

SEEING
and BEYOND

Essays on Eighteenth- to
Twenty-First-Century Art
in Honor of Kermit S. Champa

EDITED BY DEBORAH J. JOHNSON
AND DAVID OGAWA



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Hans Auer and the Morality of Architectural Space

IT IS A TELLING FACT that, nearly a century after his death, a discussion of the Swiss-Austrian architect Hans Auer (1847–1906; figure 1) requires not only an introduction to historians of 19th and 20th-century architecture, but perhaps some justification as well. This is symptomatic of an enduring resistance to examining the backdrop of Germanic Modernism unfettered by the aesthetic and ideological preconceptions of the Modern Movement. Because we are the direct inheritors of this rich Teutonic tradition—and of the full weight of its theoretical, pedagogical and practical implications—it is hoped that this contribution may not only clarify the more closely circumscribed historical concerns addressed below but perhaps also expose the considerable vibrancy and sophistication of this largely neglected body of architectural theory (and its concomitant practical consequences). To the extent that it does, it may be discovered that the intellectual history of European Modernism can be significantly enriched, offering vast new corridors to explore in a fresh light. Following a brief discussion of Auer's largely unknown background and career, I shall attend to his articulation of the creative value of the idea of architectural space in the early-1880s, perhaps his most significant contribution to Architectural Realism, the dominant trend in European theory and practice during the final two decades of the 19th century.

Beginning his education at the age of four, when the family moved to Zurich in 1851, Hans Wilhelm Auer attended the Institut Beust and various *Kantonsschule* until 1864, when he apprenticed under a carpenter (*Zimmermann*) by the name of Brunner in Riesbach-Zürich.¹ Later that autumn, he entered the Federal Polytechnikum, at a time when Gottfried Semper, Friedrich Theodor Vischer and Wilhelm Lübke were on the faculty. Auer matriculated with honors in 1867 and worked briefly for the Schaffhausen city planner.

In October 1869, Auer moved to Vienna—the Austrian capital then in the midst of a colossal urban development project centering on the Ringstraße—where he attended Theophil von Hansen’s *Meisterschule* at the Academy of Fine Arts until the next spring, when he was invited to join the master’s atelier. Auer soon made himself indispensable as Hansen’s “right hand” and remained in the office for the next fourteen years. It was during this period that Hansen erected the new Stock Exchange, the Academy of Fine Arts and his most prominent commission, the Austrian Parliament (1874–84), for which Auer served as *Bauleiter*. During these years, Auer also divided his time as Hansen’s “assistant for classical architecture” at the Academy. Upon leaving Hansen’s office, he was appointed Professor of the Building Departments (*Baufächer*) at the k. k. Staatsgewerbeschule in Vienna. In 1886–87, Auer designed and erected the Eder Sanatorium (figure 2), a distinctive Neo-Renaissance building with a domed vestibule located at Schmidgasse 14 in the shadow of the Vienna Rathaus.² For his contributions to the artistic culture of the Habsburg monarchy, Auer was awarded the Golden Service Cross with Crown in 1877 and the Order of Franz Joseph in 1884.

In 1885, soon after establishing his own practice in Vienna and upon return from a vacation in Berlin, Auer was notified that he had received second prize for a design of a new Parliament and Federal Administration Building in Bern, an eastward expansion of the existing *Bundesrathaus* (erected 1852–57); Auer conceived a symmetrically canted group of the three structures in which new and old administrative buildings would flank a centrally-disposed Parliament overlooking the Aare. His designs were displayed in the 1888 International Jubilee Exhibition in Vienna and he was eventually invited to design and execute the entire complex, on which he worked uninterruptedly between 1894 until 1902 (figure 3).³

To qualify for the assignment, Auer had to change his nationality back from Austrian to Swiss, a move that also enabled him to accept a Professorship for the History of Architecture and Sculpture at Bern University in 1890. During a decade and a half in Bern, Auer designed postal facilities for Solothurn and Liestal, as well as the Four Seasons Building for the Gotthardbahn in Lucerne. He was also responsible for designing a new theater, an inn, and a casino. In addition to a healthy practice, pressing academic responsibilities and competition reviews, Auer found time to compose a typological study of stock exchanges for Durm’s *Handbuch der Architektur*,⁴ the most comprehensive and enterprising architectural publication series of the 19th and 20th centuries. He died at the age of 59 on August 30, 1906, and was recognized as one of the most gifted, articulate and distinguished European architects of his generation.

In the first half of the 1880s, while still in Hansen’s employ, Auer published three essays that have, for the most part, passed unremarked in the history of modern architectural theory. Taken as an ensemble, these essays comprise a sig-

nificant contribution to the emerging trend of Architectural Realism, which might best be understood as an entire generation’s rejoinder to the consequences of Gottfried Semper’s argument that architecture, like language, is a rich, associative web of evolving conventionalized forms which embody primordial motives, such as hearth and shelter. In this context, a “motive” reflects a conviction that the purely technical operations involved in its making had concrete consequences in the forms thus derived, and that there was thus a deep connection between the theme, its treatment and the emergence of a grand symbolism. Any given method of embodying these motives in physical form generates aesthetic value and cultural meaning through the embrace of clear objectives and a demonstrable mastery of both materials and craftsmanship. Central to Semper’s perspective was the certainty that coherent patterns could be adduced from seemingly unrelated artisanal phenomena, and further: that the specifically artistic component animating all such phenomena was an idealizing, sublimating force through which these archetypal motives could simultaneously and symbolically illumine both their origins as well as circumstantial variations in their articulation. This luminosity Semper called style.

The accretive process whereby manual fabrication achieved architectural significance Semper named the principle of dressing (*das Bekleidungsprinzip*). The expression of this principle through various methods of protecting and adorning what were originally provisional memorial or celebratory structures and their component parts—ranging from nearly diaphanous painted overlays to metallic sheathing and even material substitutions (*Stoffwechsel*) intended to enhance durability—was the engine of all artistic innovation and involved, at its heart, the beneficent “masking” or “denial of reality” common to all metaphysical enterprises.⁵

Around the time of the second edition of Semper’s *Style in the Technical and Tectonic Arts, or Practical Aesthetics* (1878; first edition, 1860–63), Conrad Fiedler addressed the issues thus raised, explaining them with admirable clarity and brevity. It is worth quoting him in full:

[Semper] explains the artistic development that these primitive forms underwent...to be the result of a striving to free form from its earlier dependence upon the requirements of construction and material, so that ‘when we look upon the work of art, the means and materials are forgotten and it is satisfying in itself as form’...[he] subjects the origin and development of architectural forms to a principle that frees architecture from the yoke of arbitrary aesthetic norms and sets it in the closest correlation to an inherent striving that is equally present in all intellectual life.⁶

The history of architecture for Semper was neither a matter of advances and regressions in the mastery of static forces, nor was it a matter of the emergence

of new artistic solutions to purely aesthetic challenges. Instead, he saw it as an enormous field of primordial psycho-physical activity in which aesthetic energies (*Kunsttriebe*) dedicated to the externalization of these idealizing forces could produce coherence amidst a staggering variety of architectural “appearances” within and across Asia, the Near East, the Mediterranean, and Europe.⁷ Scrutiny of the unfolding of these energies—as they played themselves out at different times, in various climates and cultures, yet in pursuit of comparable objectives—offered detailed examples of the still deeper connections to other “macrocosmic” arts, such as music or dancing. Without the presumption of such continuities, innovation would not only be unintelligible but also incapable of possessing style, and thus value.

He believed, in certain instances, that traditional methods of handling specific motives had to die off or be subsumed into new motive constellations before stylistic expression could again be achieved; Semper discussed such vexing conditions in *Science, Industry and Art*, his review of the 1851 Universal Exposition in London where he expressed an almost nostalgic envy at the clarity of certain primitive treatments in contrast to modern mechanical products.⁸ But it was the long stretches of continuous, artistically fertile activity that understandably captured Semper’s full attention. One of the eternally valid themes in monumental architecture—which Semper regarded as the primary force behind the Greek’s enduring stylistic breakthroughs—involved the systematic exploration of the limits posed by a given material’s physical capacities and durability (*materielle Existenzfähigkeit und Dauer*) by the idealizing forces of the aesthetic invention. It was, in fact, a challenge posed to the architects of every age. And Semper took it as an article of faith that although tectonics (“the art of combining inert, bar-shaped parts into a stable system”), and therefore construction as a whole, was insufficient to generate a “monumental theory of style,”⁹ it could nevertheless demonstrate how the idealizing mechanism functioned: “Tectonic structure first achieves monumentality through emancipation from structural-material reality (*Realistik*), through symbolic spiritualization of the expression of its determination.”¹⁰

Semper’s tense nexus between primarily symbolic, emancipating forces driving innovation and limitations imposed by the physical operations required to clad concrete figurations (*Realistik*), pertaining equally to structural and decorative elements, tacitly shaped a generation’s search for the appropriate criteria to enable contemporary architecture to participate in this tradition. After Semper, one simply could not look at the base molding of an Ionic column without “seeing” that it derived from a woven, rope-like filament originally intended to bind composite upright supports, and that such “moments” of binding and attaching had “mythical religious significance.”¹¹ One might say that in his wake, style was

regarded as the evanescent radiance of interpenetrating symbolic, material and cultural values compressed into specific plastic forms. In this manner, period styles came to be endowed with rich, expansive associations. And although he was reluctant to make specific diagnoses concerning contemporary practice—other than to advocate sustained exploration of the Renaissance vocabulary—followers and opponents alike began to explore these issues with increasing intensity and vigor. Assessing the value of evolving technology to the context of static motives of human habitation; tracking the sublimation of creative, idealizing forces through themes in various media; balancing aesthetically endorsed symbolic artifice with the demands of physical actuality: these are the larger coordinates of Semper’s realist project.

Hailed throughout the 1880s as the “leader of this healthy, pure realistic movement,”¹² Semper provided both the concepts and the language for a vibrant, enormously fertile field of theoretical, historical and archeological investigations whose main boundaries remained relatively well-defined, even as they were eventually eclipsed by the concerns raised by Hermann Muthesius’s call for *Sachlichkeit* in the years around 1900.¹³ Beyond the literary and political dimensions with which realism can, and has, been justifiably associated, it is perhaps Semper’s own use of the term—both adverbially and adjectivally (*realistisch*) as well as in his peculiar neologism for the noun form (*Realistik*)—that provides the proper handle to grasp theoretical developments in the final quarter of the 19th century. Throughout the 1880s and 1890s, a number of theorists tested the boundaries of these realistic themes, ranging from sustained analyses of the aesthetic consequences of technological evolution (Georg Heuser), the integration of traditional symbolic conventions into modern building technologies (Otto Wagner), the exploration of symbolic systems and stylistic syntheses (Constantin Lipsius and Paul Wallot), the emergence of a commercial sensibility (Paul Sédille and Alfred Lichtwark), the importance of retaining local and regional values within the emerging modern idioms (Richard Streiter), as well as providing a psychological framework for artistic innovation within the context of these concerns (Adolf Göller). The values promoted by K. E. O. Fritsch and Albert Hofmann, editors of the *Deutsche Bauzeitung*—the undisputed leader among German-language architectural journals in the five decades preceding World War I—assured that Architectural Realism was “received opinion” for decades and effectively created a realist echo chamber among rival publications. In this regard, Architectural Realism can be seen as laying the dominant chords beneath which almost all subsequent, including the most radical, strains of modernist architectural theory would play. It was one of Hans Auer’s signal, and as we shall see unintended, contributions to architectural theory to suggest the lineaments of many subsequent variations on a few core themes.

By the 1880s, a number of factors combined to undermine the authority of Semper's account of the evolution of style and its immediate relevance to the debate on contemporary architectural design. First was the fact that Semper's admittedly complex and often inchoate ideas were scattered throughout dozens of arguments playing across nearly a thousand pages of his kaleidoscopically disordered and incomplete masterwork, *Der Stil*. This was compounded by the fact that, as fresh data in the historical and archeological record continued to accumulate after the publication of his *magnum opus*, errors in fact—and therefore also interpretation—became increasingly evident. Finally, there was the undeniable evidence of a palpable evolution in the contemporary use of iron, witnessed in both humble public works and in more self-consciously “artistic” projects, such as Constantin Lipsius's Art Academy and Exhibition Building in Dresden, an explicitly Semperian meditation on architectural evolution (1882–94).¹⁴

The most contentious issue, however, concerned the perception that Semper's emphasis on decoration was frankly counter-intuitive because it failed to account for the enormous strides being made in the execution and articulation of enormous new industrial buildings. Semper left the purely aesthetic consequences of the structural exploitation of iron's tensile capabilities unaddressed in his published writings after exile.¹⁵ Although the notion of a tectonically-driven structural aesthetic had already been fully formulated by Carl Bötticher in the course of the style debate of the 1840s, it never achieved dominance—perhaps because of his association with what came to be regarded as the increasingly dogmatic and stylistically insulated aesthetic of Karl Friedrich Schinkel and his Prussian *epigones*.¹⁶ It is significant, therefore, that the reemergence of a structural emphasis in the next generation came from within the inner circle of Semper's camp.

In 1880, less than a year after Semper's death, Hans Auer became the first of his Zurich protégés to interrogate the value of the *Bekleidungsprinzip*; this he did in the context of an exacting archeological analysis of the triglyph, a cryptic element of the Doric architrave, in which symbolism and *Realistik* converge with enormous intensity.¹⁷ Auer's triglyph study, along with an equally demanding study of Renaissance rustication published in 1887,¹⁸ bracket the three general essays that comprise the core of his theoretical contribution. It should be said that these bracketing studies are remarkable for their depth, concentration and implications. The rustication study is an exemplary proto-formalist analysis of the implications and aesthetic significance of the artistic treatment of stone. By contrast, the triglyph study, to which we now turn, addresses concerns that would shape the more general claims set forth in the theory trilogy proper.

Instead of endorsing Semper's rather exotic account¹⁹ of the sartorial origins of this curious Doric component, and abjuring from a reliance upon the Vitru-

vian principle of structural petrification, Auer offers an alternative explanation to account for its emergence and peculiar formal properties. After extending the old thesis of a tradition of stereo-technical craftsmanship exported from the Nile valley, and factoring the climatic differences that required Greek buildings to shed water efficiently, Auer suggests that triglyphs were “hanging plaques,” residual forms from earlier moldings that imitated upended leaf-like shapes designed to channel water away from the building.

Leaning nominally on Semper, he believed that they acquired a purely aesthetic function as a defining seam binding the supports below to the superstructure above. As such, Auer brought an entirely new range of considerations to bear upon the significance of a single form: he refracts the traditional deliberations of structure, history and aesthetics through new facts ranging from sociological and ethnological evidence to climatological and technological considerations. He subjects his findings to rigorous proportional and longitudinal analysis, and in so doing, typifies the realistic approach to grasping a new, deeply enriched horizon of significance for the elements and syntax of architectural form, and by submitting everything to an exposed, rigorous logical analysis. It can be no accident that Auer selected perhaps the most vexing component of the Doric order: a single feature through which structural, decorative and formal speculations have streamed for millennia. While he rejects Semper's explanation, he nevertheless employs Semperian methods and prejudices; at the same time, he accents the role of structure, as Semper declines to do. In so doing, Auer threads a very fine, and very sharp, needle.

Embedded within this purely archeological exercise, Auer expresses an important notion that, unanchored from archeological concerns, would soon acquire a central position in all of his subsequent theoretical efforts. In the middle of his triglyph essay, he declares axiomatically that the fusion of roof construction technologies with those involved in support produces the “concord of building technology. Construction is the skeleton of the built organism and, in general, the least variable element. It is the basis and point of departure for the varieties of architectural style overall: the key to stylistic change lies in advancing structural ideas.”²⁰

Toward the end of the same year, 1880, in an address to the weekly assembly of the Austrian Union of Engineers and Architects, Auer expanded his thoughts and deepened his break with Semper from an innocuous disagreement about the interpretation of an archeological detail to a direct assault on the core of Semper's theoretical edifice, whose very title (“The Influence of Construction on Architectural Style”) clearly intimates the nature of the larger area of contention.²¹ This astonishing article, the first of the theoretical trilogy in which Auer staked out a post Semperian realism, while exhibiting a genuine respect for the

overall integrity of Semper's aesthetic and sociological framework, nevertheless takes issue with the position and value of specific details within it along the lines already laid forth in his triglyph study. In direct opposition to Semper's oracular pronouncement in § 62 of *Der Stil* that "the original formal principle of architecture, based on the concept of space, [is] independent of construction," Auer declares that construction is "the basis, the point of departure and the limitation of the inner architectonic capacity of a people and an age... Construction is the mediation between the ideal and reality, and indeed the establishing or limiting moment in the realization of the ideal."²² Auer considered construction to be "the actual progressive element and the immediate cause of changing architectural styles..."²³ The roof, one of Semper's celebrated "four elements" of architecture, was the key to Auer's structural equation for it effectively determined not only the formation of every other aspect of design—from the overall disposition, the layout of the plan and the development of all details—but was "the most important and primary form-determining factor" of construction.²⁴

After diverging from Semper on the significance of construction Auer curiously retreats to the explicitly Semperian proposition that "the most important and original task for architecture is the creation of spaces... and the first, most original element of space creation is the ceiling."²⁵ It constitutes a retreat insofar as it is ostensibly a concession to Semper's suggestive, almost phenomenological, consideration of the significance of space. But in none of the sections in *Der Stil* dedicated to tectonics (§§ 130–60) does the concept of space come into play; for Semper, space was a geometric property consequent to stereotomy, the assembly of cut and dressed stone. It is worth considering that, despite the stunning advances contained within his project of exploding the conventional categories of stylistic analysis, Semper remained locked within the geometric parameters of the Euclidian-Aristotelian method of understanding upright supports as primarily two-dimensional entities capable only of length and extension; it was through consideration of three dimensional objects, in this case cut stone, that it was possible to conceive of space (length, extension plus depth) as an independent object.

By contrast, Auer dispenses with the old geometric shackles and forcefully inserts space creation into the equation of tectonics and statics, simply and directly, by stating: "Through all past ages, and for all coming ages, the principle by which space can be covered admits only two methods: either by a *straight, horizontal roof* or by a *vaulted roof*, in other words, the material employed in ceiling construction can be treated either *by suspension* (with straight ceilings) or *by compression* (with vaults). There is no other method."²⁶ In this way, Auer removed space from the realm of Semper's "practical aesthetics" and established it as an independent heuristic object, an object that could be examined aesthetically, historically and

sociologically. The bulk of the lecture is comprised of telescoping historical extrapolations of his central observation. In the course of the survey which follows, Auer describes the unique spatial physiognomy of each epoch and deduces a "new artistic principle" common both to the disposition of masses and voids: dominance and subordination.²⁷ Near the conclusion, Auer goes so far as to propose a poetics of space, based upon proportion, division, rhythm, transparency (*Durchblicke*), as well as the effects of light and shadow—what we would now call strictly formal properties.²⁸ He claims that "in modern architecture the artist must, more than previously, transcend mere necessity and pure functionality by dividing and forming space according to the laws of beauty and harmonious space formation (*Raumbildung*)." ²⁹ He concludes with a prudently conceived negative evaluation of the capacity of iron, in its structural application as ceiling support and span, to inaugurate the long anticipated "new style."³⁰ In effect, after effecting a radical break with the master and charting out the vistas opened up by the extraction of the theme of space, Auer falls back on Semper's pronounced skepticism *viz.* iron's dimensional suitability to monumental architectural expression, stating that "the ancient principle of dressing must apply to the new architectural requirements."³¹

While Auer fully grasped the conceptual and aesthetic potential of "pure space" as a function of the generative forces of the tectonics, he studiously declined the opportunity to detach it from the "laws of beauty." This was not a reflexive fear of abstraction but rather a calculated position demonstrating an awareness and appreciation that current perceptual limitations were historically conditioned and, in effect, inescapable. Auer implies that it is the architect's duty to accommodate contemporary sensibilities. To give weight to his appreciation of these limitations, Auer describes how those now building in iron (*Eisenconstrukturen*) are faced with essentially the same problems as were the first stone cutters, long before the Egyptians. He claims that metallic architecture was only at the very beginning stages of its gradual integration into the "universally used and understood language of art." Yet deeper than the appeal of Semper's position is Auer's unshakable conviction that, while technologies will unceasingly unfold through time, the "unchangeable and eternal laws of beauty" will endure. It is in pursuit of this higher calling that the architect therefore "must, more than ever before, retain the traditional and proven forms, hold on to the laws of beauty and proportion embodied in the old monuments... and find in them the means through which he can be freed from the manacles of constructive necessity."³²

Auer has thus performed a dual operation by which the Semperian project of assessing the trans-historical continuities of architectural motives has been retained while subjecting specific aspects of it to calculated adjustment and correction in order to better account for the phenomena under consideration.

Auer's radical realignment of construction, in its tectonic and stereotomic manifestations, brought forth space as both a conceptual and an actual entity (*Realistik*) with positive design value, and not merely a by-product or visual quality. At a stroke, Auer introduces architectural space as a function of structural exigency while planting the seeds for exploring its historical contingencies and aesthetic potential.

Karl Schnaase was perhaps the first to discuss space as an historically contingent and aesthetically significant theme of architectural experience as early as 1834. His eighth "Netherlandish Letter" analyzing the exceptional quality of Antwerp Cathedral's interior accounted for the emergence of perspectival space through an emancipation achieved by the replacement of columnar support of wooden roofs in Roman basilicae by pier-borne vaults; here, space was the result of a technological change.³³ Space understood primarily as an effect, as opposed to a formal and symbolic object *per se*, was also discussed at length by the Berlin architect Richard Lucae in his 1869 *Schinkelfestrede*.³⁴ And in his previously cited essay entitled "Observations on the Nature and History of Architecture," Conrad Fiedler undertook a general review of Semper's *Der Stil* wherein he expanded upon Semper's latent emphasis on architectural space in the context of a general plea for consideration of the Romanesque as a viable language for contemporary architecture.³⁵

However, it was not until Auer's 1883 sequel to the construction essay, entitled "The Development of Space in Architecture," that space was first separated out as an independent topic and thoroughly explored as a generative force in the evolution of architecture.³⁶ The accomplishment of considering this abstract, non-representational entity—in fact an *a priori* Kantian category—as a legitimate subject of formal and historical exploration has, until now, been considered the distinctive achievement of the art historian August Schmarsow, whose inaugural lecture at the University of Leipzig on "The Essence of Architectural Creation" of 1893 is routinely cited as the *locus modernus* of space theory.³⁷ When published in book form the following year, it was promptly reviewed in a number of journals and triggered an especially lively and informative debate between Karl Illert and Richard Streiter that unfolded across the pages of the *Centralblatt der Bauverwaltung*.³⁸ However, one particularly penetrating Austrian reviewer, Carl von Lützow, editor of the *Zeitschrift für bildende Kunst*, declared that Schmarsow appeared ignorant of Auer's "thoughtful essay" of 1881 in which "space-thoughts are vindicated with the same emphasis Schmarsow rightly stresses."³⁹ While Lützow rightly indicates the chronological anteriority of the 1881 essay, it is in Auer's 1883 essay that the idea of architectural space is fully elaborated according to his torical, psychological and implicitly moral desiderata.

Auer's article on the development of space is structured identically to the construction piece: he opens with general propositions about the problem, draws a number of specifically architectural conclusions, then puts the conclusions through the paces of an illustrated historical survey (from the hypostyle halls of Karnak to Hansen's Vienna Stock Exchange; see figures 4 and 5), and ends with a number of reflections on the relevance of the topic for contemporary architectural practice. Auer's plates serve to highlight the spatial qualities exhibited in different constructional methods (stone as opposed to brick).

The space essay commences with a series of cascading psychological propositions about how images emerge within the mind (specifically, the faculty of imagination) and how they are then given form. For Auer, the process of bringing imaginary constructs (*die Gebilde der Phantasie*) into three-dimensional reality involves grasping both the materials and methods of transference as well as a general awareness of the historical possibilities and cultural conditions at the time of the transference. Auer's singular insight regards the relationship between products of mind as they become fabricated into fully articulated objects in the world, and, considering the abstract nature of his subject, it commends his effort to be ranked among the most significant architectural theoretical contributions of his generation, and perhaps, indeed, of the 19th century. Although one would hardly mistake his literary style for the more compact, lapidary and indeed polemical discussions of space in the ensuing decades, one cannot but admire the economy and intelligence with which he pursues a variety of related themes.

Three propositions in Auer's space essay present themselves as the vital core of his theoretical enterprise. The first concerns the psychological mechanism by which the space becomes an object of consciousness and appears in the essay's opening passages:

The most divine power moving and driving man's spirit is his imagination (*Phantasie*). His lofty flight lifts him above time and space, and by its magic all earthly constraints are released...The execution of the grandest ideas dreamed by our mind's eye (*unser geistiges Auge*) is limited by available means and materials, as well as our ability to employ them. Complete mastery of available means, which are en-souled (*beseelt*) by the spirited imagination and guided by taste, grasps the task in its noblest sense as *art* and, insofar as it refers to purpose of creating space, as *architecture*.⁴⁰

It is important to note that although Schmarsow also expresses an awareness of the imaginative aspect of spatial recognition, which he calls *Raumphantasie*, he balanced his psychology of space with what he called a space-feeling, or *Raumgefühl*. Of course, Schmarsow's premise for his entire project is the demolition of Semper's notion of architecture as mere *Bekleidungskunst*, a superficial art of decoration. He wanted to puncture Semperian superficialities in order to reach

essences, what he called “an aesthetic ‘from within.’”⁴¹ Schmarsow envisioned his project as a quest into the primordial, precognitive mind in which, drawing heavily on empathy theory, ordinary sensations and intuitions acquire psychological content as imaginative elements that can be communicated, via architecture, to the minds of others. So while Schmarsow argues for a similar continuity of inner psychological states between creator and spectator, it is based primarily upon the congruence of the physical, sensory apparatus they have in common and united through the external object. In other words, sensation as *Raumgefühl* effectively trumps the intellection of *Raumphantasie* in Schmarsow’s dynamic of spatial experience and creation.

Auer’s second proposition is that space, grasped not as the interstitial void negatively formed by the presence of architectural members but as a positive presence, constitutes the “soul” of architecture:

*Space is the soul of a building, which fills its body and characterizes it from without. Just as the soul is bound to the physical body and vice versa, both dependent on the other, so space therefore effects not only the exterior appearance of the building but is, for its part, determined by the inner structural organism. The selected or traditionally prescribed method of building determines both the physiognomy of the space as well as the collective outer appearance down to the smallest detail.*⁴²

He specifically states that works of architecture are not “mere manual accomplishments of constructors, but we are concerned here with creations of the imagination which address themselves to man’s soul; and we must remember that the imagination is not merely bound by technical capabilities and must therefore be guided by artistic taste.”⁴³

Here, too, Auer assumes a Semperian posture, yet transforms it into something, in this case, considerably more majestic and resplendent. In the opening remarks of his 1856 lecture “On the Formal Regularity of Ornament and its Meaning as an Artistic Symbol,” Semper suggests that the Greek word *κόσμος* (*kosmos*) was the key to understanding the connection between their views on art and cosmology, for the same word was used to describe both adornment as well as the “nature’s highest lawfulness and order” (*höchste Naturgesetzlichkeit und Weltordnung*). A few lines later, Semper states that “where man adorns, he brings forth with more or less awareness a natural regularity in the object he decorates.”⁴⁴ In his last published essay, “On Architectural Styles” of 1869, he returns to the theme, noting “whatever I adorn...I endow with a right to exist by making it the focus of relations that are valid for it alone. I elevate it to the rank of a person.”⁴⁵ Semper’s notion of the relationship of the macrocosm of man’s faculties to the microcosm of his creations was the consequence of a procedural event embodied in a linguistic echo.

Auer, in his turn, pushes this relationship onto a spiritual plane, suggesting a fractal resonance between man’s mind, body and soul and the physical properties of the objects he creates. Auer’s world of experiential harmonics between the human subject and his built environment is considerably richer than Semper conceived. What renders Auer’s stance so distinctive and so historically curious is that it is based on both a finer grain of historical detail than Semper could conceive as well as on a conception of man as occupying a defined place in a larger universe than Semper would allow.

Auer’s next sentence offers an elaboration of relationship between the seat of man’s imagination, the soul, and its architectural analogue: “Architecture has two souls: one is earthbound and subordinated to practical function, the other lifts itself up as an angel to the higher regions where she serves pure beauty... This dualism manifests itself in the articulation of space.”⁴⁶ Auer here seems to follow in a very general manner Aristotle’s division of the soul into rational and irrational parts.⁴⁷ Through the mediation of an “ordering human mind” space receives its coherence “like every other work of art and nature.” Auer’s spatial universe, therefore, permeates every plane of existence as a spiritual entity in which “that realm of inner form... enables space to be stamped as a true work of art, which we call the *poetry of space*.”⁴⁸ The order within must be manifested in the world without; as above, so below.

Auer’s third proposition concerns the physical conditions that obtain with regard to the three-dimensional projection of these imaginative constructs over the course of time: “...the highest task and actually the driving and fundamental moment in the development of architecture was finding the mediation of the opposition between the greatest and most free spatial development and, at the same time, the greatest monumentality and durability.”⁴⁹ Here we encounter a significantly modified reiteration of the duality Semper described in his treatment of the process by which tectonic activity achieves monumentality.⁵⁰

A corollary to this proposition is Auer’s belief, later echoed by the art historian Heinrich Wölfflin, that not everything is possible at any given time:

the architectonic ideal which absorbs the imagination depends precisely upon the conditions of technical capacity together with practical knowledge. A people, for instance, who know nothing of the vault can not have it as an ideal; only traditional and available technology can be extended and further developed.⁵¹

Also in evidence here is an attention to the natural economies involved when creating space: the play between the surface area of necessary supports, the impression of solidity, and the durability of the materials employed. Massively overbuilt structures yield but sclerotic space; slender tectonic structures open up space at the risk of impermanence, and thus false economy. Auer’s concern with the

unfolding play of spatial values (security versus freedom) as a reflection of cultural values (security versus freedom) was the underlying theme of his illustrated historical taxonomy of spatial configurations. As such, his spatial calculus is reminiscent of the investigations into the nature of value by Carl Menger, the founder of the Austrian School of Economics, whose theory of marginal utility was elaborated during the years of Auer's employment under Hansen.⁵²

Auer's final theoretical effort to concern us, "Modern Style Questions" of 1885, wraps up his theory trilogy and addresses the larger significance of his observations on construction and space as they concern contemporary architectural practice.⁵³ In it he lays forth a rudimentary cultural critique to explain why the concept of style, which although generally understood and well defined, had devolved in actual usage to encompass often conflicting perspectives. This he saw as an extension of the enormous and ever expanding body of human knowledge—historical, scientific and social—which, in and of itself, offered neither emphasis nor focus: "the individual retains free choice of where to seek his ideal, where he wants to strive—by inclination, talent, fashion or by whatever accident is offered by the dominant direction."⁵⁴ In this sense, architecture was subject to the same potential confusion of values and priorities as other disciplines. His prescription was clear: in the face of all the potential technical, aesthetic, and historical demands placed on architects, "it is absolutely necessary" to cultivate "the most comprehensive and exhaustive command of the entire world of architectural form." The resulting style would, like every style before the Renaissance, "demolish the boundaries of tradition, reach and extend in all dimensions."⁵⁵

However, perhaps to the chagrin of later readers, Auer proclaims that the emergence of a new style has, in fact, already occurred—it was to be seen in the "modern Renaissance." He flatly declares that "our contemporary architecture is based upon a broadening of the architectonic principles of the 16th century."⁵⁶ Here one sees the prototype for the nearly identical claim of another Viennese architect, Otto Wagner (1841–1918), who just four years later stated that he saw his own work as the embodiment of the progressive, realistic exploration of "a certain free Renaissance."⁵⁷ For Auer, the idiom of the Renaissance had demonstrated itself capable of fulfilling the needs of virtually every conceivable program to which it had been applied and in the broadest conceivable range of nuance and expression. Already in his construction article of 1881, Auer praised the Renaissance for several reasons: it digested the constructive principles of all previous ages and fashioned from them something of its own; it had solved contemporary problems by applying eternally valid rules and recognizable forms; and it was able to achieve "organically integrated works" in which the artist could use apparent construction if necessary to achieve higher aesthetic objectives.⁵⁸ But what captured Auer's attention is the fact that *within* this tradition of a "mod-

ern Renaissance" the contemporary architect was completely free to employ whatever style he so desired: "The collective characteristic of the architecture of our century is that it is independent of all styles."⁵⁹

Here Auer employs Semper's very broad definition of style as an accord, a resonance—not a set of distinct, repeating visual characteristics within the work of an individual, a school, a period, a nation, or a race. The incidental formal attributes that distinguish Gothic from Baroque constitute a qualitatively different sphere of interest than the transcendental radiance of cultural preoccupations in and through the world of forms. Here the resonant factor of style onto which Auer fastens is that between cultural and personal aspirations:

This property of modern architecture leads therefore to the *expression of individuality* of our own age by which the artist impresses upon his buildings a specific character according to his ideals, fixing on certain higher developed artistic periods, be it Greek or Roman, Byzantine, Romanesque or Gothic, or any other specialty of the Renaissance."⁶⁰

It is up to the architect to provide an "artistic hull" because "all modern buildings...allow themselves to be translated in other styles because plan and spatial disposition are identical...[meaning that the] unique stylistic properties of modern building are but externalities."⁶¹ For him, the great energies of the present age were consumed in the working out of larger issues (*Neubildung von Gesamt-Dispositionen*), and as such possessed precious little to tackle the creation of new formal details that were properly the concern of earlier artistic periods. If one could speak of a "style question" per se, it was in the sense of asking what "motive for artistic representation" was best suited to the character of the task at hand, and how this motive should be assessed and visually developed; style was secondary. In essence then, Auer believed that the issue of style in contemporary architecture had nothing to do with the particular idiom selected, but rather with addressing and expressing larger cultural aspirations. And it was toward achieving some sense of clarity in the larger, Semperian sense of style for contemporary architecture that Auer dedicated his remaining thoughts.

After sequentially evaluating the artistic and structural achievements of each historical period beginning with the Greeks, he fastens onto the High Renaissance and Baroque when "the architectonic principles which we recognize as still valid today and upon which our modern architecture is based" were first addressed.⁶² He saw in the Baroque the "common basis for all our views," and cites Prince Eugene, Leibniz, Voltaire, Rousseau, and Newton as expositors of social principles which remained fresh. The "inner spiritual connection" between the main character of his age and that of the Baroque was apparent regardless of the style in which it was expressed, and which was in itself evidence of a deeper developmental process at work.

This process, as described by Auer, can be characterized as a concentrically interlocked periodicity witnessed in phenomena as different as the revolution of planets on their axes and in their orbits, to the movement of the hour and minute hands on a clock. Perceptually, time seems to pass quickly when we attend to the phenomena of smaller cycles. We thus deceive ourselves as to the true movement, and significance, of larger phases:

Precisely this appearance is demonstrated in the flow of culture, the flow of the development of art: the grand architectural principles of spatial disposition, the articulation of masses and the structural experiences step regularly and undisturbed with the universal development of the human spirit, but the individual form of style—the detail, the decorative—changes more quickly, underscoring those local influences and temporary views and proceed from one extreme to another.⁶³

Auer is effectively saying that his contemporaries were deluded if they thought otherwise.

Auer then turns to discuss why the Baroque, which he tellingly compares to late Imperial Rome, seems to have become “modern again” after a century of neglect.⁶⁴ Though not naming him, he refers to Albert Ilg’s pseudonymous pamphlet *The Future of the Baroque Style* of 1880 which had unintentionally created a surging public demand for the Baroque.⁶⁵ Although Auer saw the Baroque as a fitting tribute to the Viennese spirit, he expected that the vogue for “the newest extravagances” would vanish as quickly as it had emerged. In its specific formal properties, the Baroque had little, he concluded, to offer modern bourgeois building needs: neither residential nor commercial structures afforded the proper scale or occasion for the exercise of the formal language of the Baroque.

Within the same broad tradition of the architectural language forged in fifteenth century Italy, though, Auer saw possibilities that were more suited to contemporary demands. Specifically, the Austrian variant of the Northern Renaissance—which he saw as “finer, more elegant and significantly warmer and friendlier” than the German Renaissance—if “purified” from idiosyncrasy and “improved and ennobled through the modern knowledge of pure style,” offered considerable potential for appropriate architectural exploration (figure 6).⁶⁶ This purification process was not something alien; it had, in fact, been undertaken as a corrective measure to the excesses of the Baroque when the age of Klopstock, Schiller and Goethe had achieved a refinement and ennobling of manners by a “return to natural simplicity.” For Auer, “purity of form is no academic chimera” because it provides the method by which “artistic expression is given in its most natural, understandable and most beautiful development.”⁶⁷ And while he said that beauty was a more important objective than purity of form, by submitting to a new phase of “striving to return to the simplicity of nature” it would be possi-

ble for architecture to celebrate its rebirth and find its most certain directive through the “improvement of taste.”⁶⁸ In short, only by striving after “completeness, beauty and natural truth” could this improvement occur, and the result would be that “our architecture would be the true expression of our age, and therefore *stylgemäss*.”⁶⁹

It is tempting to read into Auer the seed of later theoretical developments, to see him as incipiently, immanently Modernist. Indeed, one could argue that several features of Auer’s theory surpass—in terms of quality, cogency and radicality—many of the progressive claims Otto Wagner made in the mid-1890s. For instance, his concise, archeologically demanding articulation of a structurally-based alternative to the Semperian tradition of reading artistic development as the function of decorative *Beleidungskunst* appears to be the immediate source for Wagner’s overwhelming and influential absorption with decorated tectonics. In extracting the idea of space from his construction-based theory, one also sees very clearly the seeds of an entire movement whose speculative and polemical arguments were grounded in the notion that space had not been fully explored as an object of aesthetic and architectural form, beginning with the emphasis on *Raumkunst* in the Reform Movement and extended by Henrik Berlage’s decisive impact in the first years of the 20th century. In his call for a reanimation of the Romantic “return to Nature,” one has only to think of Paul Mebes’s *um 1800* movement at the turn of the 20th century. And Auer’s focus on “pure form,” given special attention in his astonishingly rigorous rustication study of 1887 (figure 7), also appears to anticipate the art historical formalism of Alois Riegl and Heinrich Wölfflin, both of whom contributed significantly to shaping architectural theory in the decade preceding the Great War.⁷⁰ Here Auer provides a measured, taxonomic and well illustrated analysis of the antique sources and psychological effect of the various forms of Renaissance rustication (plain, diamond, quarry-faced and cyclopean), and catalogues the occurrences of each form. Insofar as one discerns in Wilhelmine architecture a dedicated effort to explore the expressive and ideological potential of rough-hewn stone far beyond the parameters of historical styles by such architects as Bruno Schmitz, Wilhelm Kreis and Fritz Schumacher, Auer’s analysis of rustication may possibly have exercised immediate influence.

While all of these anticipatory notions possess some degree of merit, they drain Auer’s achievement of its true and lasting significance. It is not merely what these ideas could and would eventually become that fascinates; rather, it is the fact that they were conceived within and artfully expressed through the language of classical moral psychology and rhetoric. To stand Emil Kaufmann’s argument on its head, in Auer we see the “Renaissance system” reaching well into the end of the 19th century—as a system of form and as a system of thought.⁷¹ Auer’s

true achievement was in having conceptualized what we regard as 20th-century critical concerns with a simplified adaptation of the Renaissance's interpretation of ancient critical and psychological tools.

Indeed, Auer cast his ideas in the language of "invention," "disposition," "fantasy," and "soul." These terms are the language of rhetoric and humoral psychology, a body of thought which promoted an understanding of microcosmic and macrocosmic relationships that Darwin had ostensibly shattered.⁷² And in comparison to Semper's psychology of artistic creativity based on *Kunsttriebe*, Auer's imagination-based explanation of the projection of mind-soul-body states through the creative act appears *retardataire*. In fact, by relying upon a humanistic vocabulary for a post-theological argument, Auer typifies the cultural dislocations he felt and discerned in his style essay. But it is Auer's steadfast conviction that imagination was "the most divine power" of the human spirit, that fantasy was the mechanism by which man's soul is projected into the soul (space) of buildings, that beauty was more important than either style or form, and that innovation was inconceivable without a clear grasp of the vital continuities within any given tradition—all these notions, and the classical terminology in which they are expressed, represent an unusual development upon Semper's own intrinsic, and often overlooked, humanist inclinations.

On the opening page of Hans Semper's 1880 biography of his father, in order to offer the broadest possible perspective on the subject at hand, he offered a passage attributed to Seneca that Semper adopted as his life motto as a young man seeking direction: "Non fuerat nasci/nisi ad has//scientiae artes//harum/palmam/feretis. [There would be no value in being born if not for science and art; in them are victory's laurels.]"⁷³ Semper was so taken with this motto, in fact, that he organized the iconographic program of the *sgraffito* decoration of the entire north façade of the Zurich Polytechnikum around it.⁷⁴ Lawrence Harvey, a British pupil who studied under Semper in Zurich, reported in 1884 that Seneca was Semper's favorite author, and noted that Semper took great relish in diminishing Darwin's achievement by referring students to a passage in Seneca's ninetieth *Epistle* where the survival of the fittest had been expressed more compactly and incisively.⁷⁵ We know that Semper owned the 1809 Strasbourg edition⁷⁶ of Seneca's *Epistulae Morales*, and may have taken note of Seneca's not infrequent discussion of architectural matters, from specific prescriptions for the proper outfitting of a Stoic residence to reflections on Scipio Africanus's villa.⁷⁷

While this is not the appropriate venue to undertake a discussion of Stoic aesthetics, it is the interpenetration of aesthetics into ethics—that is into morality—that one must attend to. For Seneca, it was important that modest habits (*mores*), the indelible sign of a balanced and well ordered soul, should find fitting

expression in manners, ranging from one's eating habits and apparel to one's residence. As Seneca remarks in his ninety-fifth *Epistle*, "As our acts and our thoughts are, so will our lives be." Habits, manners, and customs: these are the main terms by which one enters the world of Stoic moral psychology. In the Stoic "great chain of being," the divine spark of the soul, if improperly cared for, would lose its capacity to resonate through thought and behavior, leaving the individual disconnected not only from one's fellows but also from higher, increasingly divine spheres as well. Decency of thought and conduct was thus the touchstone not only of a spiritually balanced existence, but of civility as well.

It was this civilizing function of architecture that Semper focused on in the his discussion of the hearth, the first of his *Four Elements of Architecture*, published in 1851. It is worth quoting Semper at length:

The first sign of human settlement and rest after the hunt, the battle, and wandering in the desert is today, as when the first men lost paradise, the setting up of the fireplace and the lighting of the reviving, warming, and food-preparing flame. Around the hearth the first groups assembled; around it the first alliances formed; around it the first rude religious concepts were put into the customs of a cult. Throughout all phases of society the hearth formed that sacred focus around which the whole took order and shape.

It is the first and most important, the *moral* element of architecture. Around it were grouped the three other elements: the *roof*, the *enclosure*, and the *mound*, the protecting, negations or defenders of the hearth's flame against the three hostile elements of nature.⁷⁸

Again, Semper's concentration on the "element" or "motive" of the hearth, of course, was bound to his conviction that the technical operations involved in its making had practical consequences for the forms thus derived. But it is the cultural value of social activities centered on this primordial "element" that make it moral. In an 1850 manuscript for his unpublished "Comparative Building: Theory" Semper wrote: "The hearth is the germ, the embryo of all social institutions... It was a moral symbol."⁷⁹ The hearth's moral authority was only extended as it has gradually assumed new functional roles, for instance, as the altar. Semper's three other elements have as their origin and purpose the protection of the hearth. Auer transfers the moral capital of the four elements into the entity that is formed by their completion. To paraphrase Edmund Burke, space has become for Auer the location, the opportunity at which the living's commitment to the dead and the not-yet-born, quite literally, takes shape.

Auer, as a Swiss *Semperschüler*, would have taken in Semper's views of the significance of architecture's "elemental," moral values directly at the source. His own convictions, expressed in the language of moral psychology and rhetoric, simply extend Semper's values concerning the important issues of continuity: the

laws of formal beauty surpass the epiphenomena of decorative patterns. Recall that in Auer's 1881 essay on "The Influence of Construction," it was the macrocosmic value of "inner, organic spatial disposition" gleaned from Renaissance principles that promised "new powers and new freedoms" through "inner moral and ethical awareness" (*inneres moralisches und sittliches Bewusstsein*). This awareness enabled the architect to see "apparently new laws of the moral world order (*sittliche Weltordnung*) already present in the eternal laws of natural necessity."⁸⁰ These moral concerns were based upon careful consideration of actual practices, expectations, and real places: the habits and conditions of daily life. Though Auer could conceive an architecture of pure spaces and forms, it was the weight of moral responsibility to return to, honor, and serve these real habits that renders his theory a conservative, if exquisitely wrought, contribution to Architectural Realism.

NOTES

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1. Auer's biographical details are synthesized from Carl Bruo, "Hans Auer," in *Schweizerisches Künstler-Lexikon* (Frauenfeld: Verlag von Huber & Co., 1905) 1:61–62; Franz Innerhofer, "Hans Wilhelm Auer" in Ulrich Thieme and Felix Becker, eds., *Allgemeines Lexikon der bildenden Künstler von der Antike bis zur Gegenwart* (Leipzig: Verlag von Wilhelm Engelmann, 1908), 2: 243; Othmar Birkner, "Hans Wilhelm Auer," *Sauer Allgemeines Künstler-Lexikon. Die Bildenden Künstler aller Zeiten und Völker* (Munich/Leipzig: K. G. Sauer, 1992), 5: 612. Passing references to Auer appear in Mitchell Schwarzer, *German Architectural Theory and the Search for Modern Identity* (Cambridge: Cambridge University Press, 1995), 80–81, 192–94.
 2. *Architektonische Rundschau* V (1889): pl. 80 plus plans and A. Kisa, "Die Bauten Hans Auer's," *Allgemeine Kunst-Chronik* 11, no. 19 (1887): 493–94. Cf. Dehio, *Wien. II. bis IX. und XX. Bezirk* (Vienna: Anton Schroll & Co., 1993), 274. The building is currently the property of the U.S. Government and serves as headquarters for the U.S. Information Agency.
 3. Andreas Müller, *Der verbitterte Bundeshausarchitekt. Die vertrackte Geschichte des Parlamentsgebäude und seines Erbauers Hans Wilhelm Auer, 1847–1906* (Zurich: Orell Füssli, 2002).
 4. Hans Auer, "Börsengebäude," in Joseph Durm et al., eds., *Handbuch der Architektur*, IV. Theil, 2. Halbband, 2. Heft: *Gebäude für die Zwecke des Wohnens, des Handels und Verkehrs* (Stuttgart: Arnold Bergsträßer, 1902), 247–302.
 5. Gottfried Semper, *Der Stil in den technischen und tektonischen Künsten, oder praktische Aesthetik. I. im Handbuch für Techniker, Künstler und Kunstfreunde*, 2nd ed. (Munich: Fr. Bruckmann Verlag, 1878–79 [1860–63]), 1:217n. Hereafter: Semper, *Der Stil*, 2nd ed. The passage reads: "Vernichtung der Realität, des Stofflichen, ist notwendig, wo die Form als bedeutungsvolles Symbol, als selbständige Schöpfung des Menschen hervortreten soll."
 6. Conrad Fiedler, "Bemerkungen über Wesen und Geschichte der Baukunst," *Deutsche Rundschau* 15 (1878), 361–83; translated as "Observations on the Nature and History of Architecture," in *Empathy Form and Space. Problems in German Aesthetics, 1873–1893*, ed. Harry F. Mallgrave and Eleftherios Ikonomou (Santa Monica: The Getty Center, 1994), 125–46, here 129.
 7. It is precisely this appreciation for deep continuities that the art historian Alois Riegl shared with Semper, and which is frequently overlooked when assessing his expanding critique of Semper. For Riegl's debt to Semper, see J. Duncan Berry, "'Style'—or whatever," *The New Criterion* 11, no. 8 (1993): 71–74 and Harry F. Mallgrave, *Gottfried Semper: Architect of the Nineteenth Century* (New Haven, CT: Yale University Press, 1996), 371–81. To my knowledge, the obvious similarity between Semper's *Kunsttriebe* and Riegl's *Kunstwollen* has not been explored.
 8. To take but one example: "If single incidents carried the force of conviction, then the recognized triumphs at the Exhibition of the half-barbaric nations, especially the Indians with their magnificent industries of art, would be sufficient to show us that we with our science have until now accomplished very little in these areas," in Gottfried Semper, *Wissenschaft, Industrie und Kunst. Vorschläge zur Anregung nationalen Kunstgefühles bei dem Schlusse der Londoner Industrie-Ausstellung* (Braunschweig: Vieweg, 1852), translated as "Science, Industry and Art" in Gottfried Semper, *The Four Elements of Architecture and Other Writings*, trans. Harry F. Mallgrave and Wolfgang Herrmann (Cambridge: Cambridge University Press, 1989), 134.
 9. Semper, *Der Stil*, 2nd ed., 2:199: "Die Kunst des Zusammenfügens starrer, stabformig gestalteter Theile zu einem in sich unverrückbaren System ist unstreitig für die monumentale Stillehre..."
 10. Semper, *Der Stil*, 2nd ed., 2:381–82: "Monumentalität erreicht die tektonische Struktur erst durch Emancipation von der struktiv-stofflichen Realistik, durch sinnbildliche Vergeistigung des Ausdrucks ihrer Bestimmung."
 11. Semper, *Der Stil*, 2nd ed., 1:78.
 12. K. E. O. Fritsch, "Stil-Betrachtungen," *Deutsche Bauzeitung* 27 (1890): 417–31, 434–40, here 423: "Führer in dieser gesunden, echt realistischen Bewegung war Gottfried Semper..." Fritsch's title derives from a passage in Semper, *Der Stil*, 2nd ed., 2:201. It should be noted that Semper did not employ the term "realistic" as a positive valuation; see, e. g., *Der Stil*, 2nd ed., 1:238, 408 and 2:380–81, 415, 423, 445.
 13. Harry F. Mallgrave, "From Architectural Realism to *Sachlichkeit*: The Polemics of Architectural Modernity in the 1890s," in Harry F. Mallgrave, ed., *Otto Wagner: Reflections on the Rebirth of Modernity* (Santa Monica: Getty Center for the History of Art and the Humanities, 1993), 291–321.
 14. J. Duncan Berry, "From Historicism to Architectural Realism: On Some of Wagner's Sources," in Mallgrave, 1993 (see note 13), 248–52 and now my "Wege durch den Historismus: Semper'sche Themen von Lipsius bis Schumacher" in the forthcoming proceedings of the 2003 Dresden Semper symposium: Henrik Karge, ed., *Gottfried Semper: Dresden and Europa. Die moderne Renaissance der Künste* (Acts des internationalen Kolloquiums der Technischen Universität Dresden in der Gemäldegalerie Alte Meister, Dresden, 27–30 November 2003).
 15. See Wolfgang Herrmann, *Gottfried Semper: In Search of Architecture* (Cambridge, MA: MIT Press, 1984), 174–83 and now Dieter Weidmann, "Semper's Verhältnis zum Eisen" in *Gottfried Semper, 1803–1879: Architektur und Wissenschaft*, ed. Winfried Nerdinger and Werner Oechslin (Munich: Prestel Verlag, 2003), 321–29.
 16. Carl Gottlieb Wilhelm Bötticher, "Das Prinzip der hellenischen und germanischen Bauweise hinsichtlich der Übertragung in die Bauweise unserer Tage," *Allgemeine Bauzeitung* 11 (1846): 111–25; translated as "The Principles of the Hellenic and Germanic Ways of Building with

- Regard to Their Application to Our Present Way of Building,” in Wolfgang Herrmann, trans. and ed., *In What Style Should We Build? The German Debate on Architectural Style* (Santa Monica: The Getty Center, 1992), 147–67.
17. Hans Auer, “Die Bedeutung der Triglyphen. Ein Beitrag zur Frage über den Zusammenhang ägyptischer mit dorischer Baukunst,” *Zeitschrift für bildenden Künste* 15 (1880): 279–83, 322–25, 354–60. Later in the decade, Auer published a second archeological study: “Der Tempel der Vesta und das Haus der Vestalinnen am Forum Romanum,” *Denkschriften der kaiserlichen Akademie der Wissenschaften. Philosophisch-Historische Classe* 36 (Vienna: F. Tempsky, 1888), 209–28 plus 8 pls.
 18. Hans Auer, “Die Quaderbossierung der italienischen Renaissance,” *Zeitschrift des österreichischen Ingenieur- und Architekten-Vereins* 39 (1887): 179–86 plus Pls. XXXIII–XXXV.
 19. Semper *Der Stil*, 2nd ed., 1:31. Durm acknowledges the vital significance of Auer’s essay on the opening page of his important history of Greek architecture and later weighed the evidence of both positions—as well as Viollet-le-Duc’s 1875 treatment in *L’histoire de l’habitation humaine* and Julius Braun’s endorsement of Semper in the second (1873) edition of his *Geschichte der Kunst*—in Josef Durm, *Die Baukunst der Griechen* in Josef Durm, ed., *Handbuch der Architektur*, II. Theil, 1. Band (Darmstadt: Verlag von Joh. Ph. Diehl, 1881), 83.
 20. Auer, 1880, 322: “...in der Uebereinstimmung der Bautechnik. Die Konstruktion ist das Knochengerüste des baulichen Organismus und das am wenigsten variable Element. Sie ist das Basis und Ausgangspunkt für die Verschiedenheiten in den Baustilen überhaupt: in den fortschreitenden konstruktiven Ideen liegt der Schlüssel für die Stilveränderung.” Emphasis Auer’s. I have, for the most part, avoided reflecting Auer’s extravagant use of emphasis in my translations; all emphases are accurately conveyed in the original passages cited in endnotes.
 21. Franz [sic] Auer, “Der Einfluß der Construction auf die Entwicklung der Baustyle,” *Zeitschrift des österreichischen Ingenieur- und Architektenvereins* 33:1 (1881): 8–18.
 22. Semper *Der Stil*, 2nd ed., 1:213. See Auer 1881, 9: “In der üblichen Construction, welche zugleich durch das Material bedingt ist, verkörpern sich jeder Zeit die raumgestaltenden Ideale der Phantasie—sie bildet die Grundlage, zugleich Ausgangspunkt und Begrenzung für die einem Volke und einer Zeit innewohnenden baukünstlerischen Fähigkeiten...Die Construction ist die Vermittlung zwischen dem Ideal und der Wirklichkeit, und zwar das fördernde oder hemmende Moment bei der Verwirklichung der Ideale.”
 23. Auer, 1881, 9, 13: “Das Resultat des beständigen Kampfes zwischen den bestehenden überlieferten Bauweisen und den neu erwachenden Bedürfnissen ist die Entwicklung, die Weiterbildung der Construction, sie ist das eigentlich fortschreitende Element und die nächste Ursache der wechselnden Baustyle...und mit der neuen Construction war auch der neue Styl geschaffen.”
 24. Auer, 1881, 9: “Der eigentliche, wichtigste und erste formbestimmende Factor ist aber das Material und die Construction der Decke, denn die Gestaltung aller anderen Elemente,—sowohl der ganzen Disposition, der Grundrissanlage, wie aller Detailausbildung sind direct von diesem Factor—von der Constructionsort der Decke abhängig.” Semper described it as “perhaps the most important element in architectural symbolism,” in *Der Stil*, 2nd ed., 1:27; see also *Der Stil*, 2nd ed., 1:38 and 63.
 25. Auer, 1881, 9: “Die wichtigste und ursprünglichste Aufgabe der Architektur ist das Schaffen von Räumen...und das erste, ursprünglichste Element bei der Gestaltung des Raumes ist die Decke.” For Semper’s discussions of the spatial and aesthetic significance of the ceiling, see Semper *Der Stil*, 2nd ed., 1:38 and 63.
 26. Auer, 1881, 9: “Durch alle vergangenen Zeiten, für alle kommenden Zeiten gibt es dem Principe nach nur zwei Methoden, nach welchem ein Raum eingedeckt werden kann, — entweder mit einer geraden, horizontalen Decke oder mit einer gewölbten Decke,—mit anderen Worten: Das Material, welches zur Deckenconstruction benützt wird, kann entweder auf Biegung (bei der geraden Decke)—oder auf Druck (beim Gewölbe) beansprucht werden. Eine andere Methode gibt es nicht.”
 27. Auer, 1881, 11.
 28. Auer, 1881, 17: “Dadurch erhielt der Raum seine Verhältnisse, seine Gliederung, seinen Rhythmus, seine Durchblicke, seine Licht und Schatteneffekte, kurz, was man mit Einem Wort nennt: seine Poesie.”
 29. Auer, 1881, 18: “Der Künstler kann und muss in der modernen Baukunst mehr als je über das blossе Bedürfniss, über die reine Zweckmässigkeit hinaus den Raum gliedern und gestalten und die Gesetze der Schönheit und harmonischen Raumbildung walten lassen...”
 30. Auer, 1881, 16: “In dieser Anwendung als Deckenträger ist das Eisen, von dem man zuweilen die Inaugurirung eines neuen Styles erhoffte, im Gegentheile gerade jenes Element, der eigentliche materielle Factor, der die Beibehaltung älterer Bauformen, die Anwendung vergangener Style überhaupt ermöglicht, ja fördert, und die Entstehung und Entwicklung neuer constructiver und architektonischer Motive verhindert.”
 31. Auer, 1881, 17: “Damit schließt denn diese neue bauliche Errungenschaft an das uralte Bekleidungsprincip an.”
 32. Auer, 1881, 18: “...muss er [the architect] auch mehr als je festhalten an den altererbten und bewährten Formen, festhalten und den in den alten Monumenten verkörperten Gesetzen der Schönheit und der Proportion, deren gewissenhaftes Studium sein Bemühen in den vier verflochtenen Jahrhunderten war, und in ihnen den Halt und die Stütze finden, die er durch seine Befreiung aus den Fesseln der constructiven Notwendigkeit verloren.” Semper was of the opinion that spatial dimensions were not limited by cultural and moral concerns, but rather by the physical properties of the eye; see *Der Stil*, 2nd ed., 1:72.
 33. Karl Schnaase, *Niederländische Briefe* (Stuttgart and Tübingen: J. G. Cotta’schen Buchhandlung, 1834), 188–217. See Henrik Karge, “Karl Schnaase: Die Entfaltung der wissenschaftlichen Kunstgeschichte im 19. Jahrhundert,” *Kunsthistorische Arbeitsblätter* 7/8 (2001): 87–100, esp. 93–94. I would like to thank Prof. Karge for graciously furnishing me with these references.
 34. Richard Lucac, “Über die Macht des Raumes in der Baukunst,” *Zeitschrift für Bauwesen* 19 (1869), 294–306. As dispositive evidence of the inroads Semper’s theory made among rival Tektomen in Berlin, Lucac makes a number of unmistakably Semperian design recommendations in the course of his lecture, including the appropriateness of tapestry motifs for mural articulation. This represents compelling counterevidence to Rudolf Redtenbacher’s dramatic claims about Semper’s irrelevance in Berlin and elsewhere; see R. Redtenbacher, “Die moderne Baukunst vor der Forum der Kunstgeschichte,” *Deutsche Bauzeitung* 19 (1885): 257–60, 270–72, 274–75, 283–86; here 283. I intend to examine Redtenbacher’s prolific and consequential contributions to Architectural Realism, including the heated debate Semper’s son Manfred enjoined as a result of this article, in a separate study.
 35. Fiedler in Mallgrave and Ikonou 1994 (see note 6). The Romanesque was also advocated by K. E. O. Fritsch in 1890 (see note 12 above). For the Neo-Romanesque in Germany, see Michael Bringmann, “Studien zur neuromanischen Architektur in Deutschland,” Ph.D. diss., Heidelberg, 1968.
 36. Hans Auer, “Die Entwicklung des Raumes in der Baukunst,” *Allgemeine Bauzeitung* 48 (1883): 65–68, 73–74 plus pls. 51–52.
 37. August Schmarsow, *Das Wesen der architektonischen Schöpfung* (Leipzig: Karl W. Hiersemann, 1894); translated as “The Essence of Architectural Creation,” in Mallgrave and Ikonou,

- 1994, 281–97. See also Cornelius van de Ven, *Space in Architecture. The Evolution of a New Idea in the Theory and History of the Modern Movements*. 3rd ed. (Assen/Maastricht: Van Gorcum, Ltd., 1987) and more recently Mitchell Schwarzer, “The Emergence of Architectural Space: August Schmarsow’s Theory of *Raumgestaltung*,” *Assemblage* 15 (1991): 49–61, where Auer’s 1883 essay is noted.
38. Berry, 1989, 219–29.
39. Carl von Lütow, “Drei Antrittsreden deutscher Professoren,” *Kunstchronik*, N. F., 7 (1895–96): cols. 265–70.
40. Auer, 1883, 65: “Die göttlichste Kraft, die des Menschen Geist bewegt und treibt, ist seine Phantasie. In hohem Fluge hebt sie ihn über Zeiten und Räumlichkeiten und vor ihrem Zauber lösen sich alle irdischen Schranken...Die Ausführung der kühnsten Ideen, welche unser geistiges Auge träumt, wird beschränkt durch die vorhandenen Mittel und Stoffe, ebenso wie durch die Fähigkeit, mit der wir diese zu verwerthen im Stande sind. Die völlige Beherrschung der verfügbaren Mittel, die von schwungvoller Phantasie beseelt, vom Geschmack geleitet wird, die Aufgabe im höchsten Sinne erfasst, heisst: *Kunst*, und sofern sie sich auf den Zweck bezieht, Räume zu schaffen: die *Baukunst*.”
41. Schmarsow, 1894, in Mallgrave & Ikonou, 1994, 283.
42. Auer 1883, 66: “*Der Raum ist die Seele des Baues*, die den Körper ausfüllt und nach aussen charakterisirt. Wie aber die Seele an den Leib gebunden ist und ebenso der Leib an die Seele, beide von einander abhängig, so wirkt auch der Raum nicht nur auf die äussere Erscheinung des Baues, sondern ist seinerseits von dem inneren konstruktiven Organismus bedingt. Von der gewählten oder traditionell vorgeschriebenen Bauart hängt sowohl die Physiognomie des Raumes ab, wie auch die gesammte äussere Erscheinung bis in’s kleinste Détail.” Schnaase also employed the trope of a space–soul connection; see Schnaase, 1834 (note 33 above), 193, 199.
43. Auer, 1883, 66: “Es darf aber nicht ausser Acht gelassen werden, dass die Werke der Baukunst nicht bloss handwerksmässige Leistungen von Constructeuren sind, sondern dass wir es hier mit Schöpfungen der Phantasie zu thun haben, die sich an die Seele des Menschen wendet, und müssen uns erinnern, dass die Phantasie nicht bloss von den technischen Fähigkeiten begrenzt, sondern auch vom künstlerischen Geschmack geleitet werden muss.” Auer here establishes a position that is both anti-materialistic and yet undeniably Semperian, a stance that was apparently inconceivable to Alois Riegl.
44. Gottfried Semper, *Über die formelle Gesetzmässigkeit des Schmuckes und dessen Bedeutung als Kunstsymbol* (Zurich: Meyer & Zeller, 1856), in Gottfried Semper, *Kleine Schriften*, ed. Hans Semper and Manfred Semper (Berlin & Stuttgart: Spemann, 1884; reprint Mittenwald: Mäander Kunstverlag, 1979), 304–05: “Die reiche und präzise Sprache der Hellenen hat dasselbe Wort zur Bezeichnung des Zierates, womit wir uns und die Gegenstände unserer Neigung schmücken, und der höchsten Naturgesetzlichkeit und Weltordnung. Dieser tiefe Doppelsinn des Wortes *κοσμος* ist gleichsam der Schlüssel hellenischer Welt- und Kunstanschauung...Wo der Mensch schmückt, hebt er nur mit mehr oder weniger bewußtem Thun eine Naturgesetzlichkeit an dem Gegenstand, den er ziert, deutlich hervor.”
45. Gottfried Semper, “On Architectural Style [1869],” in Semper, 1989 (see note 8 above), 270. My emphasis.
46. Auer, 1883, 66: “Die Baukunst hat zwei Seelen: die eine hängt sich an die Erde und ist dem praktischen Zwecke untergeordnet, die andere erhebt sich als freie Himmelstochter in höhere Regionen und indem sie der reinen Schönheit dient, ist sie sich selbst genug. Dieser Dualismus zeigt sich auch in der Ausbildung des Raumes...Im Verhältnisse der Höhe zur Ausdehnung liegt eines der schönsten künstlerischen Momente der Raumgestaltung, dem die Architekten der Antike, wie der Renaissance sogar durch Aufstellung bestimmter Zahlenverhältnisse nahe zu kommen gesucht haben.”
47. Aristotle, *De Anima*, III, ix and *Nicomachean Ethics*, I, xiii. See Philp J. van der Eijk, “Aristotle’s Psycho-Physiological Account of the Soul–Body Relationship” in *Psyche and Soma: Physicians and Metaphysicians on the Soul–Body Problem from Antiquity to the Enlightenment*, ed. John P. Wright and Paul Potter (Oxford: Oxford University Press, 1993), 57–78.
48. Auer, 1883, 66: “Durch die Thätigkeit des ordnenden Menschengestes und unter dem Zwange der praktischen Nothwendigkeit werden die im Raume erforderlichen Säulen und Pfeiler in Reihen und rhythmischer Regelmässigkeit gruppiert. Der Raum erhält dadurch seine Gliederung, seine proportionale Theilung, wie jedes andere Werk der Kunst und der Natur. Es entsteht jene malerische Schönheit, jener perspektivische Reiz, jene Mannigfaltigkeit in der Beleuchtung, kurz jene Fülle und jener Reichtum der inneren Gestaltung, der den Raum zum wahren Kunstwerke zu stempeln vermag, für welchen die Bezeichnung der *Poësie des Raumes* gefunden wurde.”
49. Auer, 1883, 65: “...die höchste Aufgabe und das eigentlich treibende und fördernde Moment in der Entwicklung der Baukunst war; die Vermittlung zu finden dieser Gegensätze, zwischen möglichst grosser und freier Raumentwicklung und gleichzeitiger möglichster Monumentalität und Wetterbeständigkeit.”
50. See note 10 above.
51. Auer, 1883, 65: “Denn die architektonischen Ideale, welche der Phantasie vorschweben, hängen jederzeit genau mit dem Stande des technischen Könnens, des praktischen Wissens zusammen. Einem Volke z. B., das [sic] kein Gewölbe kennt, kann ein solches auch nicht zum Ideal werden;—es kann nur die überlieferte und geübte Technik vervollkommen und weiter führen.” The epistemological limitations intimated here became a leitmotif for art historian Heinrich Wölfflin, who would later compress the thought into seven words: “Not everything is possible at all times.” See Heinrich Wölfflin, *Principles of Art History. The Problem of the Development of Style in Later Art*, 7th German ed., trans. M. D. Hottinger (New York: Holt & Co., 1932), 11.
52. See Carl Menger, *Principles of Economics*, trans. James Dingwall & Bert F. Hoselitz (Grove City, PA: Libertarian Press, 1994 [1871]) and his *Investigations into the Method of the Social Sciences with Special Reference to Economics*, trans. Francis J. Knock (New York: New York University Press, 1985 [1883]). See also Max Alter, *Carl Menger and the Origins of Austrian Economics* (Boulder, CO: Westview Press, 1990). The use of economic arguments in the architectural theory of this period merits much closer attention.
53. Hans Auer, “Moderne Stylfragen,” *Allgemeine Bauzeitung* 50 (1885): 19–21, 25–27.
54. Auer, 1885, 19: “...dem Individuum bleibt die freie Wahl, wo es seine Ideale suchen, wofür es streben will, bis Neigung, Talent, Modeströmung oder irgend ein Zufall die Richtung dauernd bestimmen.”
55. Auer, 1885, 19: “...für alle diese neuen Probleme die richtigste Lösung zu finden, dass zur Erfüllung dieser weitgehenden Ansprüche nach jeder Seite hin die unumschränkste und möglichste vielseitige Beherrschung der gesammten architektonischen Formenwelt absolut nothwendig ist. Ein in sich zum Abschlusse gekommener Styl...muss die Grenzen der Tradition sprengen und sich nach allen Seiten strecken und dehnen.”
56. Auer, 1885, 20.
57. Otto Wagner, *Fünfe Sitzgen, Projecte u. ausgeführte Bauwerke*, vol. 1 (Vienna: Author, 1889), translated by E. V. Humphry as: *Sketches, Projects and Executed Buildings by Otto Wagner* (New York: Rizzoli, 1987), 17; Berry, 1993, 246–48.

58. Auer, 1881, 14.
59. Auer, 1885, 20: "Unabhängig von allen Stylfragen, ist dieses die gemeinsame Charakteristik der Baukunst unseres Jahrhunderts."
60. Auer, 1885, 20: "Diese Eigenart der modernen Architektur führt darum auch zu dem unserer Zeiteigenen Ausdruck der Individualität, wonach die Künstler ihren Bauten einen bestimmten persönlichen Charakter aufprägen, indem sie, ihren Idealen entsprechend, sich einer gewissen höher entwickelten Kunstepoche anschliessen, sei es nun den Griechen oder den Römern; der byzantinischen, romanischen oder gothischen Bauweise oder irgend einer Spezialität der Renaissance." Cf. Auer, 1881, 14 where he makes a strong, Burckhardian equation between the emergence of individualism in the Renaissance, a new "räumliche Entwicklung," and the fact that "style no longer stands above the artist, rather the artist determines the style, and impresses upon his works individuality." On the emergence of individualism as an artistic theme in the 1890s via Julius Langbehn, see Cornelius Gurlitt, *Die Deutsche Kunst seit 1800. Ihre Ziele und Taten*. 4th ed. (Berlin: Georg Bondi, 1924 [1899]), 342–44; and more recently Fritz Stern, *The Politics of Cultural Despair. A Study in the Rise of Germanic Ideology* (Berkeley: University of California Press, 1974 [1961]).
61. Auer, 1885, 20: "Die modernen Bedürfnisse stellen die Hauptdisposition, das Knochengestüt, den ganzen Organismus fest, das der Architekt dann mit der kunstvollen Hülle, in dem ihm passend scheinenden Faltenwurf umkleidet und mit kostbarem Schmucke zielt. Alle modernen Bauten, in irgend einem der üblichen Style erbaut, lassen sich mit genau derselben Plan- und Raumdisposition in einen anderen Styl übersetzen, der sicherste Beweis, dass die modernen Styleigenthümlichkeiten nur in Aeusserlichkeiten liegen." Auer had already used the Kernel/Hull trope in 1881 (p. 9). For a discussion of this theme (omitting Auer), see Werner Oechslin, *Otto Wagner, Adolf Loos and the Road to Modern Architecture*, trans. L. Widder (Cambridge/New York: Cambridge University Press, 2002).
62. Auer, 1885, 21: "und stellt jene architektonischen Prinzipien auf, die wir heute noch als gültig anerkennen und auf denen unsere moderne Baukunst beruht." Two paragraphs later, Auer states "...so sehen wir in der Spätrenaissance die Resultirende gezogen aus allen früheren Stylen und im engsten Anschlusse daran: unser Jahrhundert."
63. Auer, 1885, 21: "Wir stehen auch hier vor einer analogen Erscheinung, wie sie die Natur, wie sie jede organische Entwicklung zeigt, wo neben einer grossen, allgemein fortschreitenden, Bewegung immer die in kleineren Perioden stattfindenden Umwälzungen und Erneuerungen zur Erscheinung kommen.
- Im Weltensysteme bewegen sich die Sonnen, Planeten und Monde in ihrer Bahn unaufhaltsam weiter, während sie sich in rascherem Tempo um sich selbst drehen; dieselbe doppelte Bewegung theilte sich auch allem Leben auf den Himmelskörpern mit, bis hinter zur geringsten Bewegung: dem Fluge der Vögel und dem Laufe der Gewässer. So bewegt sich auch der grosse Zeiger der Uhr schneller und kehrt öfter wieder scheinbar auf denselben Punkt zurück,—nur scheinbar, weil indessen der kleine Zeiger, der das allgemeine Fortschreiten andeutet, ebenfalls vorgerückt ist.
- Genau dieselbe Erscheinung zeigt auch der Gang der Kultur, der Gang der Kunstentwicklung: die grossen, baulichen Hauptprinzipien der Raumdisposition, der Massengliederung und der konstruktiven Erfahrungen gehen ihren regelmässigen Schritt mit der allgemeinen Entwicklung des menschlichen Geistes ungestört weiter, aber die Einzelform der Style, das Detail, das Dekorative wechselt rascher, unterwirft sich den jeweiligen lokalen Einflüssen und den temporären Anschauungen und geht von einem Extrem zum anderen."
64. Auer, 1885, 25. It was attention to Baroque and Late Roman art, then still considered degenerate, as worthy phases manifesting growth and development that animated the mature career of the prominent member of the Viennese School of Art History, Alois Riegl (1858–1905). See Julius von Schlosser, "Die Wiener Schule der Kunstgeschichte. Rückblick auf ein Säkulum deutscher Gelehrtenarbeit in Österreich," *Mitteilungen des österreichischen Instituts für Geschichtsforschung*, Ergänzungs-Band 12, no. 2 (1934): 182–93 and Margaret Olin, *Forms of Representation in Alois Riegl's Theory of Art* (University Park, PA: Pennsylvania State University Press, 1992).
65. See Bernini der Jüngere [Albert Ilg], *Die Zukunft des Barockstils* (Vienna: Mang'sche K. K. Hofverlags u. Universitäts-Buchhandlung, 1880). For the fascinating character and career of Ilg, see Alphons Lhotsky, "Albert Ilg, 1847–1896," in H. Wagner & H. Koller, eds., *Alphons Lhotsky. Aufsätze und Vorträge* (Vienna: Verlag für Geschichte und Politik, 1974), 4: 277–302. Inexplicably, the Viennese Neo-Baroque of the 1880s remains a tantalizing, and almost wholly unexplored, subject.
66. Auer, 1885, 26–27: "Indessen möge man nun an diese oder jene Stylerichtung anschliessen, an die Hochoder Spätrenaissance, so sollten ihre Schöpfungen nicht unmittelbar kopirt, sondern stets von den Eigenhümlichkeiten, Mängeln und Schlacken der Zeit gereinigt, missverständliche oder handwerkmäßige Ausartungen im Sinne der modernen Kenntniss der reinen Style verbessert und veredelt werden."
67. Auer, 1885, 27: "Denn die Reinheit der Form ist keine bloss [sic] akademische Chimäre... Die sogenannten reineren Formen sind diejenigen, welche künstlerische Ausdrucksweisen in ihrer natürlichsten, verständlichsten und schönsten Durchbildung geben."
68. Auer, 1885, 27.
69. Auer, 1885, 27: "Suchen wir auf der geraden Linie zu möglichster Vollkommenheit, Schönheit und Naturwahrheit uns emporzurängen, unserer Zeit, dem Leben, dem Bedürfnisse den nicht zu verweigernden Tribut zu zollen, den Geschmack immer mehr zu heben, zu verfeinern und zu veredeln,—so wird dadurch unsere Baukunst der wahre Ausdruck unserer Zeit und somit stylgemäss sein."
70. See note 18 above.
71. Emil Kaufmann, *Architecture in the Age of Reason: Baroque and Post-Baroque in England, Italy and France* (Cambridge, MA: Harvard University Press, 1955). See also Paul Frankl's belief that the Renaissance lasted until 1900 in his *Entwicklungsphasen der neueren Baukunst* (Leipzig: B. G. Teubner, 1914); translated and abridged by James Ackerman as *Principles of Architectural History* (Cambridge, MA: MIT Press, 1968).
72. For the parallel interpretation of Quattrocento architectural theory, see Christine Smith, *Architecture in the Culture of Early Humanism: Ethics, Aesthetics and Eloquence, 1400–1470* (Oxford: Oxford University Press, 1993).
73. Hans Semper, *Gottfried Semper: Ein Bild seines Lebens und Wirkens* (Berlin: Calvary, 1880), I. The younger Semper returns to the pseudo-Senecan passage in his later account: Hans Semper, "Gottfried Semper," in Bruen (see note 1), 3: 129. Semper adopted the motto from a portrait of the Spanish King Alphonso the Wise (1221–1284) he had seen while a student in the Hamburg Johanneum and assumed that it was taken from Seneca's *Naturales Quaestiones*. The actual passage from *Naturales Quaestiones* (I, Praef., 4) reads: "Nisi ad haec admitterer non tanti lucrati nasci."
74. Andreas Hauser, "Gottfried Semper in Zürich: Republikanische Bauformen," in Neudinger and Oechslin, 2003 (see note 15 above), 304. Hauser's compelling examination of Semper's iconographic program will be published as "Semper's Wahlspruch: Der Konflikt um das Bildprogramm des bürgerlichen Polytechnikums" in the forthcoming Dresden *Wien* also

- mentioned in note 14 above. Here, Hauser explores in fascinating and exquisite detail the origins of the motto, its variations, questionable philological provenance, its pedagogical significance, and the political firestorm it engendered.
75. Lawrence Harvey, "Semper's Theory of Evolution in Architectural Ornament," *Transactions of the Royal Institute of British Architects*, N. S., 1 (1885): 29–54, here 29–30. See also Seneca, *Ad Lucilium Epistulae Morales* (Cambridge, MA: Harvard University Press, 1920) 2:396, which reads: "Naturae est enim potioribus deteriora summittere. Mutis quidem gregibus aut maxima corpora praesunt aut vehementissima." For the English Semperite debate, see Berry, 1989, 191–218.
76. Only after completion of this manuscript did the long awaited English translation of *Der Stil* appear, in which Mallgrave details Semper's sources by edition. See Gottfried Semper, *Style in the Technical and Tectonic Arts, Or, Practical Aesthetics, a Handbook for Technicians, Artists, and Friends of the Arts*, trans. Harry F. Mallgrave and Michael Robinson (Los Angeles: Getty Center for Education in the Arts, 2004), 942; Johann Schweighäuser ed., *Annaei Senecae ad Lucilium epistulae morales*, 2 vols. (Strasbourg: Societas Bipontinae, 1809). For Semper's library, see MS 148 at the ETH Zurich, partially described in Wolfgang Herrmann, *Gottfried Semper: Theoretischer Nachlaß und der ETH Zürich. Katalog und Kommentare* (Basel/Boston/Stuttgart: Birkhäuser, 1981), 114.
77. Seneca's observations on architecture (*Epistles* VIII, XXIV, LXXXVI, XC and CXV) generally follow the Stoic doctrine of *nihil admirandum*.
78. Semper, 1989, 102.
79. Gottfried Semper, "Vergleichende Baulehre [MS 58, 1850]," in Herrmann, 1984 (see note 15 above), 198.
80. Auer, 1881, 14: "Wenn dem Menschen in seinem Aufwärts-Streben nach geistiger Freiheit mit den Gesetzen der Naturnothwendigkeit und in den materiellen Bedingungen der äusseren Verhältnisse der Weg zu Ende geht, der ihn höher und weiter führt, so greift er in seine Brust und findet im inneren moralischen und sittlichen Bewusstsein neue Anhaltspunkte und neue Gesetze, denen er gehorcht und in ihrer Befolgung neue Kräfte und neue Freiheiten,—er lernt das Gute um das Guten willen zu schätzen und zu üben, und indem er dann auf das Vergangene zurückblickt, findet er diese scheinbar neuen Gesetze der sittlichen Weltordnung schon in jenen Gesetzen der Naturnothwendigkeit.
- So auch die Phantasie. Als sie aus den Fesseln der constructiven Beschränktheit sich losgelöst, als sie in der neu aufgegangenen Sonne geistiger Aufklärung ihre erstarrten Fittiche zu freien höheren Schwünge erheben wollte, musste sie, um nicht in's Unendliche, Schrankenlose sich zu verlieren, wieder einen festen Halt sich verschaffen, auf den sie sich stützen kann." Schnaase also explicitly conflates the aesthetic and the ethical, though not as a function of his historical account of architectural space but rather in terms of the obligations of proportional expression in general; see Schnaase, 1834 (note 33 above), 190.
- . "Börsengebäude." In Joseph Durm et al. eds., *Handbuch der Architektur*, IV. Theil, 2. Halbband, 2. Heft: *Gebäude für die Zwecke des Wohnens, des Handels und Verkehrs*, 247–302. Stuttgart: Arnold Bergsträßer, 1902.
- . "Die Entwicklung des Raumes in der Baukunst." *Allgemeine Bauzeitung* 48 (1883): 65–68, 73–74.
- . "Moderne Stylfragen." *Allgemeine Bauzeitung* 50 (1885): 19–21, 25–27.
- . "Die Quaderbossierung der italienischen Renaissance." *Zeitschrift des österreichischen Ingenieur- und Architekten-Vereins* 39 (1887): 179–86.
- . "Der Tempel der Vesta und das Haus der Vestalinnen am Forum Romanum." *Denkschriften der kaiserlichen Akademie der Wissenschaften. Philosophisch-Historische Classe* 36, 209–28. Vienna: F. Tempsky, 1888.
- Lucae, Richard. "Über die Macht des Raumes in der Baukunst." *Zeitschrift für Bauwesen* 19 (1869): 294–306.
- Müller, Andreas. *Der verbitterte Bundeshausarchitekt. Die vertrackte Geschichte des Parlamentsgebäudes und seines Erbauers Hans Wilhelm Auer, 1847–1906*. Zurich: Orell Füssli, 2002.
- Schmarsow, August. *Das Wesen der architektonischen Schöpfung*. Leipzig: Karl W. Hiersemann, 1894.
- Schnaase, Karl. *Niederländische Briefe*. Stuttgart and Tübingen: J. G. Cotta'schen Buchhandlung, 1834.
- Semper, Gottfried. *Der Stil in den technischen und tektonischen Künsten, oder praktische Aesthetik. Ein Handbuch für Techniker, Künstler und Kunstfreunde*. 2nd ed. Munich: Fr. Bruckmanns Verlag, 1878–79.
- . *The Four Elements of Architecture and Other Writings*. Translated by Harry F. Mallgrave and Wolfgang Herrmann. Cambridge: Cambridge University Press, 1989.

SELECT BIBLIOGRAPHY

- Auer, Franz (sic). "Der Einfluß der Construction auf die Entwicklung der Baustyle." *Zeitschrift des österreichischen Ingenieur- und Architekten-Vereins* 33, no. 1 (1881): 8–18.
- Auer, Hans Wilhelm. "Die Bedeutung der Triglyphen. Ein Beitrag zur Frage über den Zusammenhang ägyptischer mit dorischer Baukunst." *Zeitschrift für bildenden Künste* 15 (1883): 279–83, 322–25, 354–60.



FIGURE 1. Franz Würbel, *Hans Auer*, ca. 1885, collection of the author.



FIGURE 2. Hans Auer, "Eder Sanatorium," 1886–87 from *Architektonische Rundschau—Skizzenblätter aus allen Gebieten der Baukunst* 5, 1889, courtesy of the Trustees of the Boston Public Library, Boston, MA.

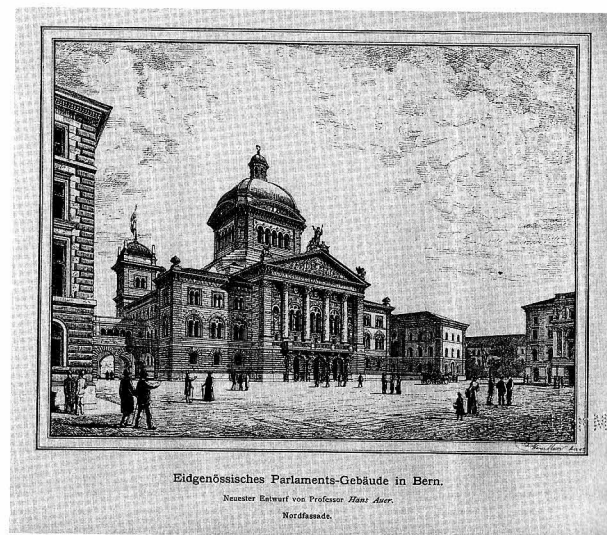


FIGURE 3. Hans Auer, "Swiss Bundeshaus," 1894–1902, from *Schweizerische Bauzeitung* 21, 1893, courtesy of Michigan Information Transfer Service, University of Michigan, Ann Arbor, MI.

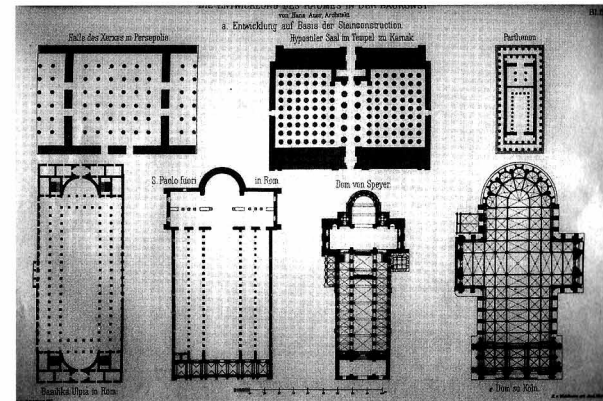


FIGURE 4. Hans Auer, "The Development of Architectural Space: Stone Construction" from Hans Auer, "Die Entwicklung des Raumes in der Baukunst," *Allgemeine Bauzeitung* 48, 1883, courtesy of the Trustees of the Boston Public Library, Boston, MA.

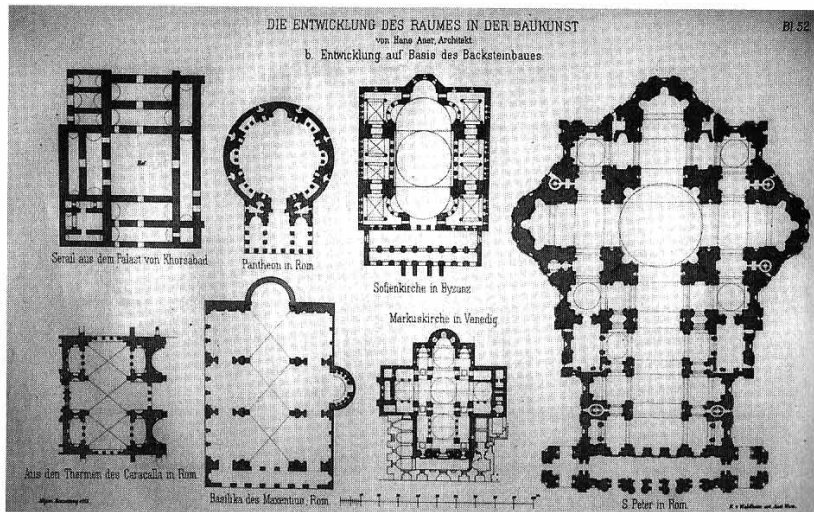


FIGURE 5. Hans Auer, “The Development of Architectural Space: Brick Construction” from Hans Auer, “Die Entwicklung des Raumes in der Baukunst,” *Allgemeine Bauzeitung* 48, 1883, courtesy of the Trustees of the Boston Public Library, Boston, MA.

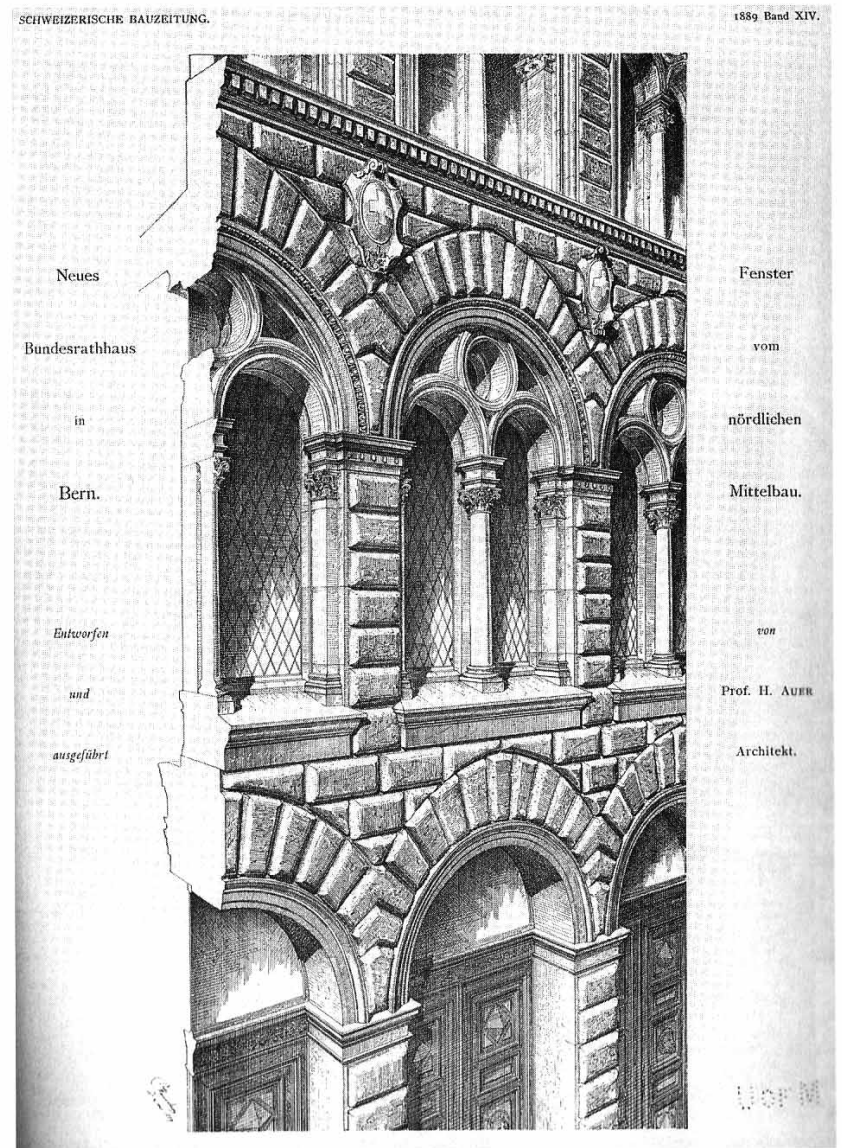


FIGURE 6. Hans Auer, “Detail of the Fenestration of the North Façade of the Swiss Bundesrathhaus” from *Schweizerische Bauzeitung* 14, 1889, courtesy of Michigan Information Transfer Service, University of Michigan, Ann Arbor, MI.

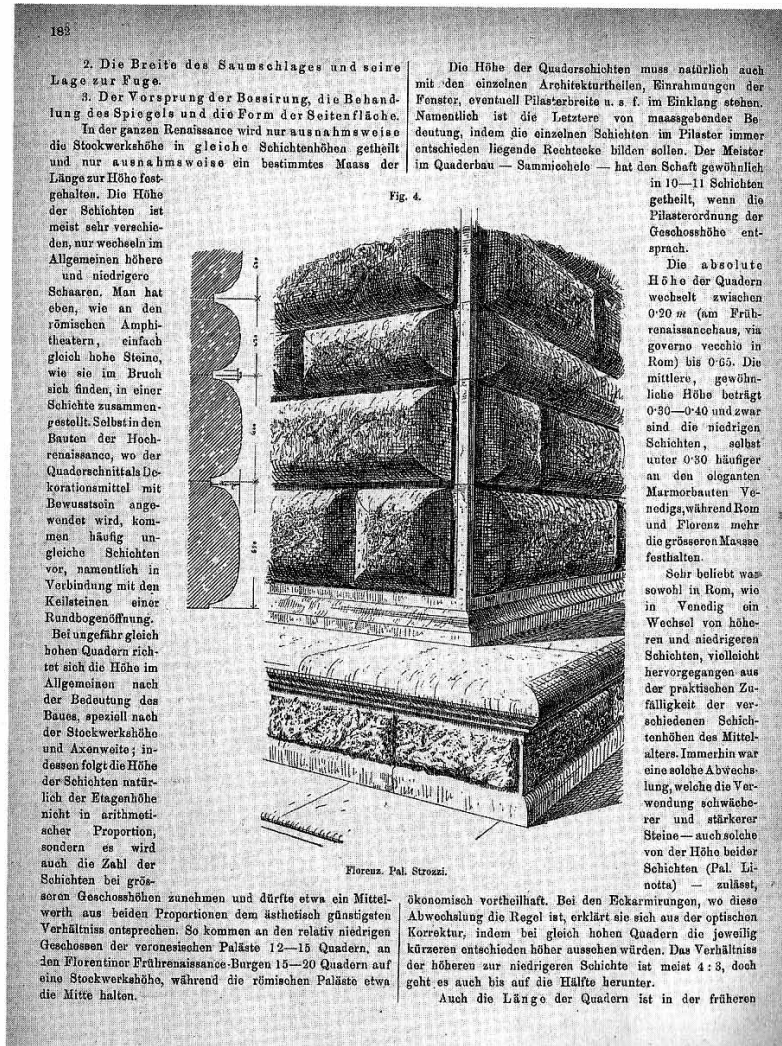


FIGURE 7. Hans Auer, "Rustication Study of Palazzo Strozzi" from Hans Auer, "Die Quaderbossirung der italienischen Renaissance," *Zeitschrift des Österreichischen Ingenieur- und Architekten-Vereins* 39, 1887, courtesy of the University of Pennsylvania, Philadelphia, PA.