliedert*) in contrast to accumulated knowledge, which Kant refers to as *gehäuft,* literally meaning "piled up." Vitruvius explains that orderly arrangement begins by treating individual members separately and then placing them in a proportioned whole.[11] In the preface to his fourth book, he cites his own treatise as a "corpus" that brings together the scattered and disordered bits of architectural knowledge the ancient world possessed:

> I have observed, Emperor, that many in their treatises and volumes of commentaries on architecture have not presented the subject with well-ordered completeness, but have merely made a beginning and left, as it were, only desultory fragments. I have therefore thought that it would be a worthy and very useful thing to reduce the whole of this great art to a complete and orderly form of presentation, and then in different books to lay down and explain the required characteristics of different departments.[12]

Indra Kagis McEwen has pointed out that Vitruvius is the first Roman writer to insist that his writing constituted a "body" of knowledge.[13] Cicero, for example, uses *corpus* to refer to the body politic, whereas Vitruvius repeatedly uses it in reference to the collection of written knowledge.[14] Given Vitruvius's expectation that the architect learn many arts, and given his elaborate discussion of the relation between the human body and the arrangement of buildings, it is not surprising that readers for centuries also applied his organic architectural metaphors to the organization of all knowledge. Cesare Cesariano's first Italian translation includes a commentary that compares the arrangement of Vitruvius's ten books to the human body. Whereas Vitruvius refers to the Latin "ordina" when describing the arrangement of treatises, buildings, and bodies, Cesariano's commentary refers to "membriculi Articularii," suggesting the complex body that appears in Kant's text.[15]

As we will argue later, the architectonic of the first *Critique* extends Vitruvius's plan for systematizing his own discipline. While Vitruvius is concerned with elegance and "appropriateness," Kant, we shall see, expects an epistemological and moral purpose from the careful arrangement of scientific knowledge. He does not

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10. Kant, *Kritik der reinen Vernunft,* 653 [A833/B861].
11. Vitruvius, *The Ten Books on Architecture,* trans. Morris Hicky Morgan (New York: Dover, 1960), 13.
12. Ibid., 101.
13. Indra Kagis McEwen, *Vitruvius: Writing the Body of Architecture* (Cambridge, MA: MIT Press, 2003), 7–10.
14. Klaus Sallmann compares Vitruvius's books to a ring of columns that together support a great load. He argues that Vitruvius does not take up Horace's idea of *humanitas.* Klaus Sallmann, "Bildungsvorgaben des Fachschriftstellers: Bemerkungen zur Pädagogik Vutruvs," in *Vitruv-Kolloquium,* ed. Heiner Knell and Burkhardt Wesenberg (Darmstadt: Deutscher Archäologen-Verband, 1984), 18.
15. Cesare Cesariano, *Vitruvius, De architectura* (1521) (Munich: Wilhelm Fink, 1969), LXI.

emphasis the beauty of systematic knowledge, even though the classical tradition does. Vitruvius most famously cites the human body as the example of symmetrical proportion: "In the human body there is a kind of symmetrical harmony between forearm, foot, palm, finger and other small parts; and so it is with perfect buildings."[16] Kant also invokes a bodily metaphor to describe the systematic organization of knowledge: "[It is] like an animal body, the growth of which is not by the addition of a new member, but by the rendering of each member, without change of proportion, stronger and more effective for its purposes."[17] However, Kant's analogy is situated within a natural historical framework concerned with the growth of individual bodies and the advancement of species; thus he distinguishes between sophisticated bodies possessing articulated organs and simpler organisms, such as worms. The difference between an animal and a worm reinforces the distinction between articulated thought, which distributes knowledge across the many subdivisions of a philosophical system, and accumulated knowledge, which merely collects data, adding it to the body of already existing information without any effort at order.

Kant's adaptation of the Vitruvian analogy shows that much as the classical tradition continuously reapplied the body metaphor for unity, each iteration revealed the altering biological conception of an organism. The historical development of science, particularly biology, meant that each time bodies are mapped onto buildings the definition of the "body" had changed. Far from constituting a fixed analogy, the many evocations of the body/building relation shift with the history of the two terms.[18] The body is conceived differently; it is divided up according to new criteria, grasped by new categories, perceived according to varying agendas. Sometimes it is human, as in Vitruvius; other times it is placed within broader taxonomies. Gender becomes an explicit factor for the orders of columns, as Vitruvius clearly presumes a male form when presenting his initial comparison.

Kant's organic model is much more abstract than Vitruvius's. The Roman focuses on specific parts in order to meld an idealized male body with geometry. For Vitruvius, the correlation between building and body is carried out by geometrical comparisons. A circle and a square are the middle terms in the analogy:

> For if a man be placed flat on his back, with his hands and feet extended, and a pair
> of compasses centered at his navel, the fingers and toes of his two hands and feet will

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16. Vitruvius, *Ten Books on Architecture,* 14.

17. Immanuel Kant, *Critique of Pure Reason,* trans. Norman Kemp Smith (New York: St. Martin's Press, 1965), 653–654; Kant, *Kritik der reinen Vernunft,* ed. Jens Timmermann (Hamburg: Felix Meiner, 1998), 861 [A833/B861].

18. For Kant's incorporation of the epigenesis theory of reproduction into the first *Critique,* see John Zammito, "'This inscrutable *principle* of an original *organization*': Epigenesis and 'looseness of fit' in Kant's Philosophy of Science," *Studies in History and Philosophy of Science* 34 (2004): 73–109; and Helmut Müller-Sievers, *Self-Generation: Biology, Philosophy, and Literature around 1800* (Stanford, CA: Stanford University Press, 1997), 48–64.

touch the circumference of a circle described therefrom. And just as the human body yields a circular outline, so too a square figure may be found from it. For if we measure the distance from the soles of the feet to the top of the head, and then apply that measure to the outstretched arms, the breadth will be found to be the same as the height, as in the case of plane surfaces which are perfectly square.[19]

Vitruvius's famous placement of the male figure within geometry was critically reformulated in the first modern architectural treatise, Alberti's *On the Art of Building*.[20] Alberti wrote in large part to rectify the errors and omissions he perceived in Vitruvius.[21] He shifted away from the idealized male body as the model for all construction. In order to legitimate his own expanded correlation between bodies and buildings, Alberti claims that the ancients did more than study one body type; they considered all shapes.[22] With some irony, he credits "the ancients" with doing precisely what Vitruvius did not. Alberti's treatise is followed by more intense investigations of human anatomy as it related to building design. Alina Payne summarizes the importance of anatomy for Renaissance architecture: "The growing scientificization of the human body—its analysis and display as a section through a building, layer by layer, mobile joint by mobile joint—had brought about an abstract conception of its parts and their role in the functioning of the whole that permitted leaps into the world of moments and construction."[23] The Venetian architect Vincenzo Scamozzi, for example, gives considerable anatomical detail to his rendition of the familiar analogy:

The section of the well-proportioned building is like the anatomy of a human body. As in the latter one can see the connection between bones, the linkages of the nerves,

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19. Vitruvius, *Ten Books on Architecture,* 73.

20. Two recent studies on Alberti's relation to Vitruvius begin by discussing the modern writer's frustration in understanding passages of the ancient text: Hartmut Baumann, "Die Aufbauprinzipien von L. B. Albertis De re aedificatoria," *Zeitschrift für Kunstgeschichte* 53.4 (1990): 444–446; Caroline van Eck, "The Structure of 'De re aedificatoria' Reconsidered," *Journal of the Society of Architectural Historians* 57.3 (1998): 280–281.

21. Alberti's frustrations are expressed most in the opening to his book 6, where he describes the Roman as "an author of unquestioned experience, though one whose writings have been so corrupted by time that there are many omissions and many shortcomings. What he handed down was in any case not refined, and his speech such that Latins might think that he wanted to appear a Greek, while the Greeks would think that he babbled Latin. However his very text is evidence that he wrote neither Latin nor Greek, so that as far as we are concerned he might just as well not have written at all, rather than write something that we cannot understand." Leon Battista Alberti, *On the Art of Building in Ten Books,* trans. Joseph Rykwert, Neil Leach, and Robert Tavernor (Cambridge, MA: MIT Press, 1988), 154.

22. "By studying in Nature the patterns both for whole bodies and for their individual parts, they understood that at their very origins bodies do not consist of equal portions, with the result that some are slender, some fat, and others in between; and observing the great difference in purpose and intention between one building and another…they concluded that, by the same token, each should be treated differently." Alberti, *On the Art of Building,* 303.

23. Alina Payne, *The Architectural Treatise in the Italian Renaissance: Architectural Invention, Ornament, and Literary Culture* (Cambridge: Cambridge University Press, 1999), 211.

and the intersection of the veins, with the covering of soft tissue; so in the former one can see the trimming of the columns, and walls, the interlocking of the cornices, the entwining of those things that ornament, and finally the shells that cover the internal parts.[24]

Kant does not focus on anatomical details except as a basis for distinguishing species from one another. Yet at each stage in the history of the Vitruvian metaphor, the principle of unity is upheld over any disorder. The Renaissance inclusion of anatomy could easily have undone the classical model. If one were to use the interior of bodies to supplement Vitruvius's focus on the face and limbs, all sorts of nonsymmetrical shapes might be introduced. The organs, as well as the muscles and nerves, are not as beautifully balanced as a statue of Apollo. The compactly folded-up string of tubing that makes up the intestines does not conform to the Vitruvian system. Guts have more in common with contemporary, anticlassical blob buildings. Each adaptation of the Vitruvian model demonstrates a commitment to preserve the principle of unity even as it is reiterated within a new scientific context. When Kant includes comparative anatomy in his organic model, he adjusts the classical statement by setting the articulate body against the accumulative and by evaluating the internal organization of these bodies on the basis of how they allow for their own growth. He does not, however, abandon the presumption that bodies are wholes.

While geometry is certainly important to Kant as a method of demonstrating conceptual relations, he does not, however, apply its terms to the organic unity. Overall, the tendency was to use the body/building analogy in such a manner that the body was represented as a living entity, capable of movement and development. The symmetrical relations of the face and limbs are decisive for Vitruvius, whereas Alberti adapted the body/building analogy to focus more on their activity. He credits the Romans with studying the organization of bodies in order to understand their practical use. This economical approach meant that animals as well as humans became the model for construction.[25] Alberti's inclusion of animals within architectural discourse may not have been followed by later Italian writers; however, his anatomical interest was. The internal arrangement of vertebrates seemed to confirm and expand Vitruvius's original comparison. Alberti would focus on specific features, such as the connection of muscle tissue to bones as a guide for building roof trusses.[26] Kant, in turn, concentrates on the internal relation of organs as they shape the growth of the body.

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24. Quoted in Payne, *Architectural Treatise,* 233–234.
25. Alberti, *On the Art of Building,* 158: "As for Italy, their inborn thrift prompted them to be the first who made their buildings very like animals. Take the case of the horse: they realized that where the shape of each member looked suitable for a particular use, so the whole animal itself would work well in that use."
26. Alberti, *On the Art of Building,* 81.

Most notably, by comparing the accumulation of knowledge internal to a system with the elongation of worms or snakes (*Gewürme*), Kant suggests not only a biological metaphor that lacks the capacity for self-awareness and reflection, but also a creature loaded with Christian imagery. In Luther's translation of the Bible the worm and all creatures like it are the lowest living form listed in Genesis 1:26. The eighteenth-century poetry continued to juxtapose humans and worms. In his unfinished poem on eternity, Kant's favorite poet, Albrecht von Haller, represents the mathematical sublime of endlessness with the wormlike size of the human:

> O culmination of greatness!
> What is the person who compares himself to you!
> He is a worm, a sand pebble in the world;
> The world itself is but a point when I measure it against you.
>
> Vollkommenheit der Größe!
> Was ist der Mensch, der gegen dich sich halt!
> Er ist ein Wurm, ein Sandkorn in der Welt;
> Die Welt ist selbst ein Punkt, wann ich an dir sie messe.[27]

Goethe's Faust reiterates the comparison, though more in despair than in glorification:

> The gods I don't resemble! Too deep is the feeling!
> The worm I resemble, who crawls through the dust.
>
> Den Göttern gleich' ich nicht! Zu tief ist es gefühlt!
> Dem Wurme gleich' ich, der den Staub durchwühlt. (line 652)

Within earlier architectural theory, the figure of the worm is mentioned without cosmological grandeur to indicate architectural failure, as in a wall that lacks geometrical precision. Alberti asks:

> Who would not rebuke severely a person who, unconstrained by circumstance, built a wall that wandered like a worm, now here, now there with no order, no method, with some sections long and some short, the angles unequal and the composition unshapely, especially if the *area* is obtuse on one side and acute on the other, its method confused, the order disturbed, without forethought or careful plan?[28]

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27. Albrecht von Haller, "Unvollkommenes Gedicht über die Ewigkeit," in *Deutsche Dichtung im 18. Jahrhundert,* ed. Adalbert Elschenbroich (Munich: Carl Hanser, 1960), 33.
28. Alberti, *One the Art of Building,* 311.

Particularly important as far as Kant is concerned are Alberti's last critical comments; the "worming" wall demonstrates a confused method, a disturbed order, a lack of plan or forethought.

Christo draped fabric over buildings or stretched it across landscapes to create just the disordered look Alberti disparaged. The worm, furthermore, is a figure that we can connect to Greg Lynn's theorization of the fold as it stands in opposition to the organic body. When Lynn cites the flatworm as an alternative to the organic paradigm, he is invoking Deleuze and Guattari's "body without organs," reversing Kant's preference for articulation over accumulation. The flatworm, or planarian, when cut into pieces, can regenerate into multiple bodies that are nevertheless not symmetrical replications of the original. For Lynn the flatworm represents the possibility that a single body might proliferate variations of itself that do not automatically imitate the form from which they sprang.[29] Kant includes just such shapeless proliferation within his theorization of accumulation, for the regenerative quality that Lynn cites in the planarian caused a sensation when it was first recognized in 1740 with Abraham Trembly's discovery of the polyp. Kant was familiar with the strange shapes into which polyps reproduced themselves asexually. In the *Critique of Judgment,* he suggests that polyps are the lowest form in a hierarchy of comparative anatomy.[30] Kant's worm does not completely correspond to Lynn's characterization of the fold, for Kant argues that the worm is incapable of incorporating differences. While contemporary theory celebrates Leibnizian fabrics, Kant understood his predecessor's metaphysics as a failed system, which could not be reconciled with Newtonian physics.

While Kant's terms are explicitly biological, the theory of the articulated body was already explicit in fifteenth-century Italian accounts of the perfect structure. Alberti writes extensively about the need to divide the whole building into compartments so that each may be examined individually both in terms of its particular utility and its position within the whole plan. That Kant's account matches Alberti should come as no surprise. Kant was well read in the Latin classics and would probably have found Alberti's treatise more accessible than later Italian works. Alberti, unlike Vitruvius, stresses the need to articulate components, thereby providing a more abstract standard for integration. Alberti links compartition to the Vitruvian terms *firmitas, commodus,* and *venustas;* however, his own comparisons with animal bodies later in the text suggest the term could be applied more broadly:

> All the power of invention, all the skill and experience in the art of building, are called
> upon in compartition; compartition alone divides up the whole building into the parts

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29. Greg Lynn, "Multiplicities and Inorganic Bodies," in *Folds, Bodies, and Blobs: Collected Essays* (Brussels: La Lettre Volée, 2004), 44–45.
30. Immanuel Kant, *Critique of Judgment,* trans. J. H. Bernard (New York: Hafner Press, 1951), §80, p. 208.

by which it is articulated, and integrates its every part by composing all the lines and angles into a single, harmonious work that respects utility, dignity and delight.[31]

By dividing the plan into parts, Alberti argues, one can decide whether any one could be left out without damaging the whole:

> Could anything be omitted from any of these, through inattention and neglect, without detracting from the dignity and worth of the work? The greatest care and attention, then, should be paid to studying these elements, which contribute to the whole work, so as to ensure that even the most insignificant parts appear to have been formed according to the rules of art.[32]

What for Alberti are standards for planning a building become for Kant the criteria for judging the coherence of a system of knowledge. Behind the art of system building lies the art of building.

The questions of how to define proportion and what its absence meant to the beauty of a building were highly refined by the eighteenth century. Proponents of French classicism, for example, had already at the end of the seventeenth century accused Roman baroque structures of lacking a clearly defined order in which the elements can be recognized. Such buildings were said to depart from ancient forms. According to the valences of classical discourse, the opposite of proportion was a *pile,* a mass of stone without shape. Eventually, Heinrich Wölfflin would make this late classicist slur into the basis of his epochal history. He remarks: "This very antipathy to any form with a clear contour is perhaps the most basic trait of the baroque style."[33] The rhetoric of antithesis characterized buildings with a high degree of architectural intention as mere piles of stone. François Blondel, in his *Cours d'architecture,* denounced Bernini's colonnade for St. Peter's as "an unformed mass of columns without arrangement." Walter Kambartel, in 1972, translated the French "un amas informe de Colonnes sans arrangement" into a German that Kant would have used as well: "einen unförmigen Haufen von Säulen ohne Arrangement."[34] Kant himself uses the term *Haufen* to describe the mere accumulation or piling on of empirical impressions in much the same manner that Blondel accuses Bernini of simply having layered columns around the plaza of St. Peter's. André Felibien similarly refers to misproportioned buildings as a "confused mass": "Nous voyons des bâtimens qui ne

31. Alberti, *On the Art of Building,* 23.
32. Ibid.
33. Heinrich Wölfflin, *Renaissance and Baroque,* trans. Kathrin Simon (Ithaca, NY: Cornell University Press, 1964), 64.
34. Walter Kambartel, *Symmetrie und Schönheit: Über mögliche Voraussetzungen des neueren Kunstbewußtseins in der Architekturtheorie Claude Perraults* (Munich: Wilhelm Fink, 1972), 21.

sont qu'un amas confus de corps avances & arriere-corps."[35] The classicist tendency to attack Bernini, a habit that Goethe and K. P. Moritz adopted as well, is less important for understanding Kant's architectural thinking than the manner in which neoclassical architectural theory defined its antithesis: all structures that did not have an articulated proportion were characterized as a mere chaotic mass. Eighteenth-century Germans knew *Haufen* from Luther's Bible to mean "a huge pile of stones," or "a chaotic crowd."[36] By lumping anything that was not strictly proportioned into a single broad category, the classical discourse enacted the judgment it made against other styles.[37] All things unproportioned were placed together, regardless of their particular style, that is, disproportionate proportions. Thus both baroque and Gothic buildings could be subsumed under the same category as confused masses.

Kant's appropriation of the distinction between an articulated structure and a pile did not focus on such stylistic debates. Instead, he used the architectural opposition between a well-defined arrangement and a mere mass to stress the importance of making critical distinctions. Rather than marking one's adherence to an ancient canon of thought, the *Critique of Pure Reason* repeatedly insisted on the epistemological principle that empirical impressions needed to be arranged according to some overarching principle if they were to be understood as knowledge. The neoclassical concern for proportion as a matter of balance and symmetry was not itself important for the *Critique.* Kant refunctionalizes architectural terms such as "proportion," "symmetry," and "eurythmy" by using the more general term "articulation." The canonical terms are uncoupled, subsumed, and abstracted under a new organizing principle. To be sure, at various points, Kant still displays an interest in symmetry for its own sake, yet we should not confuse the arrangement of the book with Kant's argument concerning the art of system building. While there may be a lopsided symmetry in the *Critique*'s contents, the art of system building does not concern itself with symmetry. Kant's transcendental method focuses on the rational process that underlies any proportioned structure, namely, the act of arranging material according to some Idea. Symmetry as it was debated among architects would have been understood by Kant as the arrangement of building material according to an idea of the beautiful. The art of system building lies somewhere between the idea that provides the orientation for a system's structure and the material that constitutes the structure. So, for example, the gesture of creating a system requires

35. A. Felibien, *Entretiens sur les vies et les ouvrages des plus excellens peintres anciens et modernes avec la vie des architectes* (1666–1685), in the Trévoux edition (1725) I, p. 73; cited in Kambartel, *Symmetrie und Schönheit,* 26.

36. For a discussion of the theological implications of *Haufen* among Moravians and Pietists, see Julie Tomberlin Weber, "Translation as a Prism: Broadening the Spectrum of Eighteenth-Century Identity," in *Ethnographies and Exchanges, Native Americans, Moravians, and Catholics in Early Modern America,* ed. A. G. Roeber (University Park, PA: Penn State University Press, 2008), 200–203.

37. Paul Frankl follows Richard Krautheimer in ascribing this position to Alberti. Paul Frankl, *The Gothic: Literary Sources and Interpretation through Eight Centuries* (Princeton, NJ: Princeton University Press, 1960), 257.

both distance from the material and the capacity to arrange it according to critical thought. For Kant the architectonic consists in the critical distance of thought that rearranges the empirical impressions given to it by perception, just as an architect designs the materials available for construction. The antithesis of a system with its architectonic order remains the "pile" of sensory impressions. Kant's rearticulation of the architectural discourse amounts to an expansion of terms used in more tightly focused debates between Italian baroque and French classicism in which hyperbolic distinctions are deployed against competing styles.

Kant follows the Renaissance presumption that a natural organism does not contain unnecessary organs.[38] Alberti had stressed that every compartment of a building needed to fit harmoniously, and Palladio followed this definition, though he more explicitly stated that every component had to be necessary to the whole.[39] Every component of a building is likewise justified by a purpose. When the architect is warned not to leave a crucial component out of his plans, this presumes that his tendency is to build simply, to include fewer elements rather than too many. Kant's architectonic would similarly test whether a science could be excluded without harm. This procedure of eliminating what is deemed unnecessary is only one of the ways in which architectural procedure is related to Kant's logical method.

Leibniz, who most likely coined the philosophical use of "architectonic," had a very different understanding of the term from Kant. When Kant states that reason is by nature architectonic, he presumably has Leibniz's claim of universal harmony in mind. Architectonic, in this context, refers to the tendency to recognize a pattern in natural phenomena. This cosmological habit is distinct from the architectonic Kant proposes as a methodological step at the end of the *Critique of Pure Reason.* The tendency to see all things in the universe as part of a master plan is distinctly at odds with Kant's intention to critically evaluate all systems of knowledge. Leibniz reverses Alberti's and Kant's procedure when he argues that God created the best possible universe. Rather than testing a plan to see if anything could be removed, Leibniz argues that we cannot conceive of any quality that the architect of the universe should have added in order to make the world more perfect: "I think that one acts imperfectly if he acts with less perfection than he is capable of. To show that an architect could have done better is to find fault with his work."[40] Contrary to the stripped-down functionalism of the organic body, Leibniz conceives imperfection as the failure to add what is needed. Both Alberti and Kant characterize imperfection as excess, as the inclusion of that which could be eliminated. Implicit then in any conception of

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38. Wölfflin summarized Alberti: "The proportions of the whole and of the parts must be based on an underlying unity; none must appear accidental and each must follow from the other as a matter of necessity, as the only possible and natural one." Wölfflin, *Renaissance and Baroque,* 66.

39. Alina Payne traces the concept of *necessità* through the lineage of Renaissance treatises; see her *Architectural Treatise,* 184.

40. G. W. Leibniz, *Discourse on Metaphysics,* trans. George Montgomery (LaSalle, IL: Open Court Publishing, 1902), 5.

the natural body as a living entity is the presumption that only that which is required for staying alive matters, at least within nature. Excess ornamentation has for Alberti a monstrous quality—in the sense of a body with distended features: "The faults of ornament that must be avoided most of all are the same as those in works of Nature, anything that is distorted, stunted, excessive or deformed in any way. For in Nature they are condemned and thought monstrous, what would be said of the architect who composes the parts in an unseemly manner?"[41] This conception of nature and the organism reinforces the classical concept of the ornament as unnecessary.

Kant considers the proportioned body in terms of its development, whereas Vitruvius presumes a static, ideal body. Kant does not confine his analogy to the human body, whereas Vitruvius presumably operates within the assumption that the human is the highest form. For Kant the implied hierarchy that the organic model inevitably draws does not exist between the human form and all others, but between complex organisms and simpler ones. As we have seen, Kant was by no means the first to adapt the analogy so as to include more than humans. Alberti had taken animal bodies generally as the natural template for architectural symmetry.[42] Kant's organic model is distinct from the Vitruvian because his presumes that bodies grow over time. The difference between the organism and the worm lies not only in their internal structural arrangement, but also in the manner in which both life-forms extend themselves: the organism distributes matter throughout its internal arrangement while the worm adds material on at the ends. The organism expands, whereas the worm lengthens.

Articulation versus accumulation is also a fundamental distinction in construction. In order for the symmetrical relation of a building's parts to be possible, each element needs to be distinct, which means that it is positioned apart from, but in relation to, the other elements of the building. The worm comparison suggests a process of expansion in which new material is simply added onto the end, wherever there is space, rather than distributed throughout the body. Medieval cities were characterized as uncontrolled masses that expanded without organization. When rationalists criticized the layout of medieval cities, they pointed out that builders would simply add on to existing structures. We have already discussed why Descartes claimed that such cities were less attractive. Their twisting, turning alleys are an accumulation, unlike a city in which houses were built on a grid, which articulates boundaries between public and private spaces. The densely tangled layout of streets and buildings in Paris had long been a problem according to architects and public officials interested in regulating the populace. By the time Laugier wrote his essay in the middle of the eighteenth century, the confusion was a well-worn topic: "It would be tedious

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41. Alberti, *On the Art of Building,* 311.
42. Ibid., 303. Lisa Kanerva discusses Alberti's many references to "animal-like buildings" in her *Defining the Architect in Fifteenth-Century Italy: Exemplary Architects in L. B. Alberti's "De re aedificatoria"* (Helsinki: Suomalainen Tiedeakatemia, 1998), 122–127.

to revive here the distressed comments which the whole nation has been making for a long time about the chaos of hovels which completely hide the beautiful façade of the Louvre. It is to be hoped that one day the palace will be completed and that the buildings that crowd round the entrance and obstruct its approaches will then be razed to the ground."[43] In *Poetry and Truth,* Goethe also describes the common practice in old cities of expanding the upper floors of houses so that they hung over the ground floor, crowding and darkening the street below.[44] He describes in detail how his father undertook various "repairs" in order to expand the upper floors of the family house, thereby circumventing new restrictions on just such construction. This process of small alterations would result in a building with little overall coherence, no proportion or symmetry. Goethe describes his father as "little concerned with external architectonic appearance."[45] All these criticisms demonstrate a preference for self-conscious ordering, an aversion to the serpentine flow of the arabesque, and a blindness to the charms of haphazard accumulation, be they medieval or baroque.

While Goethe and Descartes connected architectonic order with beauty, and though Kant does not address aesthetics directly in the first *Critique,* his understanding of the integrated system does correspond to the classical definition of the beautiful building. When he defines the architectonic as the "art of the system," he is for one thing using the term in a rhetorical formula (the art of diplomacy, the art of noise, etc.). More importantly, though, the phrase shows how the debate over whether architecture was a science or an art framed Kant's work, for by defining the architectonic as the "Kunst der Systeme," Kant is really postulating an art that organizes the sciences. Architecture was the discipline in which it was most difficult to determine where the art began and the science left off. The architectonic amounted to the subtle turn in rational thought that moved from knowledge to aesthetics, a boundary that Kant guarded insistently in the *Critique of Judgment,* but which has been challenged by those who argue that Kant understates the role of imagination in both the first and the third *Critique.*[46] Even without such a critical reading of Kant, we should take the artistic character of systems very seriously. The tension between art and system is resolved only at the very end of the *Critique,* as a turn toward early Greek *Lebensphilosophie.*[47] Although he separates the two

43. Marc-Antoine Laugier, *An Essay on Architecture,* trans. Wolfgang Herrmann and Anni Herrmann (Los Angeles: Hennessey & Ingalls, 1977), 92.

44. "In Frankfurt, wie in mehrern alten Städten, hatte man bei Aufführung hölzerner Gebäude, um Platz zu gewinnen, sich erlaubt, nicht allein mit dem ersten, sondern auch mit den folgenden Stocken überzubauen; wodurch denn freilich besonders enge Straßen etwas Düsteres und Angstliches bekamen." Johann Wolfgang Goethe, *Dichtung und Wahrheit,* in *Werke,* ed. Erich Trunz and Hans Joachim Schrimpf (Munich: Beck, 1981), 9: 15. [*Werke* is cited hereafter as HA with volume number and page number.]

45. Goethe, *Dichtung und Wahrheit,* HA 9: 16.

46. Heidegger, for example, stresses the importance of the transcendental imagination within Kant's system. Martin Heidegger, *Kant und das Problem der Metaphysik* (Bonn: Friedrich Cohen, 1929), 120 ff.

47. Tassilo Eichberger prefers the Greek *techne* over the more specific eighteenth-century aesthetic sense of the term *Kunst.* Tassilo Eichberger, *Kants Architektur der Vernunft: Zur methodenleitenden Metaphorik der Kritik der reinen Vernunft* (Freiburg [Breisgau]: Alber, 1999), 42.

modes of judgment from one another in the *Critique of Judgment,* in the *Critique of Pure Reason* Kant posits an aesthetic form as the ideal organization of scientific knowledge. A system of knowledge, whether it be an individual discipline or the architectonic combination of them all, is best organized much like an autonomous work of art, as a unified organism with parts that serve the whole. That Kant refers to this unity as architectonic demonstrates the resonance of Renaissance theory and its desired unity of the sciences, the body, and art. Kant will address aesthetics in the *Critique of Judgment,* but already in the section on the architectonic of reason, we see Kant's presumption that art and the beautiful are organized systematically as an organic whole. The link between Kant, eighteenth-century aesthetics, and classical architecture becomes even more visible when we review sixteenth-century Italian definitions of beauty. Palladio states in the first chapter of his first book on architecture: "Beauty will result from the form and correspondence of the whole, with respect to the several parts, of the parts with regard to each other, and of these again to the whole; that the structure may appear an entire and complete body, wherein each member agrees with the other, and all are necessary to compose what you intend to form."[48] Palladio's definition has particular relevance to Kant's epistemology, for the former's description appears in the section entitled "Of the Several Particulars That Ought to Be Considered and Prepared before We Begin to Build." Just as Kant investigates the conditions for knowledge, so Palladio defines beauty before construction. It exists in the plan for the building, preceding whatever sensual pleasure the building will provide for its inhabitants and visitors. As Goethe will discover, the organically integrated beauty of a Palladian villa exists not only as a drawing but also as an abstraction, an exercise in contemplation. When Palladio makes the statement that beauty (*bellezza*) results from these plans, he is simply drawing out an ideal implicit within Alberti's assertion that the integrated building possesses dignity and grace. For both architects, there is much beauty in the thought of a building, even before the ground has been broken. This admiration for the plan alone links Kant's concept of the system with the more broadly discussed theories concerning the autonomous work of art. Kant's language of systems, in the *Critique of Judgement* and elsewhere, has much in common with eighteenth-century characterizations of the beautiful because it borrows directly from Renaissance architecture.

The Table of Categories

Kant hoped that readers would keep an image of the entire *Critique of Pure Reason* in mind as they proceeded through its many rooms. This concern becomes most tangible in his presentation of the a priori categories of the understanding. In "The Analytic of Concepts," he struggles with the question of how to build his

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    48. Andrea Palladio, *The Four Books of Architecture* (New York: Dover, 1965), 1.

own argument upon the ruins of older philosophical systems. As part of his answer, he once again invokes the distinction between accumulated and articulated knowledge. In the preface to the "Analytic," he starts by providing a new conceptual arena within which to deploy the distinction; however, as he proceeds into the body of his argument, he makes the highly unusual move of turning the articulation/accumulation distinction onto the material form of the text itself. Kant departs from the usual linear typeface of the book when he presents lists of logical judgments and categories in a geometrical shape. The three diamond-shaped lists provide a geometrical order, an articulation, that departs visually from the sequential, that is, accumulative, movement reading usually takes. The tables, literally and figuratively, break the linear flow of reading as they transform philosophical argument into a geometrical schema. Unlike modern concrete poetry, which gives visual shape to writing in order to disrupt the construction of meaning, Kant's recourse to geometry reinforces the architectonic form of transcendental philosophy through the visual presentation of words.[49] If, as Lessing argued in *Laokoon,* literature arranges meaning temporally as a succession of events, then the allure of architectural forms in literature would be the possibility that this sequential order would be reconfigured spatially. Angelika Corbineau-Hoffmann brings the question closer to Kant when she suggests that architecture holds out the possibility that writing might occupy a place that is not immediately conditioned by temporal movement.[50] The tables present a geometry of the text that replaces the sequence of reading. As they shape the words on the page, the tables demonstrate the abstract referential character of the writing. They emphasize that words refer to ideas, allowing the reader to contemplate the categories in spatial-visual terms common to architectural plans. Kant makes clear that these two-dimensional forms are themselves but a preparatory device for understanding the interaction of the categories as a three-dimensional sphere. This last step remains unrepresented, however; Kant leaves it to the reader to extrapolate the space of logical relations from diagrammatic lists of the a priori categories.

Just at one of the most complex stages of his argument, Kant turns to a visual mode of representing thought associated with architecture. He interrupts the flow of his prose to present several schematic plans of how the logical categories stand in relation to each other. Not only does he stop writing out his argument; he presents a succession of tables without much introduction. They appear rather suddenly on the page, as if they carried some argumentative weight of their own: the first, an organization of the different logical forms under which judgments are made; the second, a list of the categories that condition understanding.

49. Craig Saper, "The Music of Visual Poetry and Architecture," *Yearbook of Interdisciplinary Studies in the Fine Arts* 1 (1989): 159.

50. Angelika Corbineau-Hoffmann, "Architekturen der Vorstellung: Ansätze zu einer Geschichte architektonischer Motive in der Literatur," in *Architektur wie sie im Buche steht,* ed. Winfried Nerdinger (Munich: Architekturmuseum München; Verlag Pustet, 2007), 27–28.

The tables are presented here, in the Norman Kemp Smith translation. The Table of Judgements appears first.[51] The Table of Categories appears a few pages later.[52]

Table of Judgements

I. *Quantity of Judgements*
Universal
Particular
Singular

II. *Quality*
Affirmative
Negative
Infinite

III. *Relation*
Categorical
Hypothetical
Disjunctive

IV. *Modality*
Problematic
Assertoric
Apodeictic

Table of Categories

I. *Of Quantity*
Unity
Plurality
Totality

II. *Of Quality*
Reality
Negation
Limitation

III. *Of Relation*
Of Inherence and Subsistence
    (*substantia et accidens*)
Of Causality and Dependence
    (cause and effect)
Of Community (reciprocity
    between agent and patient)

IV. *Of Modality*
Possibility—Impossibility
Existence—Non-existence
Necessity—Contingency

It is well worth considering why, at what many Kant scholars would call the center of his argument, Kant stops to present a list arranged in a particular visual order. Without a doubt, the implications of this section of the *Critique* for Kant's entire argument are immense. As Reinhart Brandt notes, "All critique, transcendental philosophy, and metaphysics (of morals and of nature) has its foundation in the table of judgements. If there is a single foundation on which the doctrines

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51. Kant, *Critique of Pure Reason,* 106–107.
52. Kant, *Critique of Pure Reason,* 113.

of Kant's philosophy are built, it must be the table of judgements."[53] Heidegger, likewise, stresses that this section serves as "the key to understanding the entire book, as the foundation of Kant's metaphysics."[54] Kant must demonstrate the existence of the categories if he wants to prove that understanding is structured by rational principles within cognition and not by the empirical world. Without the structuring order of the categories, Kant's idealist turn would fall into the claim that knowledge of the world is radically subjective, with no interpersonal certainty. Whimsy would become the rule, and no claims to knowledge would have a universal legitimacy. Yet the tables themselves have an arbitrary quality. They are particularly strange because one might ask how Kant arrived at these particular categories, a point particularly worth making because he credits Aristotle for having uncovered certain categories but then criticizes him for presenting them in a haphazard manner dispersed unsystematically through his writing.[55] Many commentators have questioned why Kant does not argue for the specific categories. Why does he simply present a list as if it were taken from lecture notes or some handbook in logic?[56] Where is the philosophical justification for these particular categories as a priori implicit within any synthetic act of understanding? How are we to compare the visual significance of the arrangement with the content of each list? Is there a qualitative difference between the visual presentation of the table and the written argument of the *Critique*? Both Reinhard Brandt and Barbara Bauer allow that there might be some demonstrated quality in the table that might not be communicated in a discursive form, but how does one philosophically evaluate this visual significance?[57] Certainly, in the second edition of the *Critique of Pure Reason,* Kant presents an interpretation of the table wherein he explicates its layout, yet this

53. Reinhard Brandt, *The Table of Judgements: Critique of Pure Reason A67–76; B92–101,* trans. Eric Watkins, North American Kant Society Studies in Philosophy 4 (Atascadero, CA: Ridgeview Publ., 1995), 1.

54. "Das Verständnis dieses Paragraphen ist der Schlüssel zum Verständnis der Kritik d.r. V. als einer Grundlegung der Metaphysik." Heidegger, *Kant und das Problem der Metaphysik,* 53.

55. "Dann wird aber überhaupt unsicher, welchen Charakter diese Urteilstafel hat. Kant selbst schwankt und nennt sie bald eine 'transzendentale Tafel', bald eine 'logische Tafelder Urteile'. Fällt so nicht der Vorwurf, den Kant der kategorientafel des Aristoteles macht, auf seine Urteilstafel zurück?" Heidegger, *Kant und das Problem der Metaphysik,* 51.

56. For Kant's sources, see Heinz Heimsoeth, "Herkunft und Entwicklung von Kants Katagorientafel," *Zur Kantforschung der Gegenwart,* ed. Peter Heintel and Ludwig Nagl (Darmstadt: Wissenschaftliche Buchgesellschaft, 1981), 25–32.

57. "What justifies this table and the systematicity and completeness Kant claims for it? Is it 'evident and incapable of proof'? While a certain degree of plausibility is supposed to result from the arrangement of the logical functions in an intuitive table whose four headings the reader can grasp in a single intuition (uno intuitu), its discursive support can be realized only by a reader who is aware of information and interpretations of the text that Kant presupposes." Brandt, *Table of Judgements,* 1. Bauer follows Brandt's lead: Barbara Bauer, "Die Philosophie auf einen Blick: Zu den graphischen Darstellunngen der aristotelischen und neuplatonische-hermetischen Philosophie vor und nach 1600," in *Seelenmaschinen: Gattungstraditionen, Funktionen und Leistungsgrenzen der Mnemotechniken vom späten Mittelalter bis zum Beginn der Moderne,* ed. Jörg Jochen Berns and Wolfgang Neuber (Vienna: Böhlau, 2000), 484.

description cannot exhaust the significance of its visual organization. The discourse about the table does not supplant the table itself.

What end do the tables serve? For a start, Kant is working within the norms of his age. As Foucault remarks, "The drawing up of 'tables' was one of the great problems of the scientific, political and economic technology of the eighteenth century."[58] In a specifically epistemological context, Peter Baumanns reads the table as a response to the empiricist tabula rasa.[59] By choosing a four-cornered diamond shape for his list, Kant suggests that the formal positioning of the categories contributes some validity to their deduction, or at the very least the form assists the reader in understanding the argument. [60] Kant refers to each as a *Tafel,* which today suggests a blackboard but might once have indicated any surface on which geometrical figures could be sketched. Of course, in ordinary speech, the term refers to a table upon which a meal is served.[61] The *Tafel* thus might be a spread of plates and food for the reader to consume, one placed (laid out) in such a manner that the position of each item tells something important. The *Tafel* prepares an activity, namely, the consumption of the meal. The formal (logically and ceremonially) arrangement of the *Tafel* explains the sequence of the meal. The arrangement tells how the meal will be eaten, which foods in what order. It tells us something about those who participate. The arrangement of the *Tafel* guides the subsequent event. Kant was very fond of large midday meals with invited guests and placed great importance on the rituals of dinner conversation. A guest who could not contribute to the conversation, who had little to say for himself, would likely not receive a second invitation. Banquets, furthermore, stand at the origin of the memory arts, a subject we will discuss in detail in the next chapter. Kant's *Tafel* shares a kinship with the table Simonides recreated in his mind. As Bauer has argued, Kant's *Tafel* is descendant from the many tables, charts, trees, and diagrams used by scholars to present logical categories in visually comprehensible form. As such it participates in the modern reception of the memory arts, that is, the reliance on visual forms situated in space as a means of organizing complex discursive relationships.[62] In the *Anthropologie,* we find clear evidence that Kant and

58. Michel Foucault, *Discipline and Punish: The Birth of the Prison,* trans. Alan Sheridan (New York: Vantage, 1979), 148.

59. Peter Baumanns, *Kants Philosophie der Erkenntnis: Durchgehender Kommentar zu den Hauptkapiteln der "Kritik der reinen Vernunft"* (Würzburg: Königshausen & Neumann, 1997), 240.

60. Barbara Bauer draws a compelling connection between Kant's presentation and the early modern tradition of graphically representing philosophical systems according to the emblematic adaptation of the classical *ars memorativa.* See Bauer, "Die Philosophie auf einen Blick," 481–519.

61. Nietzsche writes about *Tafeln* in *Thus Spoke Zarathustra,* but he is thinking more along the lines of Moses than Kant. A *Tafel* can also be a tablet on which laws are written. Exodus 24:12: "Und der HERR sprach zu Mose: Komm herauf zu mir auf den Berg und bleib daselbst, daß ich dir gebe die steinernen Tafeln, Gesetz und Gebot, die ich geschrieben habe, um sie zu unterweisen." Zarathustra says that he is surrounded with broken old tablets and half-written new ones. In a Nietzschean sense Kant's table of categories is the rendering of a new law of truth. Baumanns, *Kants Philosophie der Erkenntnis,* 240.

62. See also Lina Bolzoni's history of table and charts used by Renaissance logicians in *The Gallery of Memory,* trans. Jeremy Parzen (Toronto: University of Toronto Press, 2001), 23–73.

his audience were quite familiar with these ancient arts. In one lecture, he compares the famous polyhistorians with a train of one hundred camels carrying a load of books, reminding us of the worm that grows by accumulation. Indeed, Kant urges the reader not to judge the memory artists too harshly, for their ability to hold vast information was already praiseworthy, even if they lacked the *Urteilskraft* or ability to judge it.[63] The architectonic, on the other hand, reorders the linear sequence of rhetorical speech into a spatial structure. It has the quality of a memory theater in the sense that it provides a means of testing whether one has failed to include some information. Having left some knowledge out, having overlooked some data, is not the same as having forgotten something that was once known. Still architecture, the spatial arrangement of knowledge, is used as a means to determine the completedness of knowledge. Kant's architectonic shares with Descartes the sense that an order will allow one to check, reexamine, knowledge in order to see if there is more knowledge to be acquired. Ultimately, the spatial arrangement of knowledge is more than an ordering; it establishes a method of examination.

Not only does a *Tafel* suggest a physical space within which memory occurs; it also conceives that space as contemplative. Whereas the classical authors imagined mnemonic space as architectural, the eighteenth century was open to using natural tableaus. When in *Poetry and Truth* Goethe describes the view of the Alsatian landscape from the tower of the Strasbourg Muenster as a *Tafel,* he does so to emphasize the calm, detached manner in which he, a new arrival to the region, contemplated his future: "Such a fresh view into a new landscape, where we plan to spend some time, retains its unique character, both pleasant and fateful, so that the whole lies before us like an unwritten slate."[64] From the tree in "Von deutscher Baukunst" upon which he etches Erwin's name to the woods in *Poetry and Truth* where he meets his beloved, the natural objects around Strasbourg became the surface on which Goethe wrote. A *Tafel* has a preliminary quality: it is viewed at the beginning of an exercise, such as living in Strasbourg or expounding the a priori categories. The *Tafel* allows the eye to wander over objects to the extent that they seem meaningful at first glance. In a word, Goethe's gaze upon the *Tafel* is disinterested, because it occurs at the very opening of an activity. The *Tafel* allows calm thought, and yet, as Goethe admits, it creates some anxiety about how the future will fill in the neutral space. Here, too, at the beginning of Kant's deduction, the *Tafel* allows a moment of calm, and yet fairly contentless, reflection about its elements. Just as the traveler does not have any strong personal feelings about a new landscape, so

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63. "Von den Wundermännern des Gedächtnisses, einem Picus von Mirandola, Scaliger, Angelus Politanus, Magliabecchi usw., den Polyhistoren, die eine Ladung Bücher für hundert Kamele als Materialein für die Wissenschaften in ihrem Kopf herumtragen, muß man nicht verächtlich sprechen, weil sie vielleicht die für das Vermögen der Auswahl aller dieser Kenntnisse zum zweckmäßigen Gebrauch angemessene *Urteilskraft* nicht besaßen." Immanuel Kant, *Anthropologie in pragmatischer Hinsicht,* in *Sämtliche Werke* (Leipzig: Insel, 1921), 1: 364.

64. Goethe, *Dichtung und Wahrheit,* HA 9: 357.

too the philosophic reader might have a nonjudgmental response to the prelimi-
nary plan of Kant's deduction. Indeed, given the saturation of Kant's architectural
description of the *Critique of Pure Reason,* the tables represent a plan of a plan (a
diagram of the entire *Critique*).

Derrida's treatment of the tables in *Truth in Painting* shows just how suggestive
Kant's terminology is. In his reading of the *Critique of Judgment,* Derrida consid-
ers the tables just at the point where Kant applies the four moments of judgments,
from the *Critique of Pure Reason,* to judgments of taste. Derrida describes Kant's
application of logical categories to tasteful judgements as a "framing," which he
quickly points out does not fit well. What might be appropriate for distinguishing
modes of logical judgments, Derrida suggests, does not apply to the question of
beauty. Derrida then goes on to show the violence that this "framing" performs
on aesthetics. "Framing," however, is a term Derrida locates in the third *Critique;*
it is not the subject or even a metaphor in the *Critique of Pure Reason,* the work in
which Kant first defines the four modes of logical judgment. To make his point
that Kant's application of the first *Critique* to the third fails, Derrida imports a term
from the third in order to explain an argument in the first. Nothing need prevent
Derrida from making this move. He is free to chose his own metaphors. How-
ever, in doing so he passes over Kant's own terms. By importing the "frame" into
the first *Critique,* Derrida frames the *Tafel:* in other words, he engages in his own
act of framing the first *Critique* through the third, even as he points out how the
first "frames" the third. The imposition of concepts onto domains where they are
ill suited—logical terms in aesthetics—is a practice that Derrida sets in reverse—
aesthetic terms in logic. The *Tafel* is surrounded by the frame, creating a surreal
image—a framed table. Derrida then sets out to dismantle this odd ensemble, yet it
is one he has already imposed on the text.

A table provides a surface for a logical deduction and a visual image, a func-
tion particularly important for Kant as he "lays out" his categories. Is there some
demonstrative quality to the table in its visual presentation? Does Kant introduce
the table in the same manner as he would present a geometrical proof? Barbara
Bauer very sensitively draws out the visual significance of Kant's table in order to
demonstrate its relation to baroque illustrations of philosophical systems. What dis-
tinguishes Kant's list from these earlier visualizations of philosophy is its abstract,
geometrical simplicity. Bauer understands the table as a rhetorical strategy rather
than a mathematical demonstration.[65] The visual representation of a geometrical
problem is central to its demonstration. If one sees a triangle, then one intuits the
relation of the sides to each other. Does Kant anticipate a similar effect for his ta-
bles? Does the visual representation of the categories have the same explanatory

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65. "Die Kantischen Tafeln sind Relikte einer Darstellunngsform der Philosophie, die in der
Frühen Neuzeit selbstverständlich auf die rhetorische Wirkmacht und Überzeugungskraft der Bilder
neben oder anstelle der Worte vertraute." Bauer, "Die Philosophie auf einen Blick," 489.

quality as an architectural plan? To see the drawings of a building's organization is to understand it more abstractly and completely than if one were to read about it.

Within the Kantian jargon, the visual appeal of a table would be akin to a geometrical proof, an image that carries an explanatory weight: "All concepts are discursive and all constructions intuitive."[66] Kant separates conceptual discourse from mathematical demonstrations, yet the *Tafel* is one moment in which he combines both as a "construction" that equates with drawing (*zeichnen*), the medium shared by architects and geometers. The connection between geometry and architecture raises the possibility that the *Tafel* amounts to a visual, two-dimensional plan of pure understanding. As such it assists the conceptual thinker without contributing new discursive knowledge: "The mathematician is a great architect. Through his order he can be very useful for philosophy; however, he cannot enrich it with new concepts. Where a concept is assumed, mathematics accomplish everything, but where concepts are discursive, the mathematician can accomplish nothing."[67] That Kant would present his philosophy as a drawing runs counter to his repeated insistence, in a deliberate critique of Cartesian argumentation, that philosophy cannot rely on mathematics to explain the relationship of knowledge to the world. There is little doubt among scholars that Kant distinguishes sharply between philosophical deductions and geometrical demonstrations; thus for him to rely on a visual presentation of a philosophical argument, such as the printed page showing the *Tafel,* runs against his avowed method.[68] Mathematics, Kant argues, operates through constructions that do not directly arise from empirical intuitions.[69] Mathematical proofs consist of demonstrations, as opposed to philosophical arguments, which employ concepts about the empirical world:[70] "All knowledge arising out of reason is derived either from concepts or from the construction of concepts. The former

66. "Alle Begriffe sind Discursiv und die Constructionen intuitiv, daß z.E. aus einem Punkt über der Linie nur ein Perpendikel möglich sey, beweise ich nicht aus dem Begriff des Perpendikels oder der geraden Linie etc, sonder durch Construction, ich zeichne nehmlich alles hin." Immanuel Kant, "Vorlesung über Philosophische Enzyklopädie," in *Gesammelte Schriften* (Berlin: Walter de Gruyter, 1980), 29: 6.

67. "Der Mathematicer ist ein großer Architect. Durch Ordnung kann er der Philosophie sehr nützlich seyn, aber wird sie mit neuen Begriffen nicht bereichern. Wo ein Begriff constrairt werden soll, da kann der mathematicus alles thun, aber bey begriffen die discursiv sind, wird er nichts ausrichten." Kant, "Vorlesung über Philosophische Enzyklopädie," 29: 12–13.

68. Various studies reiterate Kant's distinction: Howard Duncan, "The Euclidean Tradition and Kant's Thought on Geometry," *Canadian Journal of Philosophy* 17.1 (March 1987): 24 and 35; Matthias Schirn, "Kants Theorie der geometrischen Erkenntnis und die nichteuklidische Geometrie," *Kant-Studien* 82.1 (1991): 5; and Lisa Shabel, "Kant on the 'Symbolic Construction' of Mathematical Concepts," *Studies in the History of Philosophy and Science* 29.4 (1998): 589.

69. Lisa Shabel interprets Kant as insisting that our pure intuition of space makes geometry as a science possible. A crucial step in this argument, she claims, is Kant's claim that geometrical claims are not formulated a posteriori. Lisa Shabel, "Kant's 'Argument from Geometry,'" *Journal of the History of Philosophy* 42.2 (2004): 204.

70. "Die Philosophie ist eine Vernunft Wissenschaft aus Begriffen und die Mathematic eine Vernunft Wissenschaft aus der Construction." Kant, "Vorlesung über Philosophische Enzyklopädie," 29: 6.

is called philosophical, the latter mathematical."[71] Kant no doubt has geometry in mind when he argues that mathematics entails the demonstration of constructions that are intuited a priori, though he extends the argument to include algebra. His account of how mathematics demonstrates a proof relies strongly on visual terms. A geometrical construction is *anschaulich,* whereas philosophy relies on words: "I should therefore prefer to call the first kind *acroamatic* (discursive) *proofs,* since they may be conducted by the agency of words alone (the object in thought), rather than *demonstrations* which, as the term itself indicates, proceed in and through the intuition of the object."[72] The difference between seeing and hearing suggests an anthropological distinction between perception and modes of thought. Listening and the discursive quality of philosophy are thematized in order to mark the boundaries of systematic philosophy. By repeatedly rejecting mathematics as the basis for knowledge, Kant separates himself from Descartes and Leibniz, both of whom Kant claims deployed mathematical proofs to demonstrate the nature of the world. [73]

In the section on the architectonic we find a similar moment in which Kant discusses the discursive quality of philosophical argumentation. He distinguishes here between modes of arranging knowledge: either as a system or "rhapsodically," which means according to the linear narration of oral poetry. The term entered philosophy through Plato's dialogue *Ion* and was invoked favorably by Kant's Königsberg contemporary Johann Georg Hamann in his 1761 essay, "Aesthetics in a Nutshell: A Rhapsody in Cabbalistic Prose." The rhapsode performs epic poetry for a listening audience, who is always caught in the present moment of speaking. The listener in the midst of a performance does not have an overview of the entire work. Memory and anticipation may saturate the work, so that the audience is led to anticipate or recall events, but temporal allusions are always caught in some particular instance. Systematic philosophy, on the other hand, allows, indeed Kant would insist, requires, a comprehensive understanding that narration never provides. (Even the gods in Homer, for all their detachment, are carried along by the war and their own rivalries.) Rhapsody depends very much on the ear, though the speaking poet no doubt contributes to the telling through his body. Kant's distinction between systematic thinking and rhapsody suggests two different temporalities as well as a different order of the senses. The systematic thinker reflects after the fact. He is not caught up in the stream of sensory experience. Instead he analyses when it is no longer immediate. He waits until after the first impression. This delay suggests that the senses are less important in systematic thought; nevertheless the

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71. Kant, *Critique of Pure Reason,* 656; Kant, *Kritik der reinen Vernunft,* 864 [A837/B865].

72. Kant, *Critique of Pure Reason,* 590–591; Kant, *Kritik der reinen Vernunft,* 781–782 [A735/B763].

73. Leibniz points out that the difference between mathematical and linguistic signs means that philosophical and mathematical questions need to be articulated differently, yet in his "Nouveaux essais sur l'entendement humain" he allows Philalethes to posit: "On peut juger du juste et de l'injuste aussi incontestablement que dans les Mathematiques." Leibniz, *Philosophische Schriften,* 3.2: 296.

process of thought is described in visual terms. Here again Kant compares his writing to the architectural plan and sketch.

Implicitly, Kant does connect a visual process with the table. His textual explanation of how the categories operate explains that each element is put into relation to the others through an act of synthesis performed by the imagination. Where is the imagination in the table? It is nowhere listed among the concepts. Instead imagination is the operation of the concepts listed. The table reiterates the visual character of imagination by showing the categories it deploys in synthesis that constitutes knowledge. In order for knowledge to be understood, it must be arranged according to the concepts shown in the table. The act of moving sensory impressions through the categories is itself performed by the imagination; thus it does not appear listed. The imagistic arrangement of the categories into four lists symmetrically aligned into a cross suggests a factor that arranges the concepts in the table but does not appear within it. The table as formal arrangement requires the engagement of Kant's most elusive and imprecisely defined faculty. The form of the table, its break with normal discursive flow and its rearrangement of the concepts into a diamond, is the table's visual representation of imagination.

The arrangement of the words in the table suggests an order outside the discourse that corresponds to Kant's insistence that the *Critique of Pure Reason* be understood as a whole rather than in its details. The layout of the table gives a visual perception of the architectonic order that lies beyond the immediate discursive argument. The unity of the work is not encapsulated by the text itself, though it is theorized in Kant's discussion of the architectonic. The table has the qualities of a sketch or a plan. It presents the metaphor of architecture within the text as a symmetrical distribution of words. The fact that certain lists are longer than others, that Kant does not present a neatly symmetrical image, where letters and words correspond not only in terms of their signifieds but also typographically, shows that the discursive still has precedence over the architectonic image.

Kant defends the table as providing a plan of his entire undertaking. Again the German stresses the architectural character of Kant's intention. First he couples philosophical thought with the visual contemplation of the table. The playful tone suggests that looking at the table could allow insights into the overall form of rational understanding: "This table of categories suggests some nice points, which may perhaps have important consequences in regard to the scientific form of all modes of knowledge obtainable by reason."[74] The table then is a visual image of Kant's entire project: "For that this table is extremely useful in the theoretical part of philosophy, and indeed is indispensable as supplying the *complete plan of a whole science,* so far as that science rests on *a priori* concepts, and as dividing it systematically

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74. Kant, *Critique of Pure Reason,* 115; "Über diese Tafel der Kategorien lassen sich artige Betrachtungen anstellen, die vielleicht erhebliche Folgen in Ansehung der wissenschaftlichen Form aller Vernunfterkenntnisse haben könnten" (Kant, *Kritik der reinen Vernunft,* 159).

according to determinate principles."[75] Kant uses the ground/edifice metaphor, but the foundation is nothing more than the table, which gives a visual representation. The grounding should not be understood literally as a foundation based on first principles, but instead as a sketch, a plan that represents the interaction of the categories through their static placement in a four-sided figure. Kant's epistemology is grounded not on certain knowledge of self-consciousness—cogito, ergo sum—but instead it is posited upon a deduction of categories, which are knowable only through a schematic rendering of human reason. The transcendental deduction is an example of how he would wish the architectonic of knowledge to survey all sciences in order to recognize what rational concepts have not been accounted for but lie implicit within the others. The architectonic would allow one to deduce what forms of knowledge must be at work but have not yet been properly recognized.

In his specific comments Kant makes clear that the arrangement of the table into four classes is important. He proceeds to read the four clusters in relation to each other—that is to say, the visual positioning of each list over and against the other is itself an indication of the organization of rational thought. Kant wants to arrange the categories in a four-sided table because this format allows him to show that the four types of categories do not operate sequentially in the process of composing a synthesis of the understanding. The two-dimensional character of the table on the page can be compared to the architectural plan, which in flat images lays out the position of three-dimensional objects.[76] The "table" is understood as a highly abstract representation of four supports connected by a surface. No one category has precedence over the other; they coordinate with each other, rather than subordinating to each other. The elements are united in a sphere, Kant argues, which makes them a coherent whole in which no one part can be left out, and wherein each element acts on the other.

The two tables have a similar layout in order to support Kant's claim that the a priori categories are derived from the logic of judgments. This derivation is both

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75. Kant, *Critique of Pure Reason,* 115; "Denn daß diese Tafel im theoretischen Teile der Philosophie ungemein dienlich, ja unentbehrlich sei, den Plan zum Ganzen einer Wissenschaft, so fern sie auf Begriffen a priori beruht, vollständig zu entwerfen, und sie mathematisch nach bestimmten Prinzipien abzuteilen" (Kant, *Kritik der reinen Vernunft,* 159 [B109]).

76. Brandt's reading confines itself to understanding the table as a representation on a flat surface. Brandt, *Table of Judgements,* 60: "The table metaphor does not suggest either a temporal affiliation or a genetic principle. All elements are simultaneously and equally justified. They do not arise from a higher principle or a source that generates and defines them. The table of judgements is not a genealogical tree, neither from above nor from below. And yet in this table there is a series designated by numbers: we begin with quantity, and then proceed left to quality, then over to relation, and finally to modality. The numbers indicate that what is in question is neither clockwise nor counter-clockwise circular motion, but rather that the upper triad is set up first in the standard reading sequence, and then one proceeds to modality. We saw above that this corresponds to the irreversible structure of traditional logic. The table may also do justice optically to the special position of modality, which Kant emphasizes in the explanatory passage: the triangle of the first three headings is closed in itself as a complete geometrical figure. By extending it to a rectangle something qualitatively new is added, but in such a manner that the fourth element need only be a reflection or mirroring of the three proceeding it."

genealogical and inherent to the nature of the categories. While not giving a complete history of logic, Kant suggests that the a priori categories of understanding have been recognized in the past; however, they had not been organized in a systematic manner, as he has done with the tables he presents. Aristotle is credited with having isolated several fundamental logical principles, however without having articulated their interconnections, for he, Aristotle, proceeded "rhapsodically." The systematic presentation of the categories advances philosophical thought, according to Kant, because it organizes logical principles into a unified whole. Writing about the layout, Kant explains:

> This division is developed systematically from a common principle, namely, the faculty of judgement (which is the same as the faculty of thought). It has not arisen rhapsodically, as the result of a haphazard search after pure concepts, the complete enumeration of which, as based on induction only, could never be guaranteed. Nor could we, if this were our procedure, discover why just these concepts, and no others, have their seat in the pure understanding.[77]

The rationale is very similar to the arguments Kant presents for an architectonic of all knowledge. Only a vision of the whole will allow one to recognize if any element has been left out. The table, like the architectonic, is modeled on the plan drawn prior to construction so that the entire undertaking can be examined critically before the ground is broken. In contrast, the "rhapsodic" acquisition of knowledge relies on luck and inspiration. Theodor Adorno directly connects Kant's polemic against rhapsodic thought with the Cartesian rule "that one 'should in every case institute such exhaustive enumerations and such general surveys' that one 'is sure of leaving nothing out.'" For Adorno, Descartes' rule amounts to the "true principle of systematic thought," a mode Adorno contrasts with the impulsive style of the essay.[78] While Kant does acknowledge fortuitous modes of thought, such as genius, in the *Critique of Judgment,* he clearly values systematic articulation over chance insight.

Kant's explanation as to how he deduced the table has its own rhapsodic, and thus unsystematic, quality. Here, at the most important moment of systematic articulation, Kant falls into a seemingly arbitrary representation. Never is a full account given of the transition from the first table to the second. Why break down logical judgments in four lists of three? Just how were the categories reconfigured from the logical table? No full systematic account is provided. In the second edition, Kant does offer an abbreviated genealogical derivation of three categories—"unity," "plurality," and "totality"—as having been only implicitly understood by Scholastic logic [B113–116]. In this passage, Heidegger recognizes an intention to

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77. Kant, *Critique of Pure Reason,* 114; Kant, *Kritik der reinen Vernunft,* 157 [A81/B106–107].

78. Theodor Adorno, "The Essay as Form," in *Notes to Literature,* trans. Shierry Weber Nicholsen (New York: Columbia University Press, 1991), 1: 15.

uncover the origins of consciousness's unity with being. As much as later philosophers might elaborate on Kant's historical understanding of the categories, those passages in which Kant discusses how earlier philosophers half recognized the categories are still only elucidations of the visual table. The crucial point of the tables is that they suggest a unified entity. Kant claims that the tables are an advance over earlier epistemology because they suggest through their visual array that the fundamental principles of logical judgment (and the a priori categories) operate in conjunction with each other. The table as visual image represents articulation more clearly than discourse, which is itself a medium of accumulated words in a row. In the commentary of the second edition, Kant explains to readers how they are supposed to interpret the image of the lists as a representation of the categories in operation. For example, disjunctive judgments, which would have to be written in an either/or sentence, are better represented in a visual field than in a grammatical sequence.[79] While the tables are the only image Kant presents to portray the categories, he states that the operation of the categories shown in the table forms a sphere. If the table shows the static relation of the categories to each other, the sphere is better suited for describing interactive relations such as the simultaneous attraction and repulsion of two bodies to and from each other or the relation of a thing divided into parts, wherein the parts are distinct from each other and yet are all included within the complete thing to which they belong. Kant finds the sphere more apt for representing these intertwined relations. If we think of the table in three dimensions, each one of the four lists with its three categories allows for a twelve-part interaction that Kant conceives of as creating the relations of a sphere. Kant does not provide a complete explanation of how the geometrical representation of the categories occurs. The best we are left with is the suggestion that the interaction of the categories positioned in the table when activated in thought can be described as a sphere. Kant introduces this new geometrical figure in the midst of very specific comments in the second edition without having provided a general explanation for this three-dimensional figuration of the categories. While one could imagine a transposition of the table to a sphere, Kant does not provide one.

The a priori categories are crucial because they are the concepts consciousness employs to synthesize diverse intuitions into a coherent entity. The many confused sensations that the mind receives from the outside world need to be collected, preserved, and aligned by an act of the mind in order for them to be intelligible [A77]. The categories function as concepts that organize sensations into thoughts. Kant stresses the operation as a synthesis, an action (*eine Handlung*), that entails intellectually grasping (*begreifen*) a multitude of sensations. Implicit within Kant's description of synthesis is the hand that collects, acts upon, and grabs hold of sensory data: "By *synthesis,* in the most general sense, I understand the act of putting different

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79. Kant, *Critique of Pure Reason,* 117; Kant, *Kritik der reinen Vernunft,* 161 [B112].

representations together, and of grasping what is manifold in them in one [act of] knowledge."[80] The synthesis of the understanding is an action, but the table of categories is static representation. It presents a plan whose elements are supposed to show their functional relation to each other through their positions. The placement of the words implies an interaction, a conceptual doing that interacts with another. The process of thinking appears on the page as abstractions set against each other. The four-cornered layout along with their implied interaction is caught up in another tension—that between the immobility of the concepts in the table and the operation of synthesis that Kant credits to imagination (*Einbildungskraft*). The mode of representation (signifier)—through a table in a book—replicates the drama between the elements (signified). The table shows the categories of understanding, but it does not portray the act of synthesis. How these categories operate in understanding is left out of the picture.

The Architect as Master of All and Nothing

The architectonic section of the *Critique of Pure Reason* characterizes the formation of knowledge, both in the epistemological sense of absorbing and analyzing perceptions and in the practical, biographical sense of learning over time, as the reorganization of raw data into a complex, abstract order. The specific movement of understanding implied by the table of categories is compared to the temporal development of knowledge, both biographically for a thoughtful person and discursively for the history of science. This section will examine how Kant places knowledge into a unity that shares surprising features with the liberal arts education put forward in Vitruvius's treatise on architecture. My reading will show how ancient architectural theory provided systematic philosophy with key conceptual terms, as well as with a humanist ideal, akin to the subjective aspirations of eighteenth-century *Bildung*. In the end, ancient architecture serves as a model representation of how the arrangement of freestanding elements into a whole redefines subjectivity. It provides a means to describe the subject statically, as having an internal order that is "structured," and fluidly, as changing over time (rising, decaying, restoring itself).

Architecture rivaled philosophy from the start by presenting itself as the overarching discipline that integrates other disciplines. Given the complex knowledge required for either undertaking, Vitruvius, the one Roman architect whose treatise on building has survived to the present, opens his *Ten Books on Architecture* with the question of education. What branches of study are required for the successful

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80. Kant, *Critique of Pure Reason,* 111; "Ich verstehe aber unter **Synthesis** in der allgemeinsten Bedeutung die Handlung, verschiedene Vorstellungen zu einander hinzutun, verschiedene Vorstellungen zu einander, und ihre Mannigfaltigkeit in einer Erkenntnis zu begreifen" (Kant, *Kritik der reinen Vernunft,* 154 [B103]).

education of an architect? Before listing any specific fields of knowledge, Vitruvius distinguishes between theory and practice in knowledge. Some might expect that he would raise this point in order to insist that architects are far more concerned with the practice of building, yet he warns immediately that the successful architect needs a thorough knowledge of both: "Architects who have aimed at acquiring manual skill without scholarship have never been able to reach a position of authority…while those who relied only upon theories and scholarship were obviously hunting the shadow, not the substance."[81] The difference between theory and practice, Vitruvius goes on to write, corresponds to the distinction between the signified and that which gives it significance, the signifier—a tantalizing comparison on which Vitruvius does not elaborate. Regardless, the first chapter presents a theory of knowledge, which seeks to unify divisions through the practice of educating architects: "One who professes himself an architect should be well versed in both directions."[82] Evenhandedness, or balance, is an important virtue for ancient writers familiar with Aristotle; thus it seems as sensible for Vitruvius to counsel against an overly theoretical approach to architecture as it is for him to bemoan the absence of abstract thinking in construction. However, it soon becomes clear that the real concern for Vitruvius is that architects might not receive sufficiently philosophical education. Vitruvius lays out the distinction between theory and practice in order to justify a wide curriculum for architects. The organization of Vitruvius's treatise, wherein the discussion of building materials precedes the analysis of proportion and the orders, suggests that in the ancient education of an architect practical knowledge also precedes theory. Vitruvius's famous rule that all structures must be built with a concern for durability, convenience, and beauty also suggests an ascending movement wherein an education in laying out foundations precedes aesthetics. As important as the technique for building a proper wall may be for Vitruvius, he is eager not to have the architect's education remain there. Instead he posits an ascending movement from the material into the abstract that follows the arc of Platonic education. Before entering into the specific questions of proportions, Vitruvius presents a theory of knowledge. Theory, as opposed to the practice of building, has two important roles in Vitruvius's treatise: to define the discipline's educational requirements and to explain the stylistic rules for designing buildings appropriate to their function.

Following the division between theory and practice, Vitruvius lists the many branches of knowledge necessary for an architect: "Let him be educated, skilful with the pencil, instructed in geometry, know much history, have followed the philosophers with attention, understand music, have some knowledge of medicine, know the opinions of the jurists, and be acquainted with astronomy and the theory

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81. Vitruvius, *Ten Books on Architecture,* 5.
82. Ibid.

of heavens."[83] These fields obviously encompass many others. Vitruvius goes on to include arithmetic and optics under geometry. History blends into mythology and religion. Painting and sculpture are mentioned later. Military tactics and fortifications are not immediately included, yet they saturate Vitruvius's writing.

The list seems encyclopedic, but Vitruvius suggests that the architect need not have complete mastery in the fields listed.[84] In studying philosophy, it suffices to "have followed with attention." An understanding of the primary opinions and an acquaintance with a field are often enough for the architect. One might wonder, based on Vitruvius's description, just how thorough the education of the architect is meant to be.[85] Is he required to understand all aspects of the field, or does he need to study only those that apply to construction? How well versed in the law does an architect need to be? Vitruvius explains that debates over property boundaries, building codes, and the relations between neighbors are often of decisive importance in the design of a building. The immediate question, then, for the busy architect becomes, Is a knowledge of property rights sufficient, or is a comprehensive understanding of Roman law the only secure basis for resolving housing disputes? Can an architect have a smattering of knowledge, or must the architect be systematic in his studies, learning more than most every other educated professional? Can the architect move lightly among fields, collecting only what will serve his immediate, practical goals of construction, or must the architect grasp the inner organization of these sciences with the same insight and facility as their practitioners?

The opening sentence boldly asserts a hierarchy of knowledge with architecture at the peak: "The architect should be equipped with knowledge of many branches of study and varied kinds of knowledge, for it is by his judgment that all work done by the other arts is put to the test." Architecture is not a subject like any other; it cannot be learned in the same manner as other sciences.[86] Vitruvius argues instead that it must be acquired in stages that stretch out across an entire life. The different forms of liberal education are organized like the human body—as a single whole composed of different members.

The education of the Vitruvian architect has certain similarities with Socrates' account of how the philosopher moves from loving boys to contemplating the Beautiful. Socrates' rendition of Diotima's speech in Plato's *Symposium* describes how the lover of beauty rises in stages: first, from sensual desire for a particular body,

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83. Ibid.
84. Alberti would later echo Vitruvius's account, though with a list of character traits that suggested not only that the architect needed to be well educated, but also supreme in many other human qualities: "A great matter is architecture, nor can everyone undertake it. He must be of the greatest ability, the keenest enthusiasm, the highest learning, the widest experience, and, above all, serious, of sound judgement and counsel, who would presume to call himself an architect." Alberti, *On the Art of Building,* 315.
85. Martin Briggs, *The Architect in History* (Oxford: Clarendon Press, 1927), 19, 30–34.
86. Heiner Knell, *Vitruvs Architekturtheorie: Versuch einer Interpretation* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1985), 29.

then to loving many bodies, followed by a learned love of beautiful things until arriving at the form of Beauty.[87] Vitruvius does not explicitly equate knowledge with an understanding of beauty; thus the educational path he describes does not have the aesthetic character of the *Symposium.* Nevertheless, Vitruvius does present the education of an architect as a spiritual ascent:

> Consequently, since this study is so vast in extent, embellished and enriched as it is with many different kinds of learning, I think that men have no right to profess themselves architects hastily, without having climbed from boyhood the steps of these studies and thus, nursed by the knowledge of many arts and sciences, having reached the heights of the holy ground of architecture.[88]

One can still detect the echo of a student-teacher relationship in this description. Vitruvius is particularly concerned that students not rush ahead of their abilities to assume the rank of architect. In the introduction to book 3, he reiterates the common ancient opinion that Socrates was the wisest of men. Unfortunately, few recognize the wisdom in others, and very often the lessons of philosophy are overlooked by those who do not see the virtues that others possess. Because of this common inability to judge others correctly, Vitruvius argues it is necessary for the educated to write treatises, such as his own. Out of this somewhat self-serving argument, it becomes clear that Vitruvius holds Socrates up as the exemplar for the educated architect. Vitruvius's text stands in for the experienced wisdom that would, in a better world, be recognized and respected.[89] Later, Vitruvius provides a list of the many Greek and Latin treatises he has consulted in preparing his own. Thus the first form of knowledge listed among the architect's many—skill with a pencil, an art Socrates eschewed—serves the Vitruvian architect as a means of assuring his lasting fame, even in the face of career disappointments.

Vitruvius was by no means alone in describing architecture as that art that organizes all others. The Greek word *architecton* did not so much mean "master craftsman" as "craft organizer," the individual responsible for supervising the various crafts on a large construction project.[90] The lexical shift whereby the "architect"

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87. Plato, *Symposium,* trans. Alexander Nehamas and Paul Woodruff (Indianapolis: Hackett, 1989), 59.

88. Vitruvius, *Ten Books on Architecture,* 10.

89. John Soane also recognizes an ethics in Vitruvius's adaptation of philosophy: "[Vitruvius] particularly inculcates the necessity of philosophy to enlarge the mind of the artist, to free him from arrogance, and to make him courteous, just and faithful; above all things he exhorts him to avoid avarice; as no work can succeed without fidelity and integrity; and not to be covetous, nor to have his mind intent on receiving gifts but to support with prudence and propriety, his dignity and reputations." John Soane, *Plans, Elevations, and Sections of Buildings* (London, 1788; repr., Farnborough, England: Gregg International Publishers, 1971), 2.

90. J. G. Landis, *Engineering in the Ancient World* (Berkeley: University of California Press, 1978), 209.

was transformed from directing laborers to mastering knowledge did not occur with Vitruvius. Indeed, he does not make this distinction as sharply as earlier writers. For example, he contrasts his own pedagogical expectations with those in a lost manual written by Pytheos, the architect of the temple to Minerva at Priene, the first building known to have a plan developed systematically on a grid of squares upon which the structural elements are organized.[91] Pytheos, it seems, maintained that the architect should be more accomplished than men who specialized in their particular fields. The architect, according to Pytheos, must attain perfection in every area. Vitruvius argues that such a standard is both impossible and unnecessary. An architect need not also be a superior musician, sculpture, painter, philologist, and physician. Architectural knowledge in these fields relies on a theoretical understanding, but practical knowledge of every science is beyond the capacity of any one individual. Klaus Sallmann argues that here Vitruvius follows Plato's maxim that the level of education depends foremostly on the purpose for which it is used rather than on the requirements of a particular discipline.[92]

The concept of an organic unity in which the individual elements are all coordinated to form a whole does not begin with Vitruvius. Aristotle refers to the bodily structure of poetry; however, what makes the link between Kant and Vitruvius plausible is the equation of architecture with the organic unity of knowledge. Kant uses "architectonic" as a metaphor to refer to an as yet unattained integration of systematic knowledge, whereas Vitruvius uses the figure of the architect and his education in order to give "architecture" a systematic character both as a mode of knowledge and a profession. Implicit within both discussions of architecture and the organic unity of all knowledge is the figure of Socrates. Toward the end of his discussion of the architectonic of pure reason, Kant states that true philosophy entails the application of systematic knowledge to the essential ends of human reason. The true philosopher arranges knowledge architectonically with an understanding of moral law. This teacher, as Kant calls him, proscribes the responsibilities that the different forms of knowledge have with regard to human reason. Here Kant is reiterating the distinction between the docile philosopher, who merely knows the logic of a particular system, and the reflective philosopher, who critically appraises systems according to the standards of human reason. The "teacher" Kant mentions remains an ideal, a standard of rational thought to be attained, but not yet possible. Socrates appears as the implicit referent. However, Kant refrains from ascribing agency to the position of architectonic reflection. As John Zammito has suggested, Kant's "Lectures on Philosophical Encyclopedia" may be decisive in understanding the anthropological implications of the *Critique*'s opening assertion that reason

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91. David M. Jacobson, "Hadrianic Architecture and Geometry," *American Journal of Archaeology* 90 (1986): 69.
92. Sallmann, "Bildungsvorgaben des Fachschriftstellers," 18.

is doomed to look for answers it cannot provide.[93] The "Lectures" coincide closely with passages in Kant's discussion of the architectonic, specifically regarding the purpose of developing such a system of systems.[94] In the "Lectures" Kant describes a kind of truth that has long remained hidden. The architectural metaphor, with its insistence on digging up old foundations, reappears in the German *verborgen,* which suggests that this truth has lain hidden under the ground, buried with a system of thought, as an insight that critical philosophy unearths first in its epistemological excavations: "A buried idea of philosophy has long lain in humans." (Ein verborgene Idee der Philosophie hat in den Menschen lange gelegen.)[95] This hidden idea has been misrecognized, treated as if it belonged to a system of learnedness. Kant identifies Zeno, Epicurus, Diogenes, and Socrates as thinkers whose primary concern was understanding the basic conditions of humanity and finding means to achieve them: "The ancients were teachers of wisdom. They demanded examples from their teachers, they were supposed to live as they taught. Diogenes, the teacher of simplicity, showed through his life how to be satisfied simply."[96] Kant specifically contrasts these figures with Plato and Aristotle, who for their age were "Künstler der Vernunft":

> There were at that time also artists of reason such as Plato and Aristotle. The philosophy of Aristotle followed the school method; he was inclined toward the subtleties of speculation. Plato followed the free spirit of his genius. Neither speculation nor analysis stands out in his case, rather more rapture (*Schwärmerey*).[97]

He then identifies Socrates as the first thinker to distinguish between speculation and wisdom, the latter requiring one to examine behavior:

> Socrates taught that speculation does not help us fulfill our condition; instead we must examine our behavior, if we want to understand ourselves. He does not use his philosophy in order to occupy our amazement or thirst for knowledge, rather to teach us wisdom.[98]

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93. John H. Zammito, *Kant, Herder, and the Birth of Anthropology* (Chicago: University of Chicago Press, 2002), 286–292.

94. On the relation of the manuscript to the *Critique of Pure Reason,* see Manfred Kuehn, "Dating Kant's *Vorlesung über Philosphische Encyklopädie," Kant Studien* 74.3 (1983): 302–314.

95. Kant, "Vorlesung über Philosophische Enzyklopädie," 29: 9.

96. "Die Alten [waren] Lehrer der Weisheit. Sie forderten von ihrem Lehrern Beyspiele sie sollten leben wie sie lehrten. Diogenes der Lehrer der Genügsamkeit zeigte durch sein Leben, wie es anging gnügsam zu seyn." Kant, "Vorlesung über Philosophische Enzyklopädie," 29: 9.

97. "Es gab auch zu ihrer Zeit Künstler der Vernunft wie Plato und Aristotles. Die Philosophie des Aristotles war nach der Schul Methode, er inclinirte zur Subtilitaet der Speculation. Plato folgte den freyen Lauf seines Genies. Nicht der Speculation, der Analysis, sondern eine gewiße Schwärmerey sticht bey ihm vor." Kant, "Vorlesung über Philosophische Enzyklopädie," 29: 9.

98. "[Socrates] lehrte, die Speculationen helfen nichts unsere Bestimmung zu erfüllen; sondern wir müßen unser Verhalten examiniren, ob wir dadurch dazu gelangen können. Er gebrauchte nicht seine

The "Lectures on Philosophical Encyclopedia" are striking because Kant singles out a humanist goal for philosophy in contrast with systematic speculation. In the "Lectures" he associates mathematics and architecture with the organization of systematic thought. The architectonic he opposes explicitly with encyclopedic knowledge, suggesting again the distinction between articulation and accumulation. The encyclopedic thinker gathers facts without considering their relation to the purpose of human existence. In the "Lectures," Kant uses the type of popular assertive language that he eschews in the *Critique:*

> The idea of wisdom must lie at the foundation of philosophy, just as the idea of holiness must underlie Christianity. The philosopher is an artist, if he has knowledge of all things. Wolff was a speculative but not an architectonic philosopher and leader of reason. Actually he was not really a philosopher so much as a great artist of the human thirst for knowledge, like many others.[99]

In the architectonic section of the first *Critique,* Kant does not present such a series of abrupt oppositions. Instead the architectonic ordering of knowledge gives over to reflection on how the sciences serve human purposes. In the *Critique of Pure Reason,* Kant alludes to the humanist ideal of philosophy; however, he casts his argument in systematic terms: "The originative idea of a philosophy of pure reason…is architectonic, in accordance with the essential ends of reason, and not merely technical, in accordance with the accidentally observed similarities, and so instituted at haphazard. Accordingly the division is also unchangeable and of legislative authority."[100] The idea of the architectonic has both the fluidity of human activity and the law-giving function of moral authority. It is both legislative, in the sense that it defines the human purpose of knowledge, and can be transformed as knowledge accumulates and rearticulates.

Strikingly, at the point where Kant is most systematic, he reverts to a *Lebensphilosophie,* for here at the end of the *Critique,* in the midst of his most all-encompassing claims, he argues that the systematic arrangement of knowledge must serve the moral life. Heidegger notes this turn when he credits Kant with seeking to return to the philosophical questions that preceded metaphysics, another

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Philosophie, um unsere Bewunderung, oder Wißbegierde etc zu beschäftigen, sondern uns die Weisheit zu lehren." Kant, "Vorlesung über Philosophische Enzyklopädie," 29: 9.

99. "Die Idee der Weisheit muß der Philosophie zum Grunde liegen, so wie dem Christenthum die Idee der Heiligkeit. Der Philosoph ist ein Künstler, wenn er Kenntniße von allen Sachen hat. Wolff war ein speculativer aber nicht ein architectonischer Philosoph und Führer der Vernunft. Er war eigentlich gar kein Philosoph sondern ein großer Künstler vor die Wißbegierde der Menschen so wie es noch viele sind." Kant, "Vorlesung über Philosophische Enzyklopädie," 29: 8.

100. Kant, *Critique of Pure Reason,* 663; "Die ursprüngliche Idee einer Philosophie der reinen Vernunft…ist also architektonisch, ihren wesentlichen Zwecken gemäß, und nicht bloß technisch, nach zufällig wahrgenommenen Verwandtschaften und gleichsam auf gut Glück angestellt, eben darum auch umwandelbar und legislatorisch" (Kant, *Kritik der reinen Vernunft,* 872 [A847/B875]).

move very much at odds with the view of Kant as the systematic thinker. When Vitruvius questions what it means to call oneself an architect, Kant does the same for philosophy. He concludes that better than writing as one of the "Vernunft-künstler," the philosopher should act as the lawgiver for human reason. Rather than constructing concepts as mathematicians and logicians do, Kant puts forward the ideal of a teacher, who uses conceptual tools to foster the essentially human in rational thought. Earlier, Kant refers to this teacher as the *Urbild* that philosophers should emulate. When Kant writes, "There is still one ideal teacher," he alludes, if not directly, then to the Socrates represented as the philosopher who assembles and questions the leading practitioners of his age. In the *Critique of Pure Reason,* Kant does not linger long with the figure; he does not even name him. Instead he makes the abstract point that the ideal of the lawgiver exists in all rational beings, thus the critical examination of knowledge as it relates to the complete condition of the human.

The question of whether the architect has knowledge of all other disciplines is tempered when both Kant and Vitruvius situate the goal within a training process. Furthermore, by transforming the integration of all the sciences into moral inter-rogation of their purpose, one that can be performed by any rational being, Kant presents the architectonic as anything but the state of domination over others. Between Vitruvius's self-deprecating irony and Kant's enlightened universalism, the position of the architect alternates between mastery and Socratic irony, between a singular accomplishment and a common questioning.

Here we find a key parallel between the philosopher who interrogates the sciences as to their humane purpose and the architect who maneuvers building technologies according to a distant design. Ever since the Renaissance, architects have made a point of *not* learning the building trades too well. Palladio is the exception that proves the rule for his profession. Similarly, philosophers have studied the sciences often without entering into their academies. For all Kant's knowledge of physics, he never understood himself as a scientist. The architect/philosopher judges all the fields but is not himself a practitioner. By articulating knowledge, he or she does not reengage with its coming to being. Indeed, the absence of encyclopedic thoroughness is almost a necessity for architectonic reflection. In his notebooks and lectures, Kant reiterates the distinction between the encyclopedic thinkers, who, like Christian Wolff, learn a subject so as to write a treatise on it, and architectonic thinkers, who are concerned with the relations between disciplines.[101] For Kant the architectonic thinker is distinctly different from the encyclopedic. By describing

101. Kant's distinction lives on in German academic criticism, particularly with regard to early modern writers. Joachim von Sandrart, a seventeenth-century art historian, was described in 1986 by Christian Klamm in just these Kantian terms: "So müssen wir denn Sandrart als Geschichtsschreiber wohl zu den halb dilettantisch Material häufenden 'Polyhistoren' seines Jahrhunderts rechnen"; quoted in Thomas DaCosta Kaufmann, "Antiquarianism, the History of Objects, and the History of Art before Winckelmann," *Journal of the History of Ideas,* 2001, 528.

Wolff as merely encyclopedic, Kant implicitly dismisses his own precritical efforts at explaining the natural world through philosophical deduction. Kant concludes that ultimately the philosopher need not know all sciences, but only after decades of having studied them encyclopedically. Derrida makes the point hyperbolically: "An essential and mandatory incompetence, a structural nonknowledge, constructs the concept of philosophy as metaphysics or the science of science."[102] Likewise, the architect as master of many fields may in the end know little about any one of them. Hence both philosophers and architects appear as dilettantes to those who claim to know the facts of their own discipline.

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102. Jacques Derrida, *Who's Afraid of Philosophy? Right to Philosophy 1,* trans. Jan Plug (Stanford, CA: Stanford University Press, 2002), 62.

THE HOUSE OF MEMORY: ARCHITECTURAL TECHNOLOGIES OF THE SELF

The ancient world had its own tradition that organized thought in the form of buildings. As with architectural theory, the surviving sources are Roman, but the practice is unquestionably much older. Rhetoricians advised their students that in order to remember the many facts and stories that one needed to draw upon in public speaking, it was useful to construct a mental storage space.[1] The human body, however, was not the model for this space; rather, the mind conformed itself with some real or idealized building. The analogy between a house and memory appears in Roman rhetorical treatises in order to spur recollection, to allow an orator to quickly pull from his mind information as he is speaking. In modern writers such as Descartes or Goethe, the comparison becomes a metaphor for education, in which the self is constructed or renovated through the application of rational principles derived from architectural practice. To be sure, both ancient and modern connotations appear in the eighteenth century. German men trained in Latin since boyhood would have been quite familiar with Cicero and Quintilian, both of whom invoked architecture as an aid for memory and as a means to conceptualize

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1. Marcus Tullius Cicero, *De oratore,* trans. E. W. Sutton and H. Rackham (Cambridge, MA: Harvard University Press, 1963), II.lxxxvi.351-lxxxix.361; Quintilian, *Institutio oratoria,* trans. H. E. Butler (Cambridge, MA: Harvard University Press, 1964), XI.ii; *Rhetorica ad Herennium,* trans. Harry Caplan (Cambridge, MA: Harvard University Press, 1968), III.xvi-xxiv.

subjectivity as an organic, intelligible unity. Indeed, as we shall see, the two analogies are thoroughly intertwined in Goethe's account of his trip to Rome, where the recollection of his childhood and his reeducation of himself at middle age are described in architectural terms. Both Kant and Goethe use architectural methods in their self-reflective examination of knowledge. They are concerned about how complete their knowledge is (have they left something out, forgotten or overlooked some feature?) or how well it can be recalled. Kant's architectonic urge to arrange all scientific knowledge as a whole, in order to determine whether some discipline has been dropped unaccountedly, derives from the ancient practice of storing information in the "treasure-house" of the mind. Kant's epistemology introduces modern accounting procedures into the ancient memory structure. In general, though, the dual problem of remembering and arranging knowledge for storage are legacies of the *ars memorativa*. They are derived from preliterary techniques for data storage and retrieval that Cicero and his immediate successors turned into writing.

Roman mnemonic practice understood thought as an activity within an imaginary space. The mind was described in spatial terms in order to address the problem of time. What became of perceptions and thoughts in the long run? Although memory seemed a natural faculty, it was also clear that it could be enhanced through a calculated exercise. In its most general terms, this exercise entailed creating a spatial order in the mind so as not to be overwhelmed by the flow of time. Memory was thus conceived as a space wherein perceptions could be held over time. Latin rhetoricians repeat the trope that memory is a treasure-house.[2] Spatialized memory entailed arranging the present moment into distinct entities that were then placed within a stable container, where they would be preserved until they were needed again. Within this practice, architecture was presumed to be a stable component. The mind flows, perceptions roll into consciousness, but the house of memory, within which these are contained, remains unaltered. The spaces that hold memories are conceived as outside the flux of quotidian consciousness, yet of course these structures are themselves imaginary; they are well-ordered, visual forms the mind uses to house other more chaotic impressions.

The basic technique works as follows: a speaker selects a physical space and imprints it upon his mind by walking around it, noting its features carefully. It is important that the space be divided up into distinct areas (*loci*). Having fixated upon the shape of these rooms, the speaker then creates striking images, which represent the information he wants to remember. They in turn are placed in specific locations within the framing space. For example, they could be set in different parts of the house, so that when they needed to remembered, the speaker would imagine walking through the house until he stopped in front of the picture he wanted. Then by seeing the image with all its strange features he would remember what

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2. Quintilian, *Institutio oratoria,* XI.ii.2; *Rhetorica ad Herennium,* III.xvi. 28.

he was trying to remember. The relationship between the *loci* and the images set there compares to the relation between wax tablets and letters that are written on them. The striking images correspond to the tablets because both are supposed to be stable over time. Like letters, the images can be erased when they are no longer needed.[3]

While the *loci* are meant to be stable features of the memory system, they are just as much a product of the imagination as the graphic images used to store data. The Latin works all begin by suggesting that students of this technique use a familiar, presumably real, building within which to arrange their images; however, it seems that more advanced users of the technique required more than one such structure, and so during the course of their lives would construct many memory buildings. Quintilian suggests at first one use a spacious house with many rooms. Roman domestic architecture would have been his readers' most comfortable milieu:

> These symbols are then arranged as follows. The first thought is placed, as it were, in the forecourt; the second, let us say, in the living room; the remainder are placed in due order all around the *impilvium* and entrusted not merely to bedrooms and parlours, but even to the care of statues and the like. This done, as soon as the memory of the facts requires to be revived, all these places are visited in turn and the various deposits are demanded from their custodians, as the sight of each recalls the respective details.[4]

Later, he allows that the technique works equally well if one uses a public building, the places along a long journey, the defensive walls of a city, and even pictures or imaginary sites, an option that becomes important in the Middle Ages when monks start using Noah's ark, the temple in Jerusalem, or the city of God as the arena for memory.[5] The author of the *Rhetorica ad Herennium* also recommends fictional spaces as backdrops: "For the imagination can embrace any region whatsoever and in it at will fashion and construct the setting of some background. Hence if we are not content with our ready-made supply of backgrounds, we may in our imagination create a region for ourselves and obtain a most serviceable distribution of appropriate backgrounds."[6] By allowing for fantastical spaces, these later writers separate rhetoric from some specific locality. Whereas Cicero was said to have relied on the physical presence of Roman buildings to argue many of his cases, Quintilian and the *Ad Herennium* make the exercise more a matter of the imagination, thereby separating the mental operation of creating a space from actual places.

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3. *Rhetorica ad Herennium,* III.xvii.31.
4. Quintilian, *Institutio oratoria,* XI.ii.20.
5. Mary Carruthers, *The Craft of Thought* (Cambridge: Cambridge University Press, 1998).
6. *Rhetorica ad Herennium,* III.xix.32.

Today we must rely on written sources in order to get a sense of the Roman, and the earlier Greek, memory arts.[7] There were, presumably, many cultures that relied on recollection rather than writing. Memory, Cicero noted in *De oratore,* was a special property of the orator. Quintilian states that the two forms of retaining knowledge are not completely interchangeable, because a speaker will need to draw on memory in responding to his opponents in a debate without relying on a written text. Eloquence requires more than reading, and in extemporaneous speaking memory is the most important skill: "It is the power of memory alone that brings before us all the store of precedents, laws, rulings, sayings and facts which the orator must possess in abundance and which he must always hold ready for immediate use."[8]

Imbedded in the Roman discussion lies the mythical memory of the technique's origin. By recalling the legend of its discovery, the *ars memorativa* enacts its own technique. Cicero commences his discussion of the technique by retelling the story of how the poet Simonides of Ceos first discovered that memory could be enhanced by reconstructing the space of past events. At a banquet in honor of Scopas, a wealthy nobleman, Simonides chanted a poem in honor of his host. According to the custom he included a long passage praising Castor and Pollux. In a fit of mean-spiritedness, the host refused to give Simonides the agreed-upon fee for the performance, telling him instead to ask the two divinities he had included in the panegyric. As the banquet continued, Simonides received a message saying that two men urgently needed to speak with him outside, but when he stepped outdoors, he could find no one waiting for him. Just as he was outside, the roof of the banquet hall collapsed, crushing the host and all his guests. At this point the story amounts to a warning not to blaspheme the gods, as well as a demonstration that poets have a divine audience. But the story continues. When the relatives later wish to bury their dead, they find they cannot recognize the corpses, so horribly were they destroyed by the collapse. The only survivor, Simonides is able to identify the bodies because he recalls where each person was sitting when the roof fell in.

Cicero tells the story with a bit of skepticism and with the sense that it is already quite familiar to his audience, as is, indeed, the topic of memory techniques in general.[9] Quintilian is just as sensitive about boring his audience with an old yarn, though after completing the telling he mentions all the discrepancies among its many sources, thereby making clear once again that the story had been told many times. This familiarity points to a most basic memory practice, the retelling of myths. By alluding to the story's all-too-familiar status, Cicero and Quintilian

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7. Sabine Heimann-Seelbach argues that the tradition can be traced to the pre-Aristotelian rhetoric of the Sophists. Sabine Heimann-Seelbach, *Ars und scientia: Genese, Überlieferung und Funktionen der mnemotechnischen Traktatliteratur im 15. Jahrhundert* (Tübingen: Max Niemeyer, 2000), 417–425.

8. Quintilian, *Institutio oratoria,* XI.ii.2.

9. Later he cuts off his discussion, "in order that I may not be prolix and tedious on a subject that is well known and familiar." Cicero, *De oratore,* II.lxxxvii.358.

are presumably deploying the ironic gesture of the storyteller about to commence his performance. For a moment, they engage in the rhetoric of narrative performance. But both authors are careful not to call attention to the fact that they are also employing one of the oldest techniques of remembrance, namely storytelling. The trick is quite simple: in order to make it easier for the audience to remember the technique they are about to explain, Cicero and Quintilian retell the myth of Simonides, thereby associating the well-known narrative with the mental exercise of constructing and populating a memory space. The story of its origins reminds the audience how to engage in the complicated technique of memory storage. Yet even as they tell the story, these Latin rhetoricians distance themselves from mere rhapsodes, oral performers who have learned epics, such as the *Iliad,* through exact, line-by-line memorization. They expressly state that the technique they describe does not require word-for-word recollection. They make clear that rhetoricians compose speech without recourse to a mental script. Quintilian, who provides considerable advice on how to learn a speech by heart, nevertheless concludes that the best way to avoid making errors while speaking is to organize thoughts by dividing them into separate categories, a strategy that reiterates the mnemonic technique.[10] The tale's conclusion makes clear their preference for the spatial model of recollection. Simonides had earlier in the evening engaged in the older narrative form of recollection, by reciting a poem he had prepared before the dinner. Only after the collapse of the building does Simonides discover the memory trick that the rhetoricians use for storing facts. The story implies that spatial recollection differs from narrative performance. Simonides recalls the identities of the corpses not by retelling the experiences of the dinner. His recollection does not come through narration, but instead through the imaginary reconstruction of how the bodies were positioned in the room. The myth of Simonides has a double function. Both Cicero and Quintilian cannily use it as a reminder of how the rhetorical technique of recollection works, even as the tale's conclusion quietly supplants this older mode of remembering with the newer spatial method.

The Simonides myth is memorable because of its fatalistic plot and its graphic violence. The image of bodies crushed beyond recognition—Quintilian reports that not only their faces but also their limbs were indistinguishable—provides just the type of graphic memory cue recommended by the *Ad Herennium:* "We ought, then, to set up images of a kind that can adhere longest in the memory....If we somehow disfigure them, as by introducing one stained with blood..., so then its form is more striking."[11] More than just relying on order to identify the corpses, Simonides reconstructs in his mind the space of the banquet. His recollection in the tale lays out the two-step process later writers recommend. The space of memory is based upon a real building but is shown to be wholly imaginary once the hall

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10. Quintilian, *Institutio oratoria,* XI.ii.36.
11. *Rhetorica ad Herennium,* III.xxii.37.

has been destroyed. The space continues to exist only in Simonides' memory. The founding act of the *ars memorativa* entails the reconstruction of a ruined building. The mind restores what was knocked down by imagining the ruin as a whole again with its contents restored to life. That the practice of memory begins as the imaginary reconstruction is itself significant, given how many acts of memorialization attempt to perform the same miracle, to restore the dead through remembrance of their lived environment.

The tale of Simonides goes far beyond describing a disused rhetorical trick. Aside from being famous boxers, Castor and Pollux were, of course, twins. The towers that collapsed in New York were known by this name, too. The recovery from the September 11 attacks shows that now, too, the process of memory begins after the collapse. As in the Greek tale, the bodies in the World Trade Center were unrecognizable. The tireless urgency of relatives wanting to recover their dead was manifest in New York as much as in the tale of Simonides, and the solution lies in mental reconstruction. Simonides recalls what the building looked like before it was destroyed; he then locates the inhabitants within his figuration of the space. This two-step process has been reiterated by relatives of those lost in the World Trade Center on September 11, who stress where their family member worked in the building: "She was an analyst on the forty-first floor." Thus memorialization begins with simple statements about where the dead were when the buildings fell.

Both Cicero and Quintilian leave unspoken the tragic, religious significance of the story in order to focus on how the tale illustrates the techniques of memory enhancement. Cicero states flatly that tale shows "that the best aid to clearness of memory consists of orderly arrangement."[12] The parallel between rhetoric and architecture would have been evident to Romans. Classical architecture laid great emphasis on orderly arrangement. The Renaissance appropriation of antiquity likewise drew a parallel between orderliness in thought and speech and the five orders of architecture. The Roman *ars memorativa* allies itself with architecture in part because the placement of images in a mental space relies on the order that classical buildings have. The two methods overlap in the selection of an architectural abode for storing images. Thus Cicero advises: "One must employ a large number of localities which must be clear and defined and at a moderate intervals apart."[13] The *Ad Herennium* gives the most elaborate advice on how to select a physical space for memory retention. In a sense rhetoricians are being taught the principles one might use in designing an art museum or a stylish retail space: the space of memory needs to have readily recognizable features. It should not be overly uniform with too many intercolumnar spaces; otherwise the individual *loci* will blur one into the other, thereby confusing the speaker. As in all matters, the principle of moderation should be practiced. The space needs to be built to a scale that frames the memory

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12. Cicero, *De oratore,* II.lxxxvi.353.
13. Ibid., II.lxxxvi.358.

images so that they are easily recognized: "And these backgrounds ought to be of moderate size and medium extent, for when excessively large they render the images vague and when too small often seem incapable of receiving an arrangement of images. Then the backgrounds ought to be neither too bright nor too dim, so that the shadows may not obscure the images nor the lustre make them glitter."[14] Quintilian makes the more psychological point that recollection occurs more easily if it takes place within a familiar space: "For when we return to a place after considerable absence, we cannot merely recognize the place itself, but remember things that we did there, and recall the persons whom we met and even the unuttered thoughts which passed through our minds when we were there before."[15]

Modern writers on memory such as Walter Benjamin have made similar claims about the ability of memory to work once an old familiar space opens up before the subject. Benjamin's essays on his Berlin childhood correlate walking through the city with remembering his childhood. Space seemingly takes precedence over historical narration. Benjamin's passage through neighborhoods, past houses, and into specific doorways guides the sequence of reminiscences more than any biographical temporality. The chronicle of his childhood unfolds because of spatial markers, the *loci* of Roman rhetoric. Unlike the rhetoricians, Benjamin advises against an orderly approach to recollection. Quintilian also wondered at the fickleness of memory, asking some of the same questions that motivated Proust and Bergson: "And what, again, shall we say of the fact that the things we search for frequently refuse to present themselves and then occur to us by chance, or that memory does not always remain with us, but will even sometimes return to us after it has been lost?"[16] Having begun to remember, the mind has an almost limitless duration of memories to explore: "Its capacity for endurance is inexhaustible, and even in the longest pleadings the patience of the audience flags long before the memory of the speaker."[17] As with Proust's madeleine or the forgotten dog in Ludwig Tieck's "Der blonde Eckbert," the stream of remembrance can be unlocked by the smallest detail: "For even in cases of forgetfulness one single word will serve to restore the memory."[18]

In general, we can claim that the early modern connection between architecture and literature corresponds to the relationship inherited from Roman orators. During the fifteenth and sixteenth centuries in Italy, this model was often envisioned in theatrical terms, as a correspondence between an arena, its stage setting, and the actors performing upon it. Architecture provided the stage upon which the other arts performed. The fact that early modern architects sometimes also had careers as set

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14. *Rhetorica ad Herennium,* III.xix.32.
15. Quintilian, *Institutio oratoria,* XI.ii.17.
16. Ibid., XI.ii.7.
17. Ibid., XI.ii.9.
18. Ibid., XI.ii.19.

designers is not just a consequence of absolutist patronage and spectacle. This relationship of backdrop to action persisted even as architecture and literature underwent the aesthetic and ideological upheavals that preceded our own era. However, with the decline of the classical canon and the emergence of a subjective aesthetics of taste, architecture was brought to the foreground; it was compared to the other arts, judged like a poem, a statue, or a play. Architecture became an isolated object of contemplation and not just the stable frame within which the other arts performed. Yet even as it became an object of aesthetic judgment, architecture continued to hold its place as the structure that contains and reinforces the other arts. By the middle of the eighteenth century, canonical architecture served both as the arena within which the other arts performed and as one of the many media competing on the stage for the spectators' attention. When in his autobiography Goethe recollects the importance the Strasbourg cathedral had for his early writing career, he explains the complex aesthetic dynamic in theatrical and architectural phrases. He translates the emotions brought out by a building back into spatial terms, so that the sublime experience before the Strasbourg cathedral becomes itself a "backdrop" for writing a play. The relationship of the spectator before a building is doubled.[19] The cathedral is both the object of contemplation as well as the backdrop for Goethe to write drama and poetry. This doubling of architectural metaphors becomes even more complicated when we consider that this passage is itself a recollection conjured up by the image of the cathedral. The image of the cathedral that persists in the old Goethe's memory allows him to call forth, that is, narrate, the lively scene of his youth. By remembering the contours of the cathedral in the ancient rhetorical manner, Goethe is able to describe both his fascination with the building and all the writing it inspired. Within the diegesis of autobiography, mnemonic recollection frames architecture's double function as object and backdrop. Thus the poetic representation of architecture occurs on three levels in *Poetry and Truth.* Only the mnemonic reliance on architecture is not called by name. It appears naturalized within the subjectivity of the autobiographical narrator as simple memory.

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Roman memory techniques persist well into the modern era; however, they operate in the guise of psychology. They are transformed into a method whereby the subject examines him- or herself, as in the eighteenth-century *Bildungsroman,* or in the age of psychoanalysis as the object of another's commentary. Goethe's *Poetry and Truth* provides many examples of how the many traditions of architectural metaphors were layered on top of each other in one text. The most sustained example of Roman mnemonics in Goethe's writing appears in the first chapters of *Poetry and*

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19. Goethe, *Sämtliche Werke,* ed. Dieter Borchmeyer et al. (Frankfurt: Deutscher Klassiker Verlag, 1986), sec. 1, vol. 14, p. 553 [*Dichtung und Wahrheit,* bk. 12]. [*Sämtliche Werke* is cited hereafter as FA with volume number and page number.]

Truth. Within the backwards-oriented recollection of Goethe's narration, architecture frames his earliest childhood. The family house in Frankfurt appears as the first experience Goethe truly remembers. At the start of the autobiography, he addresses the ancient problem of how to sort recollections. He distinguishes between experiences we can recall through images, and family stories retold so often they have been grafted onto our memories as if they were our own. The narrator asks: how many of our earliest memories really amount to stories that family members have repeated so often that we take them as our own? Something must lie outside these stories, a more elusive authenticity. The retold stories have much the same status that English skepticism would grant habits; they are accepted as the truth about our lives without being based on experience. In contrast to these unlived tales, Goethe stresses the visual perception of the world as the standard for his own self-knowledge, for his autobiography, and by implication for the reader: he is after that "which we really possess from own lived experiences." The juxtaposition alludes neatly to the fiction and truth of the title of Goethe's work. Perceptions have the security of property, they can be owned, Goethe suggests, but rather than enter what he considers a fruitless epistemological investigation of this proposition (in the manner of Kant's *Critique of Pure Reason*), he commences to recount what he thinks he remembers: his father's house. Before long it becomes clear that both *Dichtung* (poetry) and *Wahrheit* (truth) are framed by memory.

Goethe's research for his autobiography obliged him to gather fragmentary memories, stories, diary entries, and letters. From the start, he intended to form a coherent narrative out of these diverse sources. Many of his diaries and letters from his youth he had already burned in 1797, so he asked friends to send him their recollections. Bettina von Arnim repeated for Goethe the stories his mother had told her about him. Friedrich Klinger was asked for his reminiscences about the Sturm-und-Drang movement. The sources for Goethe's research into himself were far more diverse than *Poetry and Truth* suggests. Out of small stories he wanted to construct a unified narrative that showed the protagonist's development. This was by no means typical for memoirs of the early modern period, many of which were organized as a succession of anecdotes, maxims, and characterizations of historical persons. To make matters worse, in writing his autobiography, Goethe faced the fragmentary state of his many still unfinished projects. At the point when he was writing about his own life, Goethe did not believe that he would ever complete the bits of *Faust* he had written over his lifetime. The autobiography was meant to compensate for these unfinished projects by providing a personal context that at least explained the impulses that motivated the various attempts at completion.[20] As David Wellbery has noted, Goethe was always concerned to present his writing as a

20. Erich Trunz, "Nachwort," in Goethe, *Werke,* ed. Erich Trunz and Hans Joachim Schrimpf (Munich: C.H. Beck, 1981), 9: 608. [*Werke* is cited hereafter as HA with volume number and page number.]

coherent whole.[21] In his earliest lyric poetry, he strives to avoid the impression that a work has been stitched together (*zusammengeflickt*). The seams that divide one stretch of text from another should not be obvious to the reader, Goethe insisted. A complete work of art integrated elements smoothly. Thus, for example, Goethe's thrill at standing before the Strasbourg cathedral is heightened by his discovery of a harmony and coherence that organized the Gothic ornamentation that so many others had found weird and alien. He sought a similar order and development among the fragments of his own childhood.

Descriptions of his father's house and of Frankfurt resonate as metaphors of the autobiographical subject. They also reveal the tensions that divide the self. It is not a great leap to read Goethe's description of his childhood house as a recollection of his own coming into being. Given that he relies upon a method of recollection that treats buildings as vessels for thought, how does Goethe's use of mnemonic techniques reinforce his larger project of self-referential *Bildung*? There are important differences between Cicero's and Goethe's reliance on architecture as a mnemonic technique. For a start, Goethe is writing after Descartes' own adaptation of architectural techniques for self-analysis. Like Descartes, Goethe uses architectural methods and metaphors to characterize his development. When Goethe in his *Italian Journey* refers to his self-education as comparable to the position of an architect who realizes he must alter his construction plan even though the building is already half completed, we should look to *Poetry and Truth*'s narrative of childhood to uncover the foundation that later in Rome needs rebuilding. Because *Poetry and Truth* was written around the same period in which Goethe completed his revisions of the *Italian Journey* the two texts can profitably be read in relation to each other, each presenting problems to which the other has a response.

The opposition in *Poetry and Truth* between household tales and personal experiences allows Goethe to encapsulate the scattered sources for his childhood narrative within a single subject-object dichotomy. Given his strong desire to avoid retelling events he could not know from experience, Goethe tries to give a phenomenological account of his earliest perceptions. However, it soon becomes clear that these indistinct perceptions are determined by the structures (both walls and laws) within which they occur. The first cogent memories in *Poetry and Truth* are not of people or events but of spaces. The childhood house serves as the framework within which specific events are recollected, and then included in the autobiography. In writing about his childhood, Goethe follows the technique of Roman rhetoricians, first thinking of a space within which memories are stored, and then moving through the space to discover striking images that aid in recalling more detailed events.[22]

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21. David Wellbery, *The Specular Moment: Goethe's Early Lyric and the Beginnings of Romanticism* (Stanford, CA: Stanford University Press, 1996), 124–126.

22. Harold Jantz notes that, like most eighteenth-century intellectuals schooled in Latin, Goethe was thoroughly familiar with Cicero's work: "Wir wissen aus Goethes eigenen Äußerungen und

Details drift into Goethe's recollection that allude to his adult understanding of architecture. His first conscious memory is of an old house that, he explains, was really composed of two buildings whose walls had been knocked down to form a single entity. As soon as he names the space, Goethe alludes to the story of his father renovating the house and the antagonism this project created between them. In the middle of the building rose a staircase that joined the rooms of the two houses and compensated for the different levels of the two buildings. The staircase has a crucial function because it unites two separate quarters. There is much to be read out of a divided house, both in the eighteenth century and now, but Goethe proceeds to move the narration through the levels of the house, as if he is imagining a real house, not one already loaded with interpretations. His favorite location was the downstairs entranceway, where he and his younger sister could play while the women sat nearby, preparing food or sewing. In good weather, this entrance had a Mediterranean feeling, he adds.

The opposition between familial stories and personal experience softens once Goethe has sketched out the entranceway and the street life it attracted. He returns to one particular tale told by family members about how he and the neighbor boys got into a competition throwing pots and dishes into the street to see who could smash the most most loudly. Whether the tale is true, or whether Goethe really remembered its details, remains open, for he concludes by saying that after all the dishes were broken, at least the family had a tale that they loved to tell until the end of their days.[23] Goethe's willingness to drop his epistemological scruples to allow for his own retelling of the boyhood prank recreates the domestic space wherein the women worked and talked while the children played. The story played out in the foyer and, by implication, was retold there many times.

As the narration moves through different rooms, the house is populated with a gentle mother, grandmother, and maids. All stand in contrast to his father, who makes his first appearance in the narration as a terrifying authority who regulates movement within the space (of his childhood and his recollections). The flow of memory passes through divisions in the interior, which at first are explained as simply the differences between different women but then at a crucial point become sharply differentiated. Caspar Goethe separated his children from the comforts of the feminine body. The many corners of the old house became frightening at night, we are told, and when the children snuck out of their beds to find comfort with the

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Anspielungen, daß er mit Ciceros philosophischen Werken wohl-vertraut war und daß er in ihnen häufig las, von der vor-Straßburger Zeit bis ins hohe Alter hinein. Dieser dokumentarische Beweis ist im übrigen, obwohl sehr gelegen, kaum notwendig, da diese Werke durch das ganze 18. Jahrhundert hindurch Gemeingut der Gebildeten waren." Harold Jantz, "Die Ehrfurchten in Goethes 'Wilhelm Meister': Ursprung und Bedeutung," *Euphorion: Zeitschrift für Literaturgeschichte* 48.1 (1954): 6.

23. Freud reads this specific story as indicative of the young child's angry reaction to the birth of a younger brother. Sigmund Freud, "Eine Kindheitserinnerung aus *Dichtung und Wahrheit*," (1917), in *Studienausgabe* (Frankfurt: S. Fischer, 1969), 255–266.

servants, the father frightened them back into their beds: "In this manner … father blocked our way and scared us back into our resting places." In his telling Goethe associates the children's bed with death and the grave. The division rounds itself out in the next passage, where Goethe explains that his mother had a more pleasant pedagogical method. She promised the children plums in the morning if they slept in their beds, thereby satisfying all parties concerned. Goethe mentions that the house actually belonged to his paternal grandmother, but in doing so he only heightens the sense that his father was the authority in the building. The space is filled with desirable women and a father who controls access to them. The classical rhetorical distinction between the architectural spaces within which striking images are stored overlaps with Goethe's Oedipal recollections.

Architecture is often associated with the paternal authority to control space and the movement within it. Much of the time it operates as the frame of the frame, the structure that stands around what Goethe narrates; it becomes almost invisible, the vessel that holds the people he desires. Both Goethe and the Roman rhetoricians almost look past architecture to concentrate on the figures within. According to the Roman model, memory operates when graphic images are set inside a familiar building, one that does not draw attention to itself yet organizes its contents. The memory building holds the recollections in a safe place, it anchors them; instead of drawing attention to itself, classical architecture allows the thought to contemplate the stunning pictures it holds, thereby becoming the apparatus that projects images while seeming to remain outside the gaze. The father and the architect intervene infrequently, allowing the autobiographical subject to fix on the interplay between mother and child. As the Vitruvian terms imply, classical architecture is foremostly authoritative and secure, only by exception desirable. In recounting his confrontation with his father's penchant for Italian architecture, Goethe maps the development for his own architectural tastes, from Gothic rebellion to classicist identification with the paternal order.

The Oedipal tension in Goethe's discussion of his childhood home appears in genetic terms as the difference between a haptic, sensual feeling for space and a detached, critical eye for architectural form. In "The Work of Art in the Age of Mechanical Reproduction," Benjamin makes the point that buildings can be appropriated in a twofold manner: by use and by perception, which he correlates to the senses of touch and sight.[24] Ordinary domestic architecture is experienced as a given. Only the traveler recognizes the unusual qualities of a building. Benjamin famously distinguishes between the haptic and the visual appreciation of architecture. Ordinary usage of a building results in a nonvisual relationship to architecture. The inhabitants of a place do not view their surroundings as a framework; they instead perceive what lies within. With an allusion to Goethe's *Italian Journey* and

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24. Walter Benjamin, *Gesammelte Schriften,* ed. Rolf Tiedemann (Frankfurt: Suhrkamp, 1982), 1.2: 504.

the many tourists it inspired, Benjamin contrasts the habitual use of space with the foreign visitor's contemplation of a famous building. Repeated use of a building creates an unself-conscious bodily relationship to the structure. The building exists as a backdrop to those within; they notice its contours only incidentally, not by considering it as an object of analysis. Kantian philosophy might understand these two modes of perception as a result of the subject's different interests in treating architecture as either an aesthetic or a utilitarian object. As Rodolphe Gasché notes, both Benjamin and Kant argue that aesthetic attributes are not inherent features of an object but refer back to the subject.[25] For Kant, aesthetic judgments are derived from experiences of pleasure or displeasure as they are set in relation to the free play of faculties of cognition.

Benjamin gives precedence to the habitual mode of understanding architecture as a contrast to a touristic view of buildings that emphasizes their art historical character, their style and importance in the development of art.[26] Imbedded in Benjamin's account of tactile perception is a preference for the consciousness of people who work in and around buildings, rather than those who contemplate them with an eye toward mastery, either stylistic or economic. As much as classical buildings were intended to impose a sense of awe upon their viewers, to make a strong impression upon first viewing, they lose their grandeur for those who live and work around them. The perception of ordinary inhabitants and neighbors becomes an example of unauratic appropriation. Here the reproduction of an image has nothing to do with technology; rather, it is daily contact that breeds the familiarity that wears away aura. The surest sign of an urban dweller is his disregard for the buildings on his street; only an out-of-towner would stand looking in front of a building.

The contrast between haptic and visual can be mapped onto the other juxtapositions that define Goethe's description of domestic space. He recalls the house because it contains the story of his childhood. He is far more interested in the events within than in the structure itself. Only once he confronts his father, and leaves aside his tales, does *Poetry and Truth* turn to the discourse of architecture. Through most of Goethe's writing, architecture is associated with knowledge and self-mastery, but not with possessing the desired object. The actual work of architecture concerns itself more with masculine self-discipline than with pleasure in the beautiful.

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25. Rodolphe Gasché, "Objective Diversions: On Some Kantian Themes in Benjamin's 'The Work of Art in the Age of Mechanical Reproduction,'" in *Walter Benjamin's Philosophy: Destruction and Experience,* ed. Andrew Benjamin and Peter Osborne (London: Routledge, 1994), 183.

26. In the *Arcades Project,* Benjamin compares the material historian with the ironworker, who from the scaffolding of a modern building enjoys a view unavailable to ordinary pedestrians. Here the vista that inspired celebrated photos of workers on the frames of New York skyscrapers is celebrated by Benjamin as distinctly unauratic. Susan Buck-Morss, *The Dialectics of Seeing: Walter Benjamin and the Arcades Project* (Cambridge, MA: MIT Press, 1989), 124–126.

In his architectural encounters, Goethe does not seek a beloved so much as a peer and a rival. The architectural texts are marked by a male-male engagement that is more concerned with comparisons between different forms of the artist. The contemplation of buildings does not evoke the Beloved, who returns the look of the poetic subject, instead architectural epiphanies establish a masculine, mentoring relationship. The desire expressed in both the Strasbourg essay and the *Italian Journey* seeks to establish a mimetic relation between architect and observer. The observing subject constitutes himself as emulating the architect as an artist. The situation is overtly professional. Looking at a building sets a standard for artistic accomplishment quite distinct from the erotic relation of lyric poetry. This interconnection is brought out most famously in Goethe's fifth *Roman Elegy,* where he taps out poetic meter on the back of his sleeping lover.

Judging from its place in *Poetry and Truth,* the renovation of the family house defined Goethe's relationship with his father. The house became the pretext for heated debates when Goethe was a university student; its classical features allowed Goethe in Italy to identify with his father. The drawn-out labor of reconstruction becomes the template for Goethe's own processual self-understanding. Even in his most classical phase, Goethe explained his own identity in terms of constant revision and reconstruction. The construction site of the family home became the unintended lesson of his father's pedagogy. The long, drawn-out renovations his father undertook in Frankfurt were closer to the architecture of *Bildung* than the promise of a brief, intense construction effort resulting in a pristine monument. In *One-Way Street,* Walter Benjamin contrasts the chaos and refuse of construction with the careful monitoring of Enlightenment pedagogy in the aphorism "Baustelle." Children, he argues, are drawn to the remnants of workplaces; the extra pieces of wood or cloth that fall off the carpenter's bench and the tailor's cutting board become the fantasy material for children to construct their own world of things (*Dingwelt*). Benjamin's aphorism draws on the important passage in *Wilhelm Meister's Apprenticeship,* Goethe's *Bildungsroman,* wherein the protagonist describes childhood desire as a swarming over domestic space looking for any opening that leads to pleasure.[27] While Benjamin describes children in a messy space, a construction site, and Goethe a tidy household, both recount how children work against the functional regulation of space by discovering value in things and places adults overlook. In both passages, architecture, whether under construction or completed, operates in support of the paternal law that childhood desire seeks to elude. Childish happiness is associated with the lowest place in a bourgeois household, garbage and rats, and with unseen lines of movement. Feminine figures in Goethe's writing operate within the paternal architecture and are obliged to obey its order, yet they provide those delirious exceptions that produce the happiness outside the law

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27. Goethe, HA 7: 19.

(which the law requires), by occasionally leaving the pantry door open. Wilhelm Meister plays out the scenario, so that the delightful and forbidden puppet theater that the mother presents can be understood as an alternative space within the father's house that resists regulation by giving the boy a place wherein he can himself assume the position of mastery.

Goethe makes clear that his father was interested in architecture not as a science studied at university but as a craft acquired pragmatically. As a young student, Goethe railed against his father's attempt at recreating Roman spaces in a medieval German city. As a mature writer, long since converted to classicism, he chastises his father for not paying enough attention to architectonic form. So long as his mother was alive, Caspar Goethe refrained from altering the two old houses standing side by side in the *Hirschgraben,* but Goethe writes that everyone in the family knew that he was planning major alterations. By way of a preface to his father's construction project, Goethe describes the common practice in old cities of expanding the upper floors of houses so that they hung over the ground floor, crowding and darkening the street below.[28]

His father undertook various "repairs" in order to expand the upper floors of the family house, thereby circumventing new restrictions on just such construction. This process of small alterations would result in a building with little overall coherence, no proportion or symmetry. As we have noted, Goethe describes his father as unconcerned with architectonic appearances.[29] Looking back, Goethe reports: "There was nothing architectonically elevated to be seen in Frankfurt then."[30] His father was foremostly concerned with building a comfortable interior. The two houses should be joined so as to afford him and the family open spaces. During construction, Goethe and his sister were sent to live with family friends, where they entered public schools for the first time. This removal from the family home becomes the moment in the text when Goethe narrates that he first discovered the wider city. He then moves through Frankfurt's major monuments and places. Again he follows the mnemonic practice of recounting childhood friends and adventures that he associates with specific locations. The city, he announces with the perspective of the mature narrator steeped in classical theory, was organized according to random chance and the shifting necessities of siege defense. Thinking back, Goethe reiterates Descartes' opinion about the chaos of cities built over time without a single principle. Goethe concludes that even the newest squares did not display a regulative spirit.[31] The city as well as the family house lacked the open vistas and symmetrical lines seen in the prints that Goethe's father had collected of baroque Rome. Caspar is credited with understanding the technical details of construction, but the

28. Goethe, *Dichtung und Wahrheit,* HA 9: 15.
29. Ibid., HA 9: 6.
30. Ibid., HA 9: 18.
31. Ibid.

son reiterates the old distinction between masons and architects when he accuses his father of having little "architectonic'" understanding. Goethe has nothing to say against his father as a builder; his architectural comments are always centered upon the aesthetic critique of building. Caspar, like the other good *Bürgers* of German cities, expanded his town house from the inside out. The one interior component with an Italian origin was the staircase, built wide and open in the manner of a palazzo rather than in the narrow winding style of cold German houses. Even this detail would become a point of contention for the young Goethe, leading him to flee Frankfurt into the arms of the Strasbourg cathedral.

All Goethe's comments about his father's building appear in his late autobiographical writings. Caspar Goethe had been dead for decades, his correspondence with his son deliberately burned, when his poet son, over sixty, began to revise his angry image of his father. The little that remained was architectural. As we shall show in the following chapters, the memory of the Frankfurt house, and what was done to it, came to represent the architectonic subject and the rebuilding (*Bildung*) Goethe had undergone since leaving his father's house.

Goethe's Architectural Epiphanies

Right in the middle of his weighty history of ancient architecture (*Die Geschichte der Baukunst bei den Alten*), the Berlin professor Aloys Hirt pauses to ask: Who were the architects that designed the great buildings of the past?[1] Where and how did they learn to build? Were there ancient schools of architecture? Written sources provide no information on these points, he notes with sadness. The treatises composed by the many names Vitruvius mentions as his predecessors have been lost. Even worse, for long stretches of ancient history not one architect's name is known. Such a rich history of construction!—yet only a handful of names that have been passed down to the present.[2]

By the time Hirt raised these questions in 1822, Germans had been theorizing about Greek and Roman architecture for almost eighty years, and Hirt, a trusted informant for both Goethe and Hegel, had already spent over forty years studying antiquity.[3] In the 1780s he had already become quite well known among

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1. Aloys Hirt, *Die Geschichte der Baukunst bei den Alten* (Berlin: R. Reimer, 1822), 2: 138–139.

2. A similar elegiac wonder was expressed in the eighteenth century regarding the first humans to develop language. The marquis de Condorcet wrote in 1790 about the inventors of the first alphabets: "Des hommes de génie, des bienfaiteurs éternels de l'humanité, dont le nom, dont la patrie même sont pour jamais ensevelis dans l'oubli." Nicholas de Condorcet, *Esquisse d'un tableau historique des progrès de l'espirit humain,* ed. Wilhelm Alff (Frankfurt: Europäische Verlagsanstalt, 1963), 34.

3. For a discussion of Hirt's correspondences with Hegel and Goethe, see Rainer Ewald, *Goethes Architektur: Des Poeten Theorie und Praxis* (Weimar: Ullerich, 1999), 290–307; Joseph Rykwert discusses

German travelers for his pedantic tours of Rome. Hence it may have seemed a bit unusual for him, as he was writing his most important academic treatise, to raise the kind of questions a younger person first faced with Roman ruins might ask. The simplicity of the questions, however, prepares the ground for a theoretical attitude, an interrogative stance that forms the basis for Hirt's greater theoretical schemes. The absence of textual references about ancient builders gives Hirt the justification to rely on something other than historical knowledge to explain the beauty of ancient structures. The position of the individual standing before or within a ruin becomes more important than any lost treatise about that building. At first glance, Hirt claims, the anonymity of ancient architects suggests that no agent can be assigned to the building's creation. No personal intention behind the arrangement of columns and steps can ever be known. Hirt's mournful tone reinforces the sense that the modern viewer is left only with a vast unknowable emptiness.

Yet the anonymity of ancient architects was a problem for which Hirt already knew the solution; indeed, he argues that the loss of the builders' identities gave modern viewers the opportunity to formulate a theory of architecture that would never have been possible for ancients. The absence of names and intentions meant that moderns were free and, at the same time, compelled to reflect on the higher spiritual meaning lingering within ancient ruins. The lack of texts would be more than compensated for by hermeneutic contemplation.

Hirt's reverie before Rome's ruins was by no means the first fantastical reconstruction of a building. The eighteenth century is brimming over with hallucinatory restorations of crumbled buildings. In 1788 the English architect John Soane stated that "every man of genius" must reflect with "heartfelt regret" on "the loss of these numerous treatises, composed by men whose ambition was to elevate the science, and to inspire the rising artists with the same enthusiasm which they felt!"[4] In his introduction to the German translation of Mézières's *Genius of Architecture,* Gottfried Huth similarly bemoaned the lack of systematic theory to organize the fragmentary history of architecture:

> The great architects built more than spoke; they raised more excellent buildings than that they wrote about. Thus it has come to pass that we have few written works about the correspondence between architecture and our sensations. All that remains are meager observations passed down, a few fundamental statements and principles tossed out in passing, but nothing complete that hangs together and is well organized.[5]

Hirt's place between the two in *On Adam's House in Paradise: The Idea of the Primitive Hut in Architecture History* (New York: Museum of Modern Art, 1972), 89–91.

4. John Soane, *Plans, Elevations, and Sections of Buildings* (London, 1788; repr., Farnborough, England: Gregg International Publishers, 1971), 2.

5. Gottfried Huth, ed., *Allgemeines Magazin für die bürgerliche Baukunst* (Weimar: Carl Ludolp Hoffmanns Witwe und Erben, 1789), 1: 98.

    Hirt's history of ancient architecture responds to this absence by attempting to synthesize Enlightenment theories of architecture with the subjective aesthetics of taste. Vitruvius himself had already complained about the many fragments left to him by earlier writers, and he had endeavored to construct an orderly account in his own treatise. For Hirt, a German living in Rome during the last decades of the eighteenth century, the problem of how to order the fragments of antiquity was even greater. While systematic theory sought to compensate for the lacunae in historical knowledge that ancient buildings presented, Johann Wolfgang Goethe presented a highly subjective interpretation of architectural history in his 1772 essay "On German Architecture."[6] Like Hirt, French theorists had sought for decades to reconcile the emotions a building inspired with the geometrical rationality of the traditional orders, yet these two strands never found a comfortable fit.[7] In Goethe's essay, they are purposively set off against each other directly. In the place of a systematic theory of architecture, Goethe formulates a heroic aesthetic of the solitary artist whose works can be understood only through a sympathetic phenomenological engagement. Goethe insists on experiencing buildings as distinct places through a radically subjective engagement with the spirit that resides there. His reveries before the Strasbourg cathedral break with Vitruvian efforts at ordering architecture. From the start, Goethe sets out deliberately to celebrate a single building and a solitary architect, in defiance of Mediterranean traditions. His essay posits a new form of pleasure in the Gothic, thereby suggesting a new relationship to the object. The cathedral holds out a phantasmic promise of satisfaction that arises from Goethe's claim to have discovered a long undetected wholeness in the facade, a feature he insists eighteenth-century criticism has suppressed. Central to his pleasure in the cathedral's harmony is the conviction that he has singularly discovered it. To enjoy the church, Goethe needs to assert that it has been denigrated by others, most notably by French classicists, and, as we shall see, by extension, by his father, Johann Caspar Goethe.

    Already in 1943, Ernst Beutler, the founding director of the Goethe Museum in Frankfurt, noted the curious fact that the young author's first independently published prose piece was an essay on architecture.[8] Between spring 1771 and fall 1772, Goethe composed a rhapsody to the massive Gothic cathedral in Strasbourg, titled "On German Architecture," which appeared initially as a slim pamphlet in November 1772. However, not until it was republished in Herder's collection *Von deutscher Art und Kunst* in 1773, did the essay receive public notice. Although the essay clearly belongs to the youthful Sturm-und-Drang movement of the 1770s,

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6. Goethe, HA 12: 7–15.
7. See Rudolf Wittkower, "Classical Theory and Eighteenth-Century Sensibility," in *Palladio and Palladianism* (New York: George Braziller, 1974), 193–204—still one of the clearest surveys.
8. Ernst Beutler, *Von deutscher Baukunst: Goethes Hymnus auf Erwin von Steinbach; Seine Entstehung und Wirkung* (Munich: F. Bruckmann, 1943), 23.

architectural historians now look past its rebellious rhetoric to concentrate on what are considered its basic theoretical claims. Its spirited defense of the Strasbourg cathedral is generally credited as the first step in the German Gothic revival.[9] Huth, the editor of Germany's first architectural journal, *Allgemeines Magazin für bürgerliche Baukunst* (General Magazine for Civil Architecture), reprinted Goethe's essay again in 1789.[10] It became known again decades later, in 1806, when Goethe discussed it in his autobiography, *Poetry and Truth.* The original essay makes another appearance in 1823 when the aged Goethe was persuaded to allow its republication and to provide a preface comparing his mature views with those of his youth. In the decades following its first appearance, "On German Architecture" was read after the fact as a dramatic intervention in the architectural debates of the age. In his lectures on aesthetics, Hegel praises Goethe somewhat heavy-handedly as the first to challenge the French classicist dismissal of the Gothic style.[11]

Goethe's assertion that the Strasbourg cathedral should be understood as distinctly German has become the essay's most famous and controversial thesis. He goes on to claim that the church was designed according to principles entirely different from those applied to Italian or French classical buildings.[12] By claiming a Gothic cathedral as German, Goethe is quite simply affirming the old Italian complaint that northern European architecture was barbaric, filled with disguising ornamentations and lacking all sense of proportion. In defending the cathedral as distinctly northern, he also rejects Marc-Antoine Laugier's claim that architecture originated with a primitive hut made of four posts and a slanted roof. Laugier proposed that this simple building served as the model for the classical Greek temple's columns, entablature, and pediment and was the standard that all subsequent buildings should imitate. In 1753, Laugier argued: "All the splendors of architecture ever conceived have been modeled on the little rustic hut.…By approaching the simplicity of this first model…fundamental mistakes are avoided and true perfection is achieved."[13] Among other views, Laugier is highly critical of ornamentation, considers the wall an inessential component, and sees the pilaster

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9. Klaus Jan Philipp, *Um 1800: Architekturtheorie und Architekturkritik in Deutschland zwischen 1790 und 1810* (Stuttgart: Axel Menges, 1997), 72–73; W. D. Robson-Scott, *The Literary Background of the Gothic Revival in Germany: A Chapter in the History of Taste* (Oxford: Clarendon Press, 1965), 78, 84.

10. Huth, *Allgemeines Magazin,* 1: 81–91.

11. "In more recent times it was chiefly Goethe who took the lead in bringing [Gothic architecture] into honour again when he looked on nature and art with the freshness of youth and in a way opposed to the French and their principles." G. W. F. Hegel, *Aesthetics: Lecture on Fine Arts,* trans. T. M. Knox (Oxford: Clarendon Press, 1975), 684.

12. Modern art historians, of course, trace the origin of the Gothic style back to the ambulatory of the St. Denis cathedral outside Paris. Eighteenth-century connoisseurs were unfamiliar with this lineage. Goethe simple reverts the widespread Italian prejudice that the Gothic was all architecture from the fall of Rome until at least the fifteenth century. He affirms that which was so often called barbaric. Marvin Trachtenberg, "Gothic/Italian 'Gothic': Toward a Redefinition," *Journal of the Society of Architectural Historians* 50.1 (March 1991): 22–23.

13. Marc-Antoine Laugier, *An Essay on Architecture,* trans. Wolfgang Herrmann and Anni Herrmann (Los Angeles: Hennessey & Ingalls, 1977), 12.

as a bad imitation of a column. The idea that architecture began with the simple hut had already been mentioned by Vitruvius, and so was well known. Laugier elevated it to the standard by which all structures should be evaluated. In response, Goethe argues that the wall, not the column, is the constituent element in German architecture. The cold climate and the need for security made it the basis for all subsequent northern European building. The massive facade of the Strasbourg cathedral reflects this fundamental difference between the Mediterranean temple and the German stronghold.

While Goethe goes out of his way to contrast the ornate facade of the Strasbourg cathedral with the pillars of Mediterranean temples and palaces, the real innovation in "On German Architecture" lies in its account of architectural contemplation. Goethe opens his celebration of Gothic architecture with a search for the lost memory of the person who designed the cathedral. When he cannot find the gravestone of the "noble Erwin," the man Goethe believed had designed the cathedral, he asserts that it is not necessary to build a memorial to him, because the cathedral is just that. Here we find one of the many passages in which Goethe echoes his opponent Laugier, who writes: "[A beautiful building] stirs in us noble and moving ideas and that sweet emotion and enchantment which works of art carrying the imprint of a superior mind arouse in us. A beautiful building speaks eloquently for its architect."[14] The spirit of Erwin remains in the cathedral he made, just as the presence of God lingers in the natural world he created. If contemporaries have forgotten the historical architect who designed the cathedral, then, Goethe writes, he shares the same fate as God, who is also forgotten by those who crawl on his creation. In Sturm-und-Drang manner, Goethe celebrates the builder as a creative genius whose sublime works are comparable to nature. From the opening paragraph, he compares the cathedral first to a tree made by God, then to soaring cliffs. The divine is equated with the creation of sublime nature. God is the architect who raised mountains that reached the clouds. When he praises Erwin for the vision of Babel in his soul ("einen Babelgedanken in der Seele"), he is not making a critical statement; rather, Goethe means to place the architect in the pantheon of great artists.[15] In this essay, the biblical story of Babel's tower functions very much like the myth of Prometheus in Goethe's lyric poetry: it is a story of singular accomplishment.

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14. Laugier, *Essay on Architecture,* 8.

15. For the Renaissance precedents for a celebratory account of the Babel legend, see Ulrike Wegener, *Die Faszination des Maßlosen: Der Turmbau zu Babel von Pieter Bruegel bis Athanasius Kircher* (Hildesheim: Olms Verlag, 1995); Robert Mode, "Masolino, Uccello, and the Orsini 'Uomini Famosi,'" *The Burlington Museum* 114.831 (June 1972): 324. Schadaeus in his 1617 list of man-made wonders of the world has no trouble comparing the Strasbourg cathedral with the Tower of Babel. Oseas Schadaeus, *Summum Argentoratensium Templum: Das ist Außführliche un Eigendtliche Beschreibung deß viel Künstlichen, sehr Kostbaren, und in aller Welt berühmten Münsters zu Strassburg* (Straßburg, 1617), iii. Enlightenment critics of absolutism tended to read the Babel story differently. Ludwig Martin Träger in his *Metaphysik* (Halle, 1770) warns against philosophical "Planmacher," who, like politicians, start huge projects, never to finish them.

The god brings about the union of humans and architecture. In his "Prometheus" fragment, as well as his more famous ode, Goethe credits the god with teaching humans to build houses.[16] In the Strasbourg essay, Goethe combines Prometheus with Babel. The essay's rebellious force is directed against the medieval church for its supposed restrictions on the cathedral project, and not, as in the ode, against the ruling deity, who in the essay functions as the foil for artistic genius. Goethe imagines the design and construction of the cathedral as an act of defiance against the church's institutional power, rather than as its supreme manifestation. For him, the architect Erwin, the spirit of the place, exists apart from the social organization of space.

Modern scholars provide a much more complex history of the cathedral, and even in his 1823 amendations, Goethe acknowledges the collective character of cathedral building. Among other inaccuracies, the celebration of Erwin overlooks the role of guild traditions. Despite having overrated the importance of a single man, Goethe's 1772 celebration of Erwin marks the changing status of the architect within aesthetics. Whereas patrons had long been credited with the erection of great buildings, Goethe's hymn to Erwin commences a shift in the German architectural discourse wherein the architect is increasingly held accountable for a building, because of his artistic abilities, rather than the patron, whose money and politics produce it. Whereas in the recitation of the church's development the older chronicles give far greater prominence to the succession of bishops in Strasbourg, Goethe addresses Erwin directly as the artist responsible for the finished work, thereby emphasizing conceptualization over execution, and presuming the existence of a single plan from a single person. In every case his attribution to Erwin depends on a distinctly new form of backward-looking, teleological projection from the gravestone to the building. Even the older sources that reference the inscription of Erwin's grave within the cathedral do so only to credit him as the master builder of the nave, not as the overall architect.[17]

Within Goethe's new aesthetic ideology, the architect is no longer a master craftsman who carries on the secret knowledge and building practices of his lodge; instead he transfers his singular vision into stone. His profession emerges in the eighteenth century from behind the authority of the patron, much as the modern poet becomes recognized as possessing a unique voice, rather than as mastering rhetorical techniques.[18] The French Academy of Architecture had been founded in 1671 in order to train architects under royal supervision.[19] A hundred years later

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16. Matthias Luserke, "Goethes Prometheus-Ode: Text und Kontext," in *Goethe Gedichte: Zweiunddreißig Interpretationen,* ed. Gerhard Sauder (Munich: Carl Hanser, 1996), 50.

17. Schadaeus, *Summum Argentoratensium Templum,* 14.

18. Martha Woodmansee, "The Genius and the Copyright: Economic and Legal Conditions of the Emergence of the 'Author,'" *Eighteenth-Century Studies* 17.4 (1984): 426 ff.

19. Antoine Picon, *French Architects and Engineers in the Age of Enlightenment,* trans. Martin Thom (Cambridge: Cambridge University Press, 1992), 26.

Goethe argues against the standardized classicism of the Academy. He uses Erwin to illustrate that the poetic architect should not be confined by conventions. Any similarity between the cathedral and smaller churches in the region Goethe explains as Erwin allowing himself to be inspired by local forms, not as his conformity to convention. The cathedral is quite literally a monstrosity that is sponsored by the existing ecclesiastical building traditions in Strasbourg but cannot be localized to the indigenous context. The Strasbourg Muenster fits the Sturm-und-Drang notion that the "genius" reshapes traditional forms. This eighteenth-century characterization of a building as monstrous for its adaptation of the familiar reappears in more recent architectural theories that define the new in architecture "as being unattributably different yet continuous."[20] Just as Goethe's poet has broken with the rhetorical traditions of lyric poetry, so too has the inspired architect stepped away from the craft-bound role of an artisan working within a received tradition. The rupture, which Sturm-und-Drang poetry is supposed to embody for German literature, is projected onto architecture, albeit with the single example from Strasbourg. Goethe does not provide a revised history of architecture; rather, he incorporates the experience of a building into his own poetic form. Architecture for Goethe culminates in rapture. The parallel between author and architect is a corollary of the originary experience of the subject's confrontation with the building.

By postulating a single architect and by further ascribing psychological traits typical of the Sturm-und-Drang representation of the poetic genius, Goethe imagines the cathedral as a medium between himself and its architect.[21] It becomes a manifestation of artistic vision that invests its meaning in material form. The spiritual character of the architect is juxtaposed to the building and ultimately is praised as the cause of which the facade is an effect. In *The Genealogy of Morals,* Nietzsche criticizes this organization of meaning as a doubling of a single event in which every thing exists as an effect and then a cause is attributed to it afterward.[22] Goethe posits an artistic spirit as the source of the cathedral, and then when he cannot find a sign of that cause, he posits that the cause has turned into the effect by arguing that the architect's memory lives through his building. The building serves as a material confirmation of the architect's spirit.

The classicist Étienne-Louis Boullée, writing during the Revolution, makes a similar argument in his essay on architecture. Like Goethe, Boullée constructs the building as a doubled cause and effect. Writing against Vitruvius's definition

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20. Greg Lynn, "The Renewed Novelty of Symmetry," in *Folds, Bodies, and Blobs: Collected Essays* (Brussels: La Lettre Volée, 2004), 65.

21. In order to recuperate the essay from the charge of narcissism, Reinhard Liess stresses the tension between Goethe as observer and the cathedral as object; however, in doing so, Liess feels obliged to defend Goethe's art historical statements about the building. Reinhard Liess, *Goethe vor dem Straßburger Münster: Zum Wissenschaftsbild der Kunst* (Leipzig: Seemann, 1985), 94.

22. Friedrich Nietzsche, *On the Genealogy of Morals,* trans. Walter Kaufmann (New York: Vintage, 1967), 45.

of architecture as the art of building, Boullée insists that before construction can begin, a building needs to be designed: "In order to execute, it is first necessary to conceive. Our earliest ancestors built their huts only when they had a picture of them in their minds. It is this product of the mind, this process of creation, that constitutes architecture and which can consequently be defined as the art of designing and bringing to perfection any building whatsoever."[23] The mechanics of construction are for Boullée quite secondary. Boullée almost goes so far as to argue that buildings exist foremostly as artistic intention; whether they are ever finished remains secondary. Like Goethe, Boullée grounds architecture on the inspiration of individuals, who are motivated but not bound by tradition.

Architectural Epiphanies

Even though he celebrates the cathedral's architect as an autonomous artist, Goethe does not treat the church as a completely secular place. As the "Third Pilgrimage to Erwin's Grave" makes explicit, Goethe's early writing about the cathedral reformulates biblical tropes and redeploys the liturgical organization of the cathedral for his own canonization of the artist.[24] The eighteenth century was by no means the first era to design buildings with the goal of changing the perceptions and emotions of those within. In her treatise on medieval memory techniques, Mary Carruthers argues that monastic buildings were laid out as meditational engines that guided both the movement and the devotion of monks.[25] The emotional effect that cathedrals had on ordinary Christians was well understood in the Middle Ages. Architectural historians have long posited that the play of light and the proportions of the cathedral's design were perceived by medieval Christians as a reflection of God's architectural order in the cosmos.[26] The liturgical stations of the church belonged to an architectural rhetoric that inspired devotion in the believer. The cathedral's tropes posited a comparison between the particular building and the heavenly city.[27] Not

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23. Étienne-Louis Boullée, "Architecture, Essay on Art," in *Boullée and Visionary Architecture,* ed. Helen Rosenau (New York: Harmony, 1976), 83.

24. Robson-Scott notes that Goethe has none of the religious awe found in later romantic writing about cathedrals; however, it overstates the case to claim that he saw no mystical or irrational qualities in the Gothic. Robson-Scott, *Gothic Revival,* 88.

25. Mary Carruthers, *The Craft of Thought* (Cambridge: Cambridge University Press, 1998), 269.

26. Erwin Panofsky, *Gothic Architecture and Scholasticism* (1951; repr., New York: Signet, 1976), 44 ff.; Otto von Simson, *The Gothic Cathedral: Origins of Gothic Architecture and the Medieval Concept of Order* (1957; repr., New York: Harper & Row, 1964), 21–58. Peter Kidson argues that no documented relationship exists between the first formulation of Gothic design at St. Denis and the mystical writings so often used to explain the architecture. Peter Kidson, "Panofsky, Suger, and St. Denis," *Journal of the Warburg and Courtauld Institutes* 50 (1987): 1–17.

27. It was a well-established trope of sacred architecture that the monumentality of a cathedral's archways and towers was intended to evoke a city gate in keeping with the reference to Augustine's city of God. For a review of the different interpretations of the westwork at Corvey, see Charles McClendon, *The Origins of Medieval Architecture: Building in Europe, A.D. 600–900* (New Haven, CT: Yale University Press, 2005), 191.

only did the passage through a cathedral's massive westwork give the sense that one had entered into the city of God, the internal arrangement of the church allowed the experienced practitioner to revisit, both physically and spiritually, devotional sites.[28] As a medieval monk might use the cathedral to inspire thought, so too Goethe uses the Strasbourg cathedral as a technology of recollection. However, he redefines the Christian understanding of the building as memory site. Rather than reading the design as a device to contemplate the divine creation of the cosmos, Christ's passion, or the lives of the saints, he understands the cathedral as serving as a memorial to its human architect. Goethe does not perceive the intricate details of the cathedral as recreating the divine order; instead he asserts that the cathedral produces emotions in the viewer comparable to experiencing the sublime in nature, an effect that, in the first paragraph, Goethe associates with the divine.

Goethe's approach to architecture is fully in keeping with the eighteenth-century expectation that a building reveal its aesthetic quality by creating an emotional response in the viewer. However, unlike most contemporary architectural critics, he adopts a mystical tone in describing his reactions. The Strasbourg essay turns the Enlightenment's contemplative approach to judging architecture into a melancholic invocation of the dead architect's spirit. Goethe's later encounters with Italian architecture are understood in much the same mournful manner. In both venues, Strasbourg and northern Italy, Goethe interprets buildings by constructing dialogues with the ghost of the architect. In Venice he remarks that the meaning of architecture rises before him like a spirit from a grave: "The art of building rises up like an old ghost from the grave, calling on me to learn the rules of a dead language, not to practice them or to take joy in them, but instead to quietly honor the venerable past age that has disappeared forever."[29] Although Goethe is here referring to his discovery of Roman architecture, the awakened ghost metaphor describes his earlier approach to the Strasbourg cathedral, as well as his Italian "conversations" with Andrea Palladio. In every case, the dialogue with the imaginary architect entails a critical exchange, in which the faults of buildings are examined along with their best features. The spectator is likewise open to learning from the building—a gesture that separates Goethe's encounters from romanticism's introverted monologues on ancient cathedrals.[30] The narrator in Wilhelm Heinrich Wackenroder's *Outpourings of an Art-Loving Friar* dreams of a night visit to a picture gallery in which the ghosts of great painters stand in front of their masterpieces; however, he is too frightened to address Raphael, his Italian ideal, and is struck dumb as he turns to Dürer. For Wackenroder, as for Goethe, aesthetic contemplation queries the artist's intentions, though early on, in the second Raphael essay, the romantic

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28. Carruthers, *Craft of Thought,* 261.
29. Goethe, *Italienische Reise* [12 October 1786], in *Werke,* 92.
30. Jens Bisky, *Poesie der Baukunst: Architekturästhetik von Winckelmann bis Boisserée* (Weimar: Hermann Böhlaus Nachfolger, 2000), 192.

critic suggests that the secrets that structure artistic meaning are themselves unknowable.[31]

With almost every important encounter with a building, from Strasbourg to Vincenza to Rome and Paestum, Goethe described how he approached the building, how his expectations were contradicted by his experience before it, and how the contemplation of the building altered his self-understanding as an artist. This basic narrative underlies even those passages where Goethe recounts disappointment with a building or city, as he does in southern Italy. The religious tone of his encounters is easily discerned.[32] In each telling, he nears a renowned building as a pilgrim eager for an epiphany. In the Strasbourg essay, he cites Peter's vision in the book of Acts, chapter 10, to explain his respect for Erwin.[33] While in Venice reading Palladio, Goethe uses expressly religious and visual terms to describe his new understanding of architecture: "The scales have fallen from my eyes, the fog rises, and I can recognize objects."[34] This sudden insight into architecture in Italy follows the pattern already set out in Germany. The one major difference is that in Strasbourg Goethe rejects his father's classicism, whereas in Italy he affirms it so as to exceed his father. However, in every instance these moments are described as epiphanies that arise from the visual contemplation of the building from the outside. As sudden, seemingly uncontrolled emotions, the epiphany objects to the reflective integration of systematic philosophy. Goethe's repeated insistence on feeling a response to a building rather than thinking or measuring it out makes clear how important it was for him not to immediately refer to the classical tradition in judging a structure.

That the essay imitates the style of a mystical epiphany does not mean that it reduces the experience of contemplating the cathedral to a single moment. Epiphanies stretch out as a dialogue, even as they posit an instance of recognition. More important than the speed with which an insight arrives is its location. The poet always returns to the place to find confirmation that enriches the initial insight. Goethe's illumination before the cathedral is more profane than sacred. He alludes to biblical passages but only in order to describe his encounter with the human.

Goethe presents a spectatorial relationship between building and observer that is very much in keeping with developments in eighteenth-century architectural theory. Within the terms of the discourse, the viewer's emotional response to the building compares to his or her reaction to a person's private being. Understood

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31. Wilhelm Heinrich Wackenroder, *Herzensergießungen eines kunstliebenden Klosterbruders* (Potsdam: Gustav Kiepenheuer, 1925), 69–70.

32. Beutler states that the rhythm of so much of Goethe's Sturm-und-Drang prose has the quality of a sermon. Not until his Italian journey does he lose this manner. Beutler, *Von deutscher Baukunst,* 47.

33. Beutler uses the reference to connect the essay with Goethe's visit to Sesenheim, where he is wooing a *Pfarrerstochter* and may have heard a sermon on the passage. Beutler notes that the passage is used after Easter and Ascension. Beutler, *Von deutscher Baukunst,* 28.

34. Goethe, *Tagebuch der italienische Reise,* FA 15.1: 686.

spatially, a building's facade presents an image that allows insight into its interior, where the soul, the psyche, or the moral character resides. The exterior serves really only as a conduit to the more important hidden identity of a building. The facade is crucial for its signifying function, but its importance as beautiful image is demoted. French eighteenth-century theorists had already put forward the argument that buildings should be judged by their character. Goethe extends this standard to all art, while insisting on the singularity of each work. The sight of the great building, be it a Gothic cathedral or a Renaissance palace, commences an imaginary, indeed almost hallucinatory, exchange of conversations and glances between building and observer that constitutes a sense of place that Goethe insists ought not be abstracted into principles of architecture.

Goethe turns the French focus on discerning character into a gothic tale by using the ancient notion of a "genius loci" to give buildings a human voice. The physiognomic metaphor implicit within the aesthetics of "character" becomes an uncanny tale of spirits in buildings. An anecdote Goethe recounts in *Poetry and Truth* shows just how easily academic discourse turns ghostly. A few months after arriving in Strasbourg, he joined a party that happened to be in a house on the sloping bank of the Rhine across from the cathedral. The dinner guests could all enjoy a clear view of the Muenster, and so they fell into polite architectural conversation. Goethe tells how he mentioned to one guest that the cathedral's one completed tower had not been finished according to its design. In discussing the missing details, the guest asked who would have told him this, and Goethe answered: "The tower itself." Upon this the guest revealed that he was the porter to the cathedral tower and that he could show Goethe archived plans that confirmed his judgment.[35] The claim that the tower told the poet what was missing from its structure was pragmatically meant as a statement about interpreting the facade of a building. Taken at its literal and most fantastic meaning, the poet's answer also means that the building speaks. Goethe transforms this ancient motif, stones that speak, into a ghostly story wherein the dead architect rises from his own building to explain its structure. Goethe refers to "the genius of the ancients" that rose "from the grave."[36] The genius loci that Alexander Pope mentions in his epistle to Lord Burlington appears in Goethe's essay as a spirit. Pope was advising the English patron of architecture not to rely on Italian, most notably Palladian, models, but to design according to the local conditions, and presumably traditions:

> Consult the genius of the place in all;
> That tells the waters or to rise, or fall;
> Or helps th' ambitious hill the heav'ns to scale,

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35. Goethe, FA 14: 544.
36. Goethe, "On German Architecture," in *Essays on Art and Literature,* trans. Ellen von Nardroff and Ernest von Nardorff (New York: Suhrkamp, 1986), 4; Goethe, FA 18: 111.

> Or scoops in circling theatres the vale;
> Calls in the country, catches opening glades,
> Joins willing woods, and varies shades from shades,
> Now breaks, or now directs, th' intending lines;
> Paints as you plant, and, as you work, designs.

The genius loci has no voice in Pope. While Pope ascribes diverse activities to the genius loci, he does not give him a voice. Pope does not spell out how Burlington, or any other builder, would actually consult with the spirit of a place. Goethe, on the other hand, turns to Shakespeare's *Hamlet* and the alchemic theories of the sixteenth century so that he might conjure up the spirit.

In Strasbourg, Goethe's genius loci is not the spirit that brings nature and architecture into an idyllic union. Only in Italy will he discover the Palladian harmonies Pope considered so inappropriate to England. Beauty is not the first impression the Gothic cathedral gives off; rather, Goethe is shocked by its monstrous appearance, and even after he has resolved his disturbed feelings, he never forgets the struggle with horror and repulsion that lies at the heart of eighteenth-century sublime. The invocation of the architect's ghost is part of Goethe's struggle to recover from a shattering architectural perception.

Throughout his career, Goethe makes sense of buildings, some of which trouble him initially as repulsive forms, by engaging in a hermeneutic process wherein he reflects on his own historical and aesthetic position as spectator, and then poetically addresses the building and its architect so as to formulate a critical judgment of the structure's aesthetic and historical significance. This engagement with architecture has a specular quality similar to the patterns David Wellbery describes in Goethe's early lyric poetry.[37] The contemplation of a building with its attendant dialogues between spectator and structure ends up constituting a more certain identity for both the subject and his object of reverie. In the case of the Strasbourg cathedral, both poet and cathedral begin the dialogue from an uncertain position: the Muenster because of its devalued Gothic appearance and Goethe because of his uncertain identity as an artist. Beauty is not the only standard; indeed at one point in the essay, Goethe pushes beauty aside in favor of art that is "characteristic" of a historical era. Art that reflects certain truths, even if they are ugly, seems, at the middle point of the essay, to be better than all too harmonious and agreeable forms, though ultimately Goethe reconciles beauty and character in a higher form that the cathedral is said to embody.

The facade of the building is the flash point for Goethe to connect a historical moment with the present. Borrowing in an unconventional manner from Walter Benjamin's *Arcades Project,* one can suggest that Goethe's essay on the Strasbourg

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37. David Wellbery, *The Specular Moment: Goethe's Early Lyric and the Beginnings of Romanticism* (Stanford, CA: Stanford University Press, 1996), 27.

cathedral is an example of a dialectical image. Goethe posits his own brief history of German architecture based on his immediate apprehension of the cathedral's facade. Out of the sublime sight of the cathedral's towering westwork, Goethe constructs a historical thesis, namely, that the building's facade, long denigrated as hideous and barbaric, stands as a rebuke to classical aesthetics and to the assertion of French national style. As Reinhard Liess notes, Goethe never postulates a history of Gothic architecture. He does not even generalize about "the Gothic" as a style or manner; rather, he organizes his thoughts in relation to a single vision, an instant that he draws out and repeats.[38] The essay is organized as a set of contrasts, between wall and pillar, between a theory of French classicism and the experience of looking at the cathedral, between rationality and feeling. These juxtapositions never rise to the level of historical narrative. Unlike Laugier, who seeks to abstract away from the experience of buildings in order to elaborate principles of architecture, Goethe's essay refuses quite deliberately to move beyond the place before the cathedral: "Principles are even more damaging to the genius than examples. Individual artists may have worked on individual parts before him, but he is the first from whose soul the parts emerge grown together into an everlasting whole."[39] The process of making judgments, with all the subjective twists and turns that constitute architectural contemplation, is more important for Goethe than for Laugier. The moment in Strasbourg is never really singular; indeed, for some months Goethe replicates his encounter, and nevertheless it is dependent on the specific location. He returns over and over again to the same place so as to confirm and expand upon his first impression. For Goethe the sight of the building grants him insight into history. That Goethe's historical thesis differs from, even contradicts, Benjamin's matters little. Both writers rely on the image as an entry into a lost moment in the past. Benjamin's dialectic at a standstill affirms that the present constructs, or shapes, our understanding of the past. For Goethe the historical moment of the dialectical image is a deeply personal and empowering engagement. He couples this epiphany with the late eighteenth-century condition of German politics: the lack of a distinctive German identity, and the fragmentation of sovereignty into princely interests. More so than that of Benjamin, Goethe's writing makes evident that the perception of the dialectical image cannot be disentangled from the psyche of the observer or the particular experience of place.

Any reading of the epiphany before the cathedral needs to consider the unconscious as well as the socially critical energies contained within it. The epiphany in Goethe differs from the profane illuminations of Benjamin's work because Goethe presents it as lived experience, rather than as historical method. Goethe's moment of insight revives a dead authority, a forgotten brother from whom the poet learns.

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38. Reinhard Liess, *Goethe vor dem Straßburger Münster: Zum Wissenschaftsbild der Kunst* (Leipzig: Seemann, 1985), 20.

39. Goethe, "On German Architecture," 4; Goethe, FA 18: 112.

Benjamin's dialectics are less heroically individual. Goethe still writes in the religious tradition of a personal conversion, whereas Benjamin awaits a messianic transformation of society. Goethe confronts the fraternal shade, but in challenging him, he also seeks, as does Benjamin, to revive a repressed and scorned mode of representation—in this case, the Gothic facade. Like Benjamin, Goethe revives an arcane mysticism as the linguistic medium for his epiphany. For Benjamin it is the Kabbalah; for Goethe the alchemy of the Protestant Reformation.[40] Just as Faust wishes to learn from the Erdgeist while controlling it, so Goethe in his architectural encounters wishes to both study and overcome the spirit of ancient architects. Within the cosmology of sixteenth-century alchemy, the spirit of a place embodies and brings about its material existence. In his critical commentary on *Faust,* Erich Trunz provides extensive documentation that the early modern hermetic tradition (a source for Goethe's *Faust*) would use the term *archeus* to describe that spirit that organized the elements, setting each in its proper position.[41] Zedler's dictionary definition of *archeus* notes two meanings of the term: first, a spirit that manifests itself as the cause for the natural order; or, for those who find the causation for things in the mechanical operations of the body, the term refers to the soul, which sets the body in motion.[42] Of these two meanings, Goethe's essay depicts the artist or *archeus* as a spirit that brings the material things into existence. The scene in which the poet confronts the demonic spirit plays itself out differently, depending in large part on how readily an identificatory relationship can be established between the two figures. The invocation of Erwin does not threaten to overwhelm the poet, whereas the Erdgeist denies any similarity with the mortal Faust. The ghost of Erwin serves more as a teacher and guide, closer to Dante's invocation of Virgil or, perhaps more ominously, Hamlet's conversation with his father's spirit, both scenes that Goethe used in later works. The moment of confrontation in the Strasbourg essay ends peacefully, as the relation shifts quickly to a brotherly union between artists, a resolution that never occurs in *Faust.*

Addressing the Architect

Aside from brief references to Goethe's enthusiasm, architectural criticism tends to overlook the rhetorical forms that shape the identifications and polemics of "On German Architecture," yet the essay's modes of address are crucial to Goethe's

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40. Goethe describes reading Arnold's *Kirchen- und Ketzergeschichte:* "I busily studied the various opinions, and since I had heard it said often enough that in the end every person has his own religion, it seemed perfectly natural to me that I could form my own and did this with great satisfaction. The new Platonism lay at its foundation, the hermetic, the mystical, and the cabbalistic each contributed their part and thus I constructed my own world, which looked strange enough." Goethe, *Dichtung und Wahrheit,* FA 14: 382 (Deutscher Klassiker edition, end of bk. 8).

41. Goethe, HA 3: 519–520.

42. Johann Heinrich Zedler, *Grosses vollständiges Universal-Lexicon aller Wissenschaften und Künste* (1732–1754) (http://mdz.bib-bvb.de/digbib/lexika/zedler), 1211.

attempt to define the architect as artist.[43] The essay begins with the poet speaking to Erwin in the first person. In a mood of disheartened expectation, the opening line lays out the semiotic triangle that Goethe will use repeatedly in his efforts to understand buildings: "As I was wandering over your grave, noble Erwin…" The grave is the cathedral, the memorial for the artist. The first-person speaker cannot find the gravestone, which he is certain, must be near. He already knows its inscription from a booklet by Heinrich Behr in 1744.[44] Indeed, travel books had long mentioned Erwin's gravestone. Goethe might just as well have read about a similar inscription in Oseas Schadaeus's handbook of 1617.[45] Schadaeus gives the reader good reason to anticipate a visit. A patriotic Alsatian, Schadaeus brags that the Strasbourg cathedral has a tower taller than every other church in Christendom. Indeed he rates the cathedral as the eighth wonder of the world, behind the seven that had been known since antiquity.[46] Goethe's more biblical language reiterates the visit of the two Marys to Jesus's tomb after his crucifixion. When he fails to find Erwin's gravestone, his dejection is quite spiritual: "I was saddened to the depth of my soul."[47] At first he thinks to design a grander grave, but then decides that it matters not if Erwin has been forgotten by the ants who crawl over his creation. His recuperative gesture compares Erwin with God. Both have been forgotten, but contemplating their work can restore the memory of both, whereupon Goethe presents a string of comparisons between the church and natural phenomena. The text states explicitly that a plastic work of art makes up for the absence of a text, the cathedral substitutes for the gravestone, implying similarly that nature replaces the Bible as the historical documentation of God's presence and death.

Although the essay's opening struggle to recuperate Erwin's memory posits the cathedral as a sufficient memorial, Goethe ends the passage with the promise to preserve Erwin's name on the bark of a tree. The parallel between trees and

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43. Rykwert, *On Adam's House,* 89.

44. The full title reads: *Straßburger Münster- und Thurn-Büchlein oder Kurtzer Begriff der merkwürdigsten Sachen, so im Münster und dasigen Thurn zu finden* (Straßburg, 1744); cited in Goethe, FA 18: 1108.

45. Schadaeus, *Summum Argentoratensium Templum,* 14; Paul Frankl, *The Gothic: Literary Sources and Interpretations through Eight Centuries* (Princeton, NJ: Princeton University Press, 1960), 329–331. Schadaeus gives a slightly different version of the tombstone: "Ervvinus von Steinbach war Bawmeister/ wie solches die Inscription uber der Schappel oder MittelMünsterthüren außweißt/ die also lautet: Anno Domini 1277. In die Beati / Urbani hoc Gloriosum Opus / inchoavit Magister Erwinus de Steinbach."

46. Schadaeus, *Summum Argentoratensium Templum,* 2: "Sonsten wird es bey den Gelehrten inn Lateinischer Spreche genenne Summum Templum, der höchste Tempel oder die fürnembste Kirch/ nicht allein daumb/ dieweil dieser Baw höher ist als andere Kirchen und Gebew der Statt/ und deß gantzen Europae; denn weder der Wienerische/ Landshutische/ Antorssische/ oder Freyburgische Thurn dieseminn der höhe zu vergleichen…. Und zwar wann wir zwischen dem Münster alhie zu Straßburg und densieben Wundern der Welt eine comparation un vergleichung anstellen/ unnd solche secundum quatuor causarum genera examiniren unnd auff die schaw führen wollen/ werden alle recht verständige den jenigen nicht widersprechen können/ die es entweder dem mehrertheil der Sieben Wunder vorziehen/ oder doch zumwenigsten das Achte derselben sein unnd paßieren lassen."

47. Goethe, "On German Architecture," 3.

the cathedral tower is reiterated as the speaker childishly promises to carve Erwin's name with an offering of leaves and grass.[48] The grove functions as a site of meditation and the place from which the poet speaks. It serves as a deliberately nonarchitectural memory theater wherein Goethe preserves his poetic inspirations. Nature serves in Goethe's early writing as the antithesis of architecture, as the escape from urban society and patriarchical authority. In "On German Architecture" and then even in *Poetry and Truth,* Goethe performs the strange move of situating the cathedral in the forest, a combination that Caspar David Friedrich will make to startling effect decades later. The opening address to Erwin is uttered not in front of or within the cathedral, but in a secret forest retreat. Erwin has been conjured into this hidden grove presumably because of the aesthetic sympathies between Gothic ornamentation and the German forest.[49] Goethe addresses Erwin as "trefflicher Mann," which a dictionary would translate as "excellent man," but when the phrase is read in an overly literal and etymological manner Erwin is literally the man who has been met. Given that Goethe in later years would bemoan his youthful enthusiasm for coded symbols in this essay, it is not too much to speculate that "trefflich" can refer back to its etymology as "treffen." The pilgrim Goethe, who has raced to Strasbourg, fleeing his paternal home, has met his ideal, the architect whom he later calls a brother. Erwin is "trefflich" because Goethe has encountered him through the cathedral, he appears as a spirit to whom the poet addresses the essay, and yet further he is the artist who has made the place, he constitutes the space that is the cathedral.

Goethe responds to Erwin's place with one of his own. The text's deictic terms situate the moment of communication through the use of the familiar *Du* imperative to "see here in this grove" (siehe hier in diesem Hain). Goethe and Erwin are conversing in the forest about his cathedral, leaving the reader to be drawn in through the command to "look here." The moment and the place are imaginary; they exist in writing or in the mind of the reader, like the memory theaters that preserve thoughts in a mental space. Already in its brief opening paragraphs, the essay has constituted three distinct spaces, all of which memorialize Erwin: the public cathedral, the forest grove, and the readerly imagination.

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48. Norbert Knopp reads this passage in relation to Goethe's later claim that the details of the cathedral contribute to the whole just as the small features of nature belong to a landscape, i.e., that all parts of the decoration contribute to the beauty of the building. Norbert Knopp, "Zu Goethes Hymnus *Von Deutscher Baukunst, D. M. Ervini a Steinbach," Deutsche Vierteljahrsschrift für Literaturwissenschaft und Geistesgeschichte* 53.4 (1979): 617–650.

49. Knopp notes that the association between the Gothic cathedral and the German forest can be traced to the early fifteenth century, when it is mentioned in a letter to an unnamed pope by an unknown author (perhaps Raphael or Castiglione). Knopp, "Zu Goethes Hymnus," 271–276. Frankl discusses the forest theory of pseudo-Raphael's letter, most notably the claim that the pointed arch emerged from the practice of tying two pines together to form support for a hut's roof. Paul Frankl, *Gothic Architecture* (Baltimore: Penguin, 1962), 217–218. See also Rykwert, *On Adam's House,* 97–101.

Goethe conceives the spirit of Erwin as the controlling artist whose singular intention is expressed in the building. Erwin creates within a tradition; his spirit alludes to the decorations that appear throughout the city's churches. Goethe conceives tradition not as an agent, and the cathedral is not a collective construction; the continuity between the Muenster and the local churches is a product of the artist's incorporation of local tradition, rather than the activity of some collective such as a guild. The artist improves upon the local practice yet draws from it as well. Erwin is above and within his society.

At a crucial point in Goethe's narration, when he stands confused and overwhelmed by the cathedral's monumental ornamentation, the ghost of Erwin rises to explain his work to the watchful poet. While ghosts have long provided protagonists with secret knowledge, in epic literature they are usually not artists who interpret their own work. The fantasy allows the viewer to learn the artist's aspirations when creating. Although no modern critic would expect that Dante or Homer would rise up to explain his intentions, Goethe uses this fiction throughout his life as a means of creating a literary voice for architecture. The fantasy presumes two forms of identification: first, sympathy between audience and artist; and second, and most problematically, when faced with ancient buildings, the ability to ascribe the work to a single creator. With Palladian structures in northern Italy, the attribution is based on the *Quattro libri dell'architettura* (Four Books of Architecture). With the temples of Paestum, the absence of a known architect heightens their alien effect on Goethe and leads him to struggle with the question Hirt described. With the Strasbourg cathedral, he settles on the tradition that a single person designed the facade, though the attribution was probably uncertain even in the eighteenth century.

The dialogue with the architect has the tone of a biblical revelation. Goethe positions the architect as a divine figure, as one who speaks, as an angel, in commands and with an inherent sense of necessity. Erwin appears before the poet with a challenging question—"Was staunst Du?" (Why are you amazed?)—as if the poet's confusion before the cathedral suggests doubt in its perfection. By asking, "Why are you amazed?" the spirit reverses the terms of the eighteenth-century discourse on taste. With the adoption of a biblical voice, the spirit in the text announces that the cathedral is not subject to a canon of good taste. The poet needs to overcome his anxiety. The cathedral is no longer treated as the mere object of emotional evaluation; instead it is presented as an unquestionable given. It is the poet's emotions that need to adapt to the building. The problem of how spirits address humans is an old one in the Christian tradition. In Luke 1:29 when the angel appears before Mary hailing her as blessed by God, she responds: "Welch ein Gruß ist das?" To which the angel replies: "Fürchte dich nicht, Maria!" (Do not be afraid!) When in Mark 16 Mary Magdalena and the other women find an angel in Jesus's tomb, the first words spoken to them are "Entsetzt euch nicht!" (Do not be amazed!) In Matthew 28:5 the same command is given as "Fürchtet euch nicht!" (Do not be afraid!)

Having rebuked the confused judgment of the cathedral, the spirit of Erwin immediately defends its massiveness as both necessary and traditional for the city. The scale of the cathedral is simply greater than that of the surrounding churches. The spirit again resorts to godlike proclamations by declaring the expansion of local traditions to a massive scale as both necessary and beautiful. "That all was necessary, and I lent it beauty" (Das all war notwendig, und ich bildete es schön) suggests the divine Creator's satisfaction in the book of Genesis.[50] However, the architectural spirit is far from omnipotent, and the last lines of his monologue bemoan the failure to complete the cathedral according to his original plan. The fate of the architect is to not complete his buildings as intended. The unfinished second tower marks an emptiness in the architect's work. Erwin speaks now more as one of Dante's shades who regrets the incompleteness of his own life. Goethe has the poet strike a pose like Dante having heard the story of Paolo and Francesca. After the spirit points out the flaws of his masterpiece, the poet sinks into sympathetic sadness: "And so he departed from me and my heart was filled with sympathy and melancholy."[51] The monologue on the cathedral's success and failure ends with the poet's melancholy identification with the architect. This sad feeling is itself an established trope within poetry. The equivalence between poet and architect is established through poetic means.

The encounter with the spirit is presented as educational, and as a means for the poet to overcome his fear of the cathedral: "I owe it to your instruction, noble genius, that I no longer reel when confronted with your profundities." (Deinem Unterricht dank' ich's, Genius, daß mir's nicht mehr schwindelt an deinen Tiefen.)[52] The conclusion to the encounter returns to Goethe's initial anxiety in order to assert through a repetition of the spirit's biblical rhetoric that it has been overcome. The declaration "Es ist gut!" signals the end of anxiety over the cathedral's monstrosity and his own insecurity before it.

David Wellbery uses the Strasbourg essay to define genius as it appears in Goethe's early writings.[53] Wholeness, the ability to pour creative force into a single unity, distinguishes genius. Kenneth Calhoun follows Wellbery's lead as he points out that the cathedral is incomplete, that the originary unity of Erwin's plan for the building was not executed.[54] Goethe will return to the tension between plan and building most notably in Italy, where he discovers that many of Palladio's buildings do not exist as they are drawn in the *Four Books.* There remains a gap between the intention of the artistic genius and its execution. In Italy, Goethe sympathizes with the problems he imagines Palladio had in executing his plans. The entire dynamic

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50. Goethe, "On German Architecture," 6; Goethe, HA 12: 11.

51. Goethe, "On German Architecture," 6; Goethe, HA 12: 11.

52. Goethe, "On German Architecture," 6; Goethe, HA 12: 11.

53. Wellbery, *Specular Moment,* 124–126.

54. Kenneth S. Calhoun, "The Gothic Imaginary: Goethe in Strasbourg," *Deutsche Vierteljahrsschrift für Literaturwissenschaft und Geistesgeschichte* 75 (2001): 6.

of imaged wholeness and failed completion is made obvious by the visual discrepancy between drawing and structure.

The Disturbing Place

While the opening section of "On German Architecture" displays its enthusiasm for the cathedral, Goethe acknowledges later that he went to the cathedral plaza prejudiced against Gothic ornamentation as an excessive and incoherently organized addition to any building: "When I first came to visit the cathedral, my head was filled with general notions of good taste.... Under the heading 'Gothic,' as in an entry in the dictionary, I piled up all the synonymous misconceptions that I had ever encountered, such as indefinite, disorganized, unnatural, patched-together, tacked-on, overladen."[55] The decisive transformation occurs when Goethe faces the front of the cathedral, a massive wall of decoration leading the eye upward to the structure's single tower:

> But what unexpected emotions seized me when I finally stood before the edifice! My soul was suffused with a feeling of immense grandeur.... They say it is thus with the joys of heaven, and how often I returned to savor such joys on earth.... How often I returned to view its dignity and magnificence from all sides. How often the gentle light of dusk, as it fused the countless parts into unified masses, soothed my eyes, weary from intense searching. There all stood before my soul, simple and great, and I, full of bliss, felt develop in me the power at the same time to enjoy and understand. There I sensed the genius of the great builder.

> Mit welcher unerwarteten Empfindung überraschte mich der Anblick, als ich davor trat! Ein ganzer, großer Eindruck füllte meine Seele.... Sie sagen, daß es also mit den Freuden des Himmels sei, und wie oft bin ich zurückgekehrt, diese himmlisch-irdische Freude zu genießen.... Wie oft hat die Abenddämmerung mein durch forschendes Schauen ermattetes Aug' mit freundlicher Ruhe geletzt, wenn durch sie die unzähligen Teile zu ganzen Massen schmolzen, und nun diese, einfach und groß, vor meiner Seele standen und meine Kraft sich wonnevoll entfaltete, zugleich zu genießen und zu erkennen! Da offenbarte sich mir, in leise Ahnungen, der Genius des großen Werkmeisters.[56]

That last "There" (*Da*) functions as a deictic marker telling us the place not only in physical space, but also within the train of Goethe's life and in the rush of his

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rhetoric, where the culmination of his reverie was reached. Far into his essay on architecture, Laugier, whom Goethe derogatorily refers to as a "flighty French philosopher-critic" (neufranzösischer philosophierender Kenner), also comes to speak about the Strasbourg cathedral with admiration.

Goethe sets architectural viewing in a narrative of travel, thereby highlighting the temporal character of architectural experiences. The sight of the building distinguishes his viewing of art from some motionless, atemporal contemplation. Yet the narrative always revolves around certain emotionally charged places. The visit to the building usually involves a long trip that is structured by a succession of arrivals and departures that are built into each other. Goethe's encounters with ancient architecture follow a pattern that starts with the anticipation of seeing the building, the surprise of engagement, and then a dialogue between himself and others (often the ghost of the architect) that attempts to resolve the strong emotions engendered by the sight of the building.

No visit to a site occurs without preparation. Despite the importance of his immediate reaction to the sight of a building, Goethe always arrives anticipating a particular image. He has seen pictures, heard travelers' tales, read criticism, and thus the encounter, for all its immediacy, is already imbedded in an architectural discourse. The poet reacts not only to the building but also to everything he has heard. The discrepancy between expectations and experience often becomes its own topic. In Strasbourg he counts on being disappointed, then finds that he is amazed. In Verona he hopes to see the culmination of ancient architecture but finds disappointment. Then later as he visits Venice and Rome, he rediscovers scenes he has known since his childhood from the prints in his father's salon.

The travel narrative of Goethe's architectural encounters parallels the movement of the lyric subject in Goethe's early poem "Willkommen und Abschied" (Welcome and Departure). In this paradigmatic work, the speaker races on horseback to arrive at a secret place where the intensity of joining his beloved is represented as an exchange of glances.[57] Dark pines threaten the rider in much the same way that Goethe saw the Muenster. Indeed, the poem and the essay switch the tree-cathedral metaphor. If the Muenster's complex ornamentation holds together like the branches of a tree, so a huge tree that confronts the rider looms like a tower, and the forest holds the frightening faces of Gothic gargoyles: "Wrapped in fog stood the oak / a giant towering there / Where, from the bush, darkness / watches with a thousand eyes." (Schon stand im Nebelkleid die Eiche, / Ein aufgetürmter Riese, da, / Wo Finsternis aus dem Gesträuche / Mit hundert schwarzen Augen sah.)[58] Just as the essay emphasizes the placedness of the church, so the poem stamps down the spot where the terrifying tree stands with the deictic "da."

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57. Meyer-Krentler notes that "Willkommen und Abschied" is structured as a departure followed by an arrival. Eckhardt Meyer-Krentler, *Willkomm und Abschied, Herzschlag und Peitschenhieb: Goethe–Mörike–Heine* (Munich: Wilhelm Fink, 1987), 100–101.

58. Goethe, HA 1: 27. Unless otherwise indicated, all translations are my own.

While the poem concerns a specular exchange with a woman that, according to David Wellbery, affirms or even constitutes the male subject, the Strasbourg essay depicts an engagement wherein the subject first mourns, then confronts, and finally reconciles himself with an authoritive male figure.[59] Before the Strasbourg cathedral, and then later at the Doric temples at Paestum, Goethe is at first repulsed by what he considers a huge, thick, ungraceful apparition. In each case, he quite consciously "pulls himself together" by finding a new aesthetic value in the disappointing sight. This recuperative hermeneutic with the building occurs in the form of an imaginary dialogue between the poet and structure's architect. The shift from repulsion to identification repeats the trajectory whereby the classical Oedipal rivalry is overcome.

Kenneth Calhoun links the essay's ambivalent praise and terror before the cathedral with the self's struggle against its own bifurcation. Goethe's horror followed by his analytical efforts to overcome this feeling, can, according to Calhoun, be understood in Lacanian terms as the awareness of the self's fundamental lack. The threatening alterity of the cathedral reflects the emotional chaos of a fragmentary subject. Calhoun also follows Wellbery's reading of Goethe's early lyric. For all the merits of this Lacanian reading it tends to accept the subjective voice at face value. When Wellbery and Calhoun emphasize the personal experience foremostly, they do not recognize how the contemporary architectural discourse permeates Goethe's lyrical passages. Wellbery argues that "the regularities that define a discourse do not saturate its individual instances, they do not define the singularity of the text which (inevitably?) contains moments that escape, disturb or contravene discursive regulation."[60] This proviso, however, ought not serve as an exemption that allows the critic to reintroduce the artist as genius and the poem as an isolated entity. Commentaries on Goethe's architectural writings tend to emphasize the unique poetic tone at the expense of situating the writing within the broader arena of architectural theory. The fusion of personal statements with theory is particular deceptive in the eighteenth century, when architectural commentaries were grounded in emotional impressions. Far from being at odds with the mainstream of French classicist thought, Goethe's highly personal account of the cathedral extends the subjectivist tendencies of eighteenth-century architectural criticism. The Strasbourg essay is an example of this theoretical engagement, a poetic account that is supposed to have theoretical consequences. In the eighteenth-century discourse, subjective impressions have implications for architectural theory. The theory, with its insistence on foregrounding feelings, guides in turn the emergence of the subjectivity it demands as its own ground. In short, when Goethe describes the Gothic as monstrous, he is not only speaking of a personal response that alludes to castration anxiety, but also writing in the familiar terms of architectural theory. Gothic buildings had been called monstrous since at least the fifteenth century. To the Roman

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59. Wellbery, *Specular Moment,* 27.
60. Ibid., 19.

eye they were grossly distorted bodies, disturbing a balanced order as much as a blob building today may unsettle a traditional Austrian town. The Gothic, now so familiar, would once have had an effect much like the deconstructed bodies of Greg Lynn's architectural speculations. Renaissance denunciations treated the Gothic as a multiplicitous body that proliferated deformed shapes within itself.[61] Goethe mocks himself a little as he describes his prejudices against the style. Like a dictionary, he writes, he could list off all sorts of negative terms associated with the Gothic. The young poet deploys the same strategy of denunciation as Kant and French classicists: he piles on his criticism. More specifically, like Kant, Goethe uses the term *haufen* to describe an incoherent mass.[62] In thinking about the Gothic, Goethe says, he stacked up the many faults, so that the denunciations piled (*gehäuft*) in his mind replicate the pile (*Haufen*) that Gothic (and any other unclassical style) supposedly embodies. The symmetrical mind dismisses the disordered pile by piling on derision. The dismissal of the Gothic enacts the fault ascribed to it in the first place—a disordered loading-up of symbols. Calhoun similarly links the Gothic with the baroque and the rococo, thereby recreating the classicist habit of piling all but the geometrically rigorous into one unwieldy and barbarous category. The monstrous Gothic is a common trope, a cliché (not unlike the castration anxiety); that is why it must be understood as an effect of discourse, as well as a subjective terror.

The facade of the cathedral represents phallic triumph and castration at once. Only one of the planned two towers was completed, because, according to lore, the builders feared that the completion of the second tower would have brought about the collapse of the entire structure. The Muenster stands thus as monument and warning, as the Tower of Babel and as its antithesis, the built and the unbuilt. Goethe writes about the energy that was to raise the two towers but sadly completed only one.

Without question the sight of the Strasbourg cathedral is a shock. Calhoun brings out how disturbing and grotesque the sight of the building was for Goethe. His repeated visits to the church constitute an effort to familiarize himself with the disturbance. They are according to psychoanalysis a form of *Reizbewältigung* (stimulus mastery). The fort-da game, which tests the poet's relation to the beloved object, takes place over a long period of time. In *Poetry and Truth,* Goethe not only tells of his repeated visits to the cathedral; he also has the church's tower reappear on the horizon as he recounts his romantic masquerade with Frederike Brion on the hills outside Strasbourg.[63]

The shock of modern urban existence is preceded in the eighteenth century by the experience of the sublime. Most commonly the sublime is associated with natural phenomena, but here Goethe gives a distinctly urban example of struggling

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61. Greg Lynn, "Multiplicities and Inorganic Bodies," in *Folds, Bodies, and Blobs,* 44.
62. Goethe, "Von deutscher Baukunst," HA 12: 10.
63. Knopp, "Zu Goethes Hymnus," 632.

rationally against an overwhelming monument. Nevertheless, in order to explain how intimidated he was by the cathedral, Goethe compares it to a giant tree, thus giving it a more recognizable quality. The analogy between city and forest persists well into the nineteenth century. Benjamin, for example, recounts how the wanderer through Paris was portrayed as a woodsman.

Walter Benjamin speculates in "Some Motifs in Baudelaire" that shock produces a singular *Erlebnis* that is distinct from sensations that are integrated into consciousness as *Erfahrungen*.[64] Whereas *Erfahrungen* can be organized into a coherent narrative of temporal duration, a shock-induced *Erlebnis* stands outside the stream of ordinary perception. *Erfahrungen* seem intelligible and even expected, whereas an *Erlebnis* arrives as a surprise that threatens the sensibility of the viewer.[65] Goethe's essay is written in response to the shock of the cathedral; his conversations with the spirit of Erwin are like a dream that recuperates the equilibrium that was disturbed by the first encounter. Goethe, the spectator, makes the building intelligible by rediscovering within it aesthetic terms familiar to him from his father's classicism—harmony and symmetry. The monstrously new that alters the familiar into an unexpected form is brought to reason when Goethe detects a continuity between the Gothic and the mainline architectural tradition. The shocking genius behind the cathedral becomes instead one manifestation of an ancient lineage. By folding the Gothic cathedral into the symmetrical and harmonious, Goethe is taking one step toward his later belief that the classical properties are themselves conditions of humanity.

Goethe's writing on architecture plays this dynamic out both within the brief temporal frame of specific visits to famous sites, as well as over the course of his entire lifetime, wherein he first rejects and then affirms his father's fascination with Italian architecture. In his encounters with buildings and their architects, Goethe does not seek a beloved so much as a peer and a rival. The architectural texts are marked by a male-male engagement that is more concerned with comparisons between different forms of the artist. The contemplation of buildings does not evoke the desired woman who returns the look of the poetic subject, rather it establishes a masculine, mentoring relationship between viewer and builder. The desire in the Strasbourg essay is mimetic: it seeks to establish an equal relation between Goethe and Erwin. As the observing subject, Goethe constitutes himself as emulating the architect.

In many Goethean texts, this Oedipal dynamic is framed by another narrative of escape, encounter, and retreat. Not only is the Italian journey an escape from Weimar and an entry into the mythical space of Italy, but the trip is itself broken down into smaller moments of departure and arrival across Italy, within cities, and

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64. Walter Benjamin, "Some Motifs in Baudelaire," in *Selected Writings,* trans. Harry Zohn (Cambridge, MA: Belknap, 2003), 4: 319.

65. Beatrice Hanssen summarizes the difficulties in translating the two terms into English, in "Language and Mimesis in Walter Benjamin's Work," in *The Cambridge Companion to Walter Benjamin,* ed. David Ferris (Cambridge: Cambridge University Press, 2004), 70 n. 2.

at specific sites. In the Strasbourg essay, the poet arrives in the city only to im-
mediately leave his hotel so as to find the cathedral, which he will revisit repeat-
edly, always checking his emotions as he comes and goes. The travel narratives of
Goethe's architectural writing are often similar to the adventures within the "spec-
ular moment" of his lyric poetry; however, whereas the lyric variant posits a scene
of desire and fulfillment, the architectural scenes entail repulsion and its subsiding
through identification.[66] The hallucinatory union with the building and its archi-
tect grants the poet a gift comparable to that which the beloved bestows in lyric
poetry; however, the architectural exchange is always a masculine, heterosexual
moment saturated with the language of education. That the master builder always
appears as both a brother artist and an authoritative teacher demonstrates that the
architectonic perspective is vital to Goethe's overall project of self-education: in
other words, the experience of architecture is not so much a matter of perceiving
the arrangement of space as understanding oneself in relation to the place.

Manfredo Tafuri marks the beginning of Enlightenment architectural theory
with Laugier's call for a return to nature in urban planning. Tafuri couples Laugi-
er's fascination with returning architecture to its natural conditions, whether as
a rambling city park or the primitive hut, with the simultaneous English inter-
est in the "picturesque."[67] The eighteenth-century suggestion that a city should
appear as natural as a forest, Tafuri argues, resonates through bourgeois design,
for it has many valences. Laugier may have had nothing more than Paris with its
many squares in mind, yet the northern European fascination with the poetics of
landscape gives "naturalism" a distinctly antiurban importance. The pedestrian, as
described by Walter Benjamin and Charles Baudelaire, stalks through Paris as if
he were in the primal forests of North America. The chaos of urban modernity be-
comes sensible as a fantasy, a hunt with deadly consequences that could also be noth-
ing more than a child's game. Wandering through the vast city becomes a mythic
undertaking, even as it promises playful insights. The eighteenth-century urge to
build and perceive buildings naturally has a second strain—the urge to escape the
city as the center of finance and government authority. The natural structure, so
readily translated, as the more human, eschews an alliance with institutions. This
refusal to join official architecture becomes visible through a modest simplicity in
design as well as a proliferation of ornamentation. A tree is both simple and profuse
in its foliage. The architectural decor of a natural building seeks to both reduce and
exceed classical convention. This double aspect of eighteenth-century "natural" de-
sign brings the hut together with the Gothic cathedral as two forms of building that
fail the classical middle. The Renaissance Italian denunciation of Gothic style as de-
rived from barbaric dwellings finds new life in the eighteenth-century integration

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66. Wellbery, *Specular Moment,* 61.
67. Manfredo Tafuri, *Architecture and Utopia: Design and Capitalist Development,* trans. Barbara Lu-
igia La Penta (Cambridge, MA: MIT Press, 1976), 4.

of Gothic ruins in picturesque landscapes. If one were to find an antiauthoritarian architecture in the eighteenth century, two likely sites would be the temporary peasant housing and the despised old ruins.

Goethe insists on these associations throughout his essay. He extends his initial comparison between the cathedral and a tree into a quarrel with Laugier's primitive hut. Beutler suggests that Goethe has an alternate design of the primitive hut in mind when he argues with Laugier.[68] In his "Prometheus" fragment, Goethe has the immortal give precise instructions on how to build the first house:

> First tear off the branches!
> Then ram them down here,
> Leaning into the ground here,
> And that one there, across it;
> Then tie them together on top!
> Then another two back there
> And then one across.
> Now branches from the top
> To the ground,
> Tied together and entwined,
> With grass all around,
> More branches over them
> So that no sunlight,
> No rain, no wind, penetrate.
> Here, my son, your refuge and hut!
>
> Erst ab die Äste!—
> Dann hier rammle diesen
> Schief in den Boden hier
> Und diesen hier, so gegenüber;
> Und oben verbinde sie!—
> Dann wieder zwei hier hinten hin
> Und oben einen quer darüber.
> Nun die Äste herab von oben
> Bis zur Erde,
> Verbunden und verschlungen die,
> Und Rasen ringsumher,
> Die Äste drüber, mehr,
> Bis daß kein Sonnenlicht,
> Kein Regen, Wind durchdringe.
> Hier, lieber Sohn, ein Schutz und eine Hütte![69]

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68. Beutler, *Von deutscher Baukunst,* 33–45.
69. Goethe, HA 4: 183.

Goethe and Laugier share a common inclination to deploy the long-standing motif of the hut as a contrast to the ostentatious baroque palace.[70] Critics have long noted that the hut appears in eighteenth-century literature as a pointed political attack on the absolutist court. Both Goethe and Laugier are working with Rousseau's terms. Poems such as "Prometheus," "The Wanderer's Storm Song," and "The Wanderer," as well as crucial scenes in *The Sorrows of Young Werther,* show that the hut represents proximity to nature and independence from society.[71] By the time of Goethe's essay, several writers had already invoked the hut as the pliable alternative to official architecture, and as such it had become the site of theoretical contention. Only the French Revolution could have enabled Georg Büchner and Ludwig Weidig to write their 1834 motto "Peace to the huts! War againt the palaces!" (Friede den Hütten! Krieg den Palästen!) Nevertheless, eighteenth-century poets had long presented the hut as a place of defiance, which in its squalor repudiated the luxury of the court. The lines from Goethe's "Prometheus," "My earth you / must leave standing / and my hut / which you never built" (Mußt mir meine Erde / doch lassen stehn / und meine Hütte, die du nicht gebaut), are not without precedent. His lean-to is the paradigm for the fortress, the castle built of thick walls intended to block out the winter and the enemy. Under the influence of Rousseau, both Laugier and Goethe are eager to present a simplified architecture that lacks pretension and participates in rural life. Goethe notes that his lean-to hut can still be seen in the fields of northern Europe as the temporary abode of farmhands. In his lyric poetry of the period, the hut also signifies an isolated existence, away from society, dependent on nature. Modesty is one of its most obvious attributes. It represents shelter without social pretense, a short-term structure for nomadic laborers. The hut does not fulfill even the first quality in Vitruvius's triad; it is neither solid nor comfortable nor pretty, but at best picturesque in the new eighteenth-century mode. Laugier, on the other hand, follows Vitruvius's myth of the first building, intending his *cabane* as a model of solidity; its four posts are the basic tectonic form for all subsequent building.

There are as many difficulties in distinguishing French from German architecture as there are in separating Goethe's essay from Laugier's treatise. While Goethe presents forceful oppositions between each, his own arguments reiterate much that appears in Laugier's volume, particularly the proposition that a building's greatness manifests itself not through an adherence to mathematical principles, but through the impression it makes upon the viewer—a position that will later be repeated almost directly by the author of *Investigations into the Character of Buildings,* when he argues that measuring the proportions of ancient buildings keeps architects

70. For a comprehensive survey of the hut in architectural theory, see Joachim Gaus, "Die Urhütte: Über ein Modell in der Baukunst und ein Motiv in der bildenden Kunst," *Wallraf-Richarz-Jahrbuch* 33 (1971): 7–66.

71. Edith Braemer, *Goethes Prometheus und die Grundpositionen des Sturm und Drang* (Weimar: Arion, 1959), 275–297; Helmut Rehder, "Das Symbol der Hütte bei Goethe," *Deutsche Vierteljahrschrift für Literaturwissenschaft und Geistesgeschichte* 15 (1937): 403–423; Gaus, "Die Urhütte."

from thinking about them critically.[72] To be certain, Laugier praises the Strasbourg cathedral and recognizes the overwhelming impression of the massive cathedral: "Nothing can be compared to the tower of Strasbourg Cathedral. This superb pyramid is a masterpiece ravishing in its prodigious height, its accurate diminution, agreeable form, the precision of its proportions and the unique delicacy of its detail. I do not believe that any architect has ever produced anything as boldly conceived, as happily thought out, as correctly executed. There is more art and genius in this one building than in all the great marvels we see elsewhere."[73] Yet, as his remarks on Notre Dame in Paris show, he also quickly recovers from his wonder, only to start noticing the many mistakes in the building.[74] In his general outline of architectural history, he reiterates the well-established opinion that medieval cathedrals reflect the bad taste of barbarians: "[It was] a new system of architecture in which neglected proportion and ornament childishly crowded produced nothing but stones in fretwork, shapeless masses and a grotesque extravagance.…Unfortunately, most of our cathedrals are fated to preserve the remains of this style for generations to come."[75] Although Laugier does not mention the analogy, one aspect of the Renaissance characterization of the Gothic as barbarian is the suggestion that its shapes, particularly the pointed arch, were derived from tying trees in a forest to form the pillars of a building.[76] Implicit within this analogy is the proposition that the columns supporting primitive houses were made of living trees. This ancient genealogy of architecture makes a double appearance in Goethe's contest with Laugier: first, in Laugier's revival of the primitive hut as the prototype for all subsequent architecture, and second, in Goethe's chain of metaphors coupling the cathedral facade with a northern European forest, the kind of inhospitable terrain Tacitus vividly associated with the tribes living across the Roman frontier.

Although Laugier's praise differs from Goethe's (for he has little love for the ornaments Goethe admired in the sunset), fundamentally the two writers share the same theatrical approach to the cathedral. Both stand before it as spectators waiting to be impressed by the facade. Both seek an organizing principle that unifies the disparate elements of the facade; both end their reverie by glorifying the architect who conceived of its form. The difference lies in what each author makes of the

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72. *Untersuchungen über den Charakter der Gebäude: Über die Verbindung der Baukunst mit den schönen Künsten und über die Wirkungen, welche durch dieselben hervorgebracht werden sollen* (repr., Nördlingen: Alfons Uhl, 1986), 43–44: "Many architects have considered the body of a building merely as an object to be measured, and this thought has been applied to the shaky theory of relations. They always have a measuring stick and a compass in their hand, instead of using their eyes, and they do not stop until the length, breadth, and height of the building has been determined down to the last inch. This work has also absorbed a large portion of their valuable time studying antiquity, time that they would better have used thinking about the object."

73. Laugier, *Essay on Architecture,* 116.

74. Ibid., 101.

75. Ibid., 8.

76. Frankl, *Gothic,* 273–276.

example. Laugier treats the cathedral and its impression on the viewer as one example in a longer discussion of church architecture, whereas Goethe remains riveted. For him the *Erlebnis* is the foundation for further poetry, as the essay's closing apotheosis of Hercules and Prometheus shows. Laugier uses his feelings to induce abstract principles, whereas Goethe posits an almost hallucinatory intimacy with a specific architect.[77] Goethe places greater emphasis on particularity. He provides a more personal reading of the cathedral's facade, without drawing conclusions about "Gothic" as a style. Nevertheless, both writers share the eighteenth-century understanding of architectural interpretation as a *Gegenüberstellung* between facade and observer.

From its first formulations, the tasteful judgment of buildings allowed for a poetic approach to architecture, though the first advocates of an emotional assessment of architecture did not take their own responses as poetry. Laugier describes some very strong feelings in response to buildings—rapture, enthusiasm, indifference, disgust, shock, and repulsion; however, he treats these responses as data in an experiment, which can be repeated by others with similar results: "I have thought a long time about these different reactions. I repeated my observations until I was sure that the same monuments impressed me always in the same way. I sounded the taste of others and, by submitting them to a similar experiment, found that all my own impressions were felt by them more or less vividly according to the different temperament that nature had given them."[78] Laugier was concerned to show that his emotional responses were not only his own. Laugier shares with Hume, and later Kant, the concern that aesthetic judgments have a general, perhaps even universal, validity. Goethe's account, on the other hand, is decisively subjective. It presents a highly personal account that does not concern itself with establishing a broad standard of judgment through a repeatable methodology. Laugier states that his feelings are the basis for the principles he derives for architecture, although he does not spell out the relationship between emotions and the new code. Laugier evaluates his feelings in order to abstract from them. Goethe, on the other hand, falls into his feelings; indeed, they are as important as the buildings themselves. Laugier returns from his emotions to discuss design principles, whereas Goethe refers to architectural standards only to explain his feelings. Laugier has a scientific method in mind, whereas Goethe treats the contemplation of a building as a moment in the education of the viewer. Goethe allows the building to impress subjectivity, whereas

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77. Reinhard Liess makes a similar point, noting the instability of Goethe's arguments: "The French scholars put great effort into providing definitions and precise concepts that remained stable over time, and which could be used by different people under different circumstances. Goethe, on the other hand, considered his concepts alterable, in a process of constant formation and alteration. The meanings could change from one sentence to the next. Any comparison or parallels between Goethe's concepts and those in the French art criticism are therefore difficult and sometimes inconclusive." Liess, *Goethe vor dem Straßburger Muenster,* 44.

78. Laugier, *Essay on Architecture,* 3.

Laugier allows feelings to serve as the basis for commentary that never really leaves the realm of architectural discourse. In Strasbourg, the Muenster alters the inner order of the poet, but Laugier does not grant architecture the ability to restructure subjectivity. Laugier's concern to establish a standard of architectural judgment that is not just personal suits the public character of architecture. Goethe's lyrical approach to buildings negates sociability, preferring instead an intimacy that shuts most others out. This pull away from the public character of aesthetic experience corresponds to the tendency of Goethe's poetry to negate "both the sociability of love and its objective representation."[79]

The intensity with which Goethe assaults Laugier has always unnerved readers, and the older Goethe makes no mention of his youthful anger toward the French theorist.[80] Of course, Goethe famously changed his architectural preferences, even before he traveled to Italy to discover Palladio and the surviving ruins of antiquity. While architectural debates often take on a vicious polemical tone that other art forums spare themselves, Goethe's anger at classicism had a distinctly personal dimension.

The problems of interpreting "On German Architecture" are inextricably connected to the history of Goethe's own self-criticism. By the time the Strasbourg essay had found an enthusiastic readership, Goethe had traveled to Italy, discovered Andrea Palladio's works, and formulated his own complex aesthetic based on ancient Greek and Roman models. In his 1806 autobiography, we can easily recognize his classicist preference for transparency and simple forms as he tries to summarize the basic arguments of the essay, and to eliminate the distortions he ascribes to his earlier writing. *Poetry and Truth* lists the salient points of "On German Architecture" in one short paragraph. Had Goethe written in his youth as clearly as he does in *Poetry and Truth,* then his essay might have had more influence, he claims. In his youth and under the influence of Herder and Hamann, he enveloped his arguments in a dusty cloud of strange words and phrases, thereby darkening the light of his thesis.[81] Architectural historians usually concur. They tend to reiterate Goethe's own synopsis and leave the hyperbolic and often obscure poetic language to literary critics. By drawing a distinction between poetry and theory, these critics fail to explain the essay's importance in elevating architecture to the status of an autonomous art. Literary critics, on the other hand, read "On German Architecture" without reference to architectural history. Their aim is to place it within the aesthetic and psychological dynamics of the Sturm-und-Drang literature. However, because it radicalizes the eighteenth century's careful balance between canonical rules and subjective taste in both disciplines, the essay needs to

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79. Wellbery, *Specular Moment,* 16.
80. Robson-Scott, *Gothic Revival,* 81.
81. Goethe, FA 14: 553.

be read from two directions, as a statement about architectural as well as literary criticism.

Two stories surround Goethe's encounter with the Strasbourg cathedral. The best-known tale recounts Goethe's anticipation leading up to the moment before the cathedral, followed by his stunned reversal of opinion at the site. Most scholarly interpretations cannot resist retelling the events preceding Goethe's epiphany, in part because the essay provides a poetic account of aesthetic expectations as they are first disproven and then transformed.[82] These interpretations tell the story of how Goethe arrived in Strasbourg, landed in his hotel, and then immediately rushed out to find the famous church. Goethe builds this narrative into the 1774 essay. Years later he layers on more details. Both tellings emphasize Goethe's aesthetic expectations before laying eyes on the cathedral. His dismissive views of Gothic architecture build up to a sudden reversal of judgment upon seeing the cathedral. Despite his disparaging prejudices, he has an unexplained urge to view the building, which is validated by his sudden admiration. The narrative amounts to an aesthetic conversion that replicates the drama of Saul's journey to Damascus. No conversion tale makes sense without first explaining how the protagonist originally despised the belief he later came to hold so fervently.

Behind this reversal lies a second backstory concerning Goethe's arguments with his father over architecture, a tale that Goethe also provides in *Poetry and Truth,* but that scholars have not linked explicitly to the Strasbourg conversion. Goethe arrives in Strasbourg, having taken the post coach in an all-day journey from his parental home in Frankfurt, where he had a long fight with his father that culminated in the young poet disparaging his father's attempt to renovate the family home in the manner of a Roman palazzo. Built into Goethe's sudden espousal of Gothic design is an eager rejection of his father's classicism. Here the plot does not entail a reversal so much as a long-standing opposition, which is given expression as an epiphany. The Oedipal rivalry manifests itself in "On German Architecture," giving a distinctly personal yet, from a psychoanalytical perspective, recognizably universal form to Goethe's espousal of the Strasbourg cathedral.

The authorities of the two backstories reinforce one another. The father's admiration for Roman architecture was confirmed by Goethe's drawing instructor, Adam Oeser, at Leipzig. The work of the French theorist Marc-Antoine Laugier, whom Goethe so unfairly attacks as merely fashionable, was to be found in the father's library.[83] In *Poetry and Truth,* Herder and Hamann are mentioned as the models for Goethe's early writing.

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82. The most recent example is Bisky, *Poesie der Baukunst,* 37–43.

83. It was the fashion in Germany to dismiss French theorists as merely fashionable. See, for example, the denunciation made just a few years before Goethe's essay: "Paris is suffering undeniable accusations at the hands of its Abbé Laugier, and even Rome gives occasion to the same. The reproaches are spreading about so swiftly that even lovers and connoisseurs of architecture are starting to claim that the art of building has declined precipitously, and instead of pursuing the good, healthy, perfect

Both stories entail a struggle against authority, which in eighteenth-century aesthetic terms was explained as a conflict between subjective judgment and universal claims to beauty. Goethe's praise of the Gothic cathedral stands in opposition to the reigning canon of architectural taste, as does his rejection of his father's classicizing tendency, yet Goethe's paean to the cathedral recuperates terms from classical architectural theory, raising the question of whether the poet ultimately affirms the paternal aesthetic he so passionately rejects. His engagement with architecture turns around the question of the individual's capacity to assert himself within an arena that claims to have already determined him. The essay on the cathedral includes a struggle with the aesthetic canon of the day, his father's comprehensive and highly classical pedagogy, and Goethe's own uncertainty as an artist.

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taste, they let themselves be seduced by the charms of novelty." (Paris leidet von seinem Abbé Laugier in der Baukunst unwidersprechliche Vorwürfe, und selbst Rom giebt zu dergleichen Anlaß. Der Tadel greift so geschwinde um sich, daß Liebhaber und Kenner der Architektur zu behaupten anfangen, die Baukunst habe sehr abgenommen, und, anstatt dem gesunden, guten, vollkommenen Geschmacke nachzustreben, lasse man sich durch den Reiz der Neuigkeit verführen.) Francis Christoph de Scheyb (Koremons), *Natur und Kunst in Gemälden, Bildhauereyen, Gebäuden und Kupferstichen,* zweyter Theil (Leipzig: Fried. Gotth. Jacobäern, 1770), 413.

The Building in *Bildung*: Goethe, Palladio, and the Architectural Media

Well before photography and electronic networks encircled the planet, there existed a European migratory channel within which architectural images were carried across the Alps by tourists and pilgrims.[1] Moving along well-established pathways, architectural drawings, treatises, and personal recollections operated as a self-replicating network that allowed travelers, once home, to recreate the buildings they so admired abroad. The northern European reception of Andrea Palladio (1508–1580), facilitated by the elegant woodcuts and explanations in his *Four Books of Architecture* (1570) and by the prominence of his buildings in cities and estates between Vicenza and Venice, demonstrates the effectiveness of this premodern media circuit. The efforts, first British, then German, to emulate Palladio's villas, palaces, and churches constitute one of the most successful examples of premodern stylistic proliferation.[2]

1. Dana Arnold, "Facts or Fragments? Visual Histories in the Age of Mechanical Reproduction," *Art History* 25 (2002): 450–468.

2. Deborah Howard writes that the *Quattro libri dell'architettura* "were to become probably the most influential of all architectural books. Certainly the treatise had a far wider influence than Palladio's own buildings." Deborah Howard, "Four Centuries of Literature on Palladio," *Journal of the Society of Architectural Historians* 39 (1980): 224–241. Werner Oechslin provides the newest, most comprehensive sweep of Palladio's resonance in *Palladianismus: Andrea Palladio—Kontinuität von Werk und Wirkung* (Zurich: gta Verlag, 2008). Surveys of Palladianism in Germany include Erik Forssman, "Palladio und Deutschland," in *Palladio: Werk und Wirkung* (Freiburg: Rombach, 1997), 113–146; David Watkin and

Not only did Palladian architecture reproduce itself throughout Europe and North America, but it integrated comfortably with other media. For many in the late eighteenth century, Palladian architecture seemed to enhance the production of literary texts, the recollection of foreign adventures, and the self-understanding of the modern subject. More than just a backdrop for the idyllic production and reception of literature, northern European Palladianism was deployed as a technology capable of assisting in the conscious reproduction of experience. Through architectural and imagistic simulation, Palladianism sought both to inspire reminiscences of earlier travels and to encourage their repetition. Stressing the importance of architectural journals, Beatriz Colomina has argued that twentieth-century architecture was constituted within its own photographic representation.[3] Renaissance buildings, while moving through much slower networks, were also understood through their media representation, rather than through the existential perception of their space. For a great portion of Europe, Palladio's own buildings existed first and foremost as drawings that allowed, indeed encouraged, the construction of similar buildings far removed from the original site. Once the first Palladian imitations rose in northern Europe, they encouraged a new audience to travel back to the original models for further inspiration and emulation. This loop has run for so long that it is impossible today to understand Palladio except through Palladianism.[4]

Goethe's *Italian Journey* was a critical component of this network, reinforcing its operation even as the text sought to escape its terms. Despite his disdain for travel literature, Goethe's memoir became the best-known German representation of Italy in general, and of Palladio in particular.[5] Goethe's letters and memoirs, furthermore, document how the imagistic recollection of buildings moved back and forth across the Alps. His writing about Italy makes clear not only that he had read treatises about the sites he planned to visit beforehand, but also that he had grown up amid engravings his father had brought back from his own Italian travels.[6] Thus, despite the literary historical rupture ascribed to Goethe's sojourn in

Tilman Mellinghof, *German Architecture and the Classical Ideal* (Cambridge, MA: MIT Press, 1987), 17–22; Kurt Forster, "Palladianism in Germany," and Jörgen Bracker, "The Circulation of Palladianism in Germany," both in *Palladio and Northern Europe: Books, Travellers, Architects,* ed. Guido Beltramini (Milan: Skira, 1999), 169–176 and 177–193; Harald Keller, *Goethe, Palladio und England* (Munich: Bayerische Akademie der Wissenschaften, 1971).

3. Beatriz Colomina, "Architectureproduction," in *this is not architecture,* ed. Kester Rattenbury (London: Routledge, 2002), 207–221.

4. "Unser Verständnis Palladios [ist] zwangsläufig durch den Palladianismus vermittelt." Kurt Forster and Martin Kubelik, *Palladio: Ein Symposium* (Einsiedeln: Schweizerisches Institut in Rom, 1980), 12.

5. For an overview of German literary scholarship, see Peter J. Brenner, *Der Reisebericht in der deutschen Literatur,* Internationales Archiv für Sozialgeschichte der deutschen Literatur 2, Sonderheft (Tübingen: Niemeyer, 1990), 286–319.

6. Just as no trip to Rome can be undertaken without the influence of predecessors, neither can an essay be written on Goethe without acknowledging those who have covered the same terrain. Herbert von Einem explains the importance of Goethe's father in "Goethes Italienische Reise," in *Beiträge zu Goethes Kunstauffassung* (Hamburg: Marion von Schröder, 1956), 49–50 in particular. Von Einem's

Rome, the trip south was motivated in large part by desires generated through this already well-established circuit of Italian images. Goethe's travelogue makes clear that he was eager to compare his memories of the pictures he knew as a boy with the actual places. In this sense Goethe can be said to have "inserted" the human subject into the migratory movement of classical images. German scholars in earlier generations had formulated long theories about the greater world based solely on their own readings. Kant felt empowered to present authoritative theories about global cultural geography in his popular anthropology lectures even though he had never left Königsberg. The late eighteenth century brought with it the new northern European demand that one not judge a work of art unless one had done more than see its image, or even just look at it briefly, as aristocrats on the grand tour might have done; instead one had to engage it with all one's being.[7] The site had to be questioned, the critical commentaries challenged, every old tale one had ever heard about the place had to be compared with what one saw directly. This kind of personal investigation not only had the potential to alter the judgment of the spectator, but also threatened, or promised, to fundamentally reconfigure the observer, who had so completely thrown himself into the aesthetic moment. Within this new subjective mode, skepticism regarding tourist literature provided one of the strongest motives for travel. The mistrust of all representations became a reason to abandon the book and to see for oneself, thereby establishing the viewing subject as the definitive arbiter of architectural meaning. Even as he critically compared images with the actual site, Goethe came to acknowledge an aesthetic intention in Palladio's architectural drawings that went beyond the technical, mimetic representation of a building. As with earlier travelers, such as the English architect Inigo Jones, Goethe's engagement with Palladio involved making comparisons that moved impulsively between his treatise and his buildings.[8] Goethe, unlike Jones, did not travel with a library of architectural books that today still bear his annotations. However, he did buy Palladio's treatise in Padua, using it initially as an authoritative introduction to classical architecture, and then later as a work to question critically.

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work thoroughly recounts Goethe's wonder at Italian architecture; however, it does not treat his efforts in Italy to write around the obvious and the famous, nor his responses to the inevitable disappointments any longed-for trip entails.

7. Friedrich Kittler describes the break between this baroque mode of reading the world and the romantic subjective engagement with its sites: "The Republic of Scholars is endless circulation, a discourse network without producers or consumers, which simply heaves words around....German poetry thus begins with the Faustian experiment of trying to insert Man into the empty slots of an obsolete discourse network." Friedrich Kittler, *Discourse Networks* (Stanford, CA: Stanford University Press, 1990), 4.

8. Sarah Mcphee, "The Architect as Reader," *Journal of the Society of Architectural Historians* 58 (1999): 457. Whereas Jones sought to position himself back at court once he had studied in Italy, Goethe's intentions were quite the opposite.

Although Goethe adopted the styles of antiquity while traveling in Italy, he did not fundamentally alter the phenomenology of architecture that he had articulated as a young man.[9] In his first essay on architecture, "On German Architecture," Goethe presented a radically subjective variation on the eighteenth-century expectation that a building reveal its aesthetic quality by creating an emotional response in the viewer. Drawing from *Hamlet,* while anticipating *Faust,* Goethe rewrote the Enlightenment's sensible contemplation of a facade into a melancholic invocation of the dead architect's spirit. Decades after his Strasbourg experience, he characterizes his first encounters with Italian architecture in much the same mournful manner. In both Strasbourg and northern Italy, Goethe interprets buildings by constructing dialogues with the ghost of the architect. In Venice he remarks that "architecture rises out of its grave like a ghost from the past, and exhorts me to study its precepts, not in order to practise them or enjoy them as a living truth, but, like the rules of a dead language, in order to revere in silence the noble existence of past epochs which have perished for ever."[10] Although Goethe is here referring to his discovery of Roman architecture, the awakened ghost metaphor readily describes his approach to the Strasbourg cathedral, as well as his "conversations" with Palladio. In every case, the dialogue with the imaginary architect entails a critical exchange, in which the faults of buildings are examined along with their best features.

Goethe defines architecture as an ancient art, one in which rules were established and then forgotten. Hence he approaches monumental buildings mournfully so as to recover the lost intentions they embody. Despite his later involvement in Weimar construction projects, Goethe studied architecture for the sake of hermeneutic transport, to imagine a historical past. Learning the rules of the discipline for the sake of actually designing and constructing a building was not his immediate goal. However, unlike the writers of baroque and rococo treatises, he did not consider architecture only in terms of the beautiful. He had absorbed enough Enlightenment critique of ostentation that his reflections on buildings always stressed the utilitarian purpose they serve. The Vitruvian categories of *firmitas* and *utilitas* became moments in a historicist analysis of beauty in buildings. Thus, for example, the fact that ancient aqueducts, temples, and stadiums were designed to serve an entire community defined Goethe's aesthetic analysis of such structures.[11]

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9. Von Einem, "Goethes Italienische Reise," 184.

10. J. W. Goethe, *Italian Journey,* trans. W. H. Auden and Elizabeth Mayer (London: Penguin, 1970), 103 [translated passages from Goethe's *Italian Journey* throughout are from the Auden and Mayer translation unless otherwise indicated]; "Die Baukunst steigt wie ein alter Geist aus dem Grabe hervor, sie heißt mich ihre Lehren wie die Regeln einer ausgestorbenen Sprache studieren, nicht um sie auszuüben oder mich in ihr lebendig zu erfreuen, sondern nur um die ehrwürdige, für ewig abgeschiedene Existenz der vergangenen Zeitalter in einem stillen Gemüte zu verehren" (12 October 1786). [Citations of *Italienische Reise* in the German original will refer to Goethe's entry date rather than the page number of a particular edition.]

11. "Eine zweite Natur die zu bürgerlichen Zwecken handelt, das ist ihre Baukunst, so steht das Amphitheater, der Tempel und der Aquadukt. Nun fühle ich erst wie mir mit Recht alle Willkürlichkeiten verhaßt waren" (27 October 1786).

    In his Strasbourg essay, Goethe formulated a highly subjective, spectatorial manner of judging architecture. In the diaries and essays he wrote from 1788 to 1790, and especially later in his 1816 memoir, *Italian Journey,* Goethe gave greater complexity to his phenomenology of architecture. His mode of apprehending was not dependent on a building's style. Standing before structures built in the late Renaissance, he sought, as he had with the medieval Gothic, to extrapolate his immediate impressions into an empathetic relationship between himself and the architect, which in turn would foster his own writing. For Goethe, architecture was to be viewed in order to educate the spectator, not only about technical matters of construction and the virtue of classical beauty, but also about the aesthetic aspirations of the architect and the self-understanding of his epoch.

    Throughout his career Goethe wrote about individual encounters with buildings as fundamentally visual experiences.[12] His long engagement with the work of Palladio in northern Italy elaborated the spectatorial terms formulated in the Strasbourg essay, wherein the building mediates a fantastical connection between observer and architect. In contemplating monumental buildings, Goethe aspires to comprehend the artistic intentions that motivated their design. He interprets buildings teleologically, in order to "speak" with the artists behind them. The empathetic triangle—spectator, building, architect—often stands in opposition to the established scholarly discourse. In his reveries Goethe inevitably cites some learned opinion or tourist brochure that has brought him to the site, but he then disparages it for missing the crucial point. In the dynamic of Goethean identification, the building functions as the valued text (akin to Werther's Homer), whereas pamphlets and scholarly opinion serve as the negative contrast. This division is made more complicated in Italy when Goethe begins to critique Andrea Palladio's *Four Books of Architecture* as he visits the architect's many buildings.

    While Goethe frames his engagement within the language of immediate experience, thereby insisting on its singularity, it becomes clear over the course of his travels that his judgments are indebted to the established architectural and poetic discourses of the late eighteenth century. Goethe's architectural aesthetic elaborates on the French tradition of Marc-Antoine Laugier's *Essay on Architecture* (1753) and Nicolas Le Camus de Mézières's *Genius of Architecture; or, the Analogy of That Art with Our Sensations* (1780), wherein the character of a building is evaluated in terms of the emotions it evokes in observers.[13] Describing the German reception of

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12. Later, in 1823, when Goethe wrote a preface for the republication of his youthful essay, he excused his long advocacy of classical architecture by stating that for many years, and even while in Rome, he had not "faced" a true Gothic cathedral; thus he had forgotten the style's splendor. There is much cant in this return to the Gothic; however, it does demonstrate how reflection on architecture depended on the presence of a building.

13. Nicolas Le Camus de Mézières, *The Genius of Architecture; or, the Analogy of That Art with Our Sensations,* trans. David Britt, intro. Robin Middleton (Santa Monica: Getty Center for the History of

French architectural theory, Ulrich Schütte observes: "The aesthetic of architecture constitutes itself...in the juxtaposition of the viewer and the viewed building."[14] This visual mode of judgment concentrated on the facade as the screen from which all architectural concerns could be interpreted. Behind the facade, both literally and figuratively, lay the practical engineering concerns of the architect as well as his spatial arrangement of the building's interior. Adherence to the classical orders was less important to the eighteenth century than the feelings a building evoked.[15] As Jens Bisky noted, "As the rules fell into doubt, subjective experience advanced in a previously unimaginable manner to become decisive in making judgments."[16] Schütte borrows the term *Wirkungsästhetik* from literary criticism to name the architectural proposition that a harmonious and beautiful building must inspire similar sensations in the spectator.[17] Even though this discourse emphasized subjective responses over traditional rules, most critics did not abandon the pretense that emotional responses to buildings could be shared generally, if not universally. Goethe's apprehension of Italian architecture is more thoroughly subjective, for it combines visual images he has known since his youth, scholarly debates over Italian art, and the memory of his father.

In his *Italian Journey,* Goethe's spectatorship develops from a simple touristic awe into a self-conscious awareness of his place as an observing subject. Along the way to Rome, buildings and their architects are incorporated into the larger project of *Bildung,* so that architecture becomes an opportunity for the subject to contemplate himself and his relation to history. Goethe's intense identifications meant that buildings were at times treated as individuals, as entities comparable to the viewer. Taken to its metaphorical extreme, the rise and fall of buildings represents the history of the viewing subject. Although treatises present buildings as static entities, unchanging monuments that exist in an ideal perfection, travel through Italy with its many half-standing ruins undid this presumption.[18] Ancient structures come to embody the process of critical self-reflection and personal change. While buildings in their imperfect condition portray the fatigue and decay of the aging poet,

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Art and the Humanities, 1992); Marc-Antoine Laugier, *An Essay on Architecture,* trans. Wolfgang Herrmann and Anni Herrmann (Los Angeles: Hennessey & Ingalls, 1977).

14. "Die Ästhetik der Architektur konstituiert sich...im Gegenüber von Betrachter und betrachtetem Gebäude." Ulrich Schütte, *Ordnung und Verzierung: Untersuchungen zur deutschsprachigen Architekturtheorie des 18. Jahrhunderts* (Braunschweig: Vieweg, 1986), 29.

15. The classical orders of columns (Doric, Ionic, Corinthian, Tuscan, and Composite) were derived from the sole surviving treatise from antiquity, Vitruvius's *Ten Books of Architecture,* written in the first century B.C. Renaissance architects such as Sebastiano Serlio and Giacomo Vignolo first canonized the orders into rules all architects needed to apply.

16. "Als die Regeln zweifelhaft wurden, avancierte die subjektive Erfahrung auf vorher undenkbare Weise zur Urteilsinstanz." Jens Bisky, *Poesie der Baukunst: Architekturästhetik von Winckelmann bis Boisserée* (Weimar: Hermann Böhlaus Nachfolger, 2000), 5.

17. Schütte, *Ordnung und Verzierung,* 26.

18. In his notes about visiting the temple in Segeste, Goethe writes: "Die Gegend ruht in trauriger Fruchtbarkeit. Alles bebaut und fast nicht bewohnt" (FA 2.3: 763).

the architect becomes a recuperative figure, who comprehends the ruin as a whole before commencing its repair. The architect holds a distant point of reflection, the Archimedean platform, where critical thought stands outside the self in order to judge and reconstruct it.

Just as Goethe's memoirs have guided later Germans through Italy, allowing them to compare their own impressions with those of the writer, his own first impressions of Italian sites were conditioned by his father, who had gone there in 1740 and had so enjoyed himself that he filled his house in Frankfurt with pictures of Italy, regaled his family with tales of distant cities, wrote his own memoirs, and obliged his entire family to take lessons in the language.[19] As Goethe arrives in Italy, he recalls suddenly his father's stories and reproductions.[20] Unlike Walter Benjamin, who cannot remember his childhood through the famous sights of Berlin, Goethe's boyhood is revived by the monuments of Rome, yet, like Benjamin, he cannot bring himself to recount these places in his letters and later memoir.[21] In his correspondence with friends in Weimar, most notably his beloved Charlotte von Stein, and later in the published edition, Goethe presumes his readers are already familiar with the grand views. Indeed, Goethe's writing is characterized by a deliberate avoidance of description that might itself reproduce what his readers could already find in an engraving.[22] Rather than recount what he saw in Italy, he often wrote about how the real sites compared to his memory of drawings he had seen before his journey. The letters home do not so much compare the site with the engraved image as with its recollection, a far more defuse and emotional construction, for the memory of an image is closely tied with when, where, and how it was first seen.

Far from claiming that the medial representation of Rome guided Goethe's experiences of the place, I would argue that Goethe's writing is always working

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19. "Mein Vater war überhaupt lehrhafter Natur, und bei seiner Entfernung von Geschäften wollte er gern dasjenige, was er wußte und vermochte, auf andre übertragen.... Wobei [meine Mutter] sich genötigt sah, auch in der italienischen Sprache einige Kenntnis und notdürftige Fertigkeit zu erwerben" (FA 1.14: 20). Victor Lange also compares the two travelogues, in "Goethe's Journey in Italy: The School of Seeing," in *Antipodische Aufklärung: Festschrift für Leslie Bodi* (Frankfurt: Peter Lang, 1987), 229.

20. Norbert Miller, "Der Dichter ein Landschaftsmaler," in *Goethe und die Kunst,* ed. Sabine Schulze (Stuttgart: Hatje, 1994), 386.

21. "Gewiß stehen zahllose Fassaden der Stadt genau wie sie in meiner Kindheit gestanden haben. Der eignen Kindheit aber begegne ich in ihrem Anblick nicht. Zu oft sind meine Blicke seitdem an ohnen entlanggestrichen, zu oft sind sie Dekor und Schauplatz meiner Gänge und Besorgungen gewesen." Walter Benjamin, *Berliner Chronik* (Frankfurt/Main: Suhrkamp, 1970), 53–54.

22. Tom Beebee understands "the lack of extensive, objective, disengaged description of Italy as a whole culture or landscape" as an indication of Goethe's drive to construct his own personal narrative of Italy. Goethe particularly avoids including the historical significance of locations in favor of an individual, aestheticized perspective. Tom Beebee, "Ways of Seeing Italy: Landscapes of Nation in Goethe's *Italienische Reise* and Its Counter-Narratives," *Monatshefte* 94 (2002): 330–332. Heinrich Niederer argues Goethe sought to avoid sentimental description in the manner of Laurence Sterne. Heinrich Niederer, "Goethes unzeitgemässe Reise nach Italien, 1786–1788," *Jahrbuch des freien deutschen Hochstifts,* 1980, 88.

against the imagistic prefiguration of experience. His letters focus on the gaps between experience, picture, and memory, consciously refusing to fill in the lacunae with an account of how Roman sites "really" appear.[23] We do not get long passages explaining what was excluded from the prints and travelogues Goethe knew before his arrival. In other words, he does not present us with a higher synthetic representation of Italy, one that brings together all the divergent representations into one master account. Instead, his writing comments on the lack of correspondence between print, memory, and experience, thereby forcing the reader to refer to already existing depictions of these sites. Yet, despite his aversion to description, Goethe's architectural epiphanies are often instigated by the established pictures and commentaries about a given site. Only in the encounters with a building does he realize how very different it is from its representation. In the end, Goethe insists that his conclusions about a building are made in the absence of medial representation in the moment of illumination standing before it. The sight of the building is supposed to supplant the memory of its earlier reproduction in prose and drawing.

Goethe's identification with Palladio supersedes the education received from his father. He never abandons his fascination with the architect.[24] Goethe famously traveled incognito through Italy so as to observe without having to answer for his fame. When pressed for his identity by the police or others, he would answer that he was a wandering architect. Palladio's profession provides Goethe a cover, one that gives him acceptance among other men, particularly Italian scholars. When locals presume that he is an architect, he does not contradict them. While searching in a bookstore in Padua for Palladio's treatise, he falls into conversation with other customers, standing around casually consulting books and chatting: "Taking me for an architect, they complimented me on my desire to study this master who had more useful and practical suggestions to offer than even Vitruvius, since he had made a thorough study of classical antiquity and tried to adapt his knowledge to the needs of our times. I had long conversations with these friendly men and learned much about the sights of interest in the town."[25] Ultimately in Rome,

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23. In her superb dissertation, Ursula Donat notes a similar tension between the memory of a building and its immediate experience: "Das wiedersehen gibt die Möglichkeit, die gegenwärtige Anschauung eines Gegenstandes mit dem erinnerten Bild zu vergleichen, d.h. Ideelles und Reales in Beziehung zu setzen. Die Spannung zwischen dem inneren Bild und dem wahrgenommenen Gegenstand wird in der Erinnerung als eine zeithafte Vorstellungsform verbildlicht." Ursula Donat, "Goethes 'Italienische Reise' als Kunstwerk" (inaugural diss., Albert Ludwigs Universität zu Freiburg i. Br., 1981), 53.

24. Decades after his return from Italy, Goethe could still bend a visitor's ear about the glories of Palladio. Sulpiz Boisserée, as he sought to woo Goethe to support his reconstruction of the Gothic cathedral in Cologne, complained about the uphill battle he faced. He reported his conversation of 8 August 1815: "Goethes Freude an der Architektur, seine rein persönliche Leidenschaft für Palladio, bis ins grasseste nichts als Palladio und Palladio. Freilich lebt er in Vicenza und Venedig in seinen Werken und Wirksamkeit noch im lebendigen Andenken" (WA Anhang Gespräche 3: 206).

25. Goethe, *Italian Journey,* 70; "Da sie mich für einen Architekten hielten, lobten sie mich, daß ich vor allen andern zu den Studien dieses Meisters schritte, er leiste zu Gebrauch und Anwendung mehr als Vitruv selbst, denn er habe die Alten und das Altertum gründlich studiert und es unsern Bedürfnis-

Goethe's identification with the profession allows him to conceptualize his own development while abandoning his earlier deification of the Renaissance architect.

Both men viewed Rome as integral to their art. Palladio made five trips to Rome to study antiquities as well as contemporary buildings.[26] Goethe's engagement with Palladio only reinforced the city's importance. Palladio is the native who points out the route to Rome but is himself absent from the place.[27] After seeing copies of Roman sculpture in Venice, Goethe deploys spatial metaphors to describe his efforts to understand ancient art. Palladio is credited with showing Goethe how to proceed: "Many striking portrait busts evoked the glorious days of antiquity. I feel myself, alas, far behind in my knowledge of this period, but at least I know the way. Palladio has opened it to me, and the way to all art and life as well."[28] At least three types of movement are indicated in this passage. First, the sight of ancient statues "transports" Goethe into the glorious past, yet this imaginative transferal only underlines how backward Goethe remains as an artist. The resolution to this discrepancy requires a movement forward revealed by Palladio, presumably because Goethe perceives him as a fellow student of antiquity. His adaptations of ancient models suggest how a modern (in the broadest sense) artist might incorporate ancient forms into a new work. Finally, Palladio's "way" can also be understood in simple geographical terms as the road to Rome. In a sense, Palladio operates as Virgil did for Dante, as a guide, teacher, and mentor up to a certain point, both geographically and spiritually. As for Goethe's architectural education, Palladio's *Four Books of Architecture* rearticulates Vitruvius's *Ten Books on Architecture,* the only surviving treatise from antiquity. As he leaves Venice, Goethe buys an Italian edition of the Latin authority but quickly finds it troublesome. Vitruvius's obscure passages require careful interpretation, and soon the tome becomes a burden in his pack: "This tome weighs as heavy in my luggage as it weighs on my brain when I study it."[29] Rather than study Vitruvius, Goethe prefers to recall Palladio's buildings, which for him are more fruitful translations of ancient ideals.

Palladio himself puts forward the student-teacher relationship as a guide for understanding his work. At the beginning of the preface, he proposes Vitruvius

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sen näherzuführen gesucht. Ich unterhielt mich lange mit diesen freundlichen Männern, erfuhr noch einiges, die Denkwürdigkeiten der Stadt betreffend, und empfahl mich" (27 September 1786).

26. Vaughan Hart and Peter Hicks, eds. and trans., introduction to *Palladio's Rome: A Translation of Andrea Palladio's Two Guidebooks to Rome* (New Haven, CT: Yale University Press, 2006), xxvi.

27. While Goethe's writing about northern Italy is filled with references to the architect, once he reaches Rome, he no longer mentions Palladio, in part because he never built there, but also because once in Rome Goethe has taken the discipline over into a new program.

28. Goethe, *Italian Journey,* 95; "Viele bedeutende Büsten versetzen mich in die alten herrlichen Zeiten. Nur fühle ich leider, wie weit ich in diesen Kenntnissen zurück bin, doch es wird vorwärts gehen, wenigstens weiß ich den Weg. Palladio hat mir ihn auch dazu und zu aller Kunst und Leben geöffnet" (8 October 1786).

29. Goethe, *Italian Journey,* 103; "Allein dieser Foliante lastet in meinem Gepäck wie das Studium desselben auf meinem Gehirn" (12 October 1786).

as his teacher: "Mi proposi per maestro, e guida Vitruvio."[30] Because of his apprenticeship to Vitruvius, Palladio becomes a mediator between the modern reader and the ancient master. Rather than display impatience with Vitruvius, as his Renaissance contemporaries had done, Palladio promises gently to clarify some of the darker passages in the master's work: "And I make no doubt, but that they, who shall read this book, and shall consider the designs in it carefully, may be able to understand many places, which in Vitruvius are reputed very difficult."[31] As Goethe's *Italian Journey* shows, the contemplation of architecture sets up a tension between building, image, and text that exceeds any insight gained by reading alone. Palladio's buildings embody the rules of ancients, their form hints at an even older norm, but, what is most important for Goethe, they do not prescribe principles. Buildings bear an aesthetic truth for Goethe, which architectural treatises can never provide. When Palladio writes that he seeks to educate the reader so that he "may learn, by little and little, to lay aside the strange abuses, the barbarous inventions, the superfluous expence, and (what is of greater consequence) avoid the various and continual ruins that have been seen in many fabricks," it would not have been difficult for Goethe to have understood these lessons as applying to himself.[32]

Goethe's understanding of Palladio's work is not confined to his *Four Books of Architecture*. His intentions are imprinted in three media: drawing, writing, and building. All three provide a means for Palladio to translate Vitruvius. "I find Palladio, by his own way of thinking and creating, a much better interpreter of Vitruvius than his Italian translator," remarks Goethe.[33] Visiting the sites depicted in Palladio's treatise makes clear that the book stands not merely as a commentary on the architecture but as an autonomous work with it own agenda.[34] For example, the buildings that were never completed are augmented by drawings that show the finished structure. At the same time, the prints and their accompanying descriptions are also a disappointment, for they do not live up to the practical obligation that architectural plans accurately depict the building. Ultimately, Goethe tries to resolve the mutual inadequacy and supplementation through an imaginary conversation

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30. Andrea Palladio, *Quattro libri dell'architettura,* facsimile (Milan: Ulrico Hoepli, 1990), 5.

31. Andrea Palladio, *The Four Books of Architecture,* trans. Isaac Ware (London: Isaac Ware, 1738; repr., New York: Dover, 1965), 80.

32. Palladio, "Preface to the Reader," in *Four Books of Architecture,* n. p.

33. Goethe, *Italian Journey,* 103; "Palladio hat mir durch seine Worte und Werke, durch seine Art und Weise des Denkens und Schaffens den Vitruv schon nähergebracht und verdolmetscht, besser als die italienische Übersetzung tun kann" (12 October 1786).

34. Deborah Howard summarizes the current view among architectural historians regarding the discrepancies between the treatise and the actual buildings: "Neither graphic nor written descriptions can be taken literally. Yet when compared with the actual buildings they throw light on Palladio's search for a complete architectural system…. Thus Palladio's own specific experiences were translated into a series of ideal models for more general application. He obviously saw his treatise as a work of art in its own right, and it was perhaps his greatest achievement." Howard, "Four Centuries of Literature," 228 n. 3.

with the "spirit" of Palladio, during which he claims to discover the third element behind the architect's buildings and drawings, his poetic intuition of antiquity.

Once in Rome, Goethe deploys the figure of the architect as a metaphor for *Bildung.* On December 20, 1786, he writes:

> I am like an architect who wanted to erect a tower and began by laying a bad foundation. Before it is too late, he realizes this and deliberately tears down all that he has built so far above ground. He tries to enlarge and improve his design, to make his foundation more secure, and looks forward happily to building something that will last.[35]

The double positing of the self as both house and architect alludes to René Descartes' inquiry into the foundations of his own beliefs.[36] Whereas in part 3 of his "Discourse on Method" Descartes thought to find another abode while he examined his foundation, Goethe suggests a longer process of renovation in which the self cannot escape its own space.[37] The metaphor of the house under renovation is a representation of the paradox of positing a self that is distinct from the self that posits. Edgar Landgraf refers to the problem as the "paradox of self-indication": "The self, in order to indicate (think) itself, must make itself different from itself to be able to do so."[38] The paradox in Goethe's metaphor is that he identifies both with the house and with the architect who transforms it. Goethe scholarship has long treated this double character of subject and object as a central feature of autobiographical discourse in general. Erich Trunz characterized *Poetry and Truth* in visual terms as a circle in which the observer and the observed are the same individual: "The problem of every autobiography: the viewer is also the viewed; he writes an epic and is himself the primary figure in the picture." (Das Problem jeder Autobiographie: der Betrachtende ist selbst der Betrachtete; er schreibt wie ein Epiker und ist selber die Hauptgestalt im Bilde.)[39]

The architectural metaphor represents an affirmation of reeducation, even as it uses classical terms to critique modern structuring of buildings and subjects. Renovating an existing building while living within it becomes the new means

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35. Goethe, *Italian Journey,* 151; "Ich bin wie ein Baumeister, der einen Turm aufführen wollte und ein schlechtes Fundament gelegt hatte; er wird es noch beizeiten gewahr und bricht gern wieder ab, was er schon aus der Erde gebracht hat, seinen Grundriß sucht er zu erweitern, zu veredeln, sich seines Grundes mehr zu versichern und freut sich schon im voraus der gewissern Festigkeit des künftigen Baues."

36. René Descartes, "Discourse on Method," in *Selected Philosophical Writings,* trans. John Cottingham, Robert Stoothoff, and Dugald Murdoch (Cambridge: Cambridge University Press, 1988), 31.

37. For a nuanced reading of how Descartes deploys architectural theory in recounting the fable of his philosophical investigations, see Claudia Brodsky, *Lines of Thought: Discourse, Architectonics, and the Origin of Modern Philosophy* (Durham, NC: Duke University Press, 1996).

38. Edgar Landgraf, "Self-Forming Selves: Autonomy and Artistic Creativity in Goethe and Moritz," *Goethe Yearbook* 11 (2002): 159–176, here 160.

39. Erich Trunz, "Kommentar," in HA 9: 611.

of conceptualizing the Italian experience. The tower is the self, which the artist constructs as his most important work of art. The perspective provided by standing above other buildings is not used to survey a distant landscape; rather, the tower's vantage point affords a view onto itself. Far from being blind to itself, the tower is distinctly conscious of its own appearance. Just as the interpretation of buildings was a means of conceptualizing the artist who created them, so the building becomes a metaphor for the observer's self-reflection. The figure that organizes this movement, which stands back momentarily and contemplates the self, is the architect, who in the fullness of his theoretical and practical knowledge can shape the self even as he is forced to compromise with practical necessities. By assuming the imaginary position of the architect, Goethe commences to build nothing less than himself.

In Goethe's equation of himself with a building, Palladio's symmetry and organic integration of parts serve as model not only of the autonomous artwork but also for the reeducated idealist subject. The new Goethe, the harmoniously integrated subject of *Bildung,* seeks to be as balanced as Palladio's villas. The terminology of classical architecture integrates readily with the Christian theology, so that both discourses promise to resolve the alienation of being divided into subject and object: "The rebirth which is transforming me from within continues."[40] Goethe's description of himself as a house begun in error with a poor foundation alludes as much to the biblical parable of the man who built his house on sand and the man who built his house on rock (Matthew 7:24–27) as to Descartes' appropriation of architectural practice. Goethe alters the biblical tale to suggest that the self is like a house constantly undergoing renovation, that the self is an accumulation of elements, which have no necessary order. A plan for articulating the self can be designed only after the foundation has been laid. This rethinking or redrawing amounts to much more than a simple addition; instead it requires the redefinition of the subject. Close to the end of his stay in Rome, Goethe returns to the surprising discovery that the minor alterations or in this case the supplement develops into a fundamental reorientation: "The visitor from the north imagines that Rome will supplement his own existence and supply what he lacks: it only gradually dawns on him, to his great discomfort, that he has to alter his reactions completely and start from the very beginning."[41] The Italian journey did not merely provide a few further images for Goethe's treasure-house of impressions. Within the terms of the present study, one would say that he did not merely acquire an interest in classical architecture but instead assumed a new spectatorial relationship to himself. Out of

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40. Goethe, *Italian Journey,* 151; "Die Wiedergeburt, die mich von innen heraus umarbeitet, wirkt immer fort" (20 December 1786).

41. Goethe, *Italian Journey,* 414; "Der nordische Reisende glaubt, er komme nach Rom, um ein Supplement seines Daseins zu finden, auszufüllen, was ihm fehlt; allein er wird erst nach und nach mit großer Unbehaglichkeit gewahr, daß er ganz den Sinn ändern und von vorn anfangen müsse" (October 1787; HA 11: 430).

an identification with the architect as artist, Goethe as the subject of *Bildung* began to criticize both the architect behind the building as well as the subject contemplating the structure.

Just as Dante moved beyond the lowest levels of the Inferno without Virgil's guidance, so Goethe claims that he too enters Rome without a mentor: "Now, at last, I have arrived in the First City of the World! Had I seen it fifteen years ago with an intelligent man to guide me, I should have called myself lucky, but, since I was destined to visit it alone and trust to my own eyes, I am happy, at least, to have been granted this joy so late in life."[42] Like Dante, he finds himself bewildered in his middle years.[43] Instead of traveling through the city with a guide, Goethe is obliged to see Rome "mit eignen Augen," a telling phrase that emphasizes the competition between personal experience and paternal memory. As he writes in *Poetry and Truth,* his first conscious recollections were of living in a large, old house that, he later notes, contained an appealing set of Italian prints:

> Within the house my gaze was drawn most to a row of Roman prospects with which my father had decorated an antechamber. They had been etched by some adept predecessors to Piranesi who understood architecture and perspective well....Every day I saw here the Piazza del Popolo, the Coliseum, St. Peter's Piazza, the Church of St. Peter's from within and without, Castel Sant Angelo, and other places.[44]

The pictures draw his eyes much as the city of Rome does. The reflexive verb suggests an operation of the pictures; they attract viewing, as if the impulse to look came from them, and not the spectator. The image directs the viewer, rather than that the subject notices the image. For the young Goethe, the Italian pictures stand out among the many local paintings in the house. For the father as well as the son, the pictures lead desire away from Frankfurt, even as their allure is conditioned by the place within which they appear. The Italian prints are themselves framed by the house, which is so clearly marked as belonging to the father. Indeed, architecture in Goethe's work is often depicted as a legacy passed down by some masculine progenitor, a structure already built that needs to be confronted, understood, and at most can only be remodeled, but not torn down in some Cartesian fantasy of

42. Goethe, *Italian Journey,* 128; "Ja, ich bin endlich in dieser Hauptstadt der Welt angelangt! Wenn ich sie in guter Begleitung, angeführt von einem recht verständigen Manne, vor fünfzehn Jahren gesehen hätte, wollte ich mich glücklich preisen" (1 November 1787).

43. Italo Michele Battafarano also compares Goethe and Palladio with Dante and Virgil, in "Böhme und Palladio in Goethes *Italienischer Reise," Morgen-Glantz: Zeitschrift der Christian Knorr von Rosenroth-Gesellschaft* 9 (1999): 274.

44. Goethe, FA 1.14: 19: "Innerhalb des Hauses zog meinen Blick am meisten eine Reihe römischer Prospekte auf sich, mit welchen der Vater einen Vorsaal ausgeschmückt hatte, gestochen von einigen geschickten Vorgängern des Piranesi, die sich auf Architektur und Perspektive wohl verstanden....Hier sah ich täglich die Piazza del Popolo, das Coliseo, den Petersplatz, die Peterskirche von außen und innen, die Engelsburg und so manches andere."

autonomous thought. This respect for buildings as having been donated by earlier generations is itself an inheritance. In *Poetry and Truth,* we are told that Johann Caspar Goethe waited until after his parent's death before remodeling the cramped medieval house to imitate the palazzi he had seen in Italy. We learn further that architectural tastes are the subject of angry debates between father and son. Johann Caspar was inevitably quite proud of his Italian facsimile, and he becomes irritated when his impertinent son, back home from university and bound for Strasbourg, mocks it. To be drawn into the engravings, to move into the pictures, even as a memory that informs Goethe's autobiography, requires one to reenter the father's house. Rome is of course aligned with the symbolism of the father on many levels. Both Johann Gottfried Herder and Sigmund Freud put off visiting the city because they associated it too strongly with the Catholic Church.[45] Freud refers to his Rome neurosis in the *Interpretation of Dreams.* He stayed away in part because of his identification with the Semitic Hannibal, who, after crushing the Roman armies in the battle of Trasimene Lake, refrained from marching on the city, even as the gates stood open.[46] Goethe's engagement with Roman authority, on the other hand, subsumes the city's many religious connotations under a critical reinvestment in his father's simulation of Italian architecture.

Kurt Eissler reads the Italian journey in direct Oedipal terms as Goethe's effort to replace his father and take possession of his mother. The discrepancy between the actual place and memory reinforces the urge to see for oneself the places depicted in the father's engravings and to thereby assume his "place."[47] Taking the paternal position requires a reentry into childhood. Fittingly, Goethe describes Rome as spread out before him like gifts at Christmas.[48] Its many piazzas appear as living embodiments of childhood desires: "All the dreams of my youth have come to life."[49] The Oedipal usurpation is never complete. While the gap between representation and the represented justifies Goethe's presence in the paternal city, it also allows a personal claim to possess the place, apart from the predetermination his father's education imposed on him: "Everything I have known for so long through paintings, drawings, etchings, woodcuts, plaster casts and cork models is now assembled

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45. Richard H. Armstrong, *A Compulsion for Antiquity: Freud and the Ancient World* (Ithaca, NY: Cornell University Press, 2005), 118.

46. Sigmund Freud, *Die Traumdeutung* (Frankfurt/Main: Fischer Verlag, 1972), 205–209.

47. Kurt Eissler, *Goethe: A Psychoanalytic Study, 1775–1786* (Detroit: Wayne State University Press, 1963), 1003–1018.

48. While childhood in *Wilhelm Meisters Lehrjahre* is played out under the sign of the Mother, the *Italienische Reise* engages the Father as the source and the rival for pleasure. Friedrich Kittler explains: "Kategorisch sagt der Roman, daß 'die Kinderfreuden' 'eigentlich zu erfinden und anzuwenden nicht des Vaters, sondern der Mutter Sache ist'"; however, his thesis does not apply to the nondomestic space of Italy. Friedrich Kittler, "Über die Sozialisation Wilhelm Meisters," in *Dichtung als Sozialisationsspiel* (Göttingen: Vandenhoeck & Ruprecht, 1978), 19. See also Melitta Gerhard, "Rom in seiner Bedeutung für Goethe—eine 'neue Welt,'" *Jahrbuch des freien deutschen Hochstifts,* 1977, 84.

49. Goethe, *Italian Journey,* 129; "Alle Träume meiner Jugend seh' ich nun lebendig" (1 November 1786).

before me. Wherever I walk, I come upon familiar objects in an unfamiliar world; everything is just as I imagined it, yet everything is new."[50] The knotted density of the remembrances Rome conjures up makes the city a particularly potent space for autobiographical reflection, for it brings together many images viewed over his life into a single location. They stand almost as if in a row: the city appears as an art gallery not only of itself, but also of Goethe's education. Crucially, the failure of the recollected images to represent the city allows Goethe a distance to reflect on his own investment in them. The contrast between image and reality becomes a coda for the autobiographical bifurcation of the subject critically reflecting on itself. Sorting through his expectations after his first brush with Palladio in Vicenza, Goethe also states that the disparate images, which he has esteemed so highly all his life, can now be rearranged according to their actual appearance: "The main thing is that all these objects that have worked upon my imagination from a distance now stand too tall to be reduced to an orderly domestic coexistence."[51] Seeing the sites makes clear just how much Goethe's own fantasy contributed to their value. With some caution, he notes that visiting famous artworks can often end in disappointment. The traveler in Italy "expects to see all the things about which he has heard so much, not as the heavens and circumstance have left them, but rather in the pure form in which they stand in his imagination, and he finds almost nothing so, he can enjoy almost nothing in this manner. Here something is destroyed, there it is painted over, here something stinks, something else is smoking, here another thing is dirty, in the taverns and with the people."[52] This medial disappointment never seriously threatens Goethe's pleasure, for the discrepancies only heighten his critical desire to uncouple the present from his father's tales. The immediate conditions on the ground do not vitiate the inherited images' glow. The loss of their aura becomes fascinating in its own right as an affirmation of the spectator's immediate perceptions.

Modern editors presume that the familial prints were taken from *Il nuovo teatro delle fabriche, et edificii in prospettiv adi roma moderna,* published in three volumes beginning in 1665 by the engraver Giovanni Battista Falda, with a fourth volume by

50. Goethe, *Italian Journey,* 129; "Alles, was ich in Gemälden und Zeichnungen, Kupfern und Holzschnitten, in Gips und Kork schon lange gekannt, steht nun beisammen vor mir; wohin ich gehe, finde ich eine Bekanntschaft in einer neuen Welt; es ist alles, wie ich mir's dachte, und alles neu" (1 November 1786).

51. Goethe, *Diaries*; "Die Hauptsache ist daß alle diese Gegenstände, die nun schon über 30 Jahre auf meine Imagination abwesend gewürckt haben und also alle zu hoch stehn, nun in den ordentlichen *Cammer* und *Haus* Ton der Coexistenz herunter gestimmt werden" (24 September 1786; *Tagebücher,* FA 2.3: 72).

52. Goethe, *Diaries*; "erwartet alle die Gegenstände von denen er so vieles hat reden hören, nicht zu finden, wie der Himmel und die Umstände wollen, sondern so rein wie sie in seiner Imagination stehen und fasts nichts findet er so, fast nichts kann er so genießen. Hier ist was zerstört, hier was angekleckt, hier stinckts, hier rauchts, hier ist Schmutz pp, so in den Wirthshäusern, mit den Menschen" (25 September 1786; *Tagebücher,* FA 2.3: 75).

Alessandro Specchi.[53] These tomes depicted the massive changes Pope Alexander VII had undertaken to revitalize Rome as a cultural center for Catholic pilgrims and European tourists.[54] After assuming the Holy See, Alexander started an ambitious plan that sought to clear the crowded streets and piazzas of peddlers and uneven houses, to expedite the completion of many half-finished churches and palaces, and to erect new monuments that would reestablish the symbolic might of Rome.[55] The greatest of these projects was Bernini's colonnade before St. Peter's cathedral. Falda's prints depicted many renovations in their projected state of completion; as a matter of history, many were left incomplete because of local opposition and short finances.[56] Today, the ideological intention behind the prints is unmistakable, but to a middle-aged German recounting his Italian adventures to his wife and children, these prints served as the visual anchors for personal tales.[57] Goethe mentions these prints not for their artistry, but because they illustrated the place he had begun studying as a boy. Their importance cannot be underestimated. Goethe felt so secure in his visual knowledge of Roman settings that in his essay "On German Architecture" he mocks Bernini's colonnade, a site he would not visit for another two decades.[58] Indeed, one common criticism of Goethe's early architectural commentary is that he thinks only in two-dimensional terms. Even the monumental Strasbourg cathedral is appreciated only for its facade. At no point does Goethe describe the interior, even though he mentions entering the church. Years of viewing prints may have trained him to think about architecture primarily in terms of its public surface. Once in Rome, Goethe would have realized that many of Falda's and Specchi's *vedute* were themselves overly complete. In the case of Falda's print of St. Peter's, Bernini's colonnade is shown in a state it never attained. These *vedute* were distinct from Palladio's illustrations in that they showed an ensemble of buildings. Rather than depict a single monument, they diffused their presentation by

53. See FA 1.14: 1077; see also Lothar Müller, "Karl Philipp Moritz erklärt Arkadien," in *Wiederholte Spiegelungen: Weimarer Klassik, 1759–1832; Ständige Ausstellung des Goethe-Nationalmuseums,* ed. Gerhard Schuster and Caroline Gille (Munich: Carl Hanser, 1999), 314 n. 20.

54. Falda's collection differed from its predecessors in its depiction of contemporary architecture in Rome, and not just the ruins of antiquity. *The Origins of the Italian Vedute—An Exhibition by the Department of Art, Brown University* (Providence, RI: Brown University, 1978), 65.

55. Richard Krautheimer explains that Falda's collection portrayed Rome as a sequence of theatrical scenes in which papal power displayed itself through architecture and urban design. Richard Krautheimer, *The Rome of Alexander VII, 1655–1667* (Princeton, NJ: Princeton University Press, 1985), 3–7.

56. For a timeless story of clearing streets, see Tod Marder, "Alexander VII, Bernini, and the Urban Setting of the Pantheon in the Seventeenth Century," *Journal of the Society of Architectural Historians* 50 (1991): 273–292.

57. Paul A. Wilson, "The Image of Chigi Rome: G. B. Falda's Il nuovo teatro," *Architectura* 26.1 (1996): 33.

58. Addressing the classicist critic, he rants: "Die herrliche Wirkung der Säulen traf dich, du wolltest auch ihrer brauchen und mauertest sie ein, wolltest auch Säulenreihen haben, und umzirkeltest den Vorhof der Peterskirche mit Marmorgängen, die nirgends hin noch her führen, daß Mutter Natur, die das ungehörige und unnötige verachtet und haßt." Goethe, "Von deutscher Baukunst," FA 1.18: 111.

showing its surroundings.[59] Their goal was to present a collection of structures as a coherent scene. They trained the viewer to perceive the city in formal terms, and not as an incoherent pile of houses. Pope Alexander's wish to create long lines of sight down straight boulevards, where monumental buildings stood without hovels and stalls clustered about, was neatly confirmed within the frame of Falda's *vedute*. Palladio, on the other hand, was concerned primarily with the depiction of a single building so that the construction of its elements could be understood in technical terms. Between Falda's clean, perspectival scenes of Rome and Palladio's precise and harmonious details, Italy would have seemed to contain nothing but aesthetically thought-through cities.

This experience of visiting places known only through media reverses the common eighteenth-century trope, one Goethe uses often in his early writings, wherein the prose reader claims that the text is so convincing that he can see the places and people rising up before him. According to Winfried Menninghaus, this readerly mode, "Darstellung," requires the text to bring forth a mental image in the reader.[60] Arriving at the place that his father's prints depicted, Goethe moves in the opposite direction of the reader who visualizes a text. He completes the interpolation begun in Frankfurt, positioning himself in the frame of Falda's and Specchi's *vedute,* only to recognize their illusion.

Not every traveler could remain so sanguine under Italian conditions. While on his own, less happy journey, Herder writes to his wife: "Thank God that another eight days have passed in dreary Rome! I cannot develop a taste for Rome; rather, the place becomes more and more burdensome with each day."[61] Herder had a miserable impression yet felt compelled, as so many later German travelers did, to compare his travels with those of Goethe. He struggles to assert the legitimacy of his negative impressions despite his friend's euphoria: "I am not Goethe; in my life I have never followed his maxims, and so I cannot start to do so in Rome."[62] Goethe, Herder explained, took to the place as a child who had been granted his

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59. Fernando Marías, "From the 'Ideal City' to Real Cities: Perspectives, Chorographies, Models, Vedute," in *The Triumph of the Baroque: Architecture in Europe, 1600–1750,* ed. Henry Millon (New York: Rizzoli, 1999), 229.

60. Winfried Menninghaus, " 'Darstellung': Friedrich Gottlieb Klopstocks Eröffnung eines neuen Paradigmas," in *Was heißt 'Darstellen'?* ed. Christiaan L. Hart Nibbrig (Frankfurt/Main: Suhrkamp, 1994), 205–226.

61. Letter to Caroline Herder, 7 March 1789, in *Herders Reise nach Italien, Herders Briefwechsel mit seiner Gattin,* ed. Heinrich Düntzer and Ferdinannd Gottfried von Herder (Gießen: J. Richer'sche Buchhandlung, 1859), 270: "Gottlob, daß wieder acht Tage in dem traurigen Rom vorüber sind! Ich kann der Hauptstadt der Welt keinen Geschmack abgewinnen, vielmehr wird sie mir von Tage zu Tage mehr läßtig."

62. Letter to Caroline Herder, 4 November 1788, in *Herders Reise nach Italien,* 155: "Ich bin nicht Goethe, ich habe auf *meinem* Lebenswege nie nach seinen Maximen handeln können; also kann ichs auch in Rom nicht."

wish: "Goethe talks about Rome like a child, and like child, lived here with all his singularity, which is why he praised it so."[63]

The difference between the textual mediation of a site and its actual condition corresponds in Goethe's aesthetic to the difference between poetic imagination and prosaic description. In *Wilhelm Meister's Apprenticeship,* the narrator states that pictures stored in memory are the material out of which the protagonist composes fiction. Memory is presented in the ancient rhetorical tradition as a storehouse from which raw material can be drawn, a move that in the eighteenth-century German context enables fictional *Darstellung.* In book 2, chapter 10, we are told that Wilhelm was obliged to write a small play while out on a pleasure cruise: he "composed out of the wealth of his treasury of living images an entire play complete with acts, scenes, characters and plot complexities."[64] Only at the end of the novel does it become clear that this storehouse of images consists of Renaissance Italian paintings.

Goethe reenacts the surprise and delight of moving into a space one has known since childhood when, at the novel's culmination, Wilhelm Meister enters the house that once belonged to the uncle of the idealized "schöne Seele."[65] Stepping through the doorway, he has the double sense that he has found the most wonderful building he has ever experienced, a holy site that makes him completely human, and that he has known, at least partially, since his childhood. In the uncle's house, he recognizes works of art that had once belonged to his grandfather. They are all Italian masters collected by the grandfather during his journey south. Unfortunately, Wilhelm's father sold them off to raise funds once the grandfather had died. In a slight shift from his own biography, Goethe credits Wilhelm's grandfather with having introduced him to Italy. Regardless of which paternal figure shows Wilhelm the first images of Italy, the epiphany in the uncle's villa corresponds to Goethe's recognition of Italian buildings from the pictures in his father's house. The parallels to Goethe's *Italian Journey* are manifest, even as the novel shifts the site of recognition to northern Europe. The Italian site is rearticulated in the novel as German and neo-Palladian. The uncle, like the historical Goethe and his real-life father, recreated his own Italian journey by replicating classical space—building, sculpture, and painting—in Germany. By the end of *Wilhelm Meister's Apprenticeship,* we have a complex circuit of Italian images that instill a desire to travel. At no point in the

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63. Letter to Caroline Herder, 4 November 1788, in *Herders Reise nach Italien,* 155: "Goethe spricht über Rom, wie ein Kind, und hat auch, wie ein Kind, freilich mit aller *Eigenheit,* hier gelebet; deshalb ers denn auch so sehr preiset."

64. "komponierte aus dem Reichtum seines lebendigen Bildervorrats sogleich ein ganzes Schauspiel mit allen Akten, Szenen, Charakteren und Verwicklungen" (FA 1.9: 477).

65. Susan Bernstein also links the Oheim's house with the larger project of *Bildung* via the Goethehaus museum in Weimar. Indeed, the house portrays how the impressions of Italy ought to be preserved in a collection after the journey's completion. While the contemporary museum is an outgrowth of the scene in *Wilhelm Meisters Lehrjahre,* the parental Goethe house in Frankfurt (now another museum) was a precursor. See Bernstein's excellent "Goethe's Architectonic *Bildung* and Buildings in Classical Weimar," *MLN* 114.5 (1999): 1014–1036, here 1028.

novel does Wilhelm enter Italy; instead he hears Mignon's poem about wanting to return to its warm smells and lovely spaces, and he rediscovers his grandfather's lost Italian paintings. The novel combines discovery with recollection, suggesting that first impressions are actually a return to a paternal legacy.

As Herder suggested, the memory of childhood lends Goethe's Italian journey the quality of a wish fulfillment. The very structure of visual representation reinforces the desire instilled by parental reminiscences. If perspectival pictures use illusion to make an absent place present, then standing in the same location as the prints seems to fill the gap inherent in representation. In Goethe's case the absence implied by the picture certainly did instill a desire to visit Italy, in order to perceive what was indirectly presented in the drawing. Accordingly, to be in Italy brought the adult back to the desires of childhood. Every forgotten thought seems to come true in Italy, yet the physical appearance of these places removes their previous fantastical character. Even as Italy fulfills a wish, the fantasy is exposed as an illusion. If we focus only on the childhood fantasy and its fulfillment, we would be warranted in claiming a reductive Lacanian position, namely, that Goethe's fulfillment in Rome is determined by desires that are the effect of another's signifiers. Throughout the *Italian Journey,* Goethe acknowledges and presumes that he, and his readers, carry around with them an assortment of mental images of Rome, and that they have recourse to engravings at any time. For this reason he considers the only point worth discussing to be the gap between these images (both mental and real) and the site as experienced by the well-educated traveler. The disruptions in the media and travel circuit, the moments when architecture fails to embody its visual ideal, are also the moments of insight, the ruins wherein the classical subject of *Bildung* begins to reconstitute itself.

Goethe and the Disappointing Site: Buildings That Do Not Live Up to Their Images

Inherent in Goethe's aesthetic assessment of architecture is his consideration of "the unbuilt." Although they are often taken as monumental units, complete and whole, buildings have different versions of themselves: the material structure left standing by history, and the architectural designs that preceded it. In the case of Palladio, an obvious tension arises between the drawings in his *Four Books of Architecture* and the existing structures. At his death many of Palladio's buildings were still under construction. The loggias of the Palazzo della Regione at Vicenza were completed a century later. Many palaces were left unfinished because of the declining fortunes of their patrons. The plague, inflation, and the expensive Turkish wars wore down prominent families' finances. Furthermore, the grand scale of the projects hampered their completion. As James Ackerman pointed out, not one of the private patrons managed to finish more than half a palace.[1] Some of the most famous Vicentine structures, such as the Olympic Theater and the Villa Rotunda, were built to conclusion later under the direction of Vincenzo Scamozzi (1552–1616).[2] Construction of the Palazzo Porto-Breganze was undertaken by Scamozzi according to Palladio's plans, yet only two of its seven bays were ever completed.

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1. James Ackerman, *Palladio* (Harmondsworth, UK: Penguin, 1966), 81.
2. Denis Cosgrove, *The Palladian Landscape* (University Park, PA: Penn State University Press, 1993), 20.

Palazzo Thiene, a project Palladio had inherited from Giulio Romano (1499–1546), lacked four sides to its courtyard. The Venetian monastery for the Conventio della Carita was presented in the *Four Books* as a reconstruction of ancient private houses; however, its idealized form was never realized, and, to make matters worse, the atrium was destroyed by fire in 1630.[3] This rough history meant that visitors arriving in Vicenza, having studied the printed record of Palladio's work, were bound to be a little disappointed. Goethe was no different, but he overcame his dismay quickly by reading the discrepancies between the treatise and the actual site as a manifestation of the autonomous artist's struggle against an unsympathetic public. In his meditations on Palladio, Goethe circles around the question of the architect's relation to his client. Faults in building, or places where the existing building does not live up to the drawings, he interprets as moments when Palladio was forced to accept a customer's shortsighted instructions. Almost all the discrepancies between plan and building Goethe resolves to the architect's credit, whom he construes as a freethinking, autonomous agent who formulated a singular artistic plan prior to the building's materialization. The unbuilt designs acquire a truth content apart from the actual buildings, yet always dependent upon them. Palladio's drawings are never treated as pure immaterial, paper architecture that disregards construction. With every Palladian drawing, Goethe presumes that the structure could have been, indeed ought to have been, finished.

Goethe's disappointment arose from his assumption that architectural drawings both preconfigure and reproduce the building they represent. Only by visiting the various sites did he come to question these tenets. His initial comments focus on the urban clutter that surrounds the famous buildings. So familiar are the drawings that at first glance the buildings simply reveal what was not drawn, specifically the spaces around them. The surprise of seeing buildings squeezed into an actual city rather than surrounded by the clean space of the page he resolves allegorically. The urban context outside the frame of Palladio's architectural drawings, complete with its many layers of historical development, is transformed from unsightly disappointments into unintended material markers of Palladio's greatness. The discrepancies between plan and execution are negative features that are themselves negated by the aesthetically and historically informed spectator.

Even today, the sight of a Palladian house does not always provoke immediate wonder and delight. In the eighteenth century, Goethe was shocked by the dirty, narrow conditions of Vicenza's streets. Like most visitors, he notes that there is little room in front of the houses to view the palazzi. The prints present a distanced vantage point, whereas the actual streets make it impossible to see many of the Vicenza palazzi head-on in their entirety. The confined spaces reinforce the discrepancies between image and site, between design and construction, and between

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3. Deborah Howard, *The Architectural History of Venice* (New Haven, CT: Yale University Press, 2002), 193–194.

artist and audience. In his *Italian Journey,* Goethe's thought follows a chain of associations that move from the narrowness of Vicenza to a reflection on how artists are never appreciated by their contemporaries. From the start, Goethe identifies with Palladio as an artist working within provincial politics. Palladio himself addresses the problem diplomatically in the second of his *Four Books of Architecture.* Remarking on townhouses, he displays a courtier's concern for decorum and for building in a manner appropriate to the site: "But as most commonly in cities, either the neighbours walls, the streets, or publick places, prescribe certain limits, which the architect cannot surpass, it is proper he shou'd conform himself to the circumstance of the situation."[4] Such polite avoidance leads Goethe to reflect upon his own position as a writer fleeing the restrictions of a provincial court.[5] Writing within the eighteenth-century discourse on artistic genius, Goethe characterizes Palladio as struggling against local conventions.[6] The city's varied buildings—some beautiful, some practical, others ostentatious—compare to different genres of writing. Autonomous poets are read side by side with those who write for entertainment. While twenty-first century urbanists celebrate small Italian towns for their stylistic unity, intending thereby to denigrate the disruptions high modernism created in the nineteenth-century cityscape, Goethe separated the artist/architect out from the local traditions. For him, the massive scale of Palazzo Valmarana's facade, with its oversized pilasters reminiscent of Michelangelo's Capitoline in Rome, reiterates that Palladio, like his buildings, literally towers over his contemporaries.[7] The visual difference between image and site becomes further proof that Palladio did not fit in with his surroundings, neither the artist nor his buildings. Within Goethe's idealism, the architect's autonomy is preserved in his conception, rather than in its material actuality. The presumption that architects are obliged to bend their designs to the interests of clients splits the actual building from its ideal conception. In his fantastical dialogue with Palladio, Goethe has the architect explain the discrepancy between the published designs and the realized buildings as a result of

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4. Andrea Palladio, *The Four Books of Architecture* (London: Isaac Ware, 1738; repr., New York: Dover, 1965), 38.

5. Niederer also understands the identification with Palladio as a projection of Goethe's frustrations in Weimar. Heinrich Niederer, "Goethes unzeitgemässe Reise nach Italien, 1786–1788," *Jahrbuch des freien deutschen Hochstifts,* 1980, 83.

6. Over the course of writing the treatise, Palladio toned down and then eliminated his complaints against clients. Howard writes that in the earliest draft, Palladio "complains bitterly of being forced to concede to the demands of patrons. A correction to this insertion states simply that he has to take the wishes of his patrons as his starting point. In the published version this passage is omitted altogether, and he merely comments that architects have to comply with the will of those who are paying." Howard, *Architectural History of Venice,* 226. Years of service in the Weimar court would have taught Goethe how to appreciate Palladio's understatement.

7. Some architectural historians note that Palladio makes many concessions to the narrow streets and the neighboring buildings; see, for example, Robert Tavernor, *Palladio and Palladianism* (London: Thames & Hudson, 1991), 93; Rudolf Wittkower is less generous about Palazzo Valmanara in his *Architectural Principles in the Age of Humanism* (New York: Norton, 1971), 84–86.

such compromise. The autonomy of the architect resides in his conceptualization of space, even if it cannot be materialized in stone.[8]

The disharmony between Vicenza's basilica and its neighbors shifts into an allegory of the architect's solitary greatness. In his letters, Goethe does not mention the specific design features of the basilica; he presumes they are known. Instead he expounds on the chaotic urban environment in which Palladio was obliged to raise his buildings. Even today, houses lean right up against the basilica, and market stalls sometimes crowd the piazza. In order to pull off his design, Goethe claims that Palladio had to simply think away the environment in which he worked, a gesture that completely unsettles Goethe because it reminds him that in Italy he must confront the same restrictions on artistry that he faced in Weimar:

> Beside the Basilica stands an old building resembling a citadel and studded with windows of unequal sizes. It is impossible to describe how wrong this looks. Undoubtedly the architect's original plan called for it to be demolished together with its tower. But I must control my feelings because here, as elsewhere, I so often come upon what I seek and what I shun side by side.

> Wie sich die Basilika des Palladio neben einem alten, mit ungleichen Fenstern übersäten, kastellähnlichen Gebäude ausnimmt, welches der Baumeister zusamt dem Turm gewiß wegedacht hat, ist nicht auszudrücken, und ich muß mich schon auf eine wunderliche Weise zusammenfassen; denn ich finde auch hier leider gleich das, was ich fliehe und suche, nebeneinander.[9]

Framing a building site to exclude neighboring structures compares to the writer ignoring contemporary taste. Overwhelmed by the layers of urban architecture, Goethe posits a second act of framing that repeats the book's format by blocking out the inchoate environment impinging on the singular building. As an architourist, Goethe invents a second, nonimagistic boundary between the work of art and its environment that restores the blank spaces of the book, through which the building was first apprehended.[10] The two buildings represent the two extremes

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8. James Young uses this distinction to explain Richard Serra's withdrawal from the Berlin Holocaust Memorial and Peter Eisenman's willingness to adapt his proposal: "The artist's and the architect's modes of operation may always diverge: where the architect generally sees an accommodation to the clients' requests as part of his job, the artist is more apt to see suggested changes, however slight, as a threat to his work's internal logic and integrity. This conflict, too, is normal in the course of collaboration between artists and architects." Implicit in Young's emphasis on this distinction is a justification of his own adjustment from skeptical academic critic to jury member in the selection of a memorial design. He narrates his own relation to the Holocaust Memorial debate as a shift from an outside design critic to an informed participant ready to actualize construction. James E. Young, "Germany's Holocaust Problem and Mine," *The Public Historian* 24.4 (Autumn 2002): 77.

9. J. W. Goethe, *Italian Journey,* trans. W. H. Auden and Elizabeth Mayer (London: Penguin, 1970), 64.

10. Goethe's attention to the discrepancies between print and building is part of a larger reassessment of Palladio's work. Howard (*Architectural History of Venice,* 230) states that even in the Veneto the

of Goethe's associations between architecture and the educated self: the incoherent architecture of Goethe's paternal house in Frankfurt versus the classical balance of the basilica. What starts as an aesthetic comparison in Vicenza becomes a division within the observing subject in Rome. The towering, old campanile, which Goethe imagines Palladio would have torn down, becomes, a few months later in the travelogue, a key figuration of his own education.

Not only does Goethe resolve the discrepancies between image and site by constructing a perceptual frame that recreates the format of a book, wherein the black page surrounds the cleanly drawn lines of an architectural plan, but he also extends the aesthetic presumption that the poetic genius stands outside social convention to include the architect's plans. He applies the logic of authorship to the architect by crediting a single name with the work's existence. Its complex history of construction, deterioration, and renovation is subsumed within the authorial principle: because the *Four Books of Architecture* has one author, so too must the buildings depicted therein have a single architect. In this sense, literature and architecture can share the term *classicism* through an aesthetics that secures the attribution of authorship by establishing clear boundaries between the poetic work and writing in general, as well as between the monumental building and its urban setting. For Goethe and the autonomy aesthetics that proceeds from his work, art separates itself from the cacophony of everyday life much as beautiful architecture seeks to clears away its neighbors. Classicism affirms the parallel between poetry and architecture at the expense of urban complexity. It seeks to clarify the multifarious meanings of city space, an enterprise that Henri Lefebvre has argued ought never succeed:

> Social space can in no way be compared to a blank page upon which a specific message has been inscribed (by whom?). Both natural and urban spaces are, if anything, "over-inscribed": everything therein resembles a rough draft, jumbled and self-contradictory. Rather than signs, what one encounters here are directions—multifarious and overlapping instructions.[11]

The attribution of a building's "author" goes beyond tracing a lineage of associations; for Goethe it entails a teleological interpretation of the building's design. Because a building is orderly, it is presumed to been the work of an architect.

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first critical comparisons of Palladio came in 1740. All of these eighteenth-century critiques came in the wake of Perrault's critical introduction to Vitruvius. Goethe, in examining building sites so exactingly, is engaged in the same sort of scientific observation of antiquity that Perrault used when he argued against the existence of harmonic proportions by demonstrating that the established treatises could not agree on the orders' dimensions. Indeed, Goethe examines building sites with some of the same tools that he uses for geological and botanical specimens. Alberto Pérez-Gómez, *Architecture and the Crisis of Modern Science* (Cambridge, MA: MIT Press, 1983), 27–39.

11. Henri Lefebvre, *The Production of Space,* trans. Donald Nicholson-Smith (Oxford: Blackwell, 1991), 142.

Structures that are perceived as disorderly (such as the parental house in Frankfurt) are implicitly without an authoritative architect. Attribution requires the recognition of order first; the link to a particular name attaches itself then to the aesthetic analysis. In the Strasbourg essay, Goethe claimed to have discovered symmetry in the Gothic cathedral's ornaments, which not only recuperated the aesthetic value of the building but also ascribed a single architect as its cause. The moment in which Goethe recognizes the coherence of a facade is also the instance in which he detects the hand of a designing architect. In Vicenza, the terms are merely reversed: the medieval Gothic reveals the lack of systematic architectonic thought, whereas the classical basilica displays an intricate orderliness that functions as a sign of artistic intention. The disparagement of "disorderly" architecture has always been a popular move in architectural criticism, and in this sense Goethe adopts a trope common to the discourse. He deploys the opposition order-disorder in both his Gothic and his classical periods. A second, more distinctly biographical connotation emerges in his mature writing: disparaging references to buildings lacking architectonic form, a line of criticism aimed at his father's house. For the son reflecting back on his life, Caspar Goethe's piecemeal renovations represent the dull absence of artistry, the lack of genius, vision, or any coherent plan. If architectonic form marks the operation of genius, then shapelessness defines the antithesis of art and the absence of a creative agent.

Within Goethe's aesthetics, the tenuous position of the architect becomes obvious not only when he curtails his plans for the sake of money, but also when he exceeds them. Luxurious villas that went beyond the balanced decorum expected of Renaissance classicism expose the architect's need to please his client. Hence buildings that celebrate the inhabitant's political rank also underscore the architect's lack of autonomy. The excessive grandeur of a villa, with its repetitive overstatement of classical motifs, Goethe explains as the architect's obligation to appease a wealthy client. The Villa Rotonda demonstrates Palladio's overuse of Roman features. Commissioned in 1566 by Paolo Almerico, a papal prelate who had represented Venice for many years in Rome, the villa served the retirement of a single powerful man. Its round dome alludes to the Pantheon. Each of the four sides of the building has a facade so grand that it could serve as the entrance to a public building, thereby exceeding what decorum would deem appropriate for a suburban villa. Goethe begins to develop critical judgments of the villa and of Palladio's relationship to his clients: "It is a square block, enclosing a round hall lit from above. On each of the four sides a broad flight of steps leads up to a portico of six Corinthian columns. Architecture has never, perhaps, achieved a greater degree of luxury."[12]

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12. Goethe, *Italian Journey,* 66; "Es ist ein viereckiges Gebäude, das einen runden, von oben erleuchteten Saal in sich schließt. Von allen vier Seiten steigt man auf breiten Treppen hinan und gelangt jedesmal in eine Vorhalle, die von sechs korithischen Säulen gebildet wird. Vielleicht hat die Baukunst ihren Luxus niemals höher getrieben" (21 September 1786; Goethe, HA 11: 55).

Goethe's reticence regarding the most famous of Palladio's villas is expressed in the word *Luxus*. Within Goethe's discourse, *Luxus* is a quality to be avoided. It constitutes the cessation of imaginative thought, for it entails the use of culture as a means of displaying wealth and power, instead of serving the further education of the individual. Goethe was critical of consumer culture particularly when it involved art objects, because it presented artifacts as mere signs of the owner's status.[13] This discontent with the purely luxurious quality of villas comes to the fore in the passage describing his visit a year later to the Villa Aldobrandini. Having learned the contours of Roman high society, Goethe notes the "glorious, though not unexpected view," indicating that a stunning picture of nature was required of any grand villa. Instead of being taken in by the view, he sees that the villa was placed to command the countryside, so that the view out the window reflects the wealth of the owner inside: "One would think that the palace was built in such a way that the glory of the hills and the flat landscape beyond could be taken in with one glance."[14] Goethe interrupts the flow of the *Italian Journey* in order to provide an editorial comment about the scene. The shift in tone, and the elevated language, suggest that the paragraph reflecting on the view from the villa was written later, as Goethe was preparing his letters for publication. Interestingly he begins with another deictic marker: "Here, however, I find myself compelled to add a thought."[15] The "here" marks both the moment in the flow of the narration and the place, the Villa Aldobrandini. The "thought" concerns the aesthetic value of the view. Goethe then makes a familiar distinction between the satisfaction gained from art when it is used for pleasure alone and when it enhances the knowledge of the viewer: "Energetic, ambitious spirits cannot be satisfied by pleasure; they demand knowledge. This demand drives them to original activity, and whatever the results may be, such a person comes to feel that, in the end, he can judge nothing justly except what he has produced himself."[16] Here we have a short summary of how art motivates the viewer to further *Bildung* by moving him to assume the position of the artist, at least in imaginary terms, so that one understands the consciousness required to produce the work of art. Critical judgment of art depends upon the viewer thinking from the position of the artist. The failure to find this imaginary configuration leads Goethe to become dissatisfied with what is presumably merely a gorgeous view. Having realized that his stay at the villa, complete with feast and learned company, was only serving the ends of pleasure and status, he is disturbed and filled with doubt that he should even be there.

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13. Daniel Purdy, "Classicism's Fashionable Twin," in *The City of Weimar: Mapping German Cultural Studies for the Long Eighteenth Century,* ed. Burkhard Henke, Susanne Kord, and Simon Richter (Rochester, NY: Camden House, 2000), 26–57

14. My translation; Goethe, HA 11: 409 (September 1787).

15. My translation; Goethe, HA 11: 409 (September 1787).

16. Goethe, *Italian Journey,* 394; "Lebhaft vordringende Geister begnügen sich nicht mit dem Genusse, sie verlangen Kenntnis Diese treibt sie zur Selbsttätigkeit, und wie es ihr nun auch gelingen möge, so fühlt man zuletzt, daß man nichts richtig beurteilt, als was man selbst hervorbringen kann" (September 1787; HA 11: 409; FA 15.1: 439).

The villa, for all its subtle proportions, its thoroughgoing symmetry, and its advantageous view of the landscape, is not strictly a work of contemplation. Goethe, as well as many viewers after him, was disturbed by the all-too-lovely vista it provided. In order to respond to this undertone of rank and wealth, Goethe began to formulate a critical view of the architect. The visit to the Villa Aldobrandini almost a year later ends with more detachment and disquietude. Already at the first stages of his journey, while standing within the Villa Rotunda, Goethe began to distinguish between the architect's obligation to celebrate his patron and his own aesthetic intentions. Treatises, for example, rarely illustrate the view from within the villa. This perspective remains the privilege of the owner. Only by standing at the window does it become obvious that the villa functions as an apparatus that transforms the surrounding landscape into the luxurious property of the spectator.[17]

Like any other traveler, Goethe grapples with the inevitable dismay one feels upon arriving at some much anticipated locale; however, he recognizes rather quickly that his own disappointment was an effect of his earlier studies. The old accusation that "poets always lie" arises, he claims, from the disappointment travelers experience when they finally visit the sites they read about: "A thousand times I have heard people complain that some object they had known only from a description was disappointing when seen in reality, and the reason was always the same. Imagination is to reality what poetry is to prose: the former will always think of objects as massive and vertical, the latter will always try to extend them horizontally."[18] Much of Goethe's writing about specific locations in Italy aims to overcome what is after all a fairly banal observation. He approaches a site intent on "seeing past" its immediate environment to the ideal historical moment when the work was first conceived. Goethe dramatizes this historicist approach by writing an imaginary dialogue with the architect, so that the building becomes the embodiment of a spirit, a fetish out of which the artist's voice speaks. This teleological approach reads the building not only as beautiful or as representative of its age, but as a communication between the spectator and the artist, whose intentions exist independently from the object:

> The gratification on a trip, if one wants to have it pure, is an abstract gratification. I have to set aside the discomforts, the repulsions, everything disagreeable, so as to search out in the work of art just the artist's thought, the first execution, the first days of the work, in order to carry it into my soul pure again, cut off from everything which time, which conquers all, and the flux of things have worked upon it. Then I

17. James Ackerman, *The Villa: Form and Ideology of Country Houses* (Princeton, NJ: Princeton University Press, 1990), 10–13; Reinhard Bentmann and Michael Müller, *Die Villa als Herrschaftsarchitektur: Versuch einer kunst- und sozialgeschichtlichen Analyse,* 2nd ed. (Hamburg: Europäische Verlangsanstalt, 1992).

18. Goethe, *Italian Journey,* 302; "Tausendmal habe ich klagen hören, daß ein durch Erzählung gekannter Gegenstand in der Gegenwart nicht mehr befriedige; die Ursache hievon ist immer dieselbe: Einbildung und Gegenwart verhalten sich wie Poesie und Prosa, jene wird die Gegenstände mächtig und steil denken, diese sich immer in die Fläche verbreiten" (13 May 1787; HA 11: 313).

have a lasting gratification and because of it I am excited for more than just the mo-
ment of pleasure or fun.[19]

Through this maneuver, the discrepancy between the engraving and the site
is superseded by the fantastical image read out of the building's current appear-
ance and written into the imaginative dialogue. Goethe's narratives suggest that
the flow of time is reversed as the spectator is transported back into the moment
of the artwork's first coming into being. Goethe supposes that his insight into the
artistry of the object gives him real historical understanding of the past, either of
the artist as isolated creator, in the case of Palladio, or of the community that built
ancient architecture. Such engagement is possible, according to Goethe, only at the
site, through repeated visits. Stories and engravings might prepare the viewer, but
once the dialogue with the work has begun, they lose their signifying function and
instead become memories measuring out the viewer's biography. The dynamic
projects a new image of the artwork that incorporates the older engraving and the
disappointing immediacy of the site into a critical dialogue about the condition of
the autonomous artist in a restrictive society.

In his first reports from Italy, Goethe grapples with a problem that eighteenth-
century architectural discourse left largely unattended: how to describe three-
dimensional space in words. Many scholars have noted that in his earliest
architectural writing, Goethe treats buildings as facades, without discussing them
as three-dimensional spaces. The impression made by his father's prints might have
been such that he would have viewed buildings foremostly as surfaces. This two-
dimensional mode of perception was not unusual for eighteenth-century Germans
accustomed to viewing Italian art on the page rather than in person. Gotthold
Lessing had a similarly Euclidean understanding of space, for he writes about
sculpture and painting without distinguishing between the distinct constructions
of space that color and stone create.[20] Erich Kleinschmidt has argued that while
eighteenth-century literature was capable of richly nuanced accounts of interior
emotions, it lacked terms adequate to describe the bodily perception of space.[21]
Lessing's preference for poetry over painting hints at the differences between other

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19. "Der Genuß auf einer Reiße ist wenn man ihn rein haben will, ein abstrakter Genuß, ich muß
die Unbequemlichkeiten, Widerwärtigkeiten, das was mit mir nicht stimmt, was ich nicht erwarte,
alles muß ich bey Seite bringen, in dem Kunstwerck [*sic*] nur den Gedancken des Künstlers, die erste
Ausführung, das Leben der ersten Zeit da das Werck entstand heraussuchen und es wieder rein in
meine Seele bringen, abgeschieden von allem was die Zeit, der alles unterworfen ist und der Wechsel
der Dinge darauf gewürckt haben. Dann hab ich einen reinen bleibenden Genuß und um dessentwil-
len bin ich gereißt, nicht um des Augenblicklichen Wohlseyns oder Spases [*sic*] willen" (25 September
1786; Goethe, FA 2.3: 75).

20. David Wellbery, *Lessing's Laocoon: Semiotics and Aesthetics in the Age of Reason* (Cambridge:
Cambridge University Press, 1984), 115–118.

21. Erich Kleinschmidt, " 'Begreif—Welt': Zur fiktionalen Raumerfahrung in der deutschen
Literatur des 18. Jahrhunderts," *Germanisch-Romanische Monatschrift* 41.2 (1991): 145.

aesthetic discourses as well. Whereas lyric poetry, aesthetics, and moral philosophy endeavored to differentiate emotions, architectural theory did not formulate a discourse focused solely on representing spatial experience; instead it aligned the bodily apprehension of built environments with the rich language of inner states. In the *Italian Journey* we see Goethe struggle to express architectural experience spatially. At first he writes about his inability to articulate his new awareness of architecture. Later, when he does try to describe a building's presence, he converts its spatiality into two-dimensional forms.[22] The problem of representing space becomes entangled with his deeper motives for traveling to Italy: his childhood education and his frustrated love affair with Charlotte von Stein. Both are themselves enveloped in the dynamics of memory, for the contrast between pictures and places stretches out in Goethe's travel writing as a distinction between immediate perception and the recollection of pictures seen in his youth and in Weimar.

Up until his Italian writing, monumental structures had been compared to tableaus or canvases that spread out before the spectator. While it is true that Goethe celebrates "experience" over reading throughout his career, in the case of architecture his insistence on bodily perceptions marks the shift from seeing architecture as a facade, onto which ornaments are attached, to recognizing buildings as forms that constitute space. His first comments on visiting Vicenza reveal his struggle to articulate in words the surplus that standing within a building provides:

> I arrived some hours ago and have already seen the Teatro Olimpico and other buildings by Palladio. An excellent little book with copperplates and a text has been published for the benefit of foreigners by someone with an expert knowledge of art. You have to see these buildings with your own eye to realize how good they are. No reproductions of Palladio's designs give an adequate idea of the harmony of their dimensions; they must be seen in their actual perspective. Palladio was a great man, both in his conceptions and in his power of execution.

> Vor einigen Stunden bin ich hier angekommen, habe schon die Stadt durchlaufen, das Olympische Theater und die Gebäude des Palladio gesehen. Man hat ein sehr artiges Büchlein mit Kupfern zur Bequemlichkeit der Fremden herausgegeben mit einem kunstverständigen Texte. Wenn man nun diese Werke gegenwärtig sieht, so erkennt man erst den großen Wert derselben; denn sie sollen ja durch ihre wirkliche Größe und Körperlichkeit das Auge füllen und durch die schöne Harmonie ihrer Dimensionen nicht nur in abstrakten Aufrissen, sondern mit dem ganzen perspektivischen Vordringen und Zurückweichen den Geist befriedigen: und so sag' ich vom Palladio: er ist recht innerlich und von innen heraus großer Mensch gewesen.[23]

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22. Werner Oechslin credits Goethe with handily adapting architectural terminology in his descriptions of Vicenza's palaces. Werner Oechslin, *Palladianismus: Andrea Palladio—Kontinuität von Werk und Wirkung* (Zurich: gta Verlag, 2008), 46.

23. Goethe, *Italian Journey,* 63; Goethe, HA 11: 52 (19 September 1786).

The passage jumps from the immediate survey of Palladio's buildings to a re-flection on the relation between architecture and its medial reproduction. The first impression concerns not the buildings themselves but what the drawings could not show. Before he can describe Palladio's palazzi, Goethe points out that book-ish knowledge of the buildings does not convey their real significance, neither the building's size nor the physical impression of how the individual components stand in relation to each other. The drawings do not reveal the buildings' spatial fullness. By pointing out how the drawings fail to convey mass, Goethe alludes to the haptic looking that Herder had long before described as combining the sense of touch with detached analytical vision.[24] Yet even as he explains the limitations of architec-tural drawing, Goethe does not construe an opposition between two-dimensional representation and the experience of space. Standing before the building, walking around and through it, the observer is ever conscious that Renaissance space was itself organized by the rules of perspective, thus preventing any real opposition between two- and three-dimensional descriptive language.

The importance of visiting the building does not vitiate the impression made by drawings seen beforehand. Even as he explains that drawings cannot convey presence, Goethe advises his reader to consult a guidebook for images of the place. In his original letter to Charlotte von Stein from Vicenza, Goethe tells her where she can find the print of Palladio's buildings in the Weimar library, and so he will not bother to describe them in writing. This quick reference to the library is one of several passing remarks in his correspondence that make clear that Goethe had already studied reproductions of Palladio's designs before leaving Germany.[25] Fur-thermore, it makes clear that he remembers the prints even as he stands in front of the site. On a semiotic level, by telling Charlotte to consult the library, Goethe accepts the convention that the buildings correspond to their textual reproduction. Thus he can stand in Vicenza confident that Charlotte in Weimar will see an ac-curate representation of the same buildings: "You can get the copper prints from the library, so I won't say anything specific, just general points."[26]

The play of architectural presence and representation is caught up in the guilt and relief Goethe feels at having left Weimar and his difficult love affair with Charlotte behind. Whatever reassurance the print might provide, Goethe insists

24. Johann Gottfried Herder, *Plastik* (1770), in *Werke,* ed. Wolfgang Pross (Munich: Hanser, 1987), 2: 401–464.

25. Herbert von Einem gives further evidence from letters and diaries that implies a familiarity with Palladio before arriving in Italy. Herbert von Einem, "Goethe und Palladio," in *Beiträge zu Goethes Kunstauffassung* (Hamburg: Marion von Schröder Verlag, 1956), 181–183. Von Einem's article is still the most comprehensive study of Palladio's importance for Goethe. Günther Martin concludes that Goethe had read Bertotti Scamozzi's *Les bâtiments et les desseins d'André Palladio* in Duke Carl August's library. Günther Martin, "Goethe und Palladio—Fiktion klassischer Architektur," *Jahrbuch des freien deutschen Hochstifts,* 1977, 70.

26. "Von der Bibliothek kannst du sie in Kupfer haben also sag ich nichts nenn ich nichts, als nur im allgemeinen" (19 September 1786; Goethe, FA 2.3: 63).

on the superiority of firsthand perceptions over representations, both image and text. He promises to compensate for his absence and his inability to write by telling her personally about the experience when he returns sometime in the future. His newfound inadequacy as an architectural writer allows him to at least momentarily refrain from communicating with Charlotte, thereby reinforcing his absence. By urging her to look at the drawing in the library, he establishes the image as a mediator between writing and speech, between his departure and his return. If he cannot find the words to write and must defer his telling, then for now at least Charlotte can gaze upon the picture that they both share, he through memory, she through the treatise. The image of the building serves as a transitional object in the dissolution of their romance. From Vicenza, he tells Charlotte that she will surely remember the building he had always liked so much, the "Casa di Palladio," a building that does not appear in the *Four Books* and whose attribution remains uncertain. Like many early modern visitors, Goethe considered the house to have been Palladio's Vicentine residence.[27] Goethe fixates specifically on this building as the center of his architectural epiphany. The legend that it was Palladio's own helps make it a nodal point for Goethe's many uncertainties. Circling around the small townhouse, he expounds on the place, its distance from Weimar with its many obligations, and the possibility of reviving his younger poetic identity through his identification and exchange with the architect. Since Goethe believes that Charlotte might remember the building, this implies that they at least discussed, if not read, works on architecture together: "You might remember that among the buildings by Palladio there is one called the House of Palladio that I have always loved in particular."[28] The passage alludes to a shared moment of reading when Goethe declared his love for the Casa de Palladio. What other affections were shared in reading the Palladian treatise remain unarticulated; however, the reference to the print and to Goethe's love for what it signifies performs the double gesture of alluding to their moment of intimacy as readers and substituting the real house in Vicenza for that intimacy. Even if Charlotte does not remember the print, the letter presumes she remembers the reading. By writing about the house in Vicenza, Goethe reminds Charlotte of his love (whether for the print or her remains unclear).

Having sent Charlotte to the library in search of a book, Goethe stresses that in reality the house is far more interesting than any mental image of it can be: "Up close it is so much more than what you think it is from a distance."[29] Again, he promises to tell her about the building when he returns. In the first letters, Goethe often offers an oral telling when he cannot explain a place in writing. That this

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27. On the same day, Goethe visited Bertotti Scamozzi, who credits the building to Palladio in his *Le fabbriche e i disegni di Andrea Palladio* (Vicenza, 1796), reprinted with an introduction by J. Quentin Hughes (New York: Architectural Book Publ., 1968), 126.

28. Goethe, FA 2.3: 67.

29. Ibid.

spoken supplement was never delivered is certain, given Charlotte's estrangement from Goethe upon his return. In yet another evasion of descriptive writing, he considers finding an artist to make an illuminated sketch of the building (the second story of the facade was covered in a fresco, now lost) but then decides that such an undertaking would attract too much attention, thereby ruining his incognito. Drawing, even when performed by another, is understood as a plausible means of representing the emotions engendered by a building. Goethe's reflections on the inadequacy of all media contradict his goal of giving Charlotte the impression that she is participating in his journey, and that, in the paradoxical logic of romantic disengagement, he has gone to Italy so that he may write to her about what he sees.[30] His comments on the paucity of pictures and words only underscore the futility of their romance.

Goethe's readiness to have his reader rely on engravings does not indicate a naïve acceptance of the image as mimetic reproduction. It reflects instead his aversion to writing scenic descriptions such as those found in a guidebook. Later, while traveling from Naples to Rome, he writes to his Weimar friends about the poverty of his own landscape descriptions. The narrator of a travelogue is required to include every detail so that the reader can construct his own image of a place. As Goethe acknowledges, he has neither the patience nor the inclination for such writing, and so he considers it a great boon that his friends have taken to reading travel books while studying engravings. What a relief, Goethe writes, that so many architects before him have more carefully represented to the external world that which he holds only in his inner eye.[31] Goethe posits a layering of travel literature wherein one representation supplements the other: "If every human individual is to be considered only as a supplement to all the others, if he is never so useful or so lovable as when he is content to play this part, this must be particularly true for travelers and writers of travel books."[32] Dirk Niefanger suggests that Goethe's position is not incompatible with a model of intertextuality that constructs Italy as a *Textraum,* a textual space, wherein different writers and artists cross-reference each other.[33] In the example of Goethe's writing on Palladio, we can see how the text presumes readers familiar with engraved images of Italian scenes. Goethe thus goes out of his way to avoid describing what the reader can see through engravings; instead he provides his own impression as a supplement to his predecessors: "So much has been said and written about Venice already that I do want to describe it too minutely. I shall

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30. Heinrich Niederer claims this paradox structures the entire journey. Niederer, "Goethes unzeitgemässe Reise," 62.

31. Goethe, HA 11: 348 (4, 5, 6 June 1787).

32. Goethe, *Italian Journey,* 331; Goethe, HA 11: 348 (4, 5, 6 June 1787).

33. Dirk Niefanger, "'Keine Natur mehr, sondern nur Bilder': Goethes Abschied vom Vesuv," in *Von der Natur zur Kunst zurück: Neue Beiträge zur Goethe-Forschung,* ed. Moritz Baßler, Christoph Brecht, and Dirk Niefanger (Tübingen: Max Niemeyer, 1997), 112.

only give my immediate impression."[34] He provides a cursory description of Saint Mark's Square with the conclusion that its sights have been pressed into engravings so often that his readers will surely have an image of it already.[35]

The incomplete mimesis provided by architectural illustrations was by no means grounds for not writing about architecture; indeed, the inadequacy of prints only reinforces Goethe's belief in the artist as a creator who makes his presence felt through the work of art.[36] The contemplation of Palladio's palaces provides a moment of double reflection, on the buildings themselves and on the failure of engravings. Goethe stresses the three-dimensionality of the buildings. Even the facades, which are so readily presented on the printed page, take on a different perspective when seen corporally. Goethe's valuation of personal experience over textual mediation is of course a familiar one, already present in *The Sorrows of Young Werther* and many lyric poems. However, the new element in Goethe's Italian writing is his concern for harmony and the spatial relationships between parts of the building. The graceful order of Palladio's buildings does not overwhelm the viewer, as, for example, when Goethe described the sublime experience of standing before the massive Gothic facade of the Strasbourg cathedral. Here in Italy the spirit is *befriedigt,* satisfied, put at ease by the building's visual rhythm. Yet Goethe still invokes the Sturm-und-Drang rhetoric that he used when describing the Strasbourg cathedral. The architect-artist has a divine quality; he virtually competes with God by creating an alternative reality: "There is something divine about his talent, something comparable to the power of a great poet who, out of the worlds of truth and falsehood, creates a third whose borrowed existence enchants us." (Es ist wirklich etwas Göttliches in seinen Anlagen, völlig wie die Force des großen Dichters, der aus Wahrheit und Lüge ein Drittes bildet, dessen erborgtes Dasein uns bezaubert.)[37] The many tensions pulling at architecture, whether it was a science or an art, whether design intentions were expressed best through buildings or drawings, whether a building should be stripped down to its structural basics or whether ornamentation had a legitimate place on a wall, all these questions Goethe seeks to resolve with his (admittedly vague) notion of a third quality. From this spectatorial position, Palladio's lie would be the manner in which he misrepresented the actual sites, whereas the truth refers to the manner in which his drawings resurrect the ideals of ancient design.[38] Far from undermining Palladio's status, these unresolved

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34. Goethe, *Italian Journey,* 77; HA 11: 67 (29 September 1786).

35. "Die sämtlichen Aus- und Ansichten sind so oft in Kupfer gestochen, daß die Freunde davon sich gar leicht einen anschaulichen Begriff machen können" (29 September 1786; Goethe, HA 11: 68).

36. Goethe, HA 11: 52 (19 September 1786).

37. Goethe, *Italian Journey,* 64; Goethe, HA 11: 52 (19 September 1786).

38. Goethe's idea of poetic architecture rejects the fantastical and is firmly opposed to baroque representation for its own sake. As the following letter to Schiller recounting his admiration for a Milanese opera company makes clear, Goethe maintains a strict distinction between architecture and stage sets; theatrical designs modify the practical rules of architecture for an aesthetic effect that belongs on the stage, not the palace facade: "Bei der Theaterarchitektur ist die große Schwierigkeit, daß man die

discrepancies invite an aesthetic resolution in the mind of the spectator. Goethe does not name the third element, though precisely its indeterminacy suggests the comparison between architecture and poetry. Beyond the truth and lie of architecture emerges *Dichtung,* a link suggested in the title of Goethe's autobiography.[39] Just as the "lie" is left unenunciated in the formula *Dichtung und Wahrheit,* Palladio's architectural *Wahrheit* and *Lüge* are transferred across genre lines to become *Dichtung.* Goethe adds architecture to the long eighteenth-century debate over how different artistic genres express similar goals. While Goethe makes no systematic claims in the manner of Lessing's Laocoon essay, he does imply that poetry and architecture share the same humanist ideals.[40]

By interpreting the misrepresentations of the book's engravings as attempts to create the illusion of an ancient order, Goethe recovers his initial belief in the poetic character of Palladio's work. In his "Architecture" essay of 1795, Goethe claims that the highest purpose of architecture is "the overgratification of the senses" (die Überbefriedigung des Sinnes), which "elevates the educated mind to the point of amazement and fascination" (einen gebildeten Geist bis zum Erstaunen und Entzücken).[41] The spectator's engagement with the building compares to the reader's attempt to grasp the purposiveness of a fictional text. The spiritual content of a particular building is derived from the individual artist's intentions, and the poetry of a building exists foremostly as appearance, or an illusion, which the architect creates to engage the cultivated viewer. The "fictional" moment in architecture depends upon the phenomenological engagement of the subject with the genius of the architect as expressed in the building.[42]

Grundsätze der echten Baukunst einsehe, und von ihnen doch wieder zweckmäßig abweichen soll. Die Baukunst im höheren Sinne soll ein ernstes hohes Festes Dasein ausdrucken, sie kann sich, ohne schwach zu werden, kaum aufs Anmutige einlassen, auf dem Theater aber soll alles eine anmutige Erscheinung sein. Die Theatralische Baukunst muß leicht, geputzt, mannigfaltig sein, und sie soll doch zugleich das prächtige, Hohe, Edle darstellen. Die Dekorationen sollen überhaupt, besonders die Hintergründe, Tableaus machen, der Dekorateur muß noch einen Schritt weiter tun als der Landschaftsmaler, der auch die Architektur nach seinem Bedürfnis zu modifizieren weiß." Johann Wolfgang Goethe, "Reise in die Schweiz," FA 1.16: 385 (Letter to Schiller, Frankfurt, 14 August 1797).

39. Günther Martin maintains that the fiction of Palladio's architecture is a dream image created by the manneristic ornamentation of his late work, which he nevertheless associates with the Villa Rotunda and the story of Mignon in *Wilhelm Meister's Apprenticeship.* Martin, "Goethe und Palladio," 79–83. Gerd Neumann connects the passage to the 1795 "Baukunst" essay and its opposition between function and decor, between supporting elements, such as walls and columns, and ornamentation. Gerd Neumann, "Aus Wahrheit und Lüge ein Drittes: Das erborgte Dasein der Architektur," *Daidalos* 1 (1981): 9.

40. "The differences between poetry and the plastic arts are differences in method, means, technique ('Wege'); their unity is their shared aim ('Ziel'). Lessing distinguishes the arts in order to insist on their proper unity." Wellbery, *Lessing's Laocoon,* 105.

41. J. W. Goethe, "Baukunst" (1795), in *Aesthetische Schriften, 1771–1805,* ed. Friedmar Apel (Frankfurt: Deutscher Klassiker Verlag, 1998), FA 1.18: 368.

42. Goethe, "Baukunst" (1795), FA 1.18: 368: "Es kann dieses nur durch das Genie, das sich zum Herrn der übrigne Erfordernisse gemacht hätte, hervorgebracht werden; es ist dieses der poetische Teil der Baukunst, in welchem die Fiktion eigentlich wirkt."

The 1795 "Architecture" essay dispenses with the assumption that buildings and plans depict a reality beyond themselves. Goethe addresses eighteenth-century theorists such as Marc-Antoine Laugier and Francesco Milizia when he insists that architecture is not a mimetic art, but he avers that at its highest level one manner of building can be used to imitate another. Architectural materials imitate one another, marble columns simulate the trees that he presumes were used in the first Greek temples. He extends the point to include historical styles and how they are imitated by later artists, namely, Palladio's effort to revive an antique Roman norm, which is Goethe's real concern. The Vicentine builder performed a double fiction by, firstly, using one set of materials to simulate another (stucco for marble) and, secondly, using ancient styles reserved for temples and other public buildings in the construction of private villas. This second level of mimesis entails a transfer of styles from one setting to another for the purpose of recreating the ancient polis within a private, rural retreat.[43] Architectural mimesis turns in upon itself. It does not show the natural world; rather each work refers to the lineage of others.

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Goethe's writing on space expresses an anxiety about time, the sense that any enjoyment of a foreign building or city is fleeting, and that only through representation can the pleasure of a new place be prolonged. The urge to preserve spatial perceptions leads him back to the very same flawed modes of representation he had so recently dismissed. Happily, Goethe's travelogue plays with the irony of this repetition. The moment of entry into a space known through images leads directly back into the circulation of images. At the point where he understands his own inscription within the cycle of signification (media-induced yearning, existential fulfillment, and nostalgic preservation), he also acknowledges his identity with the paternal Other. Landing at Saint Mark's Square, he writes that he now can see the shapes of gondolas, which he had known since his childhood. His father had brought back a small model. This encounter becomes the coda for all of Venice; from the cheerful greeting of a long-lost impression from his childhood, he extends the mood to the entire city: "Everything greeted me like an old friend; I enjoyed the cheerful impressions of my youth, which I had long ago left behind."[44] His arrival culminates with a gondola ride in which he recalls how his father told endless stories about his Italian journey, a habit he now expects to emulate: "I remembered my dear, esteemed father, who knew nothing better than to speak of these things. Will I end up like him as well?"[45] The vessel that carries Goethe also alludes to Palladio, who was born Andrea della Gondola, and whose treatise guides Goethe to Venice. Moving physically through the city recreates the childhood fantasy of enter-

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43. Goethe, "Baukunst" (1795), FA 1.18: 370: "Hierinne hat niemand den Palladio übertroffen."
44. My translation; Goethe, HA 11: 64 (28 September 1786).
45. My translation; Goethe, HA 11: 69 (28 September 1786).

ing into an image, or in this case a model of a boat. By placing himself in a gondola and toasting his father, Goethe not only recognizes his father in himself but also assumes his father's place as the enthusiastic storyteller of Italian adventures. This boat ride entails a triple movement: first, Goethe the spectator enters into the picture, and the model, of Venice as he has known them since his childhood; second, he assumes the position of his father by traveling to the place his father had visited before him so that he could experience what he had heard through stories; and, third, Goethe in Venice now knowingly assumes the position of the storyteller who will create similar images for others to contemplate and imitate.

The journey to Italy promises to undo Goethe's pained awareness of the contrast between signifier and experienced referent. Only after he settles into his trip does he acknowledge how much the inadequacy and longing he felt in Germany were organized by images of Italy. Upon arriving, he declares his relief that the word Venice no longer stands as an empty signifier: "So now, thank God, Venice is no longer a mere word to me, an empty name, a state of mind which has so often alarmed me who am the mortal enemy of mere words."[46] In both Venice and Rome Goethe describes how the act of traveling into a city already made familiar through engravings allows one not merely to revive childhood fantasies, but to enact them for the first time in physical form. Once in Italy Goethe stresses that his older imaginative representations have been replaced by a literal seeing, touching, and doing. To underscore the difference between representation and experience, Goethe invokes the myth of Pygmalion: "How different was the living from the sculpted stone!" The myth eroticizes Roman architecture. It sets up the contrast that Goethe uses in the opening strophe of the *Roman Elegies,* the difference between the cultured tourist who stares at stones by day and the naturalized visitor who learns about form from his mistress at night.

Joan Ramon Resina's concept of the afterimage helps explain the critical comments Goethe makes when he finally arrives at the places that he has known for years through printed images.[47] The term "afterimage" refers first of all to the visual sensation that lingers after the stimulus that provoked it has disappeared—a phenomenon Goethe describes in his *Farbenlehre.* But it is also understood by Ramon Resina as the critical process that destabilizes the image as the definitive representation of a site. The afterimage is what remains once the image is revealed as temporally conditioned by historical forces that shape its production. The usual art historical questions—such as Who commissioned the image? Which social perspective does it represent? What media were deployed in its construction?—create an effect that does not negate the image but eliminates its innocence. They dem-

46. Goethe, *Italian Journey,* 74; Goethe, HA 11: 64.

47. Joan Ramon Resina, "The Concept of the After-Image and the Scopic Apprehension of the City," in *After-Images of the City,* ed. Joan Ramon Resina and Dieter Ingenschay (Ithaca, NY: Cornell University Press, 2003), 1–22.

onstrate that the image does not function as pure representation. In a sense the afterimage entails the framing of the image within a critical viewing that looks past the lines of sight that the engraving constructs. For travelers to Italy, criticism of an established image entails looking at what lies outside the frame. The comparison between the image as it appears on the page and the actual conditions of a place as a traveler sees them casts the image into doubt, not because it falsely represents so much as because of all that it does not show. The image is revealed as idealistic when compared to the actual place, even as the site is made idealistic through the memory of its imagistic representation.

Even though Goethe stresses the importance of seeing a building directly, he does not let the immediate supersede the represented. He implies a sequence wherein writing, drawing, viewing, and recollecting follow upon one another, each attempting to compensate for the imprecisions of the other. The act of looking brings forth new attempts at drawing, which are responses to the prints that motivated a trip to the building in the first place. Engravings motivate the trip and remain afterward as commentaries upon the experience. Drawing elaborates upon the physical contemplation of the building.

The complex rotation from observation to recollection to renewed representation is vividly apparent in Goethe's account of his visit to the temple of Minerva in Assisi. Whatever fictional allowance Goethe granted Palladio's drawings of his own buildings he retracts in the name of archeology when faced with an actual building from antiquity.[48] He stops in Assisi (a liminal space between Venice and Rome) largely because of Palladio's drawings of the temple but is again surprised to find that the master's drawings do not conform to the appearance of the building's facade, specifically the pedestals upon which the Corinthian columns stand. Goethe writes that he can imagine a practical explanation for why the steps were cut through the soccus rather than placed in front of the columns. Had the original builders followed the established rule of placing the steps before the columns, the temple would have been too far removed from the street. For Goethe the foreshortening of the temple's facade, wherein steps and columns are interspersed, makes practical sense for a small temple in a provincial town. Palladio, whom he trusted, and here we suddenly find Goethe already writing in the past tense, must not have seen the building; otherwise he would have drawn it differently. Thus Goethe concludes with his axiom that the presence supersedes representation: "Thus the best copper print cannot teach us as well as presence." (So kann uns das beste Kupfer

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48. When engaged with architecture, Goethe often positions himself as the precocious student questioning the paternal master. This pattern emerges in his confrontations with his own father over the family home, his invocation of Erwin in Strasbourg, his adoration of Palladio, even his reliance on Winckelmann while viewing the temples at Paestum. For a subtle Lacanian account of the Strasbourg essay, see Kenneth S. Calhoun, "The Gothic Imaginary: Goethe in Strasbourg," *Deutsche Vierteljahrsschrift für Literaturwissenschaft und Geistesgeschichte,* 2001, 5–14.

nicht lehren wie die Gegenwart.)[49] Palladio scholars note that the Italian surely did view the temple himself as we have sketches from 1541 that he drew as he was preparing the *Four Books* for publication. The discrepancy between the site and Palladio's illustration is explained by Palladio's concern to demonstrate the primacy of decorum over functionality; thus he represents the temple as it should properly have been built, rather than its compromised existence.[50] Goethe is less concerned with laying out architectural doctrine, yet hyperbole in architectural drawing has an epistemological resonance for him that it would not have had for Palladio. What in the sixteenth century amounts to an idealization of a compromised reality was understood in the eighteenth century as an inaccuracy. This mistrust of drawings is confirmed in Goethe's letter to Charlotte von Stein wherein he breaks off his description of the temple by telling her to consult Volkmann's travelogue for a complete description. In the later, published version of the *Italian Journey,* he leaves off this bibliographic advice but ends the episode with the prophetic claim that he cannot express how fruitful his viewing of the temple will be: "I cannot describe the sensations which this work aroused in me, but I know they are going to bear fruit for ever."[51] This last line with its future orientation was written long after Goethe had left Assisi; thus, when understood within the editorial history of the work, it functions as a backdated prediction that has already come true.[52] It also suggests a limit to the text's own ability to portray the experience of an architectural site, thereby inviting, or better still, urging, the reader to abandon the book in favor of travel to Italy, a response generations of Germans have chosen.

By concluding the published account of the Assisi episode with one of his well-honed expressions of the inexpressible, Goethe relies on poetic language to translate architecture into subjectivity. The temple is subsumed within the reflective movement of poetic language. The otherness of ancient architecture, the inability of moderns to know its origins, the inevitable need to speculate about what the ancients wanted, and the almost certain instability of such knowledge are preserved as an educational influence. The subject standing before the temple is filled with conjectures and desires that can best be summarized as both impossible to explain and yet of fundamental importance for the poet. The difference between print and perception, the first factual discrepancies Goethe recognizes, leads to larger reflections on what the viewer learns from the temple and how he transforms these lessons. Goethe does not draw out the trope of inarticulateness, because to do so would

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49. Goethe, FA 2.3: 67.

50. Andreas Beyer, "Kunstfahrt und Kunstgebilde, Goethes 'Italienische Reise' als neoklassizistischen Programmschrift," in *Goethe und die Kunst,* ed. Sabine Schulze (Stuttgart: Hatje, 1994), 451.

51. Goethe, *Italian Journey,* 121; Goethe, HA 11: 118.

52. Goethe uses the temple's deviation from the norm as an illustration in his "Architecture" essay of 1795; he provides several drawings of how even ancient architects altered the conventions for designing public buildings. Goethe concludes the discussion in the essay by pointing out that Palladio also freely invented variations on the classical rules. Goethe, "Baukunst" (1795), FA 1.18: 373.

undermine the educational point of journey, the construction, or *Bildung* of the self. The many epiphanies that make up the Italian trip should have more than a strictly private significance; hence Goethe feels compelled not only to write about architecture but to draw it. In order to make clear the discrepancy between building and engraving, Goethe decides to draw an architectural plan of the temple. Because he has to tear himself away from the building, because he cannot spend the rest of his days staring at its facade, he urges that some architect, and a few lines later he counts himself as one, draw an exact plan of the place: "I tore myself away reluctantly and firmly resolved to call the attention of all architects to this building so that an accurate plan may be made available to us." (Ungern riß ich mich von dem Anblick los und nahm mir vor, alle Architekten auf dieses Gebäude aufmerksam zu machen, damit uns ein genauer Riß davon zukäme.)[53] The word *riß* appears twice in this one sentence, once as the verb "to tear," as in to pull oneself away from something, and then as the noun "plan," in the sense of a two-dimensional schematic of the building, each word orthographically distinct, but aural the same. The second *Riß* compensates for the first; the drawing substitutes for no longer directly seeing the temple. Only a detailed plan can make clear what Goethe has seen, namely, that Palladio misrepresents the temple's facade, yet of course this urge to draw the temple faithfully replicates Palladio's own mission to share the glories of ancient architecture with the learned world via his drawings. Goethe wants to outdo Palladio, to take accuracy one step (or many) beyond the master. The point, however, is not pedantic accuracy. Goethe has not merely taken up precise archeological methods; rather, the discrepancy between representations reiterates the primacy of firsthand experience. Drawing and perception are intertwined, so that one instructs the other. Pictures teach the viewer how to look at a site; viewing the place guides further drawings of it. Goethe assumes different positions within this circle without dwelling on the paradox.

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53. Goethe, *Italian Journey,* 121; Goethe, HA 11: 118.

Gothic Deconstruction: Hegel, Libeskind, and the Avant-Garde

It is a commonplace when discussing Hegel to associate his philosophy with authoritarian government. Henri Lefebvre's comment early in *The Production of Space* is but one example: "According to Hegelianism, historical time gives birth to that space which the state occupies and rules over."[1] Having removed Hegel from serious consideration as a theorist interesting to the avant-garde, Lefebvre, like others, proceeds to engage a variety of Hegelian concerns. However, as valid or heartfelt as such denunciations may be, they also seem to provide a cover for theorists to pursue the details of Hegel's thinking without suffering the consequences of his reputed Prussianism, and its Nazi legacy. Here I wish to examine Hegel's account of architectural history as it relates to two spatial thinkers usually placed at a far remove: Henri Lefebvre and Daniel Libeskind. While Lefebvre might well be situated in the broad reception of Hegel within French theory that follows on Alexandre Kojève's famous lectures on *The Phenomenology of Spirit,* few would posit an affinity between Libeskind's architecture, particularly his Jewish Museum in Berlin, and Hegelian thought. After all, if Hegel is the "philosopher of the state," and that state is directly related to the rise of Hitler and the Holocaust, how likely can it be that a memorial to the Jewish culture in Germany would reiterate Hegel's

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1. Henri Lefebvre, *The Production of Space,* trans. Donald Nicholson-Smith (Oxford: Blackwell, 1991), 21.

aesthetics of building? Yet, in architecture and urban planning, the European state is often the sponsor of radical design. Berlin's Jewish Museum requires official support in order to convey regret for the Holocaust. If the enterprise were private, as in the case of New York's Jewish Museum, it would send a very different, indeed a quite opposite, message. A Jewish museum in Berlin without government backing would suggest that the German state seeks to avoid addressing German-Jewish history. Given that Hegel presents several scenarios that demonstrate how grand buildings form national identity, my question is, how does subversive architecture operate when it is aligned with official policy, especially if that policy is itself highly self-critical? This is not an ethical question, as is now debated among architects building in China, so much as an investigation of the subversive building's aesthetic, or phenomenological, relation to the individual who enters it.[2]

As behooves any German philosopher, Hegel commences his discussion of architecture by questioning its status as an autonomous art. Kant had already suggested that buildings may be so determined by practicality that they are not always objects of (positive) aesthetic judgment.[3] This concern appears right at the start of Hegel's discussion as well. He limits the overall standing of architecture within his own system by stating that the material and forms of building cannot completely represent the complexity of human thought unfolding over time.[4] Hegel reiterates Kant's concern that architecture belongs to the technical skills that serve practical ends but that only occasionally manifest artistic expression. In his 1795 essay on *Baukunst* Goethe similarly sets conditions on architecture's claim to art: "If architecture is to earn its name as an art then it must bring out the sensual and harmonious in objects in addition to the necessary and the practical. This sensual-harmonious quality is in the conditions of every distinctive art; only from within these conditions can the artform be judged."[5] Aloys Hirt, the Berlin professor who had spent years in Italy studying architecture, provided a direct biographical connection between Goethe and Hegel. The *Lectures on Aesthetics* takes up the challenge Hirt presented at the opening of his 1809 *Architecture according to the Principles of the Ancients:* to

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2. The German architectural media presents the building boom in China around the Beijing Olympics as the mirror image of Berlin's reconstruction in the 1990s. Massive, avant-garde projects are coupled with a new generation of skyscrapers that show no regard for traditional city order.

3. Immanuel Kant, *Critique of Judgment,* trans. J. H. Bernard (New York: Hafner Press, 1951), §2, pp. 38–39.

4. My analysis of Hegel's *Aesthetics* overlaps with Mark Jarzombek, "The Cunning of Architecture's Reason," *Footprint: Delft School of Design Journal* 1 (Autumn 2007): 31–46. Jarzombek concerns himself primarily with the question of architecture's status as a discipline within philosophical discourse. Critics such as Jarzombek and Mark Wigley struggle against what they perceive as traditional philosophy's denigration of architecture, whereas my concern is to demonstrate just how engaged German thought was with the problems presented by architecture. Half-empty, half-full.

5. J. W. Goethe, "Baukunst" (1795), in *Aesthetische Schriften, 1771–1805,* ed. Friedmar Apel (Frankfurt: Deutscher Klassiker Verlag, 1998), FA 1.18: 367.

formulate a theory of art that would compensate for the historical erasure of build-ers' intentions by apprehending the ideal implicit in architectonic structures.[6]

This debate over architecture's standing as a free and autonomous art is not just an old warhorse trotted out by antiquarian idealists. For much of the twen-tieth century it manifested itself as the ideological concern over whether architec-ture can maintain a critical relation to capitalism. Since the late 1990s, there has emerged a postcritical line of analysis that seeks to move past the oppositions that Marxism and poststructuralism presume. Even as a postcritical aesthetics seeks to dispense with social critique and reform through architecture, Stanford Ander-son contextualizes the effort to escape the contradictions fostered by theory with a long view that stretches from 1960s to the present: "Recurrently, anxieties arise around such issues as these: can architecture be other than a mere servant to com-mercial/capitalist/ideological forces?"[7] The most recent postcritical forms of archi-tecture would eliminate antagonism between the architect as autonomous artist and the client's economic needs by blocking larger social theoretical concerns to concentrate on the specific components of designing and raising a building. Design innovation and commerce would merge to produce an architecture that does not seek to unsettle or reform its inhabitants, according to theoretical expectations gen-erated outside the immediate work of architecture. Postcritical designers want to stop measuring the discipline according to abstract standards drawn up outside the fluctuating contingencies of their own practice. In a sense, they want to suspend the debate over architecture's autonomy by declaring architecture free from external theory, for they see any comparison between architecture and critical philosophy as a losing game, in which architects are always characterized as not living up to the demands imposed by critical thought.[8] Yet this new attempt to move beyond critique and autonomy has produced a strong response from architects who value theory's challenge to convention and who find that the postcritical, "cool" aesthetic is without much specific content, indeed is a project that the more patient argue needs further articulation. Thus the question of architecture's autonomy reemerges precisely as we wait to see if has been overcome.[9]

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6. "Wir wiederholen … noch einmal, daß wir 'die Baukunst nach den Grundsätzen der Alten' nicht bloss historisch darlegen, sondern daß das Geschichtliche uns nur als Grundlage und Erkenntnissquelle gedient hat, um daraus die architektonischen Grundsätze zu entwickeln. Nach unserer Überzeugung lässt sich bloss aus der Geschichte ein System der Baukunst aufstellen, welches dem Ideal dieser Kunst entspricht." Aloys Hirt, *Die Baukunst nach den Grundsätzen der Alten* (Berlin: Realschulbuchhandlung, 1809), vii.

7. Stanford Anderson, "Quasi-Autonomy in Architecture: The Search for an 'In-Between,'" *Perspecta* 33 (2002): 30.

8. Robert Somol and Sarah Whiting, "Notes around the Doppler Effect and Other Moods of Mod-ernism," *Perspecta* 33 (2002): 72–77.

9. "May I conclude then by calling for much more careful reflection from us all, before the respec-tive roles of critique, innovation, authenticity, and expanded cultural possibility can be integrated in an 'operative' new theory of praxis for our times?" George Baird, "'Criticality' and Its Discontents," *Har-vard Design Magazine* 21 (2004/2005): 6.

In Berlin, attacks on avant-garde architecture began in the 1990s as the public debated how to build in the areas once sealed off by the Berlin Wall. Conservatives, such as Vittorio Lampugnani and Hans Kollhoff, made the aggressive, and ultimately successful, claim, that architects ought not be treated as creative artists free to follow their own stylistic inspirations in the manner of poets and painters; rather, they should be obliged to follow local traditions. Lampugnani stated quite explicitly: "We have to give up the myth of innovation, one of the fateful inheritances from the avant-garde epoch."[10] New construction in Berlin, Lampugnani argued, should be deliberately monotone. The aesthetic value in repetition needed to be "relearned." It had once been the pride of German architecture to build in a uniform style; this "simplicity" needed to be appreciated once again. In effect, designs that disrupted the standard street facade, that called out to the pedestrian, that subverted tradition, were to be banished. Instead of an architecture that challenged through its striking appearance, Lampugnani advocated for "an architecture of simplicity, density, silence, order, convention, and durability."[11] The Berlin authorities backed up their point with strict zoning regulations that precluded most forms of experimental design, as a gesture of local resistance to a globalized economy. For traditionalists, innovative architecture was equated with corporate attitudes that placed similar-looking buildings throughout the world without regard for the local environment. The attack on critical architecture invoked popular discontent with high modernist projects in Berlin. By coupling new urbanism with arguments about Berlin's unique street life, the traditionalists placed high modernist works by Gropius in the same camp as Peter Eisenman and Rem Kohlhaas. The public debate over the city center produced one unusual twist; Daniel Libeskind lectured Berliners that the freedom to design imaginatively belonged to a local tradition that stretched farther back than the Wilhelminian *Mietshäuser* (tenements) of the late nineteenth century: "The explicit denigration and rejection of architecture as art…radically denies the tradition, which begins before Schinkel and Behrens and stretches far beyond Mies."[12]

The conservative reaction against architectural autonomy was motivated in large part by a long-standing resentment against high modernist projects in West Berlin. The debate in the 1990s provides a showcase of how aggressive and deep-seated opinions about public building can become. The debate was intense not only

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10. "Wir müssen den Mythos der Innovation, eine der verhängnisvollsten Erbschaften aus der Epoche der Avantgarden, aufgeben." Vittorio Lampugnani, "Die Provokation des Alltäglichen: Für eine neue Konvention des Bauens," in *Einfach schwierig: Eine deutsche Architekturdebatte,* ed. Gert Kähler (Braunschweig: Vieweg, 1995), 16.

11. "eine Architektur der Einfachheit, der Dichte, des Schweigens, der Ordnung, der Konvention und der Duaer." Vittorio Lampugnani, "Die Neue Einfachheit: Mutmaßungen über die Architektur des Jahrtausendwende," in *Einfach schwierig,* 26.

12. "Die ausdrückliche Herabsetzung und Ablehnung der Baukunst…leugnet radikal die Tradition, die vor Schinkel und Behrens anfängt und weit über Mies hinausgeht." Daniel Libeskind, "Die Banaliät der Ordnung," in *Einfach schwierig,* 40.

because of the cold war fears transforming themselves into feelings of relief and triumph, but also because of questions about the role of architecture in shaping consciousness. After decades of ideological concessions to modernism's claim to reform society by redefining the consciousness of the populace through design innovation, conservatives felt a release of pressure with the end of Communism. Suddenly it seemed possible to build deliberately bourgeois offices and apartments. The claim that architecture necessarily reformed society came under strong attack. Architecture was denied the ability to alter consciousness; it was meant rather to affirm a West German professional fantasy of urban living, the desire to live like the grand bourgeoisie of the late nineteenth century, to live like Walter Benjamin's parents, to assume the position of the ruling class before World War I. Bauhaus modernism was blamed as the first design movement that sought to change consciousness: "With this fairy tale about the magical power of architecture to revolutionize the hearts and souls, even more the whole of society, begins the twentieth-century history of overloading architecture with fantasies of salvation and progress."[13]

Traditionalists, such as Fritz Neumeyer, claim that Bauhaus's utopian aspirations were alien to architecture, yet we can find many important earlier theorists who investigate the manner in which buildings alter people. The Renaissance assumption that beautiful architecture mimics the human form had always allowed for its chiasmic reverse. Beautiful buildings produce beautiful people. One clear motivation for princes to redesign their cities was the claim that a virtuous people is raised within ideal buildings. Berlin traditionalists did not recognize that the drive to shape thought through building was already an established tenet of German philosophy; Hegel, most notably, linked autonomy and interpolation as a fundamental feature important to architecture. While Gothic architecture was hardly revolutionary, in Hegel's system it constituted a dramatic progression in the ability of architecture to fill heart and soul with images of salvation. Hegel's account of how design alters consciousness radically departs from the view that architecture serves conventional needs, and in the overheated context of Berlin polemics makes him a surprising advocate for the avant-garde.

Hegel's lectures were given during just one of those innovative phases Libeskind mentions. Berlin architects during the first decades after 1800 sketched fantastical structures on paper, in part because there was no money for building, and in part because, as Schinkel's stylistic experiments showed, public taste swung between classical and Gothic tendencies. Hegel, for one, favored the medieval tradition and argued quite vehemently against the neoclassicism that the post-Wall traditionalists invoked in their critique of the avant-garde. In a move that reveals how far

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13. "Mit diesem Märchenglauben an die magischen Kräfte der Architektur, Herz und Seele des Menschens, je die gesamte Gesellschaft zu revolutionieren, beginnt im 20. Jahrhundert die Geschichte der Überfrachtung der Architektur mit Erlösungsphantasien des Fortschritts." Fritz Neumeyer, "Die Architekturkontroverse in Berlin: Rückfall in den kalten Krieg," in *Einfach schwierig,* 67.

removed he was from modernism in general, Hegel reverses the familiar opposi-
tions between beauty and utility, art and engineering, by claiming that functional-
ism diminishes architecture's character.[14] He argues that a well-designed space can
induce critical reflection in subjects, without grounding that reflection on a func-
tional definition of architecture. Hegel broadens the Enlightenment critique so that
it includes the problem of how subjectivity, and not just society, is organized. With-
out advocating the utopian goals of the Enlightenment or Bauhaus modernism, he
engages directly with the question of whether architecture shapes, or interpellates,
inhabitants, thereby legitimating architecture as a form of *Bildung,* as an art that
both represents and molds subjectivity.

Classical Greek and Roman design receives the weakest praise in Hegel's tri-
partite history of architecture. Rather than crediting Mediterranean antiquity with
the perfect organization of spatial beauty, Hegel distinguishes himself from En-
lightenment classicists and modernists by arguing that Greek designs turned away
from the true nature of architecture. The ancient temple was an overly practical
structure, concerned primarily with providing a secure enclosure for the sacred
contents housed within. As a succession of functional arrangements of load-bearing
elements, the Greco-Roman tradition ignored what Hegel counts as the inherent
source of architectural meaning: the sculptural symbolism of a building's shape
and mass. Hegel has a flexible understanding of sculpture. Initially the human
body serves as the model for sculpture; the Gothic, however, has sculptural quali-
ties that do not refer to the human body mimetically. Just as Kant's inclusion of
the arabesque in his *Critique of Judgment* opens his aesthetics to the formal, non-
representational qualities of twentieth-century art,[15] Hegel has a broad-enough
understanding of sculptural architecture to suggest a connection between the flow-
ing shapes of medieval churches and computer-generated designs of contemporary
architecture. In both cases, sculptural design eschews geometrical rigidity. The
decorative shapes hanging on the front of buildings are a vestige of the earlier,
more expressive phase of architecture that Hegel ascribes to the Orient, by which
he means civilizations along the Ganges, Tigris, Euphrates, and Nile rivers. Hegel's
Orientalism celebrates archaic architecture for its sculptural symbolism, crediting
the East with understanding architecture in its essence.[16] Yet even as Hegel values
architecture that existed prior to Greece, he places it within a historical narrative
that culminates in northern Europe. Ultimately he presents the Gothic cathedral as
the highest form of architecture, because it revives the symbolism of archaic monu-
ments while resolving classicism's engineering concern for load bearing through

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14. For a further discussion of how Hegel's concerns differed from those of modernists, see John
Whiteman, "On Hegel's Definition of Architecture," *Assemblage* 2 (1987): 9.

15. Kant, *Critique of Judgment,* §16, 65–66.

16. For a broader discussion of Hegel's attitude toward Egypt, which unfortunately does not con-
sider architecture, see Jeremy Pope, "Ägypten und Aufhebung: G. W. F. Hegel, W. E. B. Du Bois, and
the African Orient," *CR: The New Centennial Review* 6.3 (2006): 149–192.

a vaulted enclosure that inspires private religious contemplation within a space wide enough to contain the entire community. As in the case of Goethe's essay on the Gothic cathedral, "On German Architecture," the art historical limitations of Hegel's account are obvious. The value of both texts lies in their account of how architecture constructs subjective meaning.

In my reading of Hegel's architectural schema, I wish to isolate the individual modes of spatial perception, to lift them out of their teleology and treat them as singular possibilities. Without falling into eclecticism, we can read symbolic, classical, and romantic architecture as symptomatic of the housing shifts brought on by industrial modernization. If we read Hegel literally, then we are faced with a philosopher presenting an inadequate history of architecture, for, in his aesthetic lectures, Hegel engages in precisely those content-specific judgments about art that Kant claimed philosophers ought to avoid.[17] If we dislodge Hegel's theoretical insights from their sequential logic, we can find implications of his arguments that help explain the importance of architectural change around 1800 while providing inspiration to critical theory in the present. Such a dismembering of Hegel's system is not unusual. Henri Lefebvre recuperates the moments of architectural perception in Hegel's aesthetics. Indeed, Lefebvre's account of monumental space commences with a résumé of Hegel's claim that architecture is essentially symbolic, representational. With his contrast between buildings and monuments, Lefebvre ascribes the same communal quality to symbolic constructions, a feature that has disappeared only with capitalism: "For millenia, *monumentality* took in all the aspects of *spatiality.* . . . Monumental space offered each member of a society an image of that membership, an image of his or her social visage. It thus constituted a collective mirror more faithful than any personal one."[18] Far from associating monumentality with fascism or capitalist modernism, as participants in the Berlin debate so often did, Lefebvre understands it as preindustrial mode of spatiality that includes both the Oriental ruin and the Gothic cathedral, two terms Hegel treats as distinct.[19] Nevertheless, this earlier monumentality has hardly been overcome; indeed, for Lefebvre it might yet reappear: what Hegel saw as the Gothic cathedral's accomplishment, the union of technical innovation with symbolic expression, Lefebvre sees as a future threat in capitalist architecture.[20]

When understood in the context of the housing shifts that occurred around 1800, Hegel's celebration of romantic, or Gothic, churches says a great deal about the emergence of private space and its accompanying forms of subjectivity in the urban bourgeoisie. During the eighteenth century, German architectural writers

17. Kant, *Critique of Judgment,* §34, 127–128.

18. Lefebvre, *Production of Space,* 220.

19. "The balance of forces between monuments and buildings has shifted. Buildings are to monuments as everyday life is to festival, products to works, lived experience to the merely perceived, concrete to stone." Lefebvre, *Production of Space,* 223.

20. Lefebvre, *Production of Space,* 223.

noted that intimately arranged apartments had emerged as the dominant housing arrangement for the middle classes. Hegel's broad philosophical narrative tracing the transition from the open cultic space of the Mediterranean temple to the introspective enclosure of the medieval church needs to be understood in relation to the shift in eighteenth- and nineteenth-century housing, bemoaned by Wilhelm Riehl and diagnosed by Jürgen Habermas, in which the open sociability of the single-room farmhouse was supplanted by the compartmentalization of the urban nuclear family isolated within its personal rooms.[21] To the extent that we still live in a world of private compartments, Hegel's account of interiority as a form of consciousness and design helps us understand that the project of using architecture to transform the way people thought began well before the utopian aspirations of Bauhaus and was not always as punitive as the panopticon's disciplinary regime.

In an era dominated by functionalist building, Hegel's theories about symbolic and romantic design can help explicate contemporary architecture that diverges from the modernist canon. Through his insistence on architecture's symbolism, Hegel provides a starting point for theorizing designs that do not set functionality as their first priority. At the same time, Hegel's account allows us to reflect on how sculptural buildings alter our perception—of ourselves and the urban environment. His continuing importance as an architectural thinker emerges in Henri Lefebvre's discussion of monumental space, which commences with a reiteration of Hegel's theory of archaic architecture.[22] Through much of his lecture on architecture, Hegel holds the symbolic in opposition to the functional. Even in the synthesis that he posits as the Gothic cathedral, the sculptural and communal aspects dominate over the engineering innovations introduced by Gothic builders. Indeed, architectural discourse since the early twentieth century has insisted on preserving this opposition between designs that signal their subordination to technological demands and those that overtly seek to produce aesthetic effects. Hegel certainly understood this conflict; however, he sided quite conspicuously with the symbolic. In order to show just how complicated Hegel's understanding of the symbolic was, I will analyze Daniel Libeskind's Jewish Museum in Berlin as sculptural and romantic, a gesture that brings together two thinkers who are usually understood as politically and metaphysically antithetical. The suggestion that the Jewish Museum indulges in a romantic aesthetic has persisted ever since Libeskind's famous exchange with Derrida over the possibility of representing absence, in this case the famous "void" that runs through German-Jewish history as well as through the middle of Libeskind's building. In their conversation, Derrida repeatedly warns that any concrete manifestation of emptiness runs the risk of becoming a particular sign, and not a true void. Andreas Huyssen, in his analysis of Libeskind's place in Berlin architecture of

21. Jürgen Habermas, *The Structural Transformation of the Public Sphere,* trans. Thomas Burger and Frederick Lawrence (Cambridge, MA: MIT Press, 1989), 45.

22. Lefebvre, *Production of Space,* 220.

the 1990s, portrays this problem as the risk that the Jewish Museum would become "romantic."[23] My coupling of Hegel and Libeskind pursues this possibility, even as it tries to expand what it means for a building to be "romantic": that it can be innovative as well as representative. The accusation leveled against the avant-garde, namely, that it designed buildings to interpolate, applies to Hegel's celebration of the Gothic as well. Ultimately, both strands of my argument will show Hegel to be a thinker engaged with understanding how architecture constructs subjectivity. Despite all the flaws in his history of architecture, it does demonstrate that philosophical concepts of the private self depend upon spatial reasoning.

Symbolic Architecture and the Master/Slave Dialectic

The first phase of architectural history appears as monuments depicting human and animal bodies, or their parts—everything from phallic columns to giant sculptures of rulers to immortal sphinxes. Initially, these structures lack interior spaces. They are solid masses to be perceived from the outside as human incursions into a natural landscape. Even the Egyptian pyramids or the towers Herodotus describes project outward across a vast arena. Their internal spaces remain hidden to the viewer. The structure appears as a solid artifact, distinct from the simple shelters that housed early humans. By commencing with monuments, Hegel deliberately leaps over the Vitruvian myth about architecture originating with a simple hut. Hegel consciously wants to separate the practical enclosures from structures that represent an idea. Implicit at every stage of his history is the exclusion of practical housing from the art of architecture.

The Tower of Babel myth informs Hegel's account of symbolic architecture perhaps more than he acknowledges. Archaic structures bring together divergent populations under the authority of a great monarch. The ultimate point of the construction project is the unity formed through labor. The building itself is understood by the peasants as the product of their labor, as an affirmation of their collectivity, more than as the insignia of the monarch's authority. It becomes a sign of their communal effort, the tangible proof of the nation's unity through work. Hegel suggests that this monumental expressiveness is not confined to archaic civilization: "With this in view, it may be said that whole nations have been able to express their religion and their deepest needs no otherwise than by building, or at least in the main in some constructional way."[24] The shadow of Babel over Hegel's argument becomes most evident when he juxtaposes building with speech. The

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23. Andreas Huyssen, "The Voids of Berlin," *Critical Inquiry* 24.1 (1997): 80.

24. G. W. F. Hegel, *Aesthetics: Lectures on Fine Arts,* trans. T. M. Knox (Oxford: Clarendon Press, 1975), 636; "Man kann in dieser Hinsicht sagen, daß ganze Nationen sich ihre Religion, ihre tiefste Bedürfnisse nicht anders als bauend oder doch vernehmlich architektonisch auszusprechen gewußt haben" (G. W. F. Hegel, *Ästhetik* [Berlin: Aufbau Verlag, 1976], 2: 29).

massive tower stands where communication fails. Archaic civilizations communicated through building when speech was impossible. Having once been raised, a building's continued significance depends on its permanence or disappearance. Violent destruction constitutes meanings for buildings after the fact. Some buildings acquire entirely new meanings as ruins, such as Berlin's Gedächtniskirche, which every schoolchild learns is a warning against war, even more so because it was originally raised in celebration of Prussia's ruling dynasty. The destruction of monuments communicates negatively as absence, though, as the example of the World Trade Center demonstrates, violence can create a new identification with a building after its demise that was never there in the first place. The emotional knot that appeared after the Towers' destruction had no relation to any fondness for the buildings while they were standing whole. Furthermore, the inarticulate intensities that loss creates depend on the political conclusions drawn from looking back, as can be seen in the difference between the mourning for the old Penn Station and that for the World Trade Center. In both cases, however, their demise drew together a new collective identity that was dedicated to preventing a repetition of the first shocking loss. The sight of a ruin, whether the famous photo of pieces of Penn Station lying in a landfill, the video of the Towers burning, or a view of the broken church in the middle of the Kurfürstendamm, is supposed to elicit a categorical refusal of the violence that destroyed the building. This "Nie wieder" layers itself over, indeed may even supplant, the original monument.

The long-term survival of buildings layers on additional connotations that almost obscure any original purpose. Long-standing buildings become myths in Barthes's sense, their initial denotation lost to the vague amazement their continued existence produces. The sheer feat of an ancient building's construction and subsequent survival proves architecture's extralinguistic force. The Tower of Babel story is not a warning so much as a demonstration of society temporarily binding its members together. Whereas Kant retells the story in epistemological terms as a warning against overextending knowledge,[25] Hegel takes the Babel tale as an indication of architecture's ability to convey meaning outside language. The collective impact of architecture emerges most clearly when buildings are designed as symbols, a practice Hegel historically confines to the Orient—Babylon, India, Egypt. The massive ruins that have survived time and revolutions Hegel describes in terms of Kant's *Critique of Judgment* as filling the viewer with wonder and amazement. In more than one sense the construction of these works makes the nation. The masses of laborers brought together at one site depend upon and constitute a collective identity, while the ruins remind us of their accomplishment. Symbolic buildings stand in for speech by representing collective labor. The work required for construction adheres to the building's meaning, for those who directly labored upon it, for the

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25. Kant, *Critique of Pure Reason,* 573; Kant, *Kritik der reinen Vernunft,* 759 [A707/B735].

nation that monument later comes to represent, and, much later, for moderns who wonder at the feat. Lefebvre remarks that the archaic monument, still standing after centuries, represents a will to negate death, an urge by the architect to transfigure the body into a space with religious, political, and archeological meaning.[26]

The archaic monument's transcendence can be traced back to Hegel's famous master/slave dialectic in *The Phenomenology of Spirit.* Here he describes two forms of self-consciousness that stand in relation to, indeed confront, one another. The master exists as a being self-conscious for himself, confident in his own supremacy, whereas the slave is confronted from outside himself by fear and the threat of death. Only through his labor for the master does the slave forestall annihilation. Out of his dread that he may be killed at any moment, the slave acquires a pure negative consciousness that all things are transitory, that nothing lasts or is stable. This new understanding acquires stability through work, which shapes the slave's relationship to the material world. This new engagement with objects is the result of having passed through abject negativity to find a new, detached selfhood through service. While the master perceives the world through his unself-critical desire for objects, the servant "constructs" his relation to them out of nothingness.[27] Alexandre Kojève describes the dialectic in terms that apply more directly to the production of artifacts:

> In and by Work, Man negates himself as animal.... That is why the working Slave can essentially transform the natural World in which he lives, by creating in it a specifically human technical World. He works according to a "project" which does not necessarily result from his own innate "nature"; he realizes through work something that does not (yet) *exist* in him."[28]

In the *Aesthetics,* Hegel gives an even more specific architectural and political version of the master/slave dialectic. The purpose of building symbolic monuments was to gather together forcibly a population under the authority of the deified monarch, so that the divergent peoples become a nation at the construction site. Over time, this agenda becomes the standard for deciding in what manner to build. After its completion, the monument becomes the representation for the religious unity of the population: "The aim and content of the work was at the same time the community of those who constructed it."[29] As the process of construction becomes

26. Lefebvre, *Production of Space,* 221.

27. G. W. F. Hegel, *Phenomenology of Spirit,* trans. A.V. Miller (Oxford: Oxford University Press, 1977). 111–119.

28. Alexandre Kojève, *Introduction to the Reading of Hegel: Lectures on the Phenomenology of Spirit,* assembled by Raymond Queneau, edited by Allan Bloom, and translated by James Nichols (Ithaca, NY: Cornell University Press, 1969), 228.

29. Hegel, *Aesthetics,* 638; "Die Gemeinsamkeit der Konstruktion wird zugleich der Zweck und Inhalt des Werkes selbst" (Hegel, *Ästhetik,* 2: 31).

the building's purpose and meaning, the project dissolves the older patriarchical family order that justified the monarch's rule. Once the totality of the population has worked on the building, its religious meaning is no longer confined to the patriarch and his descendants. The product of their activity is the bond objectified in the tower and its continued imitation through the countryside. The many towers in the archaic landscape symbolize the social bond created through their (increasingly ritualized) construction.

Hegel argues that the investment of labor makes the monument a central unifying point for society. Successful monuments require collective actions. The dismantling of the World Trade Center by firefighters and ironworkers was the first public act of recovery from trauma. Similarly, both Germanys celebrated the workers who rebuilt the bombed-out cities. All sides revered the *Trummerfrau.* In the DDR, the rebellion of June 17, 1953, was sparked by a demonstration of construction workers, who were one of the few groups who felt entitled to defy the state apparatus, precisely because they were engaged in the symbolic work of rebuilding the nation.[30] Less specialized, preindustrial labor could incorporate more of the able-bodied population, as seen in medieval accounts of entire populations participating in the construction of a city's cathedral.

Hegel's arguments in the *Aesthetics* for the importance of labor in mobilizing political solidarity reemerge in Marxist theory. The massive structures of antiquity become a standard for measuring industrial capitalism's organization of production. Hegel's wonderment at the labor required for symbolic architecture was trumped in the *Manifesto* as Marx and Engels argued that capitalism has superseded the monuments of antiquity. The *Manifesto* reiterates the long-standing historiographical trope of measuring a civilization's success by the scale and subtlety of its ruins. Marx states in the *Manifesto* that the bourgeoisie showed what wonders industrial capitalism could build. He contrasts capitalist building directly with the three phases Hegel mentions: "It has been the first to show what man's activity can bring about. It has accomplished wonders far surpassing Egyptian pyramids, Roman aqueducts, and Gothic cathedrals."[31] A page later, Marx makes specific mention of capitalism's architectural wonders. What appears in Hegel as a singular reference to human labor, without historical or social specificity, is more sharply differentiated in Marx according to the system of labor production: "The bourgeoisie, during its rule of

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30. The mythology surrounding construction workers comes out vividly in Hubertus Knabe's popular history of the uprising; Hubertus Knabe, *17. Juni 1953: Ein deutscher Aufstand* (Munich: Propyläen, 2003), 98: "Dem Berliner Bauarbeiterstreik kommt in der Geschichte des 17. Juni eine Schlüsselstellunng zu. Die Bauleute, die die Häuser der Stalinallee und das nahe gelegene Krankenhaus Freidrichshain errichteten, waren die Ersten, die ihren Protest auf die Straße trugen. Ohne ihren Marsch durch die Berliner Innenstadt am 16. Juni wäre es am Folgetag nicht zu den Streiks unf Demonstrationen in der ganzen DDR gekommen. Die Berliner Bauarbeiter wurden zum Vorbild der Arbeiterschaft und Initialzünder der Volkserhebung."

31. Karl Marx and Friedrich Engels, *Manifesto of the Communist Party,* in *The Marx-Engels Reader,* ed. Robert Tucker, 2nd ed. (New York: Norton, 1978), 476.

scarce one hundred years, has created more massive and more colossal productive forces than have all preceding generations together. Subjection of Nature's forces to man, machinery, application of chemistry to industry and agriculture, steam navigation, railways, electric telegraphs, clearing of whole continents for cultivation, canalization of rivers, whole populations conjured out of the ground—what earlier century had even a presentiment that such productive forces slumbered in the lap of social labour?"[32] Despite capitalism's triumph over archaic construction, the two systems share the basic need to mobilize and coordinate vast, ethnically and linguistically diverse populations. In *Capital,* volume 1, Marx argues that the "simple cooperation" that produced archaic monuments and medieval cathedrals constitutes the fundamental form of capitalist production.[33] The key difference is that the laborer works for a wage rather than as an agricultural slave. Marx draws a connection between simple cooperation and modern industrial organization because he is at pains to distinguish factory work from traditional handicraft. He intends to demonstrate that the large-scale organization of labor accomplishes production unimaginable to the isolated craftsmen that nineteenth-century capitalism was driving into obsolescence. Even though industrial markets entail greater complexity than the simple cooperation of an army of peasant laborers, at base, Marx insists, factory work has the same fundamental form. Marx concerns himself only with the economic implications of large-scale labor organization. Religious and political motivations he dismisses in passing as the luxuries of tyrants. Marx is impressed primarily with the production of massive structures, whereas Hegel stresses the importance of collective labor in forming national consciousness.

In the immediate memory of its raising, the archaic monument established a collective identity through the organization of workers. This moment was reinforced not only by the retelling of its construction as a myth in its own right, but also through the structure's ability to convey meaning through its appearance, a quality Hegel describes as a form of nonlinguistic communication. Hegel posits an architectural language without utterances, an ability to produce thoughts in onlookers without recourse to speech. Architecture should be "an independent symbol of an absolutely essential and universally valid thought, or a language, present for its own sake, even if it be wordless, for apprehension by spiritual beings."[34] He distinguishes a building's form from the signs attached to it, giving the specific example of a cross, which certainly can evoke many images in viewers but does so through its references to external discourses. The building should convey a representational meaning distinctly derived through its own architectural form. Hegel

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32. Ibid., 477.

33. Karl Marx and Friedrich Engels, *Capital,* in *Collected Works* (New York: International Publishers: 1996), 35: 338–340.

34. Hegel, *Aesthetics,* 636; "ein selbständiges Symbol eines schlechthin wesentlichen, allgemeingültigen Gedankens, eine um ihrer selbst willen vorhandene, wenn auch lautloses Sprache für die Geister" (Hegel, *Ästhetik,* 2: 29).

intends these remarks both as a programmatic statement about the true nature of architecture and as an analytic thesis about archaic monuments. Despite Hegel's insistence that *Geist* (spirit) develop, the tone of his later arguments suggests that the oldest symbolic structures capture the essence of the discipline unlike later Greco-Roman classicism, which replaced these organic sculptural shapes with strict geometrical proportions.

His three-part account of architectural history conceptualizes Goethe's belief that architecture's aesthetic value lies in its expressiveness. Hegel revises the eighteenth-century thesis that a building's claim to beauty is best judged by the emotions it invokes in spectators by claiming that the representations that buildings produce are more conceptual than emotional. The symbolic approach advocated in the 1785 *Investigations into the Character of Buildings* hovers between a social historical and an emotional aesthetic reading of buildings' spirit.[35] For Hegel, architecture manifests an idea. Unlike Goethe, Hegel is not fixated on the individual artist as genius; rather, he is concerned with the unfolding of Spirit. Like Goethe, he considers buildings to be meaningful art when they mediate ideas. Goethe understands this operation as a relation between the architect and the spectator in which the building stands as the central point of convergence between the viewer's understanding and the artist's intention. Hegel posits a similar movement wherein the building manifests a state of consciousness in material form to an audience. Whereas Goethe wrote about specific buildings as the artistic expression of individual artists, Hegel treated history in terms of stylistic movements that represented an abstract subjectivity. Buildings produce a language without utterances. They are more than a collection of codes; their material presence is supposed to invoke imagination in the viewer: "The production of this architecture should stimulate thoughts by themselves."[36]

The Sturm-und-Drang notion of genius has not entirely disappeared from Hegel's system; instead it has taken on a transhistorical quality, one not grounded in individual subjects. Yet even within Hegel's long historical understanding of artistic development, architecture, and its status as art, depend on architecture's mediation of an idea—what Hegel calls its symbolic operation as opposed to its

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35. "Sie ist nemlich unter allen bildenden Künsten die einzige, die eigentlich auf die Einbildungskraft wirkt. Das Uage berührt sie nur, um die Phantasie in Thätigkeit zu setzen, und jades Gebäude ist ein körperliches Symbol von den Bedürfnissen des Menschen und seinem Zustande. Aber diese Bedürfnisse sind nicht blos Dach und Fach, überhaupt nicht blos physisch. Religion, Sicherheit, Aufklärung, Vergnügen, Einsamkeit, Schwermuth, Ruhe u. lauter Bedürfnisse des fühlenden Menschen liegen in den Grenzen dieser Kunst." *Untersuchungen über den Charakter der Gebäude: Über die Verbindung der Baukunst mit den schönen Künsten und über die Wirkungen, welche durch dieselben hervorgebracht werden sollen* (repr., Nördlingen: Alfons Uhl, 1986), 177. Jens Bisky also reads this passage as ambiguous. Jens Bisky, *Poesie der Baukunst: Architekturästhetik von Winckelmann bis Boisserée* (Weimar: Hermann Böhlaus Nachfolger, 2000), 108.

36. Hegel, *Aesthetics,* 636; "Die Produktionen dieser Architektur sollen also durch sich selbst zu denken geben, allgemeine Vorstellungen erwecken" (Hegel, *Aesthetik,* 2: 29).

practical function. In separating architecture's technical obligations from its aesthetic value, Hegel inherits from Kant the standard that art cannot serve a purpose external to its own form and material. Hegel's personal judgments on architecture differ significantly from Goethe's changing appreciation of architectural styles. Whereas Goethe's first essay celebrates the Gothic cathedral, only to be superseded by Renaissance fascination with antiquity, Hegel has the least interest in classical antiquity and concludes his architectural history with the Gothic, quoting directly from the Strasbourg position Goethe later abandoned. Hegel describes the spirit of architectural innovation as moving from Mesopotamia and India to Egypt, then to Greece and Rome, and finally on to the medieval Rhineland, whereas Goethe's trajectory moves away from the Rhineland to Rome and then to earlier Greek temples farther south. Much as Hegel admires Goethe's thought, he reverses its direction, historically and geographically.

Lefebvre's insistence that space not be read semiotically updates Hegel's assertion that architecture conveys meaning speechlessly:

> When codes worked up from literary texts are applied to spaces—to urban space, say—we remain…on the purely descriptive level. Any attempt to use such codes as a means of deciphering social space must surely reduce that space itself to the status of a *message,* and the inhabiting of it so the status of a *reading.*[37]

Both thinkers are elaborating on the long-standing aversion to placing (too many) allegorical figures on a facade because they distract from the building's architectonic form. For both thinkers, isolated signs fail to express architecture's distinctness. Lefebvre acknowledges that public spaces are filled with codes, whether they are derived from the Renaissance treatises or modern advertising; however, they merely describe space. Hegel's aversion to linguistic readings of buildings derives from his aesthetics of autonomy, namely, that the meaning of an artwork is inherent in its organic form, and not derived from some discourse outside of its organization of matter. The decorations in the orders of columns may have had a direct relation to the building they were supporting, but Hegel does not entertain such legends. He understands them, as did most moderns, as indications of the building's purpose and status. The eighteenth-century debate over whether columns or walls were the primary means of supporting a building arises from this aversion to "merely" decorative elements. Columns, it was argued, had no real purpose in European architecture, other than as allusions to antiquity. Lefebvre does not prognosticate against these codes so much as against the suggestion that their interpretation suffices to explain urban space. All these discussions are guided by the

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37. Lefebvre, *Production of Space,* 6.

distinction between a building's surface appearance and the environment it creates. Put simply, these thinkers resist converting three-dimensional volumes into two-dimensional texts. The codes may announce a connection between a building's internal organization and the relations of social power; however, Lefebvre follows Hegel's insistence that form conveys a meaning independent from and at odds with the immediate demands of power. After all, the master/slave dialectic insists that the peasant worker's identification with monuments differs dramatically from the monarch's political intentions.

Temporary Housing: Classicism as Functionalism

Hegel defines architecture through its formal structures, thereby extending the Enlightenment innovation of organizing architectural history according to stylistic periods. Even as he isolates architecture's visible features, he insists that the most sophisticated buildings transcend the pragmatic purposiveness of their basic structure. This transcendence entails a suspension of sensual perception by the building's inhabitants and a concentration by the subject upon itself. Not surprisingly, Hegel claims that the highest form of architecture induces self-reflection. He argues that Gothic cathedrals satisfy the practical needs of communal worship but then transcend utilitarian necessity as objects perfect in themselves, requiring no external purpose to justify themselves or to rationalize their material form.

Eighteenth-century architectural theory in Winckelmann and Laugier had sought to isolate basic forms in historic buildings in order to find a principle that could guide design and judgment of all building types. These theorists followed Vitruvius's myth of the simple, four-posted hut built at the origin of architecture in order to posit a rational function at the core of the discipline. Hegel historicizes this method of deducing a basic structure and purpose to complex buildings, by positing not one original purpose but instead three separate epochs of architecture, each with particular social requirements that led to three distinct architectural forms. By historicizing architecture's purposes as the justification for its forms, Hegel also allows buildings to "transcend" the purpose of their structure, so that they become autonomous, spiritually free, and meaningful without reference to a socially defined need.

In the second phase of Hegel's architectural history the tensions in his model of transcendence appear. Even as he seeks to surmount the classical tradition, Hegel's three-part history of architecture—from the symbolic forms of Babylonian and Egyptian obelisks, towers, and pyramids to the classical Greek temple and then on to the Gothic cathedral—recapitulates in temporal terms Vitruvius's principle that architecture must be solid, useful, and beautiful. The concept of structure around 1800 is so thoroughly enmeshed in classical architectural theory that Hegel's effort at overcoming the ancient (in favor of the medieval) requires that he reaffirm its basic categories. In the end, Hegel (like Goethe) presents an argument that

the Renaissance would have considered absurd—a classicist defense of medieval architecture.

Not every movement of *Geist*'s unfolding is met with euphoria. The *Aesthetics*' transition from symbolic to classical architecture has the grim feeling so common to the works of writers who accept modern functionalism as both inevitable and regrettable. The second phase in Hegel's architectural history was embodied most completely by the classical Greek temple, which served as the tectonically balanced enclosure for the cultic worship of gods, thereby introducing a standard that subordinated architecture's formal meaning to sculptures housed within. With the geometrical temple, architecture is reduced to providing a enclosure for other arts, without producing a form that serves its own architectural ends. Even though he treats with resignation architecture's function of sheltering people and things, Hegel deploys the practical reason of enclosure and housing to describe the internal process of reason's self-understanding. The classical temple is too concerned with practical purposes, he claims, to fully express the artist's idea within architecture. The temple or the palace houses the god or great man; thus the building's design is subordinated to a practical need. This functionality lessens the symbolic qualities inherent in architectural form and matter. Yet as he writes about architecture Hegel displays in his jargon the classicist/functionalist presumptions of enclosing a hidden interiority. In his explanation of architecture's aesthetic value, Hegel deploys spatial terms of enclosure to describe spirit. The Greek temple arranges a series of columns to support a roof, thereby creating an interior distinct from the facade. With the emergence of this distinction between inside and outside within architecture, a similar difference is applied to humans. Architecture's new obligation to provide an enclosure to protect a precious artifact within is readily translated to and from the body that houses a soul. The parallel between body and building emerges in Hegel's discussion of classical architecture's unfortunate devotion to functional needs such as shelter and protection. With Greek and Roman designs, the special needs of the interior dominate over architecture's inclination to shape space. Classical principles force builders to think mainly in practical terms, as mathematical engineers rather than plastic artists. Once introduced, the claim that architecture serves practical needs first is not so readily dismissed. Much as Hegel seeks to devalue classicism as merely functional and insufficiently symbolic, this opposition, with all its supporting variations, shapes the very arguments made against it. A close reading of Hegel's text shows that the contrast between function and expression reverses itself within the metaphorical connotations of his jargon. Hegel's account of a building's expressiveness relies on spatial metaphors that, among other connotations, suggest architecture's functional purpose. In other words, he presumes the existence of an enclosure as he explains expression. Communication understood as spatial involves the movement of meaning from an unseen interior to a public exterior, along the same axis as earlier treatises tried to read the spirit of architecture out from the facade. The author of *Investigations* states unequivocally that "the inner space is the

spirit of a building, insofar as we can conceive of such a condition."[38] Our approach to this interiority is nevertheless mediated by the facade. In a society where the difference between public and private, street and home, is rigorously enforced, the hidden is valued much more highly than the visible, even as the two are defined in relation to each other.[39] *Investigations* warns against the classicist tendency to let the symmetrical arrangement determine the placement of walls within. The interior, writes the author of *Investigations,* should not become transparent from the outside, yet it should be intelligible to the sympathetic observer.[40] Hegel's preference for expressive architecture, buildings that display their meaning, reenacts the dynamics of classical architecture that Hegel finds so unexpressive. The tension between interior and exterior marks the point in his history of architecture where subjectivity emerges, literally (as a hidden meaning that steps out to present itself) and philosophically (as an effect generated through spatial organization).

Hegel states unambiguously that rightfully architecture ought to be the art of the exterior: "Architecture…is the art whose medium is purely external."[41] Symbolic architecture in its earliest stages has no interior; only in its relation to the outside does it bear meaning. The classical temple's exterior, on the other hand, conveys a meaning through its columns, entablature, and decorations that lies elsewhere, inside. The temple's exterior signifies; it refers to the god within. Only in the last stage of his dialectical history, in the romantic or Gothic cathedral, are both deployed. The Gothic church uses the exterior to signify the existence of another meaning elsewhere, but then within the interior it also withdraws from signification to reflect upon its operation. This movement in thought corresponds to one in space. The interior of the Gothic building becomes important in a way that did not exist in the earlier forms, such as the Greek temple. The interior of the Gothic building allows for a multifaceted retreat from the exterior world, the withdrawal of the self into itself, the separation of the Gothic interior from the symbolism of the facade, and the separation of the artwork from the social-political forces that seek to control it. Hegel stresses that the highest form of architecture has a symbolic display and a social purpose, but ultimately it withdraws from both. Gothic architecture performs in its own terms and encourages the individual believer "to pull himself out of reality into himself" (sich aus der Realität in sich zurückzuziehen). The German implies a retreat inside the space that is deeper than just the nave; it is an imaginary space within the subject. The verb form "in sich zurückziehen" refers most obviously to the act of subjective, personal reflection, a withdrawal from the sensory world in order to think. It posits an abstract bodily relation that maps

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38. "Der innere Raum ist der Geist des Gebäudes, in so fern wir uns die Bestimmung desselben denken." *Untersuchungen über den Charakter der Gebäude,* 45.
39. *Untersuchungen über den Charakter der Gebäude,* 45.
40. Ibid., 18.
41. Hegel, *Aesthetics,* 634; "Die Architektur…ist die Kunst am Äußerlichen" (Hegel, *Ästhetik,* 2: 27).

sensing and thinking as the difference between an exterior surface and hidden interior. Hegel's language gives thought a space, albeit a hidden one.

Hegel's spatialization of thought appears as he defines the first, original need of art: to bring forth a thought from the spirit:

> The primary and original need of art is that an idea or thought generated by the spirit shall be produced by man as his own work and presented by him, just as in a language there are ideas which man communicates as such and makes intelligible to others.

> Das erste, ursprungliche Bedürfnis der Kunst ist, daß eine Vorstellung, ein Gedanke aus dem Geiste hervorgebracht, durch den Menschen als sein Werk produziert und von ihm hingestellt werde, wie es in der Sprache Vorstellungen als solche sind, welche der Mensch mitteilt und für andere verständlich macht.[42]

The verb "hervorbringen" posits an interior to thought and an exterior to communication. Hegel does not mention a space within which the subject produces the work, but he does elaborate, in abstract spatial terms, that the produced work is presented, literally "placed before" ("von ihm hingestellt werde"). This process of placing the work Hegel directly compares to language in which subjective representations (*Vorstellungen*) are communicated so as to make them intelligible to others:

> But in a language the means of communication is nothing but a sign and therefore something purely external and arbitrary; whereas art may not avail itself of mere signs but must give to meanings a corresponding sensuous presence. That is to say, on the one hand, the work of art, present to sense, should give lodgement to inner content, while on the other hand it should so present this content as to make us realize that this content itself, as well as its outward shape, is not merely something real in the actual and immediately present world but a product of imagination and its artistic activity.

> In der Sprache jedoch ist das Mitteilungsmittel nichts als ein Zeichen und daher eine ganz willkürliche Äußerlichkeit. Die Kunst dagegen darf sich nicht nur bloßer Zeichen bedienen, sie muß im Gegenteil den Bedeutungen eine entsprechende sinnliche Gegenwart geben. Einerseits also soll das sinnlich vorhandene Werk der Kunst einen inneren Gehalt beherbergen, andererseits hat sie diesen Gehalt so darzustellen, daß sich erkennen läßt, sowohl er selbst als seine Gestalt sei nicht nur eine Realität der unmittelbaren Wirklichkeit, sondern ein Produkt der Vorstellung und ihrer geistigen Kunsttätigkeit.[43]

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42. Hegel, *Aesthetics,* 635; Hegel, *Ästhetik,* 2: 28.
43. Hegel, *Aesthetics,* 635; Hegel, *Ästhetik,* 2: 28.

Whereas language uses arbitrary signs, art, Hegel argues, must make meaning understood through its material presence. Hegel again posits an interior and an exterior. The work of art secures within itself a content ("einen inneren Gehalt beherbergen"). The English translation neatly uses the old-fashioned "to give lodgement." The spatial distinction made explicit with the term "inneren Gehalt" ("inner content") is reiterated and given poetic breadth by the verb "beherbegen," which implies that the content is granted a secure, yet temporary, refuge within the material.

Hegel's architectural terms suggest that spirit occupies a place only for a short period of time. The structure that holds *Geist* is by its very nature impermanent. Far from rivaling God, as the Tower of Babel might, Hegel's architectural philosophical structure provides temporary housing for wanderers. The most common *Herberge* in eighteenth-century rural agricultural society would have been the shepherds' huts that could be seen across meadows where sheep grazed. Such "Herberge" would have housed a wanderer during a storm. As Goethe notes in "On German Architecture," a *Herberge* was not meant to be a permanent structure, nor were its inhabitants meant to lodge there forever. Even for the less bucolic connotations, the habitation is temporary. In the original meaning of *Herberge,* lodging was provided for a limited time: an army (*Heer*) could be kept in a castle (*Berge*) in the context of a larger conflict, but not as a permanent refuge. The Enlightenment dictionary writer Johann Christoph Adelung offers the specific example of taking a guest into one's house, again suggesting a short-term and limited occupation of the place. The Grimm dictionary cites the German translation of Matthew 25:35: "Ich was ein Gast, und ir habent mich beherberget."

To summarize the architectural metaphors in this key passage in Hegel's architectural theory: whereas "hervorbringen" and "hinstellen" suggest spatial movement of a general nature—passages that could be localized on the body as well as in a city plaza—the verb "beherbergen" has a specifically architectural meaning. Indeed, it invokes the simple hut that so haunts Enlightenment architectural theory. Both Adelung and Grimm agree that in the common usage of Hegel's time, *Herberge* referred to a place where wandering craftsmen could pay to spend the night. Hence Goethe's frequent use of the term in *Wilhelm Meister.* "Beherbergen" is thus at once a rudimentary architectural term that also suggests spatial movement: an arrival and a departure, a moment of occupying a space and a subsequent vacating.

German has many verbs that signify representation, some of which suggest a physical placing of an object before an audience. Language learners are perhaps the first to recognize the metaphor in philosophical jargon. However, drawing highbrow meanings out of German verbs requires more than a foreigner's literalism. Hegel's text calls attention to the spatial metaphors by inventing new words to represent "representation." Older words lose their general meanings as they take on specialized meanings. Grimm notes that in the eighteenth century the general sense

of *vorstellen,* meaning "to represent," was replaced by the verb *darstellen.*[44] The broad spatial connotations of *vorstellen* were concentrated on visual representation.[45] *Vorstellen* thus came to suggest portraying or projecting images on a flat surface. Hegel's text plays on two spatial connotations in philosophical meaning as architectural distinctions between the facade of a building and its interior. Representations of thought, *Vorstellungen,* are characterized in language that suggests surfaces: a canvas, a page, a facade. Material content, the feature that he claims Kant neglected, Hegel presents as something hidden within interior space. These new spatial thought forms Hegel indicates through the verbs *hervorbringen, hinstellen,* and *berherbergen.* In the textual sequence of older and newer philosophical metaphors, thought moves across a succession of space, from internal reflection to external communication. The different forms of thought are themselves characterized as a succession of surfaces and interiors, so that the subject in its most private thoughts has *Vorstellungen* that need to be carried out beyond himself so that others may understand them. The initial representation when understood within the framework of language becomes a private content that needs to be carried forth to the public. In other words, an interior private screen image acquires a spatial quality when contrasted with public discourse, which is itself situated in a space outside the subject. Expression of thought appears to the subject as a surface projection that then needs to be carried outside the interior in order to be placed, thinglike, within the public space, where it again acquires the qualities of a surface projection, a representation within language.

Finally, in yet another manner that reminds us why Enlightenment thinkers were so fascinated with engineers and architecture and their ability to transform ideas into concrete reality, Hegel suggests that the technological process of building explicitly translates the movement of interior representation into material form. The play of surfaces across spaces that characterizes the process whereby thoughts occur to the subject as representations and then are brought out into the exterior world is also implicitly the work of architecture, in which a drawn plan is converted into a material building. This building serves as a surface representation of meaning to others even as it shapes the public space within which meaning is organized. The artwork's material embodiment of an idea sets the conditions for its communication as an abstraction.

Hegel's explanation of how architecture expresses meaning relies implicitly on metaphors derived from expression's antithesis: the functional enclosure of a space.

44. Winfried Menninghaus, "'Darstellung': Friedrich Gottlieb Klopstocks Eröffnung eines neuen Paradigmas," in *Was heißt 'Darstellen'?* ed. Christiaan L. Hart Nibbrig (Frankfurt/Main: Suhrkamp, 1994), 205–226.

45. Jacob Grimm and Wilhelm Grimm, *Deutsches Wörterbuch* (Munich: Deutscher Taschenbuch Verlag, 1984), 26: 1670: "*vorstellen* [ist] im Gebrauch der Neuzeit vielfach durch *darstellen,* verdrängt worden.... Der frühere Gebrauch des Wortes tritt besonders charakteristisch hervor, wenn etwas durch Zeichnung, Malerei, Plastisch u.s.w. *vorgestellt,* d. h. zur darstellung gebracht wird; sehr oft braucht Göthe *vorstellen* in diesem Sinne."

He sets expression, as in sculptural architecture, in opposition to instrumental engineering. A building should do more than house; it should signify. Even as Hegel explains this opposition, each term is necessary to explain the other. Expression in architecture operates as a movement between a spiritual interior and a public facade. Likewise, the technical effort to construct a safe space, by building a roof and securing a perimeter, presumes the existence of a precious object that requires protection. Without the need to preserve the spiritual, there would be no point to the elaborate engineering of classical buildings. Hegel's complaint against the Greek temple is that the sacred expressive element has been removed from architecture. It has become the sculpture or the relic but not the building itself. The tension between expression and engineering goes far beyond Hegel's judgment of architectural style. Architectural figures permeate his philosophical language. In the passages where he steps back from architectural history, when he writes as the philosopher using abstract language to define art's expressiveness, he cannot rid himself of spatial metaphors, he cannot set a boundary between philosophical and architectural discourse. Nor does he necessarily want to do so, for in the last stage of his architectural history, in his account of the medieval church, he acknowledges their interdependence for a brief moment before reasserting the primacy of expression. Yet this assertion of the spiritual value of Gothic cathedrals always presumes the juxtaposition of classicism's clear division between interior and exterior space.

The Enclosed Space of Spirit

At first glance, the difference between Libeskind's Jewish Museum and the neoclassical Prussian style of the official *Mitte* corresponds to Hegel's distinction between the Gothic cathedral and the ancient temple. The Gothic cathedral, for Hegel, is built to foster interior contemplation. While it has a practical purpose, that end is superseded by the form of the overall building, which shows a diversity of isolated moments that are nevertheless united into a whole. The practical purpose of a church—to house a congregation—is fulfilled and then superseded by the Gothic structure's vast height and profuse decoration. Similarly, the practical concerns of the museum to house an exhibition are exceeded by Libeskind's design. Surrounded by postwar apartment complexes, and attached to a rococo palace that survived the war, Libeskind's building stands out as a jarring subversion of traditional Berlin architecture.[46] Just as post-Renaissance architects frequently described the medieval piles in the center of town as misshaped monstrosities from a barbarous age, Libeskind's museum presents broken lines as markings representing another barbarism. In both cases the building's lack of continuity with the surrounding structures

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46. For a history of the museum's relation to Berlin architecture, see James E. Young, "Daniel Libeskind's Jewish Museum in Berlin: The Uncanny Arts of Memorial Architecture," *Jewish Social Studies* 6.2 (2000): 1–23.

hails the viewer, forcing him to interpret these radical departures from geometrical convention. Deconstruction, seen in the long view of classical aesthetics, presents an updated version of what Vasari describes as the *maniera tedesca*.[47]

In the theoretical conclusion to *Mythologies,* Roland Barthes states that architecture shares myth's "imperative, buttonholing character."[48] A building's style, when it stands out from its surroundings, has an intentional force that summons the passerby to receive its expansive and often ambiguous connotations. The building interpolates the pedestrian; it demands that he acknowledge the message implied by its exterior appearance. Barthes stresses that this call assumes a neutral tone, as if the building's appearance were simply there, as a self-evident statement that speaks to one and all, in a general, unself-conscious manner: "Here I stand, I am just being me." To explain architectural interpolation, he cites a house in Paris designed in the manner of a Basque chalet, a familiar look in the Pyrenees, but outlandish in the city of Paris. The building's ability to hail the passerby depends on its dissonant appearance in relation to the rest of the street. This phenomenon is well established in urban literature. The narrator of E. T. A. Hoffmann's romantic, uncanny tale "Das öde Haus" recounts how a creepy old house along Berlin's fashionable Unter den Linden literally called out to him with the voice and image of a beautiful woman. The run-down, neglected building stood in sharp contrast to the new, luxurious palaces that had been built around it. The decrepit facade suggested a mystery hidden inside that the narrator tries to discover through spying and intrusion.

European architectural history contains several obvious instances of stylistic juxtapositions that have unnerved pedestrians. The many post-Renaissance denunciations of the Gothic reiterate the sense that medieval churches stick out against the classicism of later building. Had he wished to connect his reading with architectural debates in the early 1960s, Barthes might have replaced the Basque example with a modern glass-and-steel office building. By choosing a design from the Sudouest, he alludes idiosyncratically to his own provincial origins but more importantly addresses the operation of signification, while avoiding the political debates over whether cities ought to maintain a single coherent style. The post-Wall Berlin controversy arose precisely because the Senate sought to prevent constructions that jarred with the officially designated historical style. The government took its position against what it saw as the alignment of modernist and contemporary design with media spectacle. The claim was that star architects would impose their

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47. Vasari is a source for the Italian Renaissance's disdain for Gothic medieval architecture. He warns his contemporaries: "There are works of another sort that are called German, which differ greatly in ornament and proportion from the antique and the modern [Renaissance]. Today they are not employed by distinguished architects but are avoided by them as monstrous and barbarous, since they ignore every familiar idea of order, which one can rather call confusion and disorder." Quoted in Paul Frankl, *The Gothic: Literary Sources and Interpretations through Eight Centuries* (Princeton, NJ: Princeton University Press, 1960), 290.

48. Roland Barthes, *Mythologies,* trans. Annete Lavers (New York: Hill and Wang, 1972), 124.

signature styles on the cityscape, advertising themselves through buildings that dramatically broke with the continuity of neighboring buildings' designs. Having understood Barthes's point, the Berlin authorities perceived architectural interpellation as an operation of buildings interested primarily in marketing their makers. The discussion was couched by the authorities as a local government resisting global marketing; others perceived it as the invocation of a mythic Berlin style to ward off the architectural avant-garde. Ironically, Hegel, the Berlin philosopher par excellence, had argued against the nineteenth-century neoclassicism upheld by the building authorities. Although Barthes's discussion of interpolation took the perspective of the *flâneur,* Althusser's later structuralist version of hailing shares with Barthes the Marxist concern over how the populace readily accepts, indeed enjoys, the medial representations that justify capitalism and state authority, or, as Barthes wrote in his 1970 preface, that "account *in detail* for the mystification which transforms petit-bourgeois culture into a universal nature."[49] Libeskind's museum received official approval before the Wall came down. As a museum to commemorate Jews in Germany, it was granted permission to break with convention, to call out its own unique difference as a reflection of the ostracism and execution of Jews within Germany. If the Gothic's disruption of classical harmony constituted the *maniera tedesca,* Libeskind's museum with its self-differentiation from the Berlin norm has become the representation of German history in the twentieth century.

The similarities between the two modes of building are not confined to the street view but apply to the spaces beyond the facade. Hegel refers to "the wholly enclosed house" (das ganz geschlossene Haus) as the basic form within which the Christian spirit draws itself into the believer's interior. He consciously moves between two senses of "interior": the inside of a building and the most private thoughts of an individual, his soul. The building gathers together a community of believers (*Ver-sammlung*) so that they may gather their thoughts and concentrate themselves on their innermost nature (*innere Sammlung*). Hegel quite consciously plays on the variations of gathering people or thoughts. He moves from the architectural to the phenomenological. Even as the Christian community and the individual believer pull themselves away from the outside world, they also transcend the empirical world's finitude. Building and thought parallel each other as prayers address divine eternity while the architecture rises upward seemingly in defiance of tectonic laws. The height of Gothic vaults follows the contours of the believers' heavenward concentration. Prayer conditions the building's character: "But the worship of the Christian heart is at the same time an elevation above the finite so that this elevation now determines the character of the house of God."[50] In referring to the character

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49. Ibid., 9.
50. Hegel, *Aesthetics,* 685; "Die Andacht des christlichen Herzens aber ist ebensosehr zugleich eine Erhebung über das Endliche, so daß nun diese Erhebung den Charakter des Gotteshauses bestimmt" (Hegel, *Ästhetik,* 2: 72).

of the building, Hegel is adapting earlier architectural theory, which asserted that every building had a character, determined either by its rank within the columnular orders or, in the more affective version, by the sensible impression it formed upon the viewer.[51] Whereas in Enlightenment theory a building might have worn its character on its facade as a sign of its interior purpose, for Hegel, character does not concern just the semiotic communication. Instead he links character with the formation of the subject's identity. More than a judgment of taste, character manifested the subject's existential condition. Gothic architecture likewise moves beyond the classical concerns to house and represent an owner or a deity, by engaging with the infinite through its soaring vaults and elevated lighting.

The cathedral sets a wall between the sequestered believer and the social world; economy is precisely what Hegel claims the cathedral seeks to exclude. It forgets the natural world and its distractions by closing the subject off from the outside. The columns, which created a liminal transition between the Greek temple's sacred interior and the city, are transplanted into the church's interior, where they isolate the various corners of the church without eliminating a sense of vast oneness.[52] Hegel affirms the charge that Gothic design descends from the shapes in the northern European forest. The cathedral's rows of columns recreate the isolation of the forest, the *Waldeinsamkeit* of German romanticism, the sense of being isolated while surrounded by an abundance. Yet even as he posits the analogy to nature, he insists that the space of reflection is a manufactured world, set in opposition to nature. While clearly reiterating the opposition between architecture and nature that first marked the difference between the obelisk and the surrounding desert, Hegel sets the constructedness of space in a cautious relation with the subjectivity it holds. He does not give causal priority to Gothic architecture or Christian piety. Does Christian consciousness design the cathedral, or does the church move the believer to prayer? The cathedral, he notes carefully, exists through and for the subject's inner constructed world, as opposed to nature, which in this context exists simply as given. Ultimately, Hegel allows that pious interiority is constructed as much as the inside of a church. Sacred architecture interpolates while it represents. Hegel posits a double movement that does not answer the question, does the building reflect or construct subjectivity? Instead he posits a reciprocal reinforcement wherein subjects and buildings bring about each other. The medieval believer was created as much as he helped create the cathedral.

Like temples, museums have the avowed intention of altering visitors' states of mind. Those who come are presumably willing to receive the building's communication, for they already share in the discourse that brought about its construction in the first place. Libeskind's memorializing museum invokes reflection even as it represents history. It is at once the product of theory and a machine intended

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51. Jens Bisky, *Poesie der Baukunst,* 5.
52. Hegel, *Aesthetics,* 688.

to generate sophisticated musings in those who walk in and around. Like the cathedral, Libeskind's museum mobilizes the perceptual differences between interior and exterior space in order to induce contemplation. Both buildings offer those who enter specific pathways to guide their contemplation, between chapels, between exhibits. Hegel does not consider the cross shape of most cathedrals important to their ability to transform consciousness; likewise, the jagged line seen from above the Jewish Museum, a shape likened to a ruptured Star of David, does not directly alter the individual visitor's experience of the space. That the aerial profile of the Jewish Museum addresses an ideal viewer from above, much in the manner of a medieval church, is not to be excluded. Libeskind's initial statements about the museum, including his reference to angels, allude to Wim Wenders' *Himmel über Berlin,* yet, as in the film's switch from soaring camera to inner monologue voice-overs, Libeskind emphasized the disjuncture between the drawn view of the museum and the inhabited place: "When this building seemed simply a theory, people described it as a zigzag or a blitz, surely an image only seen by an angel. Today, as you walk through the building, the walls, exhibition spaces, and the building's organization generate an understanding of the scale of disrupted tradition—and the trace of the unborn."[53]

My comparison with Libeskind's museum commences with Hegel's insistence that the cathedral is not concerned with mere purposiveness and is not just an enclosure to house some sacred object. Certainly this same accusation has been leveled against Libeskind: namely, that the Jewish Museum is fascinating for its own sake but makes an inferior space for displaying exhibits. It has too many angular walls that make it difficult to hang exhibits. If, as Hegel states, the tapered arch defines the Gothic, Libeskind's museum turns these shapes on their side to produce a prow or spur, which squeezes walls together into dead ends. For Hegel, the intention behind the dark subdivisions of the Gothic cathedral's interior was the isolation of the individual from the outside. The cathedral's many sharp points help constitute "a place of dread which invites meditation," a description that applies to the Jewish Museum just as easily.[54] Both structures deliberately work against geometry. Hegel argues that the Gothic style emphasizes the interior experience of the building over the external appearance, whereas the facade is the most emphasized feature of classical buildings. Gothic churches, he claims, do not have uniform interiors. If the classical incorporates uniform geometrical shapes, the Gothic presents differentiated patterns. The height, width, and breadth of Gothic cathedrals varies considerably, whereas classical buildings have uniform proportions that have been codified since the Renaissance. Here Hegel returns to the trope of the northern forest. Gothic forms are like patterns in a forest: they may follow recognizable forms, but these shapes proliferate in an almost uncountable array of variations.

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53. Daniel Libeskind, "Between the Lines," in *The Space of Encounter* (New York: Universe, 2000), 25–26.

54. Hegel, *Aesthetics,* 688.

Classical architecture has many subdivisions, yet these are variations on canons with a very precise terminology, which, unlike the Gothic, allows city officials to set strict building codes, as was done in Berlin *Mitte*. The Gothic stands as the jarring exception to classicist uniformity, much as Libeskind's museum disturbs the smooth continuity of Berlin codes. Amid the Kreuzberg apartments that surround the Jewish Museum (many of them IBA projects), even the rococo palace of the original Jewish Museum stands as a historical discontinuity. As the sole historical building in this corner of Kreuzberg, the rococo palace reminds the pedestrian that the entire neighborhood had been flattened during the Second World War. Added to this familiar Berlin disjuncture is Libeskind's purposively askew facade.[55]

Libeskind and Hegel share an aversion to geometrical shapes because they consider them tectonic forms that do little to foster contemplation. The abstract, empty space produced by regular interior forms would not be appropriate to the movement from the earthly to the infinite that Hegel posits.[56] He specifically excludes the geometry of functionalism from the religious space of the cathedral. The need for enclosure addresses a necessary but not sufficient requirement of the cathedral. Because removing the believer from the outside world is so important to establishing piety, Gothic architecture, unlike earlier forms, is designed from the inside out, thereby reversing the ancient investment in establishing a stark exterior. In contrast to Goethe's concentration on the Gothic cathedral's facade to the exclusion of the interior, Hegel argues, the interior makes itself visible on the exterior. The meaning of the most sacred corners of the church shimmers through the walls.

The Jewish Museum shows even less respect for the independence of the facade. The massive walls rising along angular lines and interspersed with jagged windows suggest a design turned inward without any concern to address the public through a polite introduction along familiar rhetorical lines. The shapes force one to question the building's purpose; they do not provide a label. As Hegel notes, all expressive architecture produces reflection just by its very sight: "The productions of this architecture should stimulate thought by themselves."[57] Libeskind's museum proceeds from the interior to the outside in a manner akin to high modernist principles—the difference, though, is that Libeskind then seeks to wall off the outside from the inside, and instead of an outside that radiates from the inside we have a wall upon which the inside is drawn again; the lines running on the building's exterior are ultimately signs, ornaments that reinforce the building's alienation from the street even as they intrigue the pedestrian.

Medieval historians often note that cathedrals housed many worldly activities; however, by the late eighteenth century they were no longer the center of social life.

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55. Ibid.
56. Ibid.
57. Ibid., 636; "Die Produktionen dieser Architektur sollen also durch sich selbst zu denken geben, allgemeine Vorstellungen erwecken" (Hegel, *Ästhetik,* 2: 29).

They often stood emptied out, by the Reformation, the Revolution, or the relocation of trade fairs, so that by the time Goethe and the romantics walked through them, cathedrals seemed to represent the absence of commerce—a particularly important feature within an aesthetics of artistic autonomy. For Hegel the point of the cathedral is precisely its spatial remove from the marketplace: the noise of commercial exchange can be heard by the believer as he sequesters himself in prayer, but the walls assure him that he is now untouched by business. Hegel also writes about the simple and vague sound of the bells in the bell towers, which penetrates into the building, inviting meditation. Libeskind's Tower of Oblivion similarly isolates the visitor within a soaring cement volume through which street noises can be heard. The individual hears Berlin yet is surrounded by thick walls and closed in by the heavy swing of a steel door so that he may ponder Germany's past. Aural input that penetrates walls only reinforces the sense of spatial isolation. Sounds remind you of a nearby elsewhere. Around 1800 the cathedral was no longer a forum in which diverse events took place simultaneously; it became a refuge from sociability, a retreat that isolated the individual. Therein lay the curious similarity between the abandoned cathedrals and the private rooms of the bourgeois apartment that emerged midcentury. These spaces of introspection individualize thought as a solitary rather than a communal activity. Each visitor is absorbed into his own thoughts, like a reader alone with his book. This isolation seems to empower the subject, yet the apparent free range of thought he experiences is made possible by an architecture that holds distraction at bay, that isolates the individual within a chamber that at once addresses him personally and opens out to suggest that he is being spoken to from across vast distances.

To return to the Hegelian connotations of architecture: the antimonumentality of the Jewish Museum has become a focal point for official Berlin's self-recognition as the site of Jewish culture and its destruction. Libeskind's void and its surrounding walls have become a concrete expression of the new, self-conscious Germany. It would be an all-too-easy dialectical move to declare the museum a failure, given its enormous success in drawing visitors and stimulating critical discourse. The post-Wall, post-Holocaust collective identity formed around the museum implies a message opposite to that of the new World Trade Center or the Gedächtniskirche. More than refusing the reoccurrence of violence, the museum redefines the terms in which loss can be recuperated. The warning and threat of "Nie wieder" in all *Mahnmale* can be supplemented with the hope of reconciliation built on the acknowledgment of permanent loss. Libeskind's museum serves as the preservation, holding fast, and never forgetting of a negation, a symbolic architecture that shapes a collective consciousness by inducing dread and contemplation—for Germans a confession without the easy guarantee of salvation.

In Hegel's account of architectural expression, the void that bifurcates the museum at its core becomes translated into a *Vorstellung,* a representation, which then moves or is carried, through translation or some other metaphorical transference,

to the building's exterior. This act of transforming an utterly hidden, unarticulated interiority renders it into a concrete form, a move that Derrida seeks to foreclose, and that Libeskind finds necessary. There is no question that this interiority is split, fragmented, and empty at its core. These markings are then borne out again on the facade, which stands as a massive screen onto which the interior projects itself. The analogies to Lacanian psychoanalysis have produced rich, complex criticism, yet Libeskind would never claim that the void in his museum is the result of significa-tion.[58] The void must be seen as regrettable, as signifying what should never have taken place, a horror that could and should have been avoided. Regardless of the parallels between Libeskind's writing and deconstruction, the void in the Jewish Museum is not an epistemological limit. To contemplate the void is to ponder its absence, what would have happened had the Holocaust not happened. The void is perhaps a warning, a rupture never to be forgotten. Once the museum asserts an imperative and a memory, it takes on an interpolative function. Already in his very careful and polite conversation with Derrida, Libeskind describes the mu-seum as "imprinting" the viewer.[59] In recent years, Libeskind has remarked that architects differ from philosophers in that they wish to build affirmative structures. The museum couples the declarative intention of an institutional building with the critical redefinition that avant-garde juxtapositions provoke, suggesting thereby a path through the impasse between autonomy and conformity that has stymied ar-chitectural criticism.

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58. Mark C. Taylor, "Point of No Return," in *radix-matrix,* by Daniel Libeskind (Munich: Prestel, 1997), 128–135.

59. "I do not know to what extent the building is emblematical, an exemplary structure. I think, if anything, it will act on the participants in the building, and it does call for some putting together of one's 'being in a museum.' It impresses upon the participants the notion that you cannot avoid the apocalypse, impresses upon them the impossibility of saying, 'I have already been there, already seen it.'" Daniel Libeskind, "Discussion with Jacques Derrida," in *radix-matrix,* 113.

Benjamin's Mythic Architecture

Walter Benjamin's physiognomy of modern industrial cities builds on the architectonic model of correspondences between buildings and humans. It intensifies the Renaissance's particular emphasis on the facade as parallel to the face, while allowing for many more differentiations in appearance and function than classical architectonics, which always presumed the existence of a single ideal type. Kant, Goethe, and Descartes also presumed a correspondence between buildings and human character, but they began to break it down into varieties. Benjamin organized buildings into many industrial types, of which the arcade was but one, particularly representative, case. Classical theory, as the Enlightenment critics pointed out, allowed for only a handful of differences, with almost no allowance for structures that did not represent an institution. Benjamin's focus on urban physiognomy was deliberately aimed away from the monumental and the organically unified structure, toward the forgotten, the superseded, and the mundane. Tellingly, the most grandiose building he describes in his autobiographical essay, *Berlin Chronicle,* was his *Gymnasium,* for which he emits little affection.

Recent scholarship has examined Benjamin's investment in the doctrines, materials, and techniques of modernist architecture.[1] Here I wish to show how

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1. Detlef Mertins, "The Enticing and Threatening Face of Prehistory: Walter Benjamin and the Utopia of Glass," *Assemblage* 29 (1996): 6–23; Susan Buck-Morss, *The Dialectics of Seeing: Walter*

Benjamin's writing responds to the German philosophical appropriation of Renaissance theory.[2] From the start, Enlightenment revolutionaries looked back to the Vitruvian history of building to uncover a new genealogy of construction. This process began before the French Revolution but became more than a theoretical debate with the emergence of industrial technology. Walter Benjamin accepted Sigfried Giedion's claim that modern architecture began with the mundane bridges, tunnels, factories, and sewers of early industry. For Benjamin, Giedion was the theorist who most directly connected the nineteenth century's material history with high modernist architecture. Both Detlef Mertins and Susan Buck-Morss have shown that Giedion's *Building in France* provided the architectural historical narrative that informs much of Benjamin's *Arcades Project*.[3] There are strong similarities between Giedion's work and the *Arcades Project*'s method of linking technology with cultural formations. Giedion extended the old correspondence between building and consciousness into the modern era, not only by historicizing it as a narrative but also by linking industrial construction with the repressed contents of the unconscious. His account of the nineteenth century bifurcated architecture between style-driven facades and practical engineering: "Construction in the nineteenth century plays the role of the sub-conscious. Outwardly, construction still boasts the old pathos; underneath concealed behind facades, the basis of our present existence is taking shape."[4] This unconscious, unrecognized, and unaesthetic manner of building constitutes the actual site of meaning in modern architecture: "If we extract from that century those elements that live within us and are alive, we see with surprise that we have forgotten our own particular development—if you will our TRADITION." Giedion argues that the questions of industrial engineering have always been present but have remained invisible, and in that sense they are comparable to the discovery of the unconscious, which seemed at the turn of the century to have always been active without acknowledgment. He provides Benjamin with an alternative model of the Marxist base-superstructure opposition, one that interprets material history psychoanalytically. Even his metaphors anticipate Benjamin's: "Brushing aside the decades of accumulated dust atop the journals, we notice that the questions that concern us today have persisted in unsettled discussion for more than a century."[5]

Bauhaus Modernism gleamed as a utopian prospect because it promised to replace the stony tectonics that defined Wilhelminian classicism. Benjamin's enthusiasm

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Benjamin and the Arcades Project (Cambridge, MA: MIT Press, 1989), 126–131; Pierre Missac, *Walter Benjamin's Passages,* trans. Shierry Weber Nicholsen (Cambridge, MA: MIT Press, 1995), 173–197; Hilde Heynen, *Architecture and Modernity: A Critique* (Cambridge, MA: MIT Press, 1999), 95–118.

    2. For another lineage linking Benjamin's Arcades Project to idealist aesthetics, see Claudia Brodsky, "Architectural History: Benjamin and Hölderlin," *boundary 2* 30.1 (2003): 143–168.

    3. My writing is indebted to Susan Buck-Morss's seminar on Benjamin in more ways than I can recount.

    4. Sigfried Giedion, *Building in France, Building in Iron, Building in Ferro-Concrete,* trans. J. Duncan Berry (Santa Monica: Getty Center for the History of Art and the Humanities, 1995), 87.

    5. Ibid., 86.

for glass and steel construction was matched by his eagerness to escape the *Altbau* construction of the nineteenth century. To understand the liberation implied by new construction techniques, we need to examine how Benjamin was entangled in older modes of architectural perception and habitation. Already in his earliest writings, he employs architectural concepts and images to represent both the operation of memory and the grip of mythology on critical thought. Architectural figurations had both a collective and an individual connotation. Giedion provides a distinctly antihistoricist reading of architectural history. Speaking in rhetorical terms that Benjamin would adopt later, Giedion explains: "The task of the historian is first to recognize the seeds and to indicate—across all layers of debris—the continuity of development. The historian, unfortunately, has used the perspective of his occupation to give eternal legitimation to the past and thereby kill the future, or at least obstruct its development. Today the historian's task appears to be the opposite: to extract from the vast complexity of the past those elements that will be the point of departure for the future."[6] Giedion here sounds almost like Benjamin in "The Theses on the Philosophy of History," in his manifesto-like statements about the architectural historian's obligation to read the past in order to enable a revolutionary future: "In every field the nineteenth century cloaked each new invention with historicizing masks."[7]

Benjamin writes within the philosophical tradition that compares individual consciousness with the organization of a house, while also reading buildings as concrete markers of cultural history. In the first notes for his *Arcades Project,* he refers to "architecture as the most important testimony to latent 'mythology.'"[8] Most readers understandably concentrate on Paris and its arcades, for in the next sentence Benjamin states unequivocally: "And the most important architecture of the nineteenth century is the arcade." I would argue that the luxurious interiors of Benjamin's parents' generation presented an earlier, more troublesome convergence of myth and architecture. These grand nineteenth-century private spaces were saturated with mythological artifacts gathered from distant sites. The Roman figurines on Freud's office desk are but the most famous example of cultic artifacts penetrating the modern interior. These talismans were removed from religious sites to be placed in the home as a sign of the modern European's historical mastery and good taste. The bourgeois German house displayed its historical knowledge even as it built a barrier to secure its privacy. Benjamin deploys architecture, both modern and archaic, against the spatial *Aufhebung* that the sheltered interior implied. His celebration of

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6. Ibid., 85.
7. Ibid.
8. Walter Benjamin, *The Arcades Project,* trans. Howard Eiland and Kevin McLaughlin (Cambridge, MA: Harvard University Press, 1999), 834. For the German text, see Walter Benjamin, *Das Passagen-Werk,* in *Gesammelte Schriften,* ed. Rolf Tiedemann (Frankfurt: Suhrkamp, 1982), vol. 5, bk. 2, p. 1002 [hereafter German texts of Benjamin's works in *Gesammelte Schriften* will be cited by volume, book, and page as follows: 5.2: 1002].

glass architecture, and the visibility it imposed on inhabitants, were a fairly unmediated consequence of his revolutionary rage against bourgeois comfort. For all the hostility Benjamin's *Arcades Project* directs against the private rooms of his parents' generation, his short essays on Goethe show that Benjamin's assault against the mythic architecture began not in Paris, but in the most interior recesses of German culture: Goethe's house. If Tiergarten's buildings had not been destroyed in the Second World War, we would surely have a museum today that reconstructs Benjamin's childhood home, allowing readers, as for Freud and Goethe, to more readily imagine the spatial dynamics of Benjamin's early biography.

In this chapter we will examine how Benjamin's archeology of material culture developed from his engagement with Goethe as text and icon. Goethe stands in relation to nineteenth-century bourgeois culture in much the same way that the Paris arcades prefigure capitalism in the early twentieth century. In Benjamin's thinking, Goethe writes and lives before the full-fledged emergence of bourgeois culture, yet in novels such as Goethe's *Elective Affinities* the foundations for the nineteenth century can already be detected. For Benjamin, the mythic connotations of architecture are made explicit in dreams. By reading his dream texts about Goethe's house and then about Paris, we find a thread connecting the labyrinths to each other. In urban contexts, we shall see, the mythic experience of architecture entails a highly subjective distortion of a touristic gaze. The dream sequences of famous buildings are very personal engagements with picture postcard views. At the end of this chapter we will connect the mythic apprehension of architecture with the phenomenological distinctions Benjamin provides in his most famous essay, "The Work of Art in the Age of Mechanical Reproduction."[9] Our ultimate goal will be to return to the question of how humans identify with buildings.

Well before he finds it in Paris, Benjamin draws the archeology metaphor out of *Elective Affinities.* His later psychoanalytical adaptations of architectural terminology find their adumbration in his discussion of myth in Goethe's 1809 novel. In arguing for his thesis that the novel concerns mythological conflicts, rather than the social conventions of the rural aristocracy, Benjamin insistently deploys the architectural/archeological metaphor that he later adapts so readily to a psychoanalytic frame. He characterizes Goethe as the novel's divine architect: "As olympian, he laid the foundation of the work, and with scant words rounded out the dome."[10] Architecture, in the context of Benjamin's reading of the novel, entails a secret knowledge of the interior organization that lies behind the visible facade. Myth in *Elective Affinities* is hardly the sunny euphoria of the Italian journey. Instead, Benjamin

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9. Benjamin, *Gesammelte Schriften,* 1.2: 471–508; Benjamin, *Selected Writings,* ed. Marcus Bullock and Michael Jennings (Cambridge, MA: Harvard University Press, 1996), 3: 101–133. Many of us still carry around the first English edition in *Illuminations,* trans. Harry Zohn (New York: Schocken, 1969), 217–251.

10. Benjamin, *Goethe's Elective Affinities,* in *Selected Writings,* 1: 314; Benjamin, *Goethes Wahlverwandtschaften,* in *Gesammelte Schriften,* 1.1: 147.

claims, it is "the dark, deeply self-absorbed, mythic nature that, in speechless rigidity, indwells Goethean artistry."[11] Benjamin insists the novel is permeated with hidden meanings, placed there deliberately, yet beyond the immediate comprehension of its author or any of its first readers. This deeper pattern of connections operates below the drama of manners. Even though he does not specifically discuss *Elective Affinities,* Graeme Gilloch aptly describes myth's disturbing violence in Benjamin's reading of Goethe: "Myth involves human powerlessness in the face of unalterable natural laws and the subordination of reason in the face of the blind, uncontrollable forces of the natural environment. Human actions are dominated by the necessities of instinctual drives and desires. In myth, human life is not self-determined or self-governed, but rather subject to fate and the whim of the gods."[12] The archeological logic, which he reads out of the novel, Benjamin applies immediately to Goethe himself. The absence of any sketches, notes, or early drafts of the novel in Goethe's vast archive of papers proves for Benjamin that Goethe had deliberately destroyed them: "The destruction of the drafts, however, speaks more clearly than anything else. For it could hardly be a coincidence that not even a fragment of these was preserved. Rather, the author had evidently quite deliberately destroyed everything that would have revealed the purely constructed technique of the work."[13] This absence of a philological record justifies Benjamin's insistence on a hidden mythological reading, one that departs notably from the more conventional interpretations that situate the novel within social history. Benjamin's writing follows an architectonic logic: the lack of recorded plans about the novel's organization makes clear (*offenbar*), firstly, that a secret order lies buried within and that Goethe must have destroyed them. Absence is proof of destruction, which justifies the spadework of a mythological reading that searches out the buried secret, for, as Benjamin states axiomatically, "All mythic meaning strives for secrecy."[14] Respectable literary critics have not perceived how the novel struggles with the fear of death (and the belief in demonic agency), because it was "a struggle he concealed too deeply within himself."[15] *Elective Affinities* stands in poignant contrast to Benjamin's *Arcades Project.* Goethe destroyed his notes and left only the polished novel, whereas for Benjamin's massive work on Paris the case is reversed.

In the first half of *Elective Affinities,* in the scene in which Goethe's four lead characters assemble along with neighbors and local dignitaries for a ceremony to place the foundation stone of Eduard and Charlotte's new country house, the qualities associated with building and commodities are set in relation to each other so

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11. Benjamin, *Goethe's Elective Affinities,* 1: 314; Benjamin, *Goethes Wahlverwandtschaften,* 1.1: 147.
12. Graeme Gilloch, *Myth and Metropolis: Walter Benjamin and the City* (Cambridge: Polity Press, 1996), 10.
13. Benjamin, *Goethe's Elective Affinities,* 1: 313–314; Benjamin, *Goethes Wahlverwandtschaften,* 1.1: 147.
14. Benjamin, *Goethe's Elective Affinities,* 1: 314; Benjamin, *Goethes Wahlverwandtschaften,* 1.1: 146.
15. Benjamin, *Goethe's Elective Affinities,* 1: 318; Benjamin, *Goethes Wahlverwandtschaften,* 1.1:152.

that each acquires the traits of the other. The scene opens with an earnest speech about the three conditions required for building a secure structure and ends with the onlookers donating small fashion objects to be included within the time capsule in the foundation.[16] Goethe moves fluidly from the metaphysical reflections of the mason master to the merriment of officers and ladies tossing buttons, hair combs, and necklaces into the vault as memorial tokens. In the dialectical reflections of the mason who leads the ceremony, buildings are described as temporary, and fashion as durable. Within the cornerstone, Eduard has laid coins and wines as precious markers of the moment in which the foundation was laid. The guests are invited to add their own trinkets, and everything from buttons to Ottilie's necklace is laid in the stone upon which the house will rest. The mason acknowledges that in this ritual the material signs of permanence and transitoriness are reversed: "We lay this stone for eternity, to secure a long happy life for the present and future owners of this house. But in committing these treasures to the earth so carefully, we emphasize the frailty of human existence! We are also considering that this tightly sealed cover may again be lifted, which could happen only if the whole house, as yet unbuilt, were destroyed." (Wir gründen diesen Stein für ewig, zur Sicherung des längsten Genusses der gegenwärtigen und künftigen Besitzer dieses Hauses. Allein indem wir hier gleichsam einen Schatz vergraben, so denken wir zugleich, bei dem gründlichesten aller Geschäfte, an die Vergänglichkeit der menschlichen Dinge; wir denken uns eine Möglichkeit, daß dieser festversiegelte Deckel wieder aufgehoben werden könne, welches nicht anders geschehen dürfte, als wenn das alles zerstört wäre, was wir noch nicht einmal aufgeführt haben.)[17] Architecture is portrayed as unstable even as it is claimed that it withstands the pressures of nature and history; fashion goods are preserved far beyond their moment to become archeological artifacts. Goethe's mason articulates the same early modern fatefulness, that all structures are prone to destruction, that informs Kant's awareness that all philosophical systems (*Lehrgebäude*) are prone to critique, revision, and dismemberment. In his *Elective Affinities* essay, Benjamin shows how very closely the speech about foundations is connected to the grave. The mason's ceremonial incantation makes allusions to funerals and weddings. Benjamin follows Goethe's mythical thinking, wherein every new construction requires a sacrificial death. The mason's festive speech befits a funeral even as it celebrates a foundation: "It is an earnest business, and our invitation is an earnest one, for our festivities are carried out in the depths of the earth. Here within this narrowly dug-out space you do us the honor of bearing witness to our mysterious occupation." (Es ist ein ernstes Geschäft

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16. Diane Morgan provides an alternate reading of this scene that stresses the connections with Freemasonry. Diane Morgan, *Kant Trouble: The Obscurities of the Enlightened* (London: Routledge, 2000), 36–39.

17. English translation adapted from Goethe, *Elective Affinities,* trans. Elizabeth Mayer and Louise Bogan (New York: Continuum, 1990), 183; Goethe, *Wahlverwandschaften,* HA 6: 301.

und unsre Einladung ist ernsthaft: denn diese Feierlichkeit wird in der Tiefe be-
gangen. Hier innerhalb dieses engen ausgegrabenen Raums erweisen Sie uns die
Ehre als Zeugen unseres geheimnisvollen Geschäftes zu erscheinen.)[18] Every refer-
ence to known and familiar meanings also turns toward the hidden and the excep-
tional. When the mason invokes the familiar connection between architecture and
the order of the cosmos, his language also points to secret organizations as much
as it revives the Platonism of the Renaissance. Even when the mason adopts the
clear classical language of architectural treatises, his speech sounds allegorical, so
that his geometrical simplicity acquires a new double meaning. The bright sym-
metry and orderliness of Palladio takes on an ominous tone in *Elective Affinities,*
one that allows Benjamin and subsequent readers to read architecture as concealing
a secretive depth, rather than displaying the cosmos openly on its surface. *Elec-
tive Affinities* marks a new stage in Goethe's aesthetic, one that now indulges more
in the labyrinth that he had previous sought so strenuously to erase. Goethe invites
the reader to find the alternative meaning hidden inside the novel when he writes
to Carl Friedrich Zelter about his novel as if it were the laden cornerstone: "I have
laid much therein, hidden certain things as well. May this open secret bring you sat-
isfaction." (Ich habe viel hineingelegt, manches hinein versteckt. Möge auch Ihnen
dies offenbare Geheimnis zur Freude gereichen.)[19] Benjamin, like many literary
critics, quotes this letter to Zelter as proof that the reader should be attuned to bur-
ied mythological meanings, Benjamin approaches Goethe's novel, and then later
the material history of the nineteenth century, sensitive to its previously buried sig-
nificance. The stark difference between the two writers lies in their attitude toward
the secret. Whereas the late Goethe retains a rococo pleasure in the masquerade,
Benjamin writes desperately to recover artifacts threatened with oblivion.

Michael Mandelartz interprets the foundation-stone scene as the central moment
of self-consciousness, a moment when the novel reflects on its own organization, and
I would add that the scene also serves as a template for Benjamin's later historical
writing.[20] The scene can be read as an allegory of Benjamin's materialist history of the
Parisian arcades. Even though, by Benjamin's accounting, the novel describes a dis-
tinctly precapitalist society, its truth content concerns not so much the late eighteenth-
century rural aristocracy as the mythic, sacrificial forces embedded in marriage and
unleashed through divorce. As the novel sets house and marriage parallel to each other
it displays their fragility. Benjamin follows the *Maurergeselle*'s warning that even as
they raise the building, one is compelled to contemplate its demise: "The laying of
the foundation stone, the celebration of the raising of the roof beams, and moving in

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18. Goethe, *Elective Affinities,* 182; Goethe, HA 6: 300.
19. Goethe, *Briefe,* in *Goethes Werke,* ed. Bernhard Suphan and Albert Leitzmann (Weimar: Her-
mann Böhlaus Nachfolger, 1896), 4.20: 346.
20. Michael Mandelartz, "Bauen, Erhalten, Zerstören, Versiegeln: Architektur als Kunst in Goethes
Wahlverwandschaften," *Zeitschrift für Deutsche Philologie* 118 (1999): 500–517, here 500.

mark just so many stages of decline." (Grundsteinlegung, Richtfest und Bewohnung bezeichnen ebensoviele Stufen des Untergangs.)[21] Behind the novel's earnest speeches and ironic displacements, Benjamin perceives the movement of myth as a subterranean force in social relations, yet he does not provide a grand thesis about myth and architecture. More circumspectly, he links the cornerstone scene, with its festive speeches and gestures, to larger unseen forces, thereby granting a kind of legitimacy to myth through his quiet, cautious, and almost respectful line of analysis.

Recent scholarship has been very much alive to the importance of archeological tropes in Benjamin's writing on memory; however, Benjamin's references to archaic structures have quickly been coupled with nineteenth-century theories of memory and photography.[22] Sigrid Weigel notes a shift in Benjamin's use of spatial images to describe memory from the topographical model of his earliest writings on the Arcades Project in the late 1920s to the more explicit analogies between cityscapes, script, and the unconscious in the Arcades writing of the 1930s.[23] I would suggest that many Benjamin scholars and historians of modernity write and think so thoroughly within an opposition that always defines the modern as radically distinct from the ancient that they do not allow themselves to consider how deeply Benjamin's memory writing incorporated ancient mnemonic practices. We have to ignore Baudelaire's insistence that one not devote too much time to antiquity in order to recognize the vast correspondences between Benjamin's memory writing and the mnemonic tradition that winds its way with many divergences from antiquity into the baroque.

Weigel's suggestion that psychoanalysis first becomes important for the Arcades Project in the 1930s should not imply that Benjamin's earliest engagement with architecture overlooked the operations of the unconscious in his attempt to read space. Benjamin's first architectural dream interpretations did not concern the Parisian arcades so much as the more conventional monuments of nineteenth-century culture. Scattered in smaller, less methodical pieces from the 1920s we find isolated aesthetic interpretations that were later reformulated in grander terms in the 1930s. Out of these short readings we can see the continuities and smoother transitions in Benjamin's thought. Left out of Weigel's account of Benjamin's memory images is any reference to the mnemonic techniques of classical rhetoric. These practices, while "rediscovered" for late twentieth century, would have been preserved earlier in the century through canonical German literature and through the Latin education still prevailing in the Wilhelminian *Gymnasium.* Goethe's writing, most explicitly *Elective Affinities,* would have provided Benjamin a mediating link between

21. Benjamin, *Goethe's Elective Affinities,* 308; Benjamin, *Goethes Wahlverwandtschaften,* 1.1: 139.

22. Max Pensky links Benjamin's Arcades writing to Freud's famous description of the unconscious as the city of Rome with all its layers of ruins intact: "Walter Benjamin's Urban Renewal," *City* 9.2 (2005): 205–213. See also Willi Bolle, *Physiognomy der modernen Metropole: Geschichtsdarstellung bei Walter Benjamin* (Cologne: Böhlau, 1994), 306–352.

23. Sigrid Weigel, *Entstellte Ähnlichkeit: Walter Benjamins theoretische Schreibweise* (Frankfurt: Fischer, 1997), 28.

modern theories of subjectivity and the very long mnemonic tradition that traced itself back to Roman rhetoric.

Dream narration in Benjamin operates as a mental exercise of cultural history within space, wherein jarring moments from the past are preserved in specific locations. Benjamin's dreamer moves like Cicero through a building or a city, searching for a crucial forgotten fact. In both recollection and dreaming, the searching subject is given over to involuntary and serendipitous forces. The *Denkbilder* (essays) have been readily linked to baroque allegories, yet these are themselves late manifestations of a longer history of mnemonic practices. Recollections appear in Benjamin's *Berlin Chronicle* in the figure (*Gestalt*) used to place them within thought. Benjamin explains the emergence of these memory figures with much the same emphasis on placing and retrieving as in the rhetoricians: "For even if months and years appear here, it is in the form they have at the moment of commemoration." (Denn wenn auch Monate und Jahre hier auftauchen, so ist es in der Gestalt, die sie im Augenblick des Eingedenkens habe.)[24] The phrase "Augenblick des Eingedenkens" (moment of commemoration) is a lyrical form of romantic mnemonics: "Augenblick" as the subjective vision of the poetic subject, "Eingedenken" as the spatial phenomenology of placing something within thought. In *Berlin Chronicle* Benjamin refers to the city as a memory theater, wherein specific locations (*Stellen*) have greater personal importance than others. In his spatial descriptions as well as in his interpretation of lyric poetry, Benjamin shares the twentieth-century aversion to "schöne Stellen," pleasant and familiar passages sought out by tourists.[25] The essay enacts the Ciceronian practice of wandering through a familiar city in order to dredge up events and names from memory. Like that rhetorical practice, Benjamin's method arranges the past spatially rather than chronologically. The temporal order is determined by how the reflecting subject moves through the imaginary space, more than by the historical sequence in which incidents occurred. Even Roman mnemonics allow for a highly subjective organization of spatial memory. By the end of this chapter, we will see how Benjamin's insistence on a personal organization of space, which does not reiterate dominant tastes, carries over from his writing about Berlin to his aesthetics of architecture.

Unlike earlier German thinkers who adapted Roman memory experiments, Benjamin prizes the ancient city as labyrinth, whereas Kant, Goethe, and most every other adapter of ancient architecture sought orderliness.[26] The vast urban geometry of industrial cities belies the symmetrical harmonies of Vitruvius. Rather than reproducing the sharp corners of a Roman encampment, the modern city, even with its angular, functional logic, is experienced by the pedestrian as chaotic.

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24. Benjamin, *Berlin Chronicle,* in *Selected Writings,* 2: 612; Benjamin, *Berliner Chronik,* in *Gesammelte Schriften,* 6: 488.

25. On the rich double meaning of *Stellen* in literature and geography, see Eva Geulen, "Stellen-Lese," *MLN* 116.3 (2001): 475–501.

26. Benjamin, *Gesammelte Schriften,* 5.2: 1007.

This double character allows the city to become a more complete representation of human consciousness, one that includes the unconscious. To the extent that the functional and labyrinthine city serves Benjamin as an image of consciousness, we return to the tension between the articulation and accumulation of insights. Kant arranged the a priori categories symmetrically, but Benjamin posits that ordered structures accumulated over time grow into a maze. Benjamin affirms the happenstance history of insight that Kant sought to eliminate with his table of categories. Benjamin's method deploys precisely the circumstantial procedure that Kant objects to in Aristotle's philosophy: "It was an enterprise worthy of an acute thinker like Aristotle to make search for these fundamental concepts. But as he did so on no principle, he merely picked them up as they came his way."[27] Benjamin's writing, famously, insists on the unique value of insights picked up along the way.

Within the biographical account of Benjamin's development toward Marxism, *One-Way Street* represents a break from the staid labor of traditional Germanistic scholarship in favor of an avant-garde aphoristic style. In making this assertion, the work presents a motto that reiterates the trope that the self can be treated as a construction project that requires radical renovations, revised plans, and never-before-seen methods of working. True to Sigfried Giedion, Benjamin credits the engineer as the model for this self-reconstruction. Descartes and Goethe, with many in between, admired the architect as a scientific thinker who measured and redesigned material life, and Benjamin extends this lineage. In many ways the modernist insistence on an engineering approach to building reiterates the Enlightenment's strongest political arguments against architecture as a service to princes. Benjamin's presumption that architecture had liberated itself from aesthetics overstates the case, however. In this assumption, he follows Giedion's programmatic statement that "the constructor presses for a design that is both anonymous and collective. He renounces the architect's artistic bombast."[28] Benjamin's alliance with modernist engineering can be placed within the long-standing debate over whether architecture belonged to the arts or sciences. In a new twist not found in any previous articulation of the conflict, Benjamin credits a woman, Asja Lacis, with having provided him the answer, that is to say, with having redesigned him. The book's title page reads:

> One-Way Street
>
> This street is named
> Asja Lacis Street
> after her who
> as an engineer
> cut it through the author

27. Immanuel Kant, *Critique of Pure Reason,* trans. Norman Kemp Smith (New York: St. Martin's Press, 1965), 114 [A81/B107].

28. Giedion, *Building in France,* 94.

Einbahnstraße

Diese Straße heißt
Asja-Lacis-Straße
nach der die sie
als Ingenieur
im Autor durchgebrochen hat[29]

Unlike the classical architect, who integrates all elements of a project into a coherent whole, Benjamin conceives the modern engineer on the model of Haussmann, the Parisian city planner who tore boulevards through the medieval maze of the city's poorer neighborhoods. Benjamin suggests that he is himself a labyrinth that required an engineer to cut a new thoroughfare through the middle. Benjamin picks up the old Berlin tradition of naming streets not only after politicians, but also after intellectuals and artists. He is the old city, and she the planner who straightened him out. Benjamin credits Lacis with making a Communist out of him, leaving open a comparison between Haussmann's city planning and the wide boulevards Communism would later stretch out. Benjamin's admiration of high modernists, such as Le Corbusier, suggested that tearing out boulevards was not just a matter for nineteenth-century imperialists.[30]

Much as *One-Way Street* marks a rupture, Benjamin carries with him the architectural mythology of his *Elective Affinities* essay. Already on the second page of *One-Way Street,* Goethe appears to Benjamin in a dream. The third entry of *One-Way Street* has the title "Nr. 113" and is divided into three sections, each with its own title referring to a part of a house: "Souterrain," "Vestibul," "Speisesaal." The three-part structure of this aphorism in *One-Way Street* corresponds neatly to the *Denkbild* Benjamin published in the same year (1928), "Weimar." Benjamin wrote this short, three-part essay as he was revising his entry on Goethe for the *Soviet Encyclopedia.*[31] He had begun the encyclopedia piece in 1926 and worked on its revisions in 1928. All three pieces, the aphorism in *One-Way Street,* the short *Denkbild,* and the encyclopedia entry, stand in relation to each other, though not because

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29. Benjamin, *One-Way Street,* in *Selected Writings,* 1: 444; Benjamin, *Einbahnstraße,* in *Gesammelte Schriften,* 4.1: 83.

30. In Konvolut E of the *Passagen-Werk,* Benjamin quotes Le Corbusier on Haussmann: "Haussmann and the Chamber of Deputies: One day, in an excess of terror, they accused him of having created a *desert* in the very center of Paris! That desert was the Boulevard Sebastopol." In the full quotation, Corbusier, however, praises Haussmann; he mocks the way in which his own era misunderstood Haussmann. Corbusier argues that today Paris exists because of Haussmann and what was once a desert is not a congested boulevard. He shrugs his shoulders and says: "Such is life." Le Corbusier, *The City of Tomorrow and Its Planning* (New York: Dover, 1987), 156. Benjamin nips the quotation so that Corbusier's casual mockery of nineteenth-century critics of Haussmann is not included. Does Benjamin realize how much Corbusier resembles Haussmann?

31. Susan Buck-Morss recounts how the editors of the *Soviet Encyclopedia* came to reject Benjamin's article. Susan Buck-Morss, *Walter Benjamin and the Arcades Project* (Cambridge, MA: MIT Press, 1989), 387 n. 44.

they present the same ideological account of the poet. As Benjamin writes to Ger-shom Scholem, the short Weimar *Denkbild* displays the side of his Janus face that turns away from the Soviet regime.[32] The essay "Weimar" and the aphorism "Nr. 113" circle around Goethe's mythic status, whereas the encyclopedia entry presents a cogent biographical narrative that addresses the problem of Goethe's response to political tensions and events during his lifetime. The encyclopedia piece is not at all reductively ideological. It treats topics that today are familiar to most ordinary scholars, such as Goethe's relation to the Weimar court, the French Revolution, and modernization. At the time, though, Benjamin was delighted when the editors of the *Soviet Encyclopedia* approached him, because the project was such a slap at the Goethe cult. He reports to Scholem: "The divine impudence of accepting such an assignment appealed to me, and I think I will just pull the appropriate passages out of thin air."[33] He complains to his friend in Palestine about how uninspired he was to write the encyclopedia entry, his only muse being the editor's deadline. He de-scribes the assignment as "the unsolvable antinomy of writing up a popular Goethe from a materialist standpoint."[34] The full range of Benjamin's thoughts about the entry cannot be revealed by the correspondence with Scholem, given that Benja-min tells his friend directly that he has more than face when it comes to writing on Goethe. The letters to Scholem do show that the two friends shared deep knowl-edge of and esteem for Goethe. Only by reading the three pieces in relation to each other can we sense how Benjamin's Marxist conversion altered his criticism of the canonical writer. In the aphorism and the *Denkbild,* his leaps in and out of dreams demonstrate his ambivalence toward the house Goethe built.

Eric Downing reads "Nr. 113" as the first instance of Benjamin deploying an archeological metaphor to describe memory, yet I would suggest that this aphorism continues the critical method already used in the *Elective Affinities* essay.[35] The neo-classical tradition had long conjoined architecture and archeology, whereas Roman rhetorical mnemonics had always understood recollection as a walk through the storage house of memory. Benjamin couples memory with paternal legacy under-stood architecturally. Goethe is a figure in the house as well as its architect, yet the tension between destroying the father's house while unearthing childhood memo-ries within it also defines Goethe's relationship to his own father, Caspar, and to his childhood home in Frankfurt. *Poetry and Truth* lays out the autobiographical con-nection between Oedipal conflict, recollection, and architecture that Benjamin here condenses to an aphorism. Like Goethe, Benjamin joins the long line of critical confrontation and mnemonic reconstruction that relies upon the devices of spatial

32. Benjamin to Gerhard Scholem, 14 February 1929, in Walter Benjamin, *Briefe,* ed. Gershom Scholem and Theodor Adorno (Frankfurt: Suhrkamp, 1993), 2: 489.
33. Benjamin to Gerhard Scholem, 5 April 1926, in *Briefe,* 1: 416.
34. Benjamin to Gerhard Scholem, 24 May 1928, in *Briefe,* 1: 477.
35. Eric Downing, *After Images: Photography, Archeology, and Psychoanalysis and the Tradition of Bildung* (Detroit: Wayne State University Press, 2006), 188.

imagination. Whereas Goethe mocks his father's renovations of the family house, Benjamin fantasizes about its demolition, a gesture reminiscent of Descartes.

The first line of the *One-Way Street* aphorism refers to rituals that have been forgotten, specifically those involved in laying the foundation under "the house of our lives."[36] What antiquities lie buried below? They will be exposed, presumably, now that the house is under attack. Bombs are already breaking down its walls, and an assault is supposed to happen. The subjective modal form of the verb implies that the assault is planned but has yet to happen ("gesturmt werden soll").[37] What is "the house of our lives" if not the whole of bourgeois society as Benjamin knew it? The second two sections shift the scene to the Goethehaus in Weimar, adding a specifically literary reference to the phrase. In *One-Way Street* Benjamin deploys rational and political critique against the mythic foundations that he unearthed in his *Elective Affinities* essay. Alluding to the cornerstone scene, Benjamin asks what rituals were used, what sacrifices made, what magic formulas were spoken in laying the foundation to this house. This concern for mythic ritual points to the more sweeping statement in 1940: "There is no document of culture which is not at the same time a document of barbarism."[38] After 1945, Theodor Adorno frequently used the term "barbarism" in reference to the Nazis, so that today we read Benjamin's use of the term as prophetic. It also has a broader meaning in his corpus, where he uses "barbarism" to refer to all manner of religions. In "Naples," for instance, Benjamin describes the local inhabitants' Catholic faith as barbaric.[39] Thus we need to understand the term as incorporating a range of ritualistic beliefs.[40] While he opens "Nr. 113" with the intention of dismantling the mythic palace, by the end myth has been found nestling in Benjamin's dream of visiting Goethe's study. The piece moves between grand statements against the operation of myth and its quiet reemergence.

In *One-Way Street,* Benjamin alludes to a specific brutality, namely, the superstition that a building cannot stand long unless a living being has been buried within. In the *Elective Affinities* essay, he refers to the construction sacrifice, the "Bauopfer," which initially was only a wine glass engraved with the letters *E* and *O* but later in the fatal flow of the story becomes Ottilie's renunciation. When the glass does not shatter on the cornerstone, Eduard takes it as an affirmation of his love. The delicate glass hurled upward is the material contrast to the buried weightiness of the foundation. Eduard's delight in the wine glass's rescue is readily revealed as a delusion. The spared sacrifice amounts to a false lead. The momentary correspondence

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36. Benjamin, *One-Way Street,* 445.
37. Benjamin, *Gesammelte Schriften,* 4.1: 86.
38. Benjamin, "On the Concept of History," in *Selected Writings,* 4: 392; Benjamin, "Über den Begriff der Geschichte," in *Gesammelte Schriften,* 1.2: 696.
39. Benjamin, *Gesammelte Schriften,* 4.1: 307.
40. The valences of Benjamin's use of the term become quite extreme when compared with Carl Schmitt's use of "barbaric." See Horst Bredekamp, "From Walter Benjamin to Carl Schmitt, via Thomas Hobbes," *Critical Inquiry* 25 (1999): 262.

between the glass and the lovers does not forebode Eduard's escape from renunciation, for the demonic returns later in the novel to demand the sacrifice left uncompleted.[41] Benjamin does not follow the glass up into the sky; his gaze is fixed on the opening in the ground and on the cornerstone, which will serve a practical function but at this moment in the novel stands as an altar to which the characters must bring their gifts. By allowing his glass to be spared, Eduard runs the risk of not performing the required ritual properly.

Aside from *Elective Affinities,* Benjamin would have known the literary connection between building and sacrifice from Theodor Storm's *Schimmelreiter.* At a crucial point in Storm's novella, the farmers raising a North Sea dyke seek a small animal to seal their construction. American literature of the nineteenth century also provides graphic examples of repressed secrets given bodily form as buried corpses. Edgar Allan Poe's "The Black Cat" involves an alcoholic who murders his wife and buries her behind a moldy basement wall. The story impressed Charles Baudelaire so much that he began to translate Poe into French. Benjamin himself wrote about Poe's "Man of the Crowd," and he would readily have known Poe's many tales of entombment, including "The Fall of the House of Usher," "The Cask of Amontillado," "The Gold Bug," and "The Premature Burial." In *The House of the Seven Gables,* Nathaniel Hawthorne also linked the dread secret of generational sin to a secret panel containing the parchment that revealed all. Hawthorne, like Poe, gave murderous, Gothic dimensions to Balzac's truism, "The secret of a great success for which you are at a loss to account is a crime that has never been found out, because it was properly executed."[42] Benjamin's reading of Goethe's novel stresses that the trinkets laid in the foundation stand in for a more brutal sacrificial death. Goethe's mason draws the parallel between laying a cornerstone and covering up a crime with the belief that sins are as prone to be uncovered as foundations. Even though Benjamin clearly does not share the mason's belief that hidden vices and virtues are inevitably exposed, the act of foundation brings with it the anxiety or promise of exposure: "But just as the man who has done an evil deed must live in fear lest it come to light some day, so the man who has done good in secret may expect to be rewarded openly. And by the same token, we declare this cornerstone to be a memorial stone as well."[43] The laying down of construction work suggests a later digging up of archeology allowing the entire process of building to turn into a metaphor for the future's moral investigations of the present.

Any investigation that dismantles a structure, whether with spades or bombs, confronts a building's architectural solidity. Like E. T. A. Hoffmann's Rat Krespel

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41. For a potent reading that concentrates on the wine glass as fated object and as a cipher for the work of art, see Christine Lupton, "The Made, the Given, and the Work of Art: A Dialectical Reading of Goethe's *Die Wahlverwandtschaften," New German Critique* 88 (2003): 165–190.

42. Honoré de Balzac, *Old Goriot* [*Père Goriot*], trans. Ellen Marriage (Philadelphia: Gebbie, 1898), 121.

43. Goethe, *Elective Affinities,* 182; Goethe, HA 6: 301.

with his violins, Benjamin understands that in tearing down a house, one learns the secrets of its construction. In the *One-Way Street* aphorism, he couples the critique of culture with the sudden recollection of a forgotten past, in his case the memory of a school friend from his enthusiastic membership in the Youth Movement. Whether this memory represents a trauma, Benjamin does not specify. He implies that he has simply lost touch with the old friend, yet one may wonder whether this unnamed friend is Fritz Heinle, the classmate who committed suicide at the start of World War I. Certainly the assault on the house is one trauma that Benjamin does affirm as necessary, if not inevitable. To reject his youthful commitments is a step in waking from the dream.[44] The question remains, what artifacts can be recovered as the present is destroyed?

Benjamin's dream moves from the vague "house of culture" to more specific encounters with Goethe's house in Weimar. The text presents two locators, first the title of the subsection, "Vestibule," then "Visit to the Goethe House." Within the dream, the subject does not initially see himself; instead he recognizes nothing more than the space within which he stands. Only in the next line does the disoriented first person arrive to begin the narration: "I cannot remember…" (Ich kann mich nicht entsinnen…). Benjamin has trouble recalling the interior layout of the Goethehaus, yet the very act of not remembering makes clear that it is quite familiar.[45] Whereas in "Souterrain" he dredges up memory, in "Vestibule" he represses the spatial order that the subtitles create. The next line pushes him to try again, so he compares Goethe's house to the inside of a school, from which he flees. Given the negative memories of his own schooling in *Berlin Chronicle,* the parallel reinforces Benjamin's troubled relationship to official German culture. At the turn of the twentieth century any German's student's first impression of Goethe would have been that of a poet whose works had to be memorized under threat of punishment.[46] His flight seems to be stymied by two English ladies and a caretaker, passing figures whose mere presence stops the schoolboy in Benjamin from running down the long corridor. When the caretaker asks him to sign the guest book, he leafs through the pages only to find, like Heinrich von Ofterdingen,

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44. "A generation's experience of youth has much in common with the experience of dreams. Its historical configuration is a dream-configuration" (Benjamin, *Arcades Project,* 838); "Die Jugenderfahrung einer Generation hat viel gemein mit der Traumerfahrung. Ihre geschichtliche Gestalt is Traumgestalt" (Benjamin, *Gesammelte Schriften,* 5.2: 1006).

45. In her compelling reading of Benjamin's Goethe dream, Lilianne Weissberg suggests that the dreamer has stolen into Goethe's house. Weissberg's interpretation stresses the lack of comfort Jewish writers felt with official German culture, whereas my reading emphasizes how well Benjamin knew the canon. Weissberg's and my interpretations of the Goethe dream approach Benjamin's ambivalent spatialization of culture from opposite directions and thus are quite compatible. See Lilianne Weissberg, "Dining Out: Walter Benjamin Meets Goethe," in *Arche Noah: Die Idee der Kultur im deutsch-jüdischen Diskurs,* ed. Bernhard Greiner and Christoph Schmidt (Freiburg: Rombach, 2002), 249–271.

46. For a brief history of pedagogical punishments associated with Goethe's poetry, see Eckhardt Meyer-Krentler, *Willkomm und Abschied, Herzschlag und Peitschenhieb: Goethe—Mörike—Heine* (Munich: Wilhelm Fink, 1987).

that his name already appears on the page, this time in a child's awkward scrawl. The sequence ends here, leaving the dreamy impression that escape from Goethe and his institutional identity was impossible. Finding one's own name in the book of Goethe does not produce a romantic wonder and delight at the uncanny circularity socialization produces; instead it breaks the dream off with the sense that whatever one wishes to write, even one's own name, has already been entered into the book by the Other.

The last section, "Dining Room" ("Speisesaal"), presents a ceremonial encounter with Goethe that takes on the quality of ritual in response to the remark in the first line that we have forgotten the rituals. Again the spatial location in the house matters. Again the dream seems at odds with the title, for Benjamin finds himself at first in Goethe's workroom. The dream reworks the tourist trip made to the Goethehaus. The restructuring of space conforms to the dreamer's internalization of Goethe. As he rearranges the interior of the Goethehaus, the dreamer constructs a bond with the poet. He adapts features that many visitors experience, such as the long hallway through the rooms on the second floor and the diminutive size of Goethe's writing room. Benjamin writes that in his dream Goethe's writing room was even smaller than the actual one and had only one window. In the travel essay on Weimar, Benjamin notes that the shabbiness of Goethe's room is well known, thus when, in "Nr. 113," the room grows smaller and lowlier than in reality, Benjamin is not contrasting the dream room with the historical one, but rather extending its already familiar qualities. In the encyclopedia article, Benjamin quotes approvingly Goethe's comment to Johann Eckermann that he cannot abide large, ostentatious rooms:

> Magnificent buildings and rooms are all right for princes and wealthy men. When you live in them, you feel at ease…and want nothing more. This is wholly at odds with my nature. When I live in a splendid house, like the one I had in Karlsbad, I at once become lazy and inactive. A lowlier dwelling, on the other hand, like the wretched room we are in now, a little disorderly in its order, a little gipsy-like—that is the right thing for me; it leaves my inner being with the complete freedom to do what it wishes and to create from within myself.[47]

Eckermann reports the comment directly, so that he includes Goethe's reference to the room within which he and Eckermann are sitting. In "Nr. 113," Benjamin assumes the role of Goethe's secretary by joining him in his dingy room, and like Eckermann, Benjamin waits attentively for the old man to speak, which, in the dream, he never does.

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47. "Gespräche mit Eckermann," *Weimarer Ausgabe,* Anhang Gespräche, 7: 36.

Benjamin never mentions entering the room. He sits to the side of the aged Goethe, who interrupts his writing to extend an antique vase as a gift, the kind of object that might have been buried within a cornerstone. Benjamin turns it in his hand, noticing that the room has become unbelievably hot. Delicate and hollow, the vase signifies not only buried antiquity or the wine glass in *Elective Affinities,* but also a phallus passed from the father and master to the patient student. Benjamin turns the vase presumably to see the images painted on it but also to manipulate it. Having received the gift, the dreamer follows Goethe into the neighboring room, where a long table ("eine lange Tafel") has been prepared for Benjamin's relatives. Here the dream draws on the messianic tradition wherein the kingdom of God is described as a great banquet.[48] The banquet table is laid out as if for a seder. The religious ritual blends into a secular identification with the cultural icon. Parallels appear between God and Goethe, the vase and cup, all dwelling in the "house of our lives," when the aphorism is read alongside Psalm 23:5–6:

> You prepare a table before me
> in the presence of my enemies;
> you anoint my head with oil;
> my cup overflows.
> Surely goodness and mercy
> shall follow me
> all the days of my life,
> and I shall dwell in the house of
> the Lord
> my whole life long.

The dream also speaks to the desire for validation in the face of hostile relatives. In 1928 Benjamin was completing his increasingly bitter divorce, moving out of his parental house after his mother's death, and giving up his inheritance. The meal in which he sits "at the right hand" of Goethe promises to impress even the most critical family member. At the end, as Goethe rises with difficulty, Benjamin asks permission to support him. As he takes hold of Goethe's elbow he is overcome with emotions. In the last line Benjamin begins to cry, alluding to the previous dream in which he recognizes his childhood script.

In all three dreams, Benjamin finds himself sunk into childhood passions. Only at the end of the first, does he write from the position of wakefulness, and then specifically to insist that he will live directly against the dream from which he has just awoken. Benjamin well understood he was not the first German-Jewish writer

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48. Christianity extends the messianic banquet, as in Matthew 22:1–2: "Once more Jesus spoke to them in parables, saying: 'The kingdom of heaven may be compared to a king who gave a wedding banquet for his son.'"

invested in reading the iconic poet so as to separate him from the cultural propaganda of Wilhelminian Germany, nor was he the first German Jew to dream about winning the poet's approval for his work. His vitriolic attack on Friedrich Gundolf's biography of the poet, and the great energy and many pages he expends on separating his interpretation of *Elective Affinities* from the more biographical readings, demonstrate how difficult it was for many at the turn of the century to escape Goethe's paternal aura. Lilianne Weissberg also turns backward from Benjamin's dream to consider its predecessors. She associates the vase Goethe presents to Benjamin with the antiquities Freud collected on his desk.[49] In *The Interpretation of Dreams,* Sigmund Freud recounts his own dream about a friend who complained to him that he had been viciously attacked in an essay written by Goethe.[50] In the dream, Freud tries to make sense of this accusation by calculating the friend's age in relation to the year the poet died (1832). Once awake, he interprets the dream as having actually been about a young critic who attacked his Berlin colleague and friend Wilhelm Fliess. Reading Freud's account, it becomes obvious that he is quite relieved to have resolved the dream's tension. For Freud, Goethe is an authority figure, who is never challenged during the dream or its analysis; rather, Freud cheerfully cites the dream as absurd. Benjamin has a more personal investment during his dream encounter with Goethe, yet, as in Freud's dream, the poet remains a luminous figure, albeit one that Benjamin separates from official culture.

Benjamin's dream encounter with Goethe lacks the humor and the pointed reversals Heine injects into his imaginary conversation with Frederick Barbarossa in *Germany: A Winter's Tale;* however, it does show a similar desire by a Jewish writer to win the approval of a national icon. Heine only facetiously takes Barbarossa as a potential savior for Germany, but Benjamin quite earnestly handles Goethe as a luminous personage, one he can show off to his own family, presumably so that they will be proud of their boy Walter. Goethe's meal promises Jewish assimilation into German culture. Heine's dream serves a literary device for fantastical confrontations across historical time. The ironic modulation between feudalism and revolutionary democracy drives home the inconsistencies between liberalism and Prussian nationalism. Benjamin's dream has a more confessional quality: its literary stylization appears as self-analysis, rather than plotted dialogue. Hence when he weeps as he aids the aged Goethe, Benjamin presents the embarrassing side of mythology, an adoration common to bookish schoolboys. The aphorism moves from the bombardment of bourgeois culture to the awestruck meeting with Goethe via the memory of his Gymnasium friend and their shared enthusiasms. This dead figure, buried in the foundation, serves as a warning. When Benjamin awakes, he realizes that whoever resides in the house must in no way resemble the old friend.

49. Weissberg, "Dining Out," 251.

50. Sigmund Freud, *Interpretation of Dreams,* trans. James Strachey (New York: Avon, 1965), 475–477.

The friend has become the sacrifice required for the adult Benjamin's critical projects. Heine also stages a reversal when he awakes from his dream of Barbarossa, but whereas Benjamin affirms anticonformity in his wakeful state, Heine regrets the revolutionary tone he took with the medieval emperor. Both writers position cultural icons and radical critique as taking place in distinctly opposed states of consciousness. For Heine the dream is revolutionary, for Benjamin wakefulness is.

The architectural layout of the *One-Way Street* aphorism reappears in the short travel essay Benjamin wrote on visiting Weimar. As he reports to various friends, Benjamin made a last-minute decision to stay over in Weimar on his train trip from Frankfurt to Berlin. The resulting essay reads like many quaint travel reports written by big-city Germans stopping off in the provincial home of German literature, a happenstance return to an author one has already read through, but whom one is called upon to revisit for the sake of a writing assignment: "And as I rode past Weimar yesterday, I came upon the idea to stop off there on the return trip, in order to lay eyes on certain Goetheana once more, since in the next weeks I will have to occupy myself with Goethe."[51] Benjamin writes with the casual feuilleton tone that assumes the reader is already acquainted with the place and its myths. It is a commentary on the all-too familiar, a second visit to a place he has not seen in ten years, and which presumably has changed so little that one would find little reason to return, but then sometimes one does. A harmless stop. As with the aphorism, each of the three subsections locates the reader in increasingly more precise movement to the center of Weimar's myth: first, the town's largest hotel and central marketplace, then the entrance to the Goethe-Schiller archive, and, finally, Goethe's study. In the first section Benjamin awakens to hear the preparations for the open-air market in front of Hotel Elefanten. He opens his eyes, listens, goes back to sleep, then rises to watch the activity below his window, which he compares to a ballet staged for mad king Ludwig. The scene is very similar to Hoffmann's "My Cousin's Corner Window," the story Benjamin will later use to trace the literary representation of big-city crowds in Baudelaire. Hoffmann's story involves an invalid writer and his cousin who, with a telescope, track the people shopping in a marketplace in front of the tall building where the writer lives in his garret. Benjamin likewise traces the gathering and dispersion of the market over the course of the morning. Hoffmann's protagonist considers the market "a true representation of life's eternal change. Energetic work and the pleasures of looking drive the mass of humanity together. In just a few winks of an eye, everything seems old and exhausted, the voices that streamed together in the whirling crowd fade away, and the booth announces only too loudly: 'It is no more.'"[52] When Benjamin leaves his room to enter the market in Weimar, he too notes that the "orgy" of activity that seemed

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51. Benjamin to Thankmar von Münchhausen, 31 May 1928, in *Briefe,* 3: 382.
52. E. T. A. Hoffmann, "Des Vetters Eckfenster," in *Späte Werke* (Darmstadt: Wissenschaftliche Buchgesellschaft, 1979), 621; the translation is my own.

so fascinating from his window seems mundane on the ground ("nur Tausch und Betrieb"). He concludes that all gifts of the morning are best received at a height, in essence affirming the vantage point of Hoffmann's protagonist. The marketplace represents the present social condition, small-town business that for Benjamin still lingers in a nineteenth-century mode of exchange. The market is not so much an allegory of capitalism as its origin. It keeps Benjamin from dreaming, it forces him to watch and then to join, although he prefers to retreat to his literary height, like the romantic storyteller.

Benjamin discusses Weimar's most famous literary texts by entering the building in which they are housed: "In the Goethe and Schiller Archive the stairs, rooms, display cases, and bookshelves are all white."[53] As in the dream entitled "Vestibule," Benjamin examines the museum that Weimar literature has become. Again he looks at the actual pages with their handwriting. What impressions does one gather while walking through its halls? His response is the witty, ironic suggestion that the vitrines full of delicate manuscripts have the appearance of patients in hospital beds. The comparison of the archive to a hospital leads Benjamin to speculate on the contingency of the manuscripts. Were they not themselves once written in the midst of crisis? Did their existence not teeter on the brink of destruction or fame? Their enshrinement in an official building revives the belief that they were anything but official culture. Just as the second installment of the Goethe dream ends with Benjamin recognizing his own script in the Weimar guest book, the travel essay suggests a truth and a crisis in the handwriting of the manuscript, which the papers' enshrinement within the archive covers up through its own monumentality.

In the third section Benjamin returns to the kernel of Weimar's fame, Goethe's study. He writes as a tourist returning to check his earlier impressions. Nothing one sees in Goethe's small room is unfamiliar, least of all the room itself: "The primitive nature of Goethe's study is well known."[54] Hoffmann's "My Cousin's Corner Window" also confirms the impression made by Goethe's study, declaring modest writing rooms a convention of poets and writers generally. Hoffmann's narrator provides the same explanation Goethe offered Eckermann: "It is necessary to mention that my cousin lived fairly high up in a small, low room. He is a writer and this is a tradition among poets. Why have a low ceiling? Because his fantasy flies up high and builds a cheerful dome that reaches up into the blue heavens."[55] In the museum, Benjamin finds himself alone in the study for twenty minutes, and he indulges himself by fantasizing backward to what it must have been like to be in the room when Goethe wrote there.[56] This imaginary projection comes close to

53. Benjamin, "Weimar," in *Selected Writings,* 2: 149; Benjamin, *Gesammelte Schriften,* 4.1: 353.

54. Benjamin, *Selected Writings,* 2: 149; Benjamin, "Weimar," in *Gesammelte Schriften,* ed. Tillman Rexroth (Frankfurt: Suhrkamp, 1980), 4.1: 354.

55. Hoffmann, "Des Vetters Eckfenster," 598; the translation is my own.

56. Walter Benjamin, *Gesammelte Briefe,* ed. Christoph Gödde and Henri Lonitz (Frankfurt: Suhrkamp, 1997), 3: 386.

the historicist thinking he later eschews; thus he disguises the moment in *One-Way Street* as a dream: "But if we could overhear it, we would understand the pattern of existence."[57] The poet's garret is anything but advanced; it shares more with antiquity than with the "hellish" bourgeois comfort of the nineteenth century. It suggests a quieter world than modern society, a world in which the simple pattern of existence allowed an accumulation of experience to be turned into writing and even the wealthiest suffered physical pain in their daily life.[58] Goethe's room allows the gathering up of *Erfahrung,* the experience of wisdom, which Benjamin later contrasts to the shocks of modernity. This most hidden of Goethe's rooms has little in common with the bourgeois interiors Benjamin criticized for their stuffy eclecticism and material celebration of the inhabitants. The simple furniture in the study makes clear that Goethe's day revolved around writing and sleeping. His narrow bed stood across from his desk. While he slept, the manuscripts waited for him to return. "Weimar" ends with the poet's sleep, as it had begun with the author's waking. For Benjamin the modern writer cannot presume the kind of correspondence between interior life and social reality that defined Goethe's existence. The modern writer has to transform society, he suggests, in order to produce even the most feeble tones within himself.

The encounters with Goethe's novel and museum were not moments limited to Benjamin's pre-Marxist, academic career. The mythic contemplation of architecture, which these early texts detail, reappears in his writing about Paris. In one of the *Denkbilder* known as "Short Shadows I" Benjamin reviews the dynamic of yearning and disappointment Goethe had also traced in his autobiographical writing about Italy and which Benjamin had rediscovered in his own visit to the Goethehaus. The short paragraph, titled "Too Close," recounts a dream about standing before Notre Dame.[59] Benjamin's scene of a traveler come from far away to contemplate a famous facade compares readily with Goethe's writing on Strasbourg or Italy. Rather than Rome, Paris is Benjamin's object of fascination, yet in terms of the yearnings the two cities inspired they could have been interchangeable. If Rome was the capital of Christian, imperial Europe, then Paris was the capital of the modernity that shook Europe. Both cities promised a release from Germany. Benjamin writes his dream of Notre Dame within the tradition of Germans writing about their trip south to an idealized city. The title "Too Close" alludes also to the erotic play another Italian exile, Friedrich Nietzsche, describes in an entry of *The Gay Science* entitled "Women and Their Action at a Distance."[60] The erotic connotations of Benjamin's dream are more like Nietzsche's than Goethe's. Benjamin

57. Benjamin, "Weimar," in *Selected Writings,* 2: 149; Benjamin, *Gesammelte Schriften,* 4.1: 354.
58. Benjamin, "Weimar," *Gesammelte Schriften,* 4.1: 355.
59. Benjamin, *Selected Writings,* 2: 268; Benjamin, *Gesammelte Schriften,* 4.1: 370.
60. Friedrich Nietzsche, *The Gay Science,* trans. Walter Kaufmann (New York: Vintage, 1974), 123, no. 60.

blends desire with the urge to see Paris. Without stressing the point, he allows the church to take on the qualities of a beloved. Benjamin uses the same phrase in the *Elective Affinities* essay to argue against critics disappointed by his interpretation. They will accuse him, he expects, of having stepped too close to the novel, whereas, he responds, they are merely disappointed not to have rediscovered their dreamy image of the novel in literary criticism.

The Notre Dame piece opens by announcing its status as a dream, in order to provide an alibi for writing about such a touristic moment—standing in front of Notre Dame. Benjamin goes out of his way not to belabor the obvious in his urban sketches. In his travel writing generally, Benjamin holds to his insistence in *Berlin Chronicle* that the city's famous buildings have no resonance for him because he has gazed at them too often. If he is writing about Notre Dame, then it is only because he is not awake, for, as he writes about kitsch, "Dreams are now a shortcut to banality."[61] If Goethe refuses to describe the famous sites in Italy, Benjamin is embarrassed even to mention that he went near them. The paragraph starts with a simple statement of location, the left bank before the cathedral, as if the meaning were already in the placement of the dreamer and the object he sees. Location would be important for the tourist who finally arrives at the spot he has wanted to visit for so long. To have arrived is the simple and banal triumph of the dream. Only after this moment does the dream work commence. The opening is not a grammatical sentence; the subject "I" is added to the location only in the second sentence with the deictic "Da." "Da stand ich," "There stood I," meaning both "I was in front of the Notre Dame" and the simpler variations "I was merely standing there" and "There I had been brought to a standstill." The reader expects the next clause to register the disappointment: "There I stood, when…" The insertion of the pronoun "I" starts the complications. The spectator is in the right location but fails to see the church. Such an assertion presumes that the visitor can claim to know what the church looks like. Like any other traveler, he has seen pictures of Notre Dame in anticipation of going there; hence he is able to compare his mental images derived from pictures and drawings with the building before him. The brick building cannot be the signified of "Notre Dame." The word has so much more allure than the architectural structure. Benjamin, like Goethe, confronts the disappointment of arriving at the long-desired site. The church is covered in a wooden casing, *Verschalung*. The ambiguous term suggests a shell such as might surround a nut. In practical terms it might refer to scaffolding that one finds so often around cathedrals undergoing repairs. The German *Gerüst* would have been the technical term for such a construction platform, and Benjamin uses the term metaphorically in his *Arcades Project*. In this dream, *Verschalung* gives the vague sense that the church is covered up. What can be seen of the church behind its shell

61. Walter Benjamin, "Dream Kitsch," in *Selected Writings,* 2: 3; Benjamin, "Traumkitsch," in *Gesammelte Schriften,* 2.2: 620.

Benjamin describes with the imagery of a mountain: only the last terraces of its massive form soared over the wooden covering. As many before him have done, Benjamin describes the cathedral as sublime nature. In the next sentence he veers away again from the obvious, insisting that he is overwhelmed not by the object, as would be expected in the discourse of sublimity, but by his own desire for the city of Paris. Benjamin uses the distinctly romantic term for yearning, *Sehnsucht*. Faced with the paradox of being in the place that he desires yet still yearning to see it, he concludes that he made the simple mistake of coming too close to it. The paragraph concludes with the most enigmatic statements, which stand opposite the geographical location of the opening. Benjamin distinguishes between two types of yearning: that which he felt in Paris was not the same as what a picture produces in a spectator. In Paris, in his dream, he was filled with an "unheard-of" desire that nestles only in the name. This desire has already crossed the boundary (*Schwelle*) of the picture, as well as its optical and physical possession. The names "Notre Dame" and "Paris" stand apart from their pictorial representations. They lend their force (*Kraft*) to their images, giving them the status of the beloved. Inversely, the name is the refuge of all pictures, a haven that gives value to the image even when it no longer can depict the place. Benjamin insists that the name is itself outside the world of images—it is *bildlos*.

"The Work of Art in the Age of Mechanical Reproduction" contains Benjamin's most famous formulation of urban perception.[62] Most commentaries apply the essay's central term, *aura,* to film, photography, and painting; however, Benjamin first raised the question of how technology alters perception in relation to the typical Renaissance villa and its view six years before he wrote the "Work of Art" essay.[63] If we trace the emergence of Benjamin's key terms, we can more completely understand architecture's importance in distinguishing modern experience from earlier modes, particularly the pastoral villa. A key aphorism, "Poverty Always Has to Foot the Bill" (Armut hat immer das Nachsehen), written in 1929, also appeared in the same "Short Shadows" collection as the dream of Notre Dame.[64] These few dense lines set the stage for the later comparisons between architecture, nature, and photography. The luxurious view afforded the inhabitant of a Renaissance villa serves as the paradigmatic example of auratic perception. Architecture, sculpture, and painting conjoin in the ideal villa. The most famous villas include works by masters in all the genres. Palladio's Villa Barbaro at Maser included paintings by Paulo Veronese and sculptures by Alessandro Vittoria. The paintings and sculptures of a villa are not merely housed within the structure; they are fully integrated within its plan, so that, for example, frescoes of mythological landscapes on the

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62. Benjamin, *Gesammelte Schriften,* 1.2: 471–508.

63. For a useful discussion of Benjamin's comments on architecture, which, however, does not discuss the "Work of Art" essay, see Heynen, *Architecture and Modernity,* 95–118.

64. Benjamin, *Selected Works,* 2: 269; Benjamin, *Gesammelte Schriften,* 4.1: 370.

walls of a room orient the inhabitant's view out the window onto the valley that almost inevitably surrounds the most famous villas. The paintings, which surround the windows of the Villa Maser, create a sequence of landscapes in which the actual environment is but one of several idealized images of nature. While many villas had some relationship with local agriculture, either functionally as a source of income for their owner or symbolically through idyllic representations celebrating rural patriarchy, the Villa Rotunda was intended exclusively for the entertainment and pleasure of its owner.[65] Goethe notes that its grandiose rooms and porticoes would make it less than a comfortable residence.[66] Critical art historians have recounted how the Renaissance villa's vistas reinforce the prestige and power of an urban ruling elite.[67] James Ackerman notes that in order to understand how a villa responds to its surroundings one must consider not only how the facade and overall arrangement integrate with the landscape, but also how the internal organization and decoration of the rooms constitute an image of the outside world.[68] Put simply, the villa was not only meant to be viewed, but just as importantly it provided an ideal perspective onto the world. In its exclusivity the villa constitutes the antithesis of art for the masses. Its very purpose was seclusion from the urban populace, in that sense that it embodied the aesthetic perception most challenged by industrial technology. Without the pressures of city life, the villa would be unthinkable. The ideology of the villa depends on it embodying the antithesis of urban values.[69]

Benjamin picks up on Goethe's discomfort with the Italian villa's command over nature. But, unlike Goethe, he does not consider the perception granted to the villa's inhabitant an *individual* concern; rather he frames it in explicitly class terms. Nature, he argues, may provide beauty and solace to vagabonds and beggars, but its greatest splendors are offered up to the rich who sit behind the broad windows of their cool salons: "This is the inexorable truth that the Italian villa teaches anyone entering its gates for the first time in order to take a view of lake and mountains—a view next to which everything he has seen outside pales, like a Kodak photograph next to the work of a Leonardo." (Das ist die unerbittliche Wahrheit, die die italienische Villa den lehret, der zum ersten Male durch ihre Pforten trat, um einen Blick auf See und Gebirge zu werfen, vor dem, was er dort draußen gesehen hat,

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65. Robert Tavernor, *Palladio and Palladianism* (London: Thames & Hudson, 1991), 78–80.

66. "Inwendig kann man es wohnbar, aber nicht wöhnlich nennen. Der Saal ist von der schönsten Proportionen, die Zimmer auch; aber zu den Bedürfnissen eines Sommeraufenthalts einer vorehmen Familie würden sie kaum hinreichen." Goethe, HA 11: 55.

67. James Ackerman, *The Villa: Form and Ideology of Country Houses* (Princeton, NJ: Princeton University Press, 1990), 10–13; Reinhard Bentmann and Michael Müller, *Die Villa als Herrschaftsarchitektur: Versuch einer kunst- und sozialgeschichtlichen Analyse,* 2nd ed. (Hamburg: Europäische Verlangsanstalt, 1992).

68. Ackerman, *Villa,* 26.

69. Ibid., 9.

verblaßt wie das Kodakbildchen vor dem Werk eines Leonardo.)[70] Benjamin presents the scenario ironically by stating that it is nature that offers the rich a view, rather than that it is the rich who take the view. This ironic tone calls attention to how "natural" nature seems from the villa, as if the view were not constructed by the architect and the property owner. Benjamin equates the villa's view with the power, force, and presence of a Renaissance painting. In this case auratic art, in the form of the villa and the masterpiece, overwhelms photography. When standing inside the villa, aura is affirmed absolutely. The viewer sees nature out the window as if it had been placed there by God's hand: "Indeed, the landscape hangs for him in the window frame, and only for him has God's master hand added His signature."[71] Here we have a striking reversal of Benjamin's argument that photographic technology vitiates the unique presence of art. In front of the actual painting or within the exclusive position of the villa, the viewer is positioned as a premodern spectator, thereby vitiating the success of film and photography. The view from the villa seems unmediated; no image stands between the observer and beauty; there is no need for copies or any technological approaches to reality because it stands in its Edenic form just outside the window. Architecture, the placement of the building and the window, is the technology that enables this ideal and exclusive spectatorship, yet as both Goethe and Benjamin note, the first-time viewer does seem to notice the structural frame of the vision. This illusion of nature presented with all its bounty is precisely the effect that the villa's design strives for.

The perceptual difference between perspectival grandeur and urban compactness was well known in the Renaissance. Palladio's most famous villas were meant both to be admired from a distance and to present residents a view into a landscape.[72] In contrast, his urban palazzi stand on narrow streets that do not allow a view of the entire building. One almost presses up against the palazzi as one walks past, whereas the villas (and some churches) present observers a single, coherent image. In the "Work of Art" essay, Walter Benjamin takes up this contrast as a fundamental distinction between classical and modern appropriations of architecture. Benjamin describes aura as the perception of an attribute in the object that in fact is generated by the perceiving subject. Aura is experienced as if it were a quality belonging to the object, yet the point of Benjamin's history is to demonstrate that this appearance is conditioned by specific technological and economic conditions. In his early drafts of the *Arcades Project* Benjamin describes Haussmann's restructuring of Paris as similar to Pope Alexander's plans for reconstructing Rome—in order to create undisturbed, long-range vistas onto urban monuments: "The Arc

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70. Walter Benjamin, "Poverty Always Has to Foot the Bill," in *Selected Writings,* 2: 269; Benjamin, "Armut hat immer das Nachsehen," in *Gesammelte Schriften,* 4.1: 370.

71. Benjamin, *Selected Writings,* 2: 269; Benjamin, *Gesammelte Schriften,* 4.1: 370.

72. Paul Holberton, *Palladio's Villas: Life in the Renaissance Countryside* (London: John Murray, 1990), 111–128.

de Triumphe, the Sacré Coeur, and even the Pantheon appear, from a distance, like images hovering above the ground and opening, architecturally, a fata morgana. Baron Haussmann, when he undertook to transform Paris…was intoxicated with these perspectives and wanted to multiply them wherever possible."[73] Through mirrors and windows the arcade reproduces open perspectives within the narrower space of a long hallway.

The destruction of the World Trade Center provides a more potent example of the distinction between haptic and visual approaches to architecture. Before the attack, the Twin Towers were blank images perceived in distant shots of Manhattan, a view for postcards and establishing shots in television shows. Up close, they were almost impossible to see as an entirety. They were certainly not perceived as mythic double monuments by those who lived and worked around them. The majority of city residents experienced them by moving bodily through their spaces, not by gazing at them. Survivors and mourners all referred to the place within the Trade Center where people worked and died—specifically the floor and the Tower. The trauma of the Towers' destruction appeared as shocking images replayed on television repeatedly until by consensus they disappeared from all screens. The visual shock of seeing such massive buildings burning and falling apart was given bodily significance by the testimony of those who were in the buildings, those who could not watch the fire, but only run from it. This haptic experience lends an overwhelming authenticity to the image. Distant viewers shared in the physical trauma through their empathetic identification with the Towers' inhabitants. Seen on their own without the bodily identification, the burning Towers would have been comparable to images in any number of catastrophe films, which trade on the shock of seeing familiar landmarks destroyed but which have a cold, technical feel, as they are only special effects, and thus lacking in any tactile significance. The haptic experience of architecture comes closest to the mythological effects of construction and destruction that Benjamin traces in Goethe's *Elective Affinities* and that were so potently unleashed by the World Trade Center attack.

Benjamin gives precedence to the habitual mode of understanding architecture as a contrast to the touristic understanding of buildings, which emphasizes their art historical character, their style, and their importance in the development of art. Imbedded in Benjamin's account of tactile perception is a preference for the consciousness of people who work in and around buildings, rather than that of those who contemplate them with an eye toward mastery, either stylistic or economic. Giedion also moves away from the individualistic account of architectural history in favor of the mundane social. Like Benjamin, he maps the opposition in such a way that the collective and the labyrinthine correspond to the unconscious: "Like hardly any age before, all actions were labeled 'individualistic' (the ego, Nation,

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73. Benjamin, "Paris Arcades II," *Arcades Project,* 877; Benjamin, *Gesammelte Schriften,* 5.2: 1049.

Art), but underground, within disdained everyday fields, it had to create the elements of collective design, as in a frenzy."[74] As much as government buildings were intended to impose a sense of awe on viewers, to make a strong impression upon first viewing, they lose their grandeur for those who live and work around them. The perception of ordinary inhabitants and neighbors becomes an example of un-auratic appropriation. Here the reproduction of an image has nothing to do with technology; rather it is daily contact that breeds the familiarity that wears away aura. The surest sign of an urban dweller is his disregard for the buildings on his street; only an out-of-towner would stand looking in front of a building. Furthermore, the speed of urban traffic obliterates sidewalk contemplation while the chaos makes concentrated focus impossible.

Benjamin's misappreciation of the tourist's perspective is by no means unique. Tourists have always been mocked or taken advantage of; almost every tourist knows the perils of being taken for one. In one of his 1896 Berlin letters, Alfred Kerr gave a ironic list of how to tell foreigners from locals: "Even in the manner of walking one recognizes the strangers. They proceed with faces raised high and seem to always be checking if everything is in order on the roofs of houses. The native Berliners usually drag their gaze along in the dust. They avoid the wasteful expenditure of energy required to turn the ocular muscles upwards. The native-born Berliner does not contemplate department store windows with religious intensity. The native Berliner does not memorize the names of streets by heart."[75] This disregard for municipal organization is not just a characteristic of the modern urban dweller. In the essay "Naples," which Benjamin wrote with Asja Lacis, the same distinction between northern tourists and natives appears:[76] "No one orients himself by house numbers. Shops, wells and churches are the reference points—and not always simple ones. For the typical Neapolitan church does not ostentatiously occupy a vast square, visible from afar, with transepts, gallery, and dome. It is hidden, built in.... The stranger passes it by."[77] Naples lacks the clearly marked spaces of Rome that foreign travelers expect in order to enjoy the vista of famous buildings. Benjamin characterizes the disoriented northern tourist as a blind man wandering through the streets with his hands, rather than his eyes, as a guide: "The traveling citizen who gropes his way as far as Rome from one work of art to the next, as if along a stockade, loses his nerve in Naples."[78] Indeed, Goethe was clearly one of those travelers who favored the open spaces of Rome precisely because they

74. Giedion, *Building in France,* 99.

75. Alfred Kerr, "Die Fremden kommen" (June 14, 1896), in *Mein Berlin, Schauplätze einer Metropole* (Berlin: Aufbau, 2002), 105.

76. Susan Buck-Morss stressed the importance of Naples in Benjamin's development toward the Arcades Project in *Dialectics of Seeing,* 26–27. Graeme Gilloch elaborates upon and critiques Buck-Morss's analysis in *Myth and Metropolis,* 21–36.

77. Walter Benjamin, "Naples," in *Selected Writings,* 1: 416; Benjamin, "Neapel," in *Gesammelte Schriften,* 4.1: 309–311.

78. Benjamin, *Selected Writings,* 1: 414; Benjamin, *Gesammelte Schriften,* 4.1: 306.

allow for painterly contemplation.[79] Upon arriving in Sicily, Goethe comments immediately on the disturbing similarities between Palermo and Naples: "We explored the city thoroughly. The architecture is similar to that of Naples, but the public monuments—the fountains, for instance—are even further removed from the canons of good taste. There is no instinctive feeling for art here, as there is in Rome, to set a standard. The monuments owe their existence and their form to accidental circumstances."[80] This passage stands in sharp contrast to Goethe's enthusiasm for Vicenza, where he also reported his impressions of the local architecture upon first arrival. The possibility for a reverie before a singular building is made impossible by the chaotic arrangement of the urban landscape. Naples and Palermo frustrate Goethe's urge to fixate on a single structure as the expression of a solitary artist. Benjamin moved in the reverse direction: from Capri to Naples, then north to Rome and Florence. The southern city makes the strongest impression on Benjamin, hampering his feel for the cosmopolitan center. He writes to Scholem: "Even after moving to Rome I have not taken my leave from Naples. After the extreme temperament of Neapolitan city life, the moderated cosmopolitanism of Rome left me cold. Only now do I appreciate how oriental Naples is."[81]

Within the context of Benjamin's argument about art's aura and its demise through modern technology, the tactile approach to architecture serves as an example of unauratic perception.[82] The tactile perception of modern urban dwellers correlates to the same population's distracted viewing of film. Within the polarities of Benjamin's larger thesis about aura, the local, tactile perception of architecture is aligned with the surgeon's perspective on the human body. Local residents penetrate into corners of cities that few tourists even recognize, yet this perception, because it passes so closely to objects, does not provide a painterly view of entire buildings.[83]

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79. Still, Goethe's spectatorship cannot be reduced to that of a typical tourist. The recognition of foreign visitors as such was a concern in the eighteenth century. Goethe, while first traveling in Italy, sheds his northern clothes in order to walk around unnoticed. Nor should one presume that touristic viewing was always just superficial. Tourists go out of their way not to seem shallow. Indeed, they are quite capable of using the antitourist bias as a means of distinguishing themselves from other, less dedicated tourists. After a few weeks in Italy, Goethe separated himself from other northerners, whom he observed looking at a building or painting just long enough to report back home that they had seen it.

80. J. W. Goethe, *Italian Journey,* trans. W. H. Auden and Elizabeth Mayer (London: Penguin, 1970), 231; Goethe, HA 11: 234–235.

81. Benjamin, *Briefe,* 1: 362.

82. In the *Passagenwerk,* Benjamin states that architecture was the earliest form to liberate itself from the conventions of art. Benjamin is writing from the perspective of modern functionalism, yet the debate over architecture's status as fine art or a mechanical art is as long as the history of the field: "Die Architektur [ist]…am frühesten dem Begriffe der Kunst historisch entwachsen, oder besser gesagt…sie [vertrug] am wenigsten die Betrachtung als 'Kunst,' die das 19. Jahrhundert, im Grunde mit nicht viel größerer Berechtigung in einem vordem ungeahnten Maße den Erzeugnissen geistiger Produktivität aufgezwungen hat." Benjamin, *Gesammelte Schriften,* 5.1: 217 [F3,1].

83. K. Michael Hays uses Benjamin's distinctions between the painter and the camera, the magician and the surgeon, in order to distinguish different tendencies in the Bauhaus school. K. Michael Hays, *Modernism and the Posthumanist Subject: The Architecture of Hannes Meyer and Ludwig Hilberseimer* (Cambridge, MA: MIT Press, 1992), 132–133.

The localized perspective eschews the vistas required to appreciate the proportions and organic unity of classical architecture in favor of the worm's glance. Benjamin reverses the valences of the classical distinction between the architectonic and the accumulative, giving greater historical significance to the street-level perception. Within the context of industrial cities, this reversal reflects the common experience of residents, who engage with architecture only to the extent that it surrounds their working day.

Much has been written about Benjamin's strategy of losing himself in a city as if it were a forest. In Berlin the art of disorienting oneself challenges Benjamin, for he knows the city intimately. Only in Paris did he learn how to wander aimlessly while never truly being lost. In the autobiographical essay *Berlin Chronicle,* written in 1932, he contrasts wandering with the banal problem of simply not knowing where one is:

> Not to find one's way in a city may well be uninteresting and banal. It requires ignorance—nothing more. But to lose oneself in a city—as one loses oneself in a forest—this calls for quite a different schooling. Then, signboards and street names, passersby, roofs, kiosks, and bars must speak to the wanderer like a twig snapping under his feet in the forest.[84]

Paris is more than a garden maze (*Irrgarten*); it is a warren of tunnels (*Irrstollen*). Italian cities are of course famous for allowing German tourists to stray. In the essay "Uncanny," Freud writes about losing his way in the red-light district of Rome. In his letter to Scholem about his visits to Rome and Florence, Benjamin bemoans that he did not have enough time to let himself stray:

> Finally I have…not had so much time to concentrate on architecture. For my fully inductive manner of familiarizing myself with the topography of a place by searching out the banal, beautiful, or impoverished houses that make up the labyrinthian surroundings of major buildings takes up too much time and does not allow me to get to my reading: without such explorations all I have are impressions of the architecture.[85]

The method he outlines to Scholem becomes a liability when traveling quickly. Furthermore, it requires the walker to give himself over to the labyrinth:

> I have an excellent image of the topography of the place. You have to blindly tap your way out through a city so that you can walk back with sovereign confidence.[86]

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84. My translation; Benjamin, *Berliner Chronik* (Frankfurt: Suhrkamp, 1970), 20; Benjamin, *Gesammelte Schriften,* 6: 469.

85. Benjamin, *Briefe,* 363–364.

86. Ibid., 365.

As in his later descriptions of Paris as a tunnel system (*Paris Arcades II* and *Berlin Chronicle*), Benjamin suggests that the *Spaziergänger* must feel his way through the city, relying on touch rather than sight. If vision does assist, it is only for small signs seen close up, not for sighting long vistas along boulevards. Touch more than sight assists in these slow investigations.

Examining cities and buildings haptically is a minor theme in German architectural criticism. In his "Architecture" essay of 1795, Goethe remarks that architecture does not serve the eyes but can be perceived through the human body. He compares living in a well-designed building with the corporeal pleasure of ballroom dancing, wherein the body moves according to certain rules that constrict its freedom but nevertheless enhance its enjoyment:

> One would think that architecture as a fine art works solely upon the eye, yet one has hardly noticed that it would be far better if architecture worked with a sense for the mechanical movement of the human body.

> Man sollte denken, die Baukunst als schöne Kunst arbeite allein für's Auge; allein sie soll vorzüglich, und worauf man am wenigsten Acht hat, für den Sinn der mechanischen Bewegung des menschlichen Körpers arbeiten.[87]

Goethe is at once more sensual and more organized by formal rules than Benjamin:

> We perceive a pleasant sensation when, in dance, we move according to certain rules; we should be able to stir up a similar sensation in someone whom we guide, blindfolded, through a well-built house. In this case the weighty and complicated teachings of proportion apply, through which the character of a building and its various parts become possible.

> Wir fühlen eine angenehme Empfindung, wenn wir uns im Tanze nach gewissen Gesetze bewegen; eine ähnliche Empfindung sollten wir bei jemand erregen können, den wir mit verbundenen Augen durch ein wohlgebautes Haus hindurch führen. Hier tritt die schwere und komplizierte Lehre von den Proportionen ein, wodurch der Charakter des Gebäudes und seiner verschiedenen Teile möglich wird.[88]

Dance, as it appears in *The Sorrows of Young Werther,* was a euphoric introduction to sexual contact, a movement so physically enjoyable that the dancers feel almost as if they have left their bodies. The analogy in architecture, Goethe suggests, would be to lead someone blindfolded through a building. Even without sight, the proportions would make themselves more manifest to the sense of touch. Goethe's understanding of haptic perception of architecture returns to the classical analogy

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87. Goethe, "Baukunst," FA 1.18: 368.
88. Ibid.

between humans and buildings. Without stating so explicitly, he draws on the assumption that because humans are symmetrically organized, they will "grasp" a similar order in buildings through their own bodily contact with the limits that define space (the walls). Having taken hold of the geometrical arrangement of a house, they will infer an interior identity, its character, which in modernist terms is often reduced to its function—as monument, dwelling, or workplace.

The leap from Goethe's haptic sense of architecture to Benjamin's is neither historically nor theoretically direct. Goethe develops his idea during the sexual rush of living in Rome and under the influence of Johann Gottfried Herder's theory of sculpture. His scattered thoughts on haptic perception are systematized by art historians in the second half of the nineteenth century. Heinrich Wölfflin acknowledges the importance of Weimar aesthetics in his 1886 dissertation, *Prolegomena to a Psychology of Architecture.*[89] That Benjamin despised Wölfflin after attending his lectures in 1915 does not preclude his pursuing a line of aesthetics the art historian had first developed thirty years prior.[90] Still, strong differences appear between Goethe's and Benjamin's accounts of haptic perception. The poet's architectural test is perhaps too sensual to find a direct analogy in Benjamin's streetwalking. Goethe celebrates his sightless discovery of proportions in his fifth *Roman Elegy,* where he contrasts the tourist, who leafs through famous art during the day, to the evening lover, who traces the sculptural form of his mistress's breasts and hips. Goethe ties haptic sensing to his immediate bodily environment, with architecture as the widest spatial range; Benjamin extends the sensing, so that it loses its bodily immediacy to function as a metaphor for the pedestrian's encounter with a city. The arcade has the literal quality of its German name: a passageway, wherein traffic moves. Benjamin does play on the sexual/bodily connotations of the tunnel system lightly when, for example, he refers to the Passage as the mother of Surrealism, yet his materialist manner of thinking leads the topographical and architectural metaphors away from individualist significations and toward class identities.

Benjamin travels through Italy in quite the reverse manner from Goethe. Not only does he enter from the south, but he also buys and reads quantities of books: "I have had to limit myself to buying French books in Naples, Rome, and Florence, mostly new releases."[91] If Goethe seeks Italy in order to flee books and paperwork, Benjamin treats the place as an extension of his reading. Goethe remains in Italy for over a year, whereas the impoverished Benjamin hastens back to Berlin.

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89. Heinrich Wölfflin, *Prolegomena to a Psychology of Architecture,* in *Empathy, Form, and Space: Problems in German Aesthetics, 1873–1893,* intro. and trans. Harry Mallgrave and Eleftherios Ikonomou (Santa Monica: Getty Center for the History of Art and the Humanities, 1994), 153, 161. This collection presents the most important theorists of empathy for architecture in the nineteenth-century German context.

90. Thomas Levin, "Walter Benjamin and the Theory of Art History," *October* 47 (1988): 79.

91. "Ich habe mich darauf beschränken müssen, in Neapel, Rom und Florenz französische Bücher einzukaufen; meist Neuerscheinungen." Benjamin, *Briefe,* 365.

Meandering through Rome and Florence takes too much time. In the first paragraph of his *Soviet Encyclopedia* essay on Goethe, Benjamin discusses the poet's disregard for urban life, even though he had been born in Frankfurt. The only cities Goethe really ever came to know, Benjamin writes, were Rome and Naples.[92] Like Benjamin, Goethe also wrote short essays about Neapolitan street life after his return from Italy.[93] Goethe takes a physiognomic approach to the city. Benjamin and Goethe share the trait that they both write against the reigning guidebooks of their era. Just as Benjamin enjoys contradicting Baedeker, Goethe reacts against the claim made in Volkmann's *Reisebeschreibung* that Naples had up to forty thousand people who spent the day doing nothing, and sets out to describe the many types of laborers he encounters in the streets. Baggage carriers, boatmen, fishermen, coachmen, small children selling food—everywhere Goethe finds activity. He chides the northerner who would not recognize the ease and pleasure with which Neapolitans work. While he concludes it would take years living there to produce a complete tableau of the city, Goethe clearly considers such a sociological study fascinating. Like Benjamin, he tries to account for how the lower classes carry on despite their total impoverishment.

Benjamin's later theoretical account of tactile perception takes inspiration from Naples.[94] Its streets and buildings offer no firm boundaries, no severe walls, that demand that the pedestrian keep his distance. The city is described as porous, the very antithesis of classical articulation: "The stamp of the definitive is avoided." (Man meidet das definitive, Geprägte.)[95] The division between street and structure, which is meant in northern cities to reinforce the distinction between family privacy and public spectacle, does not exist in Naples. Personal relationships shift constantly in an environment where architecture does not enforce distinctions. This condition has persisted so long in Naples that over time it is even difficult to distinguish buildings that have fallen apart from those that are being built. Construction and ruin, the two extremes of architecture, blur together. Projects are finished because the social relationships are constantly shifting, and construction is kept open-ended so that buildings can adapt to new personal, familial, and communal arrangements. Architecture is required to improvise; thus it has a temporary and incomplete quality. Benjamin and Lacis provide a fantastical, whirling image of Neapolitan life, one that perhaps fits other travel accounts of the city, but even if their essay belongs to the longer tradition of Germans celebrating south-

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92. Benjamin, "Goethe," in *Selected Writings,* 2: 161.

93. Goethe, "Auszüge aus einem Reise-Journal," FA 1.18: 213–220, 221–225.

94. Graeme Gilloch identifies a similar emphasis on proximity and tactility in Benjamin's essay "Moscow." Graeme Gilloch, "Benjamin's Moscow, Baudrillard's America," in *The Hieroglyphics of Space: Reading and Experiencing the Modern Metropolis,* ed. Neil Leach (London: Routledge, 2002), 164–170 in particular.

95. Benjamin, "Naples," in *Selected Writings,* 1: 416; Benjamin, "Neapel," in *Gesammelte Schriften,* 4.1: 309.

ern Italy, there is no question that the essay's description of buildings and public spaces is decisively unclassical. Nowhere in the essays does one find an architectural description wherein the clearly defined elements of buildings are perceived as a whole by an observer standing at a perspectival distance. The separation of building and viewer, parts and whole, which underlies classical architecture, is lost to the impoverished Neapolitans, as it is hidden from modern industrial workers. The position of the average Neapolitan pedestrian corresponds closely to the modern city dwellers' tactile relation to buildings, in Benjamin's account, creating the kind of correspondence between the archaic and the modern that Benjamin relished. The archaic open spaces recounted in "Naples" inform Benjamin's first writings on the collective identity embodied by the Paris arcades: "Streets are the dwelling place of the collective. The collective is an eternally wakeful, eternally agitated being that—in the space between the building fronts—lives, experiences, understands, and invents as much as individuals do within the privacy of their own four walls." (Straßen sind die Wohnung des kollektivs. Das Kollektium ist ein ewig waches, ewig bewegtes Wesen, das zwischen Häuserwänden soviel erlebt, erfährt, erkennt und ersinnt wie Individuen im Schutze ihrer vier Wände.)[96] Benjamin's fascination with the archaic manner of building in Naples corresponds to Giedion's account of the anonymous nineteenth-century engineer who designed and built according to immediate needs: "The names of the constructors who gave shape to the nineteenth century are for the most part unknown. Just as in the Middle Ages, the actual development occurred anonymously."[97]

Only the advent of film and photography reestablishes a visual relationship between the urban populace and their environment. The camera creates a perceptual distance even as it moves in for close-ups and slow-motion shots. Film accomplishes some of the effects of Benjamin and Lacis's writing; they both isolate features that would otherwise go unnoticed. In the case of the World Trade Center attack, film provides a repetitive return to the shock of destruction—repetition carried to the extreme, so that it almost becomes a photo still, thereby freezing the attack into an eternal moment ripe for contemplation.

The pilgrimages to Ground Zero demonstrate that traumatic destruction lends an auratic quality to spaces previously considered unimportant. The World Trade Center was indeed perceived by most commuters as a place one rubbed up against, a colossus that evoked no particular aesthetic values. Only tourists would look up at it or ride the elevator up to look out from it. The Towers, like the Italian villa, provided godlike views that stunned the first-time visitor but were ignored by the thousands who worked in and around the buildings. Only after the fact did postcards, placards, and video reruns transform the Towers into a site of elegiac reflection. Photography today reinforces the spectatorial reconstruction of lost architecture,

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96. Benjamin, *Arcades Project,* 879; Benjamin, *Passagen-Werk,* in *Gesammelte Schriften,* 5.2: 1051.
97. Giedion, *Building in France,* 97.

and not just for tourists. The most engaged critics of architectural aesthetics have turned out to be the very same workers whom Benjamin so accurately described. The visual contemplation of ruins and plans for reconstruction has become the basis for intense introspection (and proud chest-beating) by the inhabitants of both locales. In New York, even the gruffest native has become an intense participant in the mythology of his own city.

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