Daniel Sherer

The Architectural Project and the Historical Project: Tensions, Analogies, Discontinuities

Alberti argued in *De Re Aedificatoria* (1452) that architecture, among all the arts, is best suited to withstand the corrosive power of time: in his view, by drawing upon the principles of *concinnitas* and *finitio*, the built project can attain a level of beauty that acts as a deterrent.[1] Alberti's thesis contrasts sharply with the present, when the force of temporalization – the acceleration of time due to the ever-quickening pace of technological development and the changes in consciousness and perception that accompany this process – makes the work's obsolescence coincide almost exactly with the moment of its production.[2] This contrast between the humanist idea of architecture's ability to resist oblivion and the "creative destruction" unleashed by the current economic and ideological order, in which projects become dispensable and forgettable very rapidly, offers an apt way of addressing the fraught relationship between architecture and history.[3]

Clearly these terms, pitched at such a high level of generality, require some delimitation of their semantic fields. To do this, it is necessary to ask two questions that are intimately tied to our contemporaneity: Can architecture harness the force of temporalization for its own ends? And, if this can be achieved, can such harnessing exploit, alongside the burgeoning digital technologies, a tendency that would appear to be antithetical to them, namely, the "return to history?"

However one responds to these questions, one thing is clear: architecture is a discipline that is primarily concerned with giving form, structure, and space to different functions, above and beyond its purely technical capabilities. Although architecture's relation to the cultural and social forces that contribute to it is often extremely complex, this

1. "Beauty may even influence an enemy, by restraining his anger and so preventing the work from being violated." Leon Battista Alberti, *On the Art of Building in Ten Books*, trans. Joseph Rykwert, Neil Leach, and Robert Tavernor (Cambridge: MIT Press, 1988), 155–56. On the theme of the power of beauty in Alberti see Manfredo Tafuri, *Interpreting the Renaissance: Princes, Cities, Architects*, trans. Daniel Sherer (New Haven: Yale University Press, 2006), 46.
2. On temporalization (*Verzeitlichung*), see Reinhart Koselleck, *Futures Past: On the Semantics of Historical Time*, trans. Keith Tribe (New York: Columbia University Press, 2004), 137, and *The Practice of Conceptual History: Timing History, Spacing Concepts*, trans. Todd Samuel Presner and others (Stanford: Stanford University Press, 2002), 113, 121.
3. Joseph A. Schumpeter, *Capitalism, Socialism and Democracy* (New York: Harper & Row, 1974), 81.

constitutive link to functionality is relatively straightforward and clearly comprehensible.

History, on the other hand, is much more ambiguous. Since the 18th century this term has referred both to the writing of history (historiography) and to the actual events and historical processes which are narrated and interpreted by such writing.[4] Due to the conceptual density of the semantic fields of the historical project and the architectural project, the relation between the two is complicated and conflictual. This is due to the fact that architecture's histories can be narrated in multiple, competing, often contradictory ways, but also to the aforementioned humanist opposition between historical time and architecture that continues to shape the tension between the ephemerality of the built project and its potential for relative permanence.

Although they are changing, at times radically, due to the advent of new technologies, architecture's raw materials are sufficiently well known. It remains an open question whether space is created by architecture or is one of its (material and formal) preconditions. On the other hand, history's raw material, according to Jacques Le Goff, consists not only of events and durations, but of time itself.[5] The historian shapes the time that he or she writes about into a coherent narrative or narratives, interpreting the evidence as he or she sees fit, using norms of scholarship involving what Michel Foucault has called "veridiction" – the enunciation of truthful discourse.[6] To achieve this kind of discourse the historian tests the evidence at his or her disposal, relying as much as possible on period sources. In this way, within the limits of the historical construction, the historian determines the rhythms of history – that is, the correct relationship between long-term, almost immobile structures of experience (*longue durée*) and the brisk tempo of events (*histoire évenémentielle*).[7]

At a very general level, architecture may be said to occupy an intermediate position between these extremes of historical time. This is the case even if, in the long run, the architectural project (a form of practice that is always tied to the present and its concerns) is opposed, in some fundamental sense, to the historical project (understood to be a mode of critical understanding relating past, present, and future.)

To clarify the wider implications of this tension, I will examine two domains in which history has been instrumentalized by architecture over the past three decades: operative criticism and the most recent developments in digital technology. These domains are rife with ideological distortions, the

4. Koselleck, *The Practice of Conceptual History*, 2.
5. Jacques Le Goff, *History and Memory*, trans. Steven Rendall and Elizabeth Claman (New York: Columbia University Press, 1992), xix.
6. Michel Foucault, *The Birth of Biopolitics: Lectures at the Collège de France 1978–79*, ed. Michel Senellart, trans. Graham Burchell (New York: Palgrave Macmillan Limited, 2008), 28–47. Although Foucault has often been criticized for lacking a firm conception of historical evidence, and has been seen as adopting a position of radical skepticism in which the truth of historical discourse and narrative is cast in doubt, recently an interview has come to light in which he defends the idea of truthfulness in history as a basic criterion. See *Speech Begins After Death,* ed. Phillippe Artières, trans. Robert Bonono (Minneapolis: University of Minnesota Press, 2013). On questions of historical truth and their relation to concepts of evidence, impartiality, and fact, see Carlo Ginzburg, *History, Rhetoric and Proof* (Jerusalem: The Historical Society of Israel, 1999), *Clues, Myths, and the Historical Method* (Baltimore: Johns Hopkins University Press, 1989), and "Checking the Evidence: The Judge and the Historian," in *Questions of Evidence: Proof, Practice, and Persuasion Across the Disciplines*, ed. James Chandler, Arnold I. Davidson, Harry D. Harootunian (Chicago: University of Chicago Press, 1994), 290–303.
7. For the methodological and theoretical implications of the distinction between long-term and event-based histories see esp. Fernand Braudel, "History and the Social Sciences: The *Longue Durée*,"in *On History*, trans. Sarah Matthews (Chicago: University of Chicago Press, 1980), and *The Mediterranean and the Mediterranean World in the Age of Phillip II*, trans. Sian Reynolds (New York: Harper & Row, 1972), 13–17.

most prominent of which is the zeitgeist or presentist assumption – the idea that a particular tendency of form, program, or technology carries the key to the present and the future – and its chief philosophical or quasi-philosophical legitimation strategy. This is the teleological construction of history, which presupposes the spurious claim that certain paths of historical development are inevitable and bound to happen.[8]

My purpose in examining these ideological distortions is to isolate critical approaches to history capable of exposing them, thereby offering new openings for the dialogue between the architectural project and the historical project. These approaches entail new possibilities for contemporary practice. Chief among these is the attempt to open an epistemic space for the unexpected and the unforeseeable in the unfolding context of the project. And this is precisely what the multiple reliance on sketch, model, and digital representation, as opposed to any exclusive focus on new regimes of computation, implies: a way out of the aesthetic defeat caused by the overwhelming success of a particular kind of rapid technological development. For with this development, we confront a dynamic that frequently leaps ahead of the more deliberate and gradual modes of attention required for the maturation of the architectural idea – modes that, in ways that are paradoxical in appearance only, are essential to the emergence of the unexpected both in the formal genesis of the architectural idea and in the built project.

8. On teleological constructions of history, the classic treatment is still Karl Löwith, *Meaning in History* (Chicago: University of Chicago Press, 1949). See also Isaiah Berlin, "Historical Inevitability," in *Four Essays on Liberty* (New York: Oxford University Press, 1969), 41–117. For the historical trajectory of the idea of zeitgeist, see, Koselleck, *Practice of Conceptual History*, 53, and Michek de Certeau, *The Writing of History*, trans. Tom Conley (New York: Columbia University Press, 1988), 27.
9. Tafuri, *Theories and History of Architecture* (New York: Harper and Row, 1980), 130.

Tafuri's Claim: Architecture vs. History

No historian has understood the complexity and agonistic nature of the relation of architecture and history better than Manfredo Tafuri. In *Theories and History of Architecture* (1968) Tafuri made the following observation about their tension that is still cogent over four decades later: "There can be no true complementarity between architectural and historical critical discourses: they can converse with each other, but they cannot complete each other, since they find themselves, inevitably, in competition."[9] In other words, for Tafuri, the coexistence of historical and architectural discourses implies a conversation between autonomous, often antithetical forces. This is why a potential complementarity between history and architecture can be ruled out: a consideration that applies as much to the architect's vision of history as to the historian's reception of architecture.

Tafuri's statement can be read in a number of ways. Rather than focusing on the dynamics of critical reception,

it might be more useful to highlight its implications for trajectories of architectural production. For when the observation in question is inserted within the wider context of Tafuri's thought, it can be inferred that, at a different level of analysis, he was drawing a distinction of the following kind: if architecture, in searching for definitive solutions to the challenges it confronts, realizes one possibility among many, history places architecture before an open field both of possibilities and constraints, exposing the most stable plans to unforeseen forces that invariably disrupt them.[10]

10. For a fuller discussion of this reading see my preface to Tafuri, *Interpreting the Renaissance*, xvi.

From this perspective, the two poles of this tension are architecture's contemporary self-awareness as a discipline and the stance it takes toward the historical past: a past, in any case, that must not be understood in unilinear fashion but as a complex intersection of different temporal orders. In light of this hybrid constitution of historical time it is evident that the need for a conscious historical stance presupposes a reading of the present whose complexity matches that of the multiple pasts it confronts. When undertaking this reading one must steer clear both of pseudohistorical nostalgia and presentist techno-determinism, both of which, lamentably, are rampant in today's architectural scene. What is more, it is always necessary to counter the partly unconscious continuation of modernism's inveterate antihistoricism (that is, the historical avant-garde's idea that they had to start from zero) with a historical knowledge that is immanent to current architectural practices rather than operative or externally imposed: a knowledge that can be translated into an understanding of the historicity of the project in light of the shifting positions (some more ideological, others more critical) it can occupy at different points in time.

Some of the more radical recent practices have recognized that history can provide a source of form while avoiding any facile mimesis. In consequence they may achieve results that are both unique and unexpected more effectively than those who merely repeat the strategies and forms of the present. From this perspective it is plausible to suggest that a renewed attention to history can only enrich architecture's claim to a possible artistic autonomy, as long as one respects the rights of discontinuity, which now as always are closely connected with the power of invention.

Tafuri vs. Croce: The Crisis of Presentism

The themes just outlined can help us trace a new genealogy of the architectural present, informed by current

understandings of history as a motivating factor for the project. Before this can be attempted, a brief analysis of a crucial aspect of Tafuri's historical project needs to be pursued. This aspect is defined by Tafuri's response to one of the principal objects of his critique, the philosophy of history of Benedetto Croce, and, along with this, the latter's primary source of inspiration, Hegel.

In true Hegelian fashion, Croce maintained a stance that was inherently progressive. This was one important consequence of his identification of history with the history of freedom. In his view, when facing the shifting needs and uncertainties of the present, men move beyond the past, often for reasons that they do not fully comprehend. Hence, for Croce, a pervasive sense of the inexorable workings of Providence is built into the structure of the philosophy of history. And since, in accordance with this providential idea, "the old and the past live on in the new and the living," it follows that all history is contemporary history.

Arguing that "nothing is given as past," Tafuri inverted Croce's dictum, which had immobilized the past by forcing it to inhabit a narrow horizon of the present. In this he was guided by a principled refusal to take the outcome of the struggles the historian narrates for granted.[11] He thereby embarked on a highly effective critique of teleology, maintaining that there is no privileged center for historical becoming, and hence no sanction either for a history of pure ruptures or of pure continuities. There are just levels of difference that require historical distance if any sense is to be made of them. Even the history of the present requires a certain distance for any understanding to arise: and the best way to acquire such distance is to look at its differences from the past – any past.[12]

This need for distance has assumed a new importance now because of a spate of recent arguments about the role of digital technology, many of which not only ignore this need, but disregard the very idea of historical distance itself. In this way they reify the present in an attempt to monopolize the future. Marshalling teleological models, these arguments reproduce Crocean and Hegelian assumptions about history, as if these have not been discredited for over half a century. I am thinking in particular of the assertions of the architect Patrik Schumacher, an avowed Hegelian determinist as far as parametric design and its potentialities are concerned, and, to a lesser degree, the arguments regarding digital agency put forward by the historian Mario Carpo, which undercut the author/architect's productive forces and design ideas.[13] By

11. Benedetto Croce, "Providence or the 'Cunning of the Idea,'" in *My Philosophy: Essays on the Moral and Political Problems of Our Time* (London: Allen & Unwin, 1949), 167–71. On the premises, implications, and reception of Croce's philosophy of history, see Arnaldo Momigliano, "Reconsidering B. Croce," in *Essays in Ancient and Modern Historiography* (Middletown: Wesleyan University Press, 1977), 345–63, Siegfried Kracauer, *History: The Last Things Before the Last* (New York: Oxford University Press, 1969), 69, and Le Goff, *History and Memory*, 106, 168, 171.

12. Tafuri, "There is no criticism, only history," interview with Richard Ingersoll, *Casabella* 619-21 (1995): 97. On historical distance, see Carlo Ginzburg, *Wooden Eyes: Nine Reflections on Distance*, trans. Martin Ryle and Kate Soper (New York: Columbia University Press, 1998), Mark Salber Phillips, *On Historical Distance* (New Haven: Yale University Press, 2003), and the more recent discussion in Jaap Den Hollander, Herman Paul, and Rik Peters, "Introduction: The Metaphor of Historical Distance," *History and Theory* 50, no. 4 (December 2011): 1–10.

13. See Patrik Schumacher, T*he Autopoiesis of Architecture: A New Framework for Architecture* (London: Wiley, 2011), and Mario Carpo, *The Alphabet and the Algorithm* (Cambridge: MIT Press, 2012).

now one would have thought that it would be unnecessary to expose the teleological underpinnings of these ideological claims, but here they are once more, affirming a metaphysics of the digital without openly acknowledging, in every case, the problematic implications of such assertions for current understandings both of architectural history and the present state of the discipline. We are thereby faced with a paradoxical and rather perplexing situation: as far as their actuality for architecture is concerned, the latest digital technologies are given ideological alibis that are dated as well as suspect.

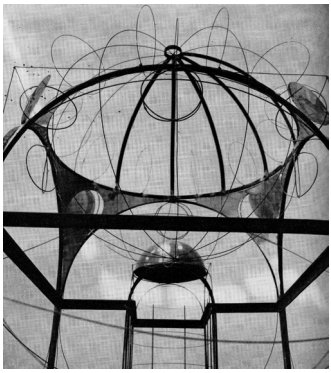
From this optic, it becomes hard to avoid the conclusion that an important aspect of the contemporary predicament has its origins in the unresolved ideological crises of the 19th century, even as it evinces the unexpected against all teleological readings. The newer forms of the digital may enable something which is potentially of use for architecture, the cultivation of endless formal exceptions, but an abuse as well, spurred on at least partly by the ideological theses I have just mentioned: the planning of the exception, the reduction of the exceptional form to a conventional horizon of expectations, rather than enabling it to break through this horizon. Only an awareness that is at once historical and critical of the simultaneity of diverse modes of representation, taken from different moments in the technical as well as artistic histories of architecture, from sketch to working and presentation drawing to physical model to computer rendering, can assist this breakthrough, this actuality of the exception against any zeitgeist ideology or teleological reduction.

Exhibiting Operative Criticism: Zevi to Eisenman

Operative criticism shares many features with current avatars of the zeitgeist ideology, among which are presentism, tendentious argument, and a lack of historical and critical distance. At the same time it is marked by a high degree of ambivalence, as it functions as a legitimation strategy that is an integral part of all criticism, that of art and architecture included – to recall just two celebrated examples, Vincent Scully's championing of Robert Venturi and Clement Greenberg's critical endorsement of Jackson Pollock.[14]

To expose what is hidden beneath the persistence of operative criticism it might prove useful to briefly examine some of its more significant historical antecedents. Tafuri points out that operative instrumentalizations of history, which acknowledge neither the constitutive difference of the past nor the indeterminate character of the future in their

14. Sigfried Giedion, *Space, Time and Architecture: The Growth of A New Tradition* (Cambridge: MIT Press, 1941). See also Clement Greenberg, "American Type Painting" (1955), in *Art and Culture* (Boston: Beacon Press, 1971), 208, and Vincent Scully, "Introduction," in Robert Venturi, *Complexity and Contradiction in Architecture* (New York: Museum of Modern Art, 1966). Famously, Tafuri compared Scully's critical attitude to the divagations of a "truffle dog looking for the new to get rid of the old." Tafuri, "There is no criticism, only history," 97.



Critical model of the Medici Chapel from "Mostra Michelangiolesca," an exhibition produced under the direction of Bruno Zevi and Paolo Portoghesi, Rome, 1964.

attempts to "force the hand" of the present, originate in the normative criticism of the 17th century with such figures as Pietro Bellori, who endorsed a classicist line against the excesses of the baroque. However, their main impetus arose in the 20th century due to the efforts of that militant follower of Croce, Bruno Zevi. It was Zevi who, in 1950, first coined the term *operative* to designate a form of history that, by grasping the "current significance" (*significato attuale*) of the past, was at one and the same time a form of criticism.[15] This last is what Tafuri later named operative criticism (*critica operativa*) to designate an approach that was committed and tendentious and that bent the materials of history to its own critical will in order to fight for a certain architectural language, approach, or line of thought.[16] This critical will was shaped to a great extent by the concerns of the present, with all of the passion (not for nothing did Tafuri, when pinpointing the precedents for operative criticism, invoke Baudelaire's idea of *critique passionée*) and inherent shortsightedness of presentism.[17]

Such are the constitutive features of operative criticism, one of the clearest manifestations of the use and abuse of history by architects from the late 20th century to our own time. Yet it is not often asked: What are the visual and architectural effects of this form of criticism? Two specific episodes provide somewhat unexpected answers to this question. The first deals with the legacy of Michelangelo, the second concerns that of Palladio.

Zevi's readings of Michelangelo, elaborated in the wake of his instrumentalized account of the 15th-century Ferrarese architect Biagio Rossetti (who Zevi presented as the founder of modern town planning), raise an important question: What is the role played by a completely ahistorical criticism of architecture?[18] A corollary to this question is: How can one ***model history*** for the purposes of architecture, turning it quite literally into an architectural model, which is to say, a three-dimensional construct of the formal, spatial, and ideological tensions pervading a specific design idea, removed from the flux of history?

A compelling answer is provided by the "critical models" designed and fabricated in 1964 by the students from the architecture school of the University of Venice under Zevi's direction, in collaboration with Paolo Portoghesi, and exhibited that year to mark the 500th anniversary of Michelangelo's death. It is no accident that in their organic, expressive presence, a number of these critical models

15. Bruno Zevi, *Architettura e Storiografia* (1950; Turin: Einaudi, 1974), 32. See Zevi, *Saper Vedere l'Architettura* (Turin: Einaudi, 1953), and Roberto Dulio, *Introduzione a Bruno Zevi* (Rome: Laterza, 2008), 94.
16. On operative criticism, see Dulio, *Introduzione,* and *La Critica Operativa e L'Architettura*, ed. Luca Monica (Milan: Edizioni Unicopli, 2001).
17. See Charles Baudelaire, *Salons in Oeuvres Complètes,* ed. Claude Pichois, vol. 2 (Paris: Gallimard, 1976), 351, and Tafuri, *Theories and History*, 144.
18. As Tafuri put it, "[Zevi's] Biagio Rossetti never existed . . . with [his interpretation of] Biagio Rossetti, Zevi was telling the first center left government [in postwar Italy] the urbanistic path to take." Tafuri, "For a historical history. Interview with Pietro Corsi," *Casabella* 619–20 (1995): 149. On the study of Rossetti in Zevi's intellectual trajectory, see Dulio, *Introduzione*, 96.

Lucio Fontana, *Neon structure for the IX Triennale of Milano*, 1951. Image courtesy Fondazione Lucio Fontana Milano.

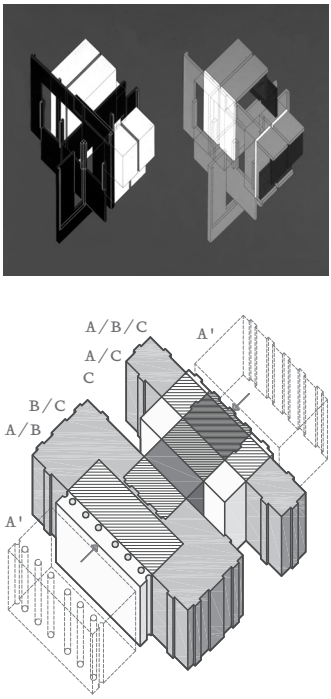
evoked the "spatialist" theses pursued by contemporaneous artists such as Lucio Fontana, an affinity on the formal and spatial levels that is only partly explained by appeals to "context."[19] For the repression of historical difference brings with it a certain tendency that can be called the long shadow of operativity. This shadow tends to create a play of similarities and analogies with artistic and architectural tendencies contemporary with the emergence of the operative premise itself, in which the historically aware, but not necessarily historicist architect, projects onto the past the needs (real or imagined) of the present.[20]

In Peter Eisenman's study of Palladio, the Renaissance architect's spatial and formal logic is revealed by means of a critical litmus test: the degree of displacement of the Palladian project vis-à-vis inherited architectural conventions, and, along with these, our usual expectations when confronted by Palladio, as conditioned by the "canonical" reading of Rudolf Wittkower. Here one cannot help but notice an affinity with Eisenman's own architecture, particularly his numbered houses, due to their immanent play of absence and presence, and the theme of *espace virtuel* attributed to Palladio's late villas and palaces.[21] Interestingly enough, even this "shadow" effect acquired, as result of the logic of the critical project itself, a certain second-order historicity, as the processes discerned within the Palladian *ars combinatoria*, and the concomitant readings of displacement, dislocation, and slippage in plan, section, and elevation pursued by the contemporary architect bear more of a resemblance to his early houses than to his projects underway at the time of the 2012 Yale exhibition.

Significant in this connection is a hitherto unexpected "ancestor figure" in Eisenman's genealogy: Zevi himself, who, though not an acknowledged member of the "lineage" like Colin Rowe, presents a compelling parallel with Eisenman's operative reading of Palladio. In this sense of a genealogy of the unforeseen, Eisenman's reading of Palladio resembles Zevi's operative model as much as it relies on Palladio himself. And in this sense too, operativity, despite, or precisely because of the fact that it forces the hand of history, and is marked by a continuous line of the most egregious distortions, has a history just as much as architecture does, even if it is of a different status. This history can be located in a liminal, ideologically charged area between practice and criticism.

Even the most cursory comparison of Zevi's and Eisenman's approaches shows that in elaborating them, these

19. See Zevi, "L'Opera architettonica di Michelangiolo nel quarto centenario della morte," and "Michelangiolo in prosa," *Architettura cronache e storia* 99, IX (9 January 1964): 650–702. Tafuri criticized the exhibition on the grounds of its operativity. His critique marked a turning point in his intellectual trajectory, causing him to choose historical scholarship over the practice of architecture. See Tafuri, *Theories and History*, 106, Luisa Passerini, "History as Project: An Interview with Manfredo Tafuri," trans. Denise Bratton, *ANY* 25/26 (February 2000): 28–31, and Tafuri, "For a historical history," 145. On the 1964 exhibition and Tafuri's critique see Andrew Leach, *Manfredo Tafuri: Choosing History* (Ghent: A&S Books, 2007), 24.
20. Tafuri, "For a historical history," 147.
21. Here I develop theses first put forward in my "Critical and Palladian," *Log* 26 (Fall 2012): 135–43.



Peter Eisenman with Matt Roman, virtual diagram of Villa Sarego at Miega, 2012. Image courtesy the architect. Top: Peter Eisenman, House VI, Cornwall, Connecticut, 1972–75. Analytic axonometric diagram. Images courtesy Eisenman Architects.

protagonists of architectural culture elaborated readings of history for their own use – that is, a vision of history for working architects, paying little or no attention to the arguments of the professional historians.[22] At the same time, *any* historical mode of interpretation, even and especially their own, becomes denatured by the very partisanship that is at the center of the operative project. Clearly, pure objectivity is impossible in history writing, whatever its object, its implicit biases, or critical orientation; but, as Tafuri observed, there must be a balance of critical participation and historical distance if any historical comprehension worthy of the name is to arise.[23] On the other hand, it is necessary to acknowledge, along with the operative critics, that architecture constitutes a very specific domain of historical study, imbued with its own epistemological assumptions and critical imperatives, and that these often disrupt the finely calibrated equilibriums of the most careful historians.

Here it is pertinent to recall Walter Benjamin's insight that architecture is the object of a passive or absent-minded perception, since it is the only art whose inherent formal logic is tied to function, and its programmatic aspect would seem to distract from a reading of form.[24] From this optic, one should consider the possibility that, for a Zevi, or an Eisenman, as it did for a Giedion or a Scully, architecture requires a special mode of criticism – operative criticism – to justify its constitutive strategies and to make the semi-conscious apprehension of architecture a matter of conscious choice, in light of the challenges facing the discipline at specific junctures in historical time.

The categories of historical knowledge in relation to operativity are therefore highly constrained, since operative criticism plans past history by projecting it toward the future.[25] Hence the manifesto-like quality, the ideological thrust and tone, of operative interventions, which skirt the boundaries of self-promotion by architects and fully mobilize the discourses of the more partisan critics and historians. Clearly, operativity has very little in common with scholarly historiography or detached criticism; yet that does not mean that one cannot find traces of it even in those domains. However it can scarcely be doubted that operative criticism openly militates for architecture, or particular tendencies of architecture, as a crucial aspect of its critical role, and that the historical past or pasts is pressed into its service when doing so. Thus, despite their separation by almost half a century, the visualizations of this role in exhibitions like Zevi's

22. Though as Carla Keyvanian points out, Zevi's vision of operative history also shifted part of the burden of design of contemporary architecture to the historians as well. Carla Keyvanian, "Teaching History to Architects," *Journal of Architectural Education* 64, no. 2 (February 2011): 1532.
23. See Tafuri, "There is no criticism, only history," 97, and *Theories and History*, 6.
24. Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, ed. Hannah Arendt, trans. Harry Zohn (New York: Harcourt, Brace & World, 1968), 239.
25. Tafuri, *Theories and History*, 141.

or Eisenman's represent a tangible extension into the curatorial, academic, and institutional realms of a characteristically modern need to explain and legitimize their formal and theoretical choices.

Contemporary Practice: The Horizon of the Exception

As we turn from the genealogy of operativity to recent architectural uses of digital technology, we do not abandon the realm of historical inquiry altogether, if only because certain convergences stand out alongside significant discontinuities. These convergences hinge on the attempt to impose specific narrative schemes on the present so as to most effectively project it into the future. This is an ambition that is shared by operative critics no less than by exponents of the most recent theories and practices of digital representation, who, for their part, are beginning to write the history of the impact of computation on the discipline.

For this reason, the historian who deals with the present (who, by definition, is never only concerned with the present) must be careful to include within his or her approach an account, which is necessarily open-ended, of the specific historicity of the architectural project and the relations between this dimension and the historical project.[26] Bearing this in mind, one must try to see what the digital regime *is not* in light of the recent and more remote pasts of the discipline, and what it *actually is*, or rather, in what the conditions for realizing its representational potentials may be said to consist. As it turns out, these conditions hinge on a critique of the conventional teleological narratives of modern architecture. Consequently they involve a novel conception of the unexpected, reserving a space, paradoxically, for the unforeseeable, or, to be more precise, for that which resists traditional historiographical schemes and critical categories.

One should not underestimate the power of these schemes to build up a horizon of expectations that acts as a barrier to the new. This barrier can be broken through by the formal exception as long as it is not planned in advance by the capacities of the regime of computation to do precisely that. For the exception to remain exceptional, the computer must cede part of its jurisdiction, part of its purely technical power of anticipation, to the formal idea. When this does not occur, the risk of teleological reduction is high. And when such a reduction occurs – a denouement that unfortunately is all too common in the immediate present – the new tools of digital design collude with the exhausted tropes of a

26. Recently it has been noted that one of the great historians of the 20th century, Johan Huizinga, refused not only to address contemporary events but also contemporaneity as such, in his historical writing. See Hollander, Paul, and Peters, "Introduction: The Metaphor of Distance," 2.

traditional and outmoded historiography, either in its operative or Hegelian varieties.

Of the many positions that are possible to take in this particular debate, consider two of the more salient ones. The first is the argument that the embrace of digital instrumentality cuts the project off from its roots in the historically developed languages of form and their originary imaginative capacities. These are often wistfully associated with the "hand" of the architect and with the unique value ascribed to drawing. The second is the contention that the new forms of computation constitute the primary tool at the disposal of the most advanced design strategies, and is therefore a sign of contemporaneity inscribed within its unfolding.

These positions are mirror images of each other. If the first option is compromised by an unconscious or barely acknowledged need to take refuge in nostalgia, and hence by a radical denial of the present, the second registers a lapse into a zeitgeist ideology whose rigidity is only matched by its faulty historical reasoning. This reasoning is flawed since such an ideology tacitly assumes a certain way of proceeding (often linked to the universe of computation) that is ostensibly in tune with the times, and even inherently so, even though what is identified as "advanced" no longer enjoys any teleological guarantees. And yet this kind of techno-determinism overlooks the inconvenient fact that no metaphysical sanction of history can be taken seriously at this point in time – and in any case what is "advanced" is not necessarily simply a matter of technology, or even of technique.

The contradiction this situation entails is not currently being confronted, much less acknowledged. The challenge nowadays is to refuse any nostalgic longing for a supposedly more pristine condition of architecture while avoiding the rampant techno-determinism that has compromised so many recent interpretations of the digital universe.

This means "thinking the present" without the interference of a vision fixated on the past or of an equally debilitating, short-sighted presentism. If the latter – let us call it the cult of computation – usurps the privilege of being up-to-date in its understanding of the historical impact of the digital code on architecture, it actually is devoid of the requisite balance between historical distance and critical participation necessary for this understanding to arise.[27] And if the former – let us call it the cult of drawing – claims to safeguard the values of an embattled architectural culture, it actually devolves quite rapidly into a mythical

27. See Hollander, Paul, and Peters, "Introduction: The Metaphor of Distance," 2.

construction of history, as ideologically compromised as any narrow focus on the immediate present.

Matters are made even more complicated by the fact that those who see computation as the royal road to the future confuse the coherence of a formal language with the exigencies and characteristics of a code, which contains nothing more (and nothing less) than a *potential* for coherence.[28] In other words, the digital code is a sophisticated design instrument that has been mistakenly regarded as an end in itself, when in fact it is just one part (however conspicuous) of a wider ensemble of technical practices, artistic impulses, and socioeconomic determinants that contribute in different ways to the architectural project.

28. Richard Wollheim, *Art and its Objects* (New York: Cambridge University Press, 1980), 132.

Nevertheless, it is possible to concede something to the purists of drawing (which to be sure, also applies to the techno-determinist argument as well, though with an entirely different set of implications): for even if the architectural idea is paramount, not the technical medium in which it is conveyed, it can hardly be doubted that some mediums are more suitable than others for specific ideas, if only because the formal and material resources, and the aesthetic effects they make available to the idea, vary. In this respect, however, one must be more essentialist than the essentialists and more relativist than the relativists: those ideas that are most appropriate for the medium of drawing (and for its various subgenres) would push architectural notation toward the artistic domain, away from its disciplinary specificity, just as ideas that are more suitable for technologies of digital representation would push this notation into a more purely technical realm.

Although digital technology is by now a historically specific and perhaps irreversible dimension of architecture, it is by no means an integral aspect of architecture's aesthetic specificity, its definition as an art. Only formal, spatial, structural and tectonic ideas and their interrelations are integral aspects of that specificity: the medium, whether digital or analog, is not. One could argue that digital codes of architecture are so inseparably bound up with the discipline that they have now become inseparable from it. However, one cannot plausibly maintain that digital codes of representation, or analog ones, are essential to architecture or inherent to its internal logic. In this sense the cult of drawing and the cult of the computer have at best an ambivalent relation to a somewhat notorious aspect of architectural culture that nowadays has been blown out of all proportion in accordance with the

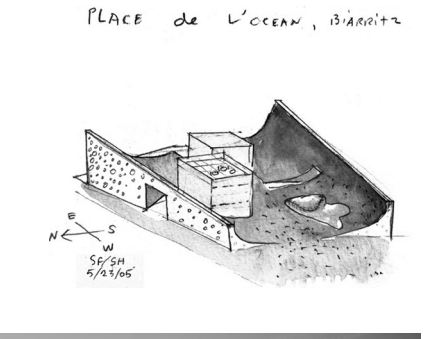
pervasive imperatives of the spectacle: the cult of the architect. Some, like Mario Carpo, have asserted that the digital regime has helped bring about the effacement of the authorial "hand" of the architect in favor of a level of anonymity comparable to preindustrial craft production (one "hand" driving out another, so to speak). This, in Carpo's view, has led to the inevitable erosion of the architect's signature – something that the adepts of the cult of drawing claim to assiduously protect, adopting in the process an unabashedly *arrière-garde* stance. In actuality both sides exaggerate their respective positions: for the resources of the computer, when deployed by the right hands, can bring out the signature of the architect just as effectively as those pertaining to hand drawing or the model.

Here one of Preston Scott Cohen's recent critical arguments is pertinent. In Cohen's view, although computation enables new modes of analysis and modeling of space that can lead to unprecedented manifestations of historically developed typologies and forms, it is not, in and of itself, the source for new forms or typologies.[29] From this standpoint, drawing and computation are equally historically contingent. Since drawing has a much longer history, and a deeper set of genealogical determinations as far as the constitutive elements (typologies as much as forms) that ground the discipline are concerned, it might still seem to retain some of its privileged position in the discipline, especially for those who claim to be more attached to the values of history. However, the mere fact of historical longevity and/or chronological priority vis-à-vis the emerging strategies of computation does not make drawing any more *essential*, logically or even formally, to architecture considered as an art form. By the same token, neither the near ubiquity of computation in contemporary architecture, nor its claim to be the sine qua non of the most advanced formal strategies of the immediate present, make it essential to any definition of architecture as a discipline, an artistic domain, or an area of culture, even if it is difficult, and even impossible to avoid the digital when discussing the contemporary situation, its crisis, and the "crisis of its crisis."[30] In all cases, the medium or the *techne* is not absolutely determining, but is caught up in a perennial dialectic with the formal idea, which now, as before, retains its primacy as the ultimate source of the project.

From this perspective it is possible to make some general observations. In terms of the aesthetic specificity of architecture, what is at stake is nothing less than a plurality of

29. Preston Scott Cohen, conversation with the author.

30. Here I refer to Tafuri's' quip, made during an interview with Luisa Passerini for the Getty Oral History Project in 1992 and published in *ANY* 25/26, that the concept of crisis is so overused today, and so drained of meaning, that it itself has gone into crisis. See Passerini "History as Project: An Interview with Manfredo Tafuri," 10. For a brief genealogy of the concept and its relation to the idea and practice of critique in the modern era, see Koselleck, *Critique and Crisis* (Cambridge: MIT Press, 1988).



Steven Holl Architects, Cité de l'Océan et du Surf Museum, Biarritz, France, 2005–2011. Photo © Iwan Baan. Top: Conceptual sketch. Images courtesy the architect.

techniques of representation ranging from the rapid sketch, to the painstakingly constructed model, to the computer rendering. All of these techniques, each in its own way, enable the contribution of diverse dimensions of formal and historical experience to the final project. Here we can trace both the continuity and change of the formal idea through all its phases of development: and in this regard local teleologies offer legitimate criteria of analysis, whereas teleological schemes on the scale of grand historical narratives remain inapplicable as criteria of a possible synthesis.

At the risk of stating the obvious, the generative phase of the project is still often that of the sketch. This is most evident in the work of an architect like Steven Holl, whose sketches for the design for the Surf Museum in Biarritz show considerable continuity with the final project. The obvious pertinence of the sketch for this typologically inflected, site-sensitive, and highly evocative work – indeed, for the initial phases of many contemporary projects – only serves to underscore the need to acknowledge the complex contribution of multiple modes of architectural representation originating in different media and, ultimately, in the historical eras in which these media themselves arose.

Even if computation appears to reign supreme today, this is often only the case in the middle and later phases of the project's unfolding. Drawing, in the form of a rapid sketch, still ensures the emergence of the initial design idea; paradoxically, this ever-renewed tradition of the sketch is very old, yet that very old rapidity still presides over the cradle of the newborn project.

In this connection one can also cite Cohen's Lightfall in the Tel Aviv Museum of Art, which can be seen as exemplifying another very old idea, or rather a very ancient and established pair of ideas: the notion that the interior is the focus of the formal concept of the work and the need for rigorous control of that concept. Here, the level of control in question is guaranteed by the geometrical logic of the interior paraboloids, which are cast-in-place curved surfaces that function as the true façade of the building, introjected into the depths of its core.[31] In itself, there is no inherent reason to connect this climactic moment of the project to the representational capacities of digital technology. The paraboloids of the Lightfall could also have been drawn by hand, as equally or more complex geometries were from the 17th century onward.

Cohen's Tel Aviv museum stands out against many

31. Preston Scott Cohen, "Herta and Paul Amir Building: Tel Aviv Museum of Art," *Log* 29 (Fall 2013): 91. For a fuller analysis of the project than the one offered here, see my essay, "The Historicity of the Modern," *Log* 24 (Winter/Spring 2012): 126–36.

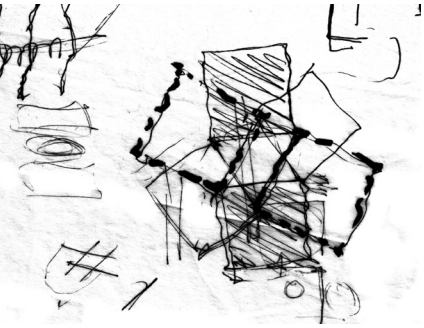
Preston Scott Cohen, Inc., Herta and Paul Amir Building, Tel Aviv Museum of Art, 2011. View into the Lightfall. Photo: Amit Geron. Images courtesy the architect.

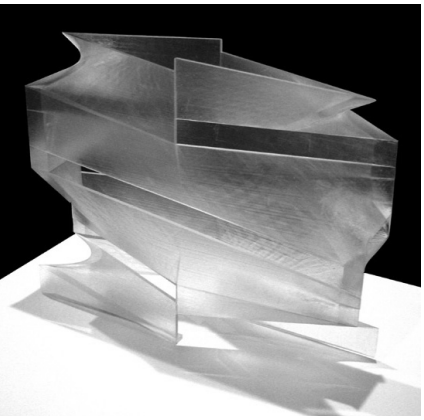
contemporary works that rely heavily on digital technologies without achieving the same level of formal resolution. In light of this, one can argue that the tendency to formal homogenization generated by contemporary techniques of computation is connected to a propensity to produce solutions that could once be regarded as exceptional but which, due to the facility of their production and the resulting multiplicity, can no longer be regarded as such. In an aesthetic universe of this kind, the exception is no longer exceptional, if only because it is no longer perceivable as such: it simply gives evidence of the same underlying condition consisting of more or less variable surfaces.

Prior to the revolution in digital representation, it was unusual, even remarkable, to have such agitated building envelopes unrelated to their spatial and structural cores. But now that we are used to the work of Frank Gehry and his epigones and the unmotivated exuberance that accompanies their inquiries, such excesses no longer seem so out of the ordinary. What we are facing at present is an open series of objects of consumption, each of which is spectacular yet all of which are as undistinguished as the next. The spectacle loses its force when every move and every new project claims to be spectacular. Rather than being one of real experiment, since the outcome of experimentation is by definition unknown, the digitally conditioned horizon consists of a procession of phenomena that are more or less predictable, containing little that is genuinely unforeseeable, and nothing remotely critical of dominant aesthetic codes.

The tension-filled dialogue between Cohen's Lightfall and the museum's relatively unobtrusive exterior is not simply a question of formalization as excess, but of the distortion or radical modification of typological motives and their spatial effects. Cohen utilizes the technologies at his disposal to alter the parameters of production and of reading of historical precedents (Borromini, above all, but also Michelangelo, in his sensitivity to the site constraints as a generative matrix of formal exceptions).

The complexity of interior form and space evident in the Lightfall is not simply projective in the sense of a deftly controlled digital technology. It also proposes a subtle yet significant redefinition of the parameters of history, which can be seen in the way it initiates a dialogue with past narratives of form. This redefinition is made possible by different modes of representation that, in a more particular sense tied to the needs of this specific project, show that a small-scale guiding





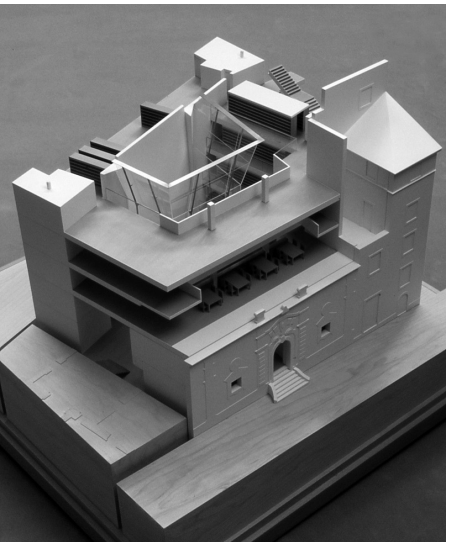
Herta and Paul Amir Building. Model of Lightfall. Top: Conceptual sketch.

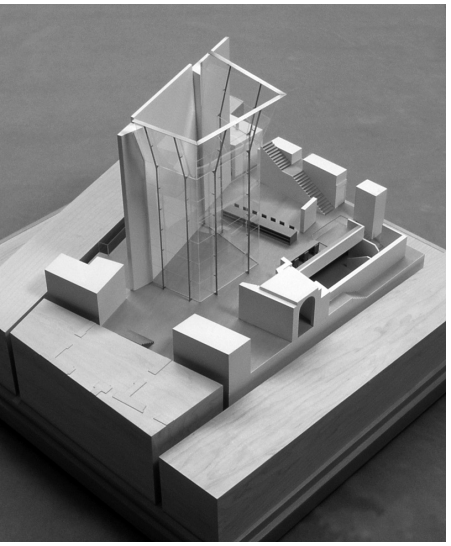
of the work, a process in some sense resembling a more restricted teleology, is actually unfolding.

This small-scale, self-contained teleological trajectory is visible from the autonomous development of the form from the sketch to the model to the final space of the Lightfall. According to the architect, the decision to place the Lightfall as the organizational core of the project was worked out in a sketch, not by recourse to digital modes of representation.[32] In this sense the sketch, in concert with these other more sophisticated modalities and codes of rendering, can be regarded as decisive in Cohen's practice as it is in Holl's, though both work in different registers in this medium of ancient rapidity. The rapidity of thought evident in the initial sketches of the Lightfall has a temporality of its own and, by extension, a role in shaping the historicity of the project that is far from insignificant. This much is clear from its centrality within Cohen's work as a whole and within the intersecting trajectories of drawing, the construction of models, and digital rendering at present. One would have to be insensitive to the values of form to claim that, even if the completed space is in many senses superior to the modelled objectification of the interior space, the model itself does not have an evocative power all its own. Among other things, the high formal resolution and specific quality of Cohen's model for the Lightfall reminds us that the model (built by hand and/or generated through computer fabrication) still occupies a singular and essential position in the ensemble of representations that play a constitutive role in contemporary architecture.[33]

The model has an irreducible status, in other words: one that has never been dislodged, even momentarily, by the revolution in digital representation that has swept aside so many other representational practices and assumptions. This unimpaired status of the model is linked, via a *longue durée* unique within the history of the discipline, to the theory and practice of Alberti, who stands at the origin of all subsequent valorizations of the model at the expense of drawing. As the model captures a different dimension of the idea, it can also transmit this idea toward the realization of the project in a particularly effective way. When Alberti argued for the disciplinary necessity of the dyad model/orthographic projection, he allowed the model to dislodge perspective, which was, from his theoretical standpoint, an inherently distorting medium: in his view, due to perspective's power of illusion, it is best kept within the realm of painting. Today the model is not simply the last bastion of physicalized representation

32. Cohen, conversation with the author.
33. A comprehensive assessment of the role of the model in architecture is still lacking, though recently useful contributions have appeared. See Albert Smith, *Architectural Model as Machine: A New View of Models from Antiquity to the Present Day* (London: Elsevier, 2004), and Mark Morris, *Models, Architecture, and the Miniature* (London: Wiley, 2006). For Renaissance models see Henry A. Millon, "Models in Renaissance Architecture," in *The Renaissance form Brunelleschi to Michelangelo: The Representation of Architecture, ed.* Henry A. Millon, Vittorio Magnago Lampugnani, (New York: Rizzoli, 1997), 19.





Juan Navarro Baldeweg, Bibliotheca Hertziana, Rome, 2000–2013. Two views of demountable model. Images courtesy the architect.

in an increasingly computerized world of rapidly consumed and dematerialized images, but also retains its primacy as a unique bearer of the spatial and formal concept of the work. As such, in a way that is at once diverse yet not that different from its function in Alberti's time, it remains an exceptionally effective means of conveying the architectural idea, both for the construction phase and what one might call the "seduction phase" – that is, pitching the idea to the client.[34]

However one evaluates the contemporary role of the model, one thing is certain: a greater degree of control in the handling of form can now be found across a wider spectrum of contemporary practices than is generally conceded by those who consider this technology to be the *sine qua non* of radical experiment. This holds true even for those practices in which digital technology is not a central concern. In other words, inspired contemporary architecture, powerful spatially and formally, can arise without significant digital mediation. To grasp this point consider the 2013 addition to the Bibliotheca Hertziana by Juan Navarro Baldeweg – which exemplifies an approach that diverges technically and formally from those adopted both by Holl in Biarritz and Cohen in Tel Aviv. In this work, a key idea of Corbusian modernism, the *promenade architecturale,* operates across a variety of scales, as the complex limit between the built project and its tight urban site is registered in its topographically sensitive pathway. This aspect of the intervention exploits the diverse changes of grade and turns them into the chief spatial motive of the design.

Located in a part of Rome near the Spanish Steps that is as historically stratified as it as topographically layered, the Hertziana presented a formidable array of challenges. These ranged from a characteristically Roman set of archaeological constraints that required preserving and displaying the ruins unearthed during construction to the need for ample interior lighting both for the excavation and the library areas of the program. To fulfill these requirements, the design had to make the archaeological discoveries as visible as the reading rooms and book stacks above them. Taking these constraints for his contemporary invention, Baldeweg initiated an open dialogue with the preexisting 16th-century structure, the Palazzo Zuccari. His approach deftly rewrites the site, carefully nesting the project within and above the excavated area behind the palace by an act of inventive structural acrobatics.

Visitors pass through the 16th-century rusticated facade

34. Alberti condemns the practice of painting the model on the grounds that it lends it an illegitimate power of illusion. *On the Art of Building in Ten Books*, 1–2, 33.

Bibliotheca Hertziana. Interior view of atrium. Top: View of atrium from roof. Photos: Andrea Jemolo.

with the grotesque *Mascherone* portal and enter into an area that in antiquity was once the garden of Lucullus. The stacks are situated at the perimeter while in the center the large glazed atrium floods the interior with light. The reading rooms, work areas, and stacks are skillfully grouped around this small trapezoidal interior on three sides, which are arranged as tiered galleries accessed vertically by internal stairs.

The architect took his inspiration from the stepped terraces of the garden on the south slopes of the Pincio, which was one of the more idyllic attractions of ancient Rome. An adroit integration between the new addition, the Renaissance facade, and the urban site is the keynote of this project, whose aesthetic effects work equally well at different scales, from the most intimate to the most extended – the large window from the reading room overlooking the Via Gregoriana making the site as open to the city as Lucullus's sloping garden once did.

This approach would appear to be particularly susceptible to the technical and formal facilitations provided by the computer, if only because it can work at practically *any* scale with ease and rapidity, but it is the carefully crafted, hand-made model, not the capacities of digital instrumentality as such, that was decisive. As a result the project holds together the eminently contemporary idea of a sectional layering of space, the villa terrace that inspired it, and the axialized 16th-century design, enabling the different strata to "speak together." This strategy makes the project read through the dual lens of contemporaneity and the dense historical layering of the site. Ultimately, at stake in the Hertziana complex is a dialectic of *longue durée* inscribed within the urban site and the luminous yet partly concealed event unleashed by the atrium, which, like Cohen's Lightfall, is a core whose hallmark is the seamless orchestration of light, space, and structure.

If Cohen's Lightfall is entered from the new building into which it is inserted as an autonomous volume that can be ascended by a central ramp, Baldeweg's atrium is a three-sided courtyard accessed through the old structure and serviced by lateral stairs. Where the Tel Aviv core is immersive and can be vertically traversed by the moving subject, the Roman *cortile* is a simple light well whose higher reaches are inaccessible and can only be seen from the side or gazed at from below. On the other hand, like Cohen's project, Baldeweg's is characterized by a sense of internal dynamism (albeit of a lesser degree) that results from a meticulously calibrated interplay of tectonic forces and luminous effects;

Federico Zuccari, Palazzo Zuccari, Rome, 1550. Photo: Andreas Muhs.

and like Cohen's, it emphasizes the interior as the chief arena of the project's formal and spatial idea.

In Baldeweg's intervention the formal level of the model is not comparable to the model for Tel Aviv, which shows a greater degree of attention both to the formal idea and its translation into material, spatial, and visual terms through digital fabrication. However, since it is demountable (unlike Cohen's), it effectively transmits the essence of the formal idea to the final project, which hinges on the negotiation between the new part and the preexisting facade and portal. This is especially evident when the relief condition of the 16th-century facade is compared with the deep spatiality of the staggered trapezoidal atrium. Though this last element clearly invokes the traditional Roman domus typology with its central impluvium, its contemporary feel – due to the extensive glazing along the atrium edge and sense of overall transparency, together with the conspicuous tectonic logic of the support system – affords the greatest possible contrast with the Renaissance facade.

Clearly, the analog methods used to make the model did not prevent it from lending the final project a contemporary sense of form and space. Baldeweg defers to the values of history by rewriting the present as a dialogue with the past, making it read as part of the ongoing conversation between the city, the Renaissance palace (here reduced to the status of an extended threshold), and the spatial nucleus comprised of interior and atrium. Maintaining a double condition of old and new enables both maximal contrast and optimal connectivity; for this reason one can say that Baldeweg develops a new understanding of the *promenade architecturale* that is comparable in its functional role to Cohen's, while being spatially quite distinct from it. Ultimately, the similarities between Cohen's Lightfall and Baldeweg's atrium are of greater significance than the differences, since both projects propose the idea that the interior is the real locus of the unfolding complexity of the work.

Despite (or perhaps precisely because of) the differences between these projects by Holl, Cohen, and Baldeweg, it is evident that an impressive formal unity can be achieved through the use of plural codes of representation, some less technologically advanced than others. *Hence, the meaningful divide historically does not run between analog and digital; it runs between formal control and lack thereof in either medium.* This criterion cuts across the usual dichotomies in unexpected ways, proposing the unexpected as a valid interpretive

category on technical as well as formal or aesthetic grounds.

That the latest developments in digital representation have made the unexpected easier to attain is by no means a foregone conclusion. It is more likely, given the powerful sense of anticipation built into the digital instruments at the disposal of the contemporary architect, and the equally important diffusion throughout the culture of the dialectic of the spectacle, that the opposite is the case. Clearly, the tenuous synthesis of both tendencies, the historical command of typological form and the technical mastery of digital codes, is present in the work of very few contemporary practitioners, and is it is this that stands out and is exceptional nowadays.

This synthesis is particularly evident in the most recent work of Cohen, which is emblematic of what I have called the historicity of the modern, which is also the historicity of type in relation to the evolving role of digital instrumentality. What is more, the argument for historical resonance, for a polyvalent historicity of form, can be said to reinforce the claims of the autonomous author/architect more than those associated with a nostalgic fixation on drawing.

One can argue that Cohen, more clearly than Holl or Baldeweg, occupies an intermediate position between the production techniques, representational codes, and spatial effects of analog and digital regimes. It is no exaggeration to say that in so doing he exemplifies the critical role, as well as the actual importance, of the medium time-frame as opposed to the extremes of the event-as-spectacle and the *longue durée* of hand-drawn forms. This occupation of a radical middle raises an important question: namely, how does the almost obsessive invocation of the digital that is occurring nowadays, or, to speak even more fashionably, of the "digital turn," operate as signifier of the latest, most contemporary phenomena in the discipline?

A plausible answer is not hard to find: for this invocation acts by making a blanket ideological claim covering all recent architectural innovation, even if beneath the surface the real situation is more complex. To grasp its complexity one should consider the possibility that the so-called digital turn – and its corollary, the tendency to overemphasize the role of computation by misreading it as a matrix of form – signifies something that can be readily detected in other areas of contemporary culture: a pervasive reversal of the means/ends rationality characteristic of late capitalism. This is due to a simple fact: to privilege the digital at the expense of everything else that contributes to architecture means that

one must also downplay, at least to some extent, the formal result. Such overemphasis on computational *techne* oversteps the bounds of a critical view that, if it were more historically informed, would also have to give equal attention to *aesthesis*. What the various presentist arguments about the digital overlook is the need to strike a balance between technical means and formal/aesthetic ends: and that is precisely the "corrective" that, each in its own way, the approaches of Holl, Baldeweg, and Cohen may be said to offer.

Project and History: The Unforeseeable

The claim to long-term continuity, predicated on the idea of a stable progression of formal innovations, each building on the previous one in an unbroken chain, may be said to be rendered inoperative by the most recent wave of technodeterminism and the ideological phenomena that are associated with it. Indeed, on the face of it, quite often the digital regime that stands at the root of this tendency is more clearly connected to the ephemerality of projects that identify architecture with the values of the image than with any attempt to generate works that are able to resist the effects of time. Computation and ephemerality would thus seem to go hand in hand (at least on one level). This is the case even if the claims of historical rupture that have been associated with many recent uses of the digital code, along with the categories with which the supposed rupture is narrated – that is, the radically new, the poetics of the exception, etc. – actually go hand in hand with hypotheses of historical continuity and formal analogy which the same categories have done their best to supersede.

Yet the discontinuist hypotheses generated by the most daring recent strategies of digital design are by no means totalizing, since in some of the most intriguing works of recent architecture, hand drawing (especially the sketch) and the most up-to-date codes of digital representation not only coexist but even cooperate to create the final result.

In other words, rupture and continuity may lead to the same formal results by different paths, whether normative principles are involved or formal consequences of those principles or neither of these alternatives. In any event, the construction of a historical consciousness that arises out of architecture, through its specific disciplinary instruments, has the greatest chance of achieving an adequate critical elaboration of the essential parameters and limitations of the project, if only because that which impedes the emergence

of the project can throw into high relief precisely what is at stake, historically, theoretically, as well as practically, when producing and experiencing architecture. Here we pick up a thread, originating at least partly in the sphere of operative criticism and historiography, but following it in the inverse direction: for as a rule, operative historiography is history narrated in a triumphalist or presentist mode, whereas what is being proposed here is what Tafuri called a "modo progettuale . . . di guardare ai fenomeni storici" – a project-based history whose attention is directed toward the impediments that need to be overcome, and the interplay of positivities and these "negative facts" only subsequently.[35]

This line of inquiry leads us to reconsider from a new angle the fact that architecture has repeatedly demonstrated a will to repress history, and not only in its high modernist/functionalist moment, despite, or precisely because of its immersion within historical forces that impede the realization of the project. Might it be possible, however, that it is not history that architecture resists, but (as Alberti affirmed) historical time itself?

In this way we can break with some of the significant implications of Tafuri's analysis, which consistently emphasize the conflicts between the architectural project and the historical project: for it is precisely from the vantage gained by opening a common front against the effects of historical time that a new affinity or alliance between history and architecture can be imagined. This is an alliance based on the common cause between the ancient privilege of historiography, of keeping an awareness of deeds, buildings, and works of art alive through the construction of cultural memory, and the equally historically grounded power of architecture, which offers a partial antidote to time's destructive effects.[36] Here it is pertinent to return to Alberti's claim that beauty, especially architectural beauty, acts as a deterrent against such effects, even if he makes it clear that this is a "weak force."

Whether or not one agrees with Alberti on this point – and whether or not any theoretically cogent notion of beauty is viable at present – one thing seems clear: if the architectural project tends to repress history and its claims, it also opens up a space for the historical project, which moves against the effects of historical time. It should be noted, moreover, that it is no longer necessary to endorse a metaphysics of architectural proportion, harmony, or beauty to maintain that architecture as a discipline and a set of technical and aesthetic practices has a unique power to resist time,

35. Tafuri, "Il mestiere dello storico," *Domus* 605 (April 1980): 51.
36. See esp. Momigliano, "The Place of Ancient Historiography in Modern Historiography," in *Settimo contributo alla storia dei studi classici e del mondo antico* (Rome: Edizioni di Storia e Letteratura, 1994), 15. The role of history in preserving the memory of persons, events, and phenomena from the past has profound links to the *topos* of *historia magistra vitae*, and hence to the idea of history as an endlessly renewable source of exemplary lessons. See Koselleck, *Futures Past*, 27.

if only on the structural level, involving the structural-material core of built form, and if only on the level of the most neutral of formalizations.[37]

To this extent (and perhaps only to this extent) the two projects, history and architecture, are similar, and perhaps analogous in a limited way, and may be said to be traversed by comparable, if distinct sets of tensions. These arise out of the critique of ideology in relation to the architectural project and out of the critique of historical categories in relation to the historical project. Arguably, the decisive instance of discontinuity or moment of historical rupture occurs at the point where the two projects overlap: an intersection that makes the emergence of new forms of historical and epistemological continuity possible at another level. This level provides the link, often seen as tenuous yet nonetheless persistent, between the succession of projects in time and the critical, theoretical, and historical discourses that it generates and which are simultaneous with it.

In this way the history of architectural thought is to a great extent coextensive with the history of architecture, understood to be the succession in time of the actual production of projects, no matter how often, and how powerfully, the link between the two is repressed, obscured, or otherwise effaced by ideology. On the other hand, architectural ideology (especially in its most recent form of techno-determinism, focused on the cult of computation) also contributes to the process of production, especially in the case of utopian projection. Here we confront yet another reason why modern and contemporary architecture, despite the ruptures that divide them and the tensions, hidden continuities, and potential analogies that bind them together, have not been able to entirely give up their utopian aspirations. Among these are formalism, including the thesis of formal autonomy in all of its variants, and the computation-based utopias (and dystopias) of the present, which often seem to be based on dreams of a pure rupture with the material world. At the same time, an important strand within the discourse of formalism that claims to hold a key to the interiority of the discipline continues under the new digital guise, though not in any intrinsic or essential connection with it, and often shorn of its utopian and/or critical implications. In this way too, *pace* Tafuri, the historical sense of architecture can be seen as complementing its historicity, since this sense refers to the "inside" of the discipline, and by analogy, designates the interior of the project, which complements its exterior.

37. Cohen, "The Hidden Core of Architecture," *Harvard Design Magazine* 35 (2012): 6–15.

This is true despite, or perhaps precisely because of, the frequency, apparent in formal and spatial terms as much as in purely historical ones, of the disjunction of interior and exterior. And though this kind of complementarity cannot be excluded a priori, as Tafuri thought, the architectural project and the historical project still do not "complete" one another, as Tafuri correctly observed. This is due to a complex task of historical knowledge that is rooted in the fact that, alongside its search for completed trajectories, history seeks to uncover the negative within the architectural project – that is, the ways in which its realization is thwarted or inescapably diminished, or in which deviations from decisive design intentions take place. For though it cannot be identified with the historical repressed, the negative is put to work both in history and in architecture as that aspect of the project which reserves a place for the unexpected, or, more precisely, for the unforeseeable: for the possibility that the project will turn out differently than anybody could have anticipated, if in fact – due to that fortuitous conjunction of luck, cunning, resourcefulness, and the power of conviction that can only arise out of genuine artistic coherence – it ends up being realized at all.

Daniel Sherer teaches architectural history and theory at Yale and Columbia Graduate School of Architecture, Planning and Preservation.