The Burden of Production as Reflection

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Similar to cinema, German architecture in the post-war period was unable to recover the stature it had possessed prior to 1933. Regardless of the available talent and actual production in Germany since then, German architecture never again set the tone for the architectural avant-garde. Key works produced by exiled members of the Weimar Republic, most prominently Mies van der Rohe’s Neue Nationalgalerie in Berlin (1969), simply confirmed the moral and cultural authority of a modern master and reclaimed him in his former Berlin. It has often been argued that the linguistic autonomy of German architecture was curtailed in the late 20th century by the iconographic pressure on form and material. The desire to nevertheless assert architecture in its own right and restore its cultural legitimacy and international relevance was the core agenda of O.M. Ungers, the architect of another German museum: the Deutsches Architektur Museum (DAM) in Frankfurt (1984). By conceiving DAM as a built manifesto, Ungers insisted on the narrative autonomy of architecture. Yet its intrinsic ‘themes’ often amounted to an equally confining demonstration of disciplinary truths.

The burden of reflection in Germany has also led to what has been labelled ‘critical reconstruction’ — in its day, a well-intended alternative to the technocratic excesses of urban renewal and mass housing production in West Berlin. But this countermovement effectively disqualified modern architecture as a vector of architectural imagination and collective identity. With roots in the 1970s ‘new urbanism’ movement, critical reconstruction has indirectly given...
credibility to a reactionary discourse on urban morphology and preservation, seamlessly followed by a legitimizing of the current reconstruction wave of historic structures throughout Germany, from the Stadtschloss Berlin to the Alstadt in Frankfurt. The ongoing manipulation of urban centres — usually strategically linked to real estate — calls for a less partisan outlook and an assessment of the circumstances of German architecture production at large. Due to such developments, a critical and synthetic discussion is not only pertinent; it is justified by the scant attention that recent architecture in Germany has received in the Anglo-Saxon world. Responding to these voids is one of the merits of Modernism as Memory: Building Identity in the Federal Republic of Germany (Figure 1). Kathleen James-Chakraborty underpins her discussion with the historical legacy of modernism. The book relates architectural culture both to modernity as a canon of material artefacts and to the society that produced it. Given the history of physical and ideological destruction in the German nation state, James-Chakraborty sees a conceptual link between architectural identity and identity politics. The title and subtitle of her book entertain a dialectic relationship: on the one side modernism as memory, on the other building identity, a tension essentially harking back to the 20th-century catastrophe of Germany. Although the title refers to a fairly recent entity, the Federal Republic of Germany, the author takes us well beyond its creation in 1949.

One of James-Chakraborty’s key arguments is that modern architecture in 20th-century Germany was encoded as a system of references, legible in various political and cultural contexts. For international audiences, the book’s mapping of the country’s architectural production in its interaction between national culture and the changing fabric of the nation state is extremely valuable. Outlining this relationship is highly contentious, given Germany’s history of leveraging identity in the formation process of the modern nation. The idea of nationhood was idealized in Romanticism and also buoyed by the French Revolution, but only achieved under militarism. One needs to hark back to the loose federation of sovereign states in the mid-19th century, with unification established only in 1871 when Prussian hegemony created the ‘Second Empire’. An ambitious newcomer to world politics, the ‘Reich’ expressed its status in a clear language that was informed by an architectural tradition of historicism, but also relied for the shaping of its identity on the production of new monuments, as the author points out with Berlin’s neo-Romanesque Kaiser-Wilhelm-Gedächtniskirche (1895). This ‘memorial culture’ at times sided with or opposed the aesthetic idiom of ‘modernity’. A telling example, under the reactionary Kaiser Wilhelm II, is the Werkbund exhibition in Cologne where, at the eve of World War I, Bruno Taut and Walter Gropius made radical architectural statements that showcased industrial production.

Although not unique, the interaction between aesthetics and the evolution of nationhood is very specific to architecture in Germany, providing German modernity with a particular iconographic framework. James-Chakraborty fathoms how this interaction affected not only the production but also the reception of architecture. Destruction, loss, and oblivion were countered by reconstruction in both the physical and the moral sense. This abyss has ascribed a pedagogical mission to architectural production. Especially where public institutions and the state are concerned, modern architecture was imbued with a moral narrative. One must not forget that the nation state in question was subjected to five different political systems in the 20th century: destroyed in 1945, officially divided in 1949, and once again unified in 1991. Regarding architectural culture, 1918, 1933, 1949, and 1989 are historic dates with profound repercussions. The end of World War I introduced housing policies under the Weimar Republic, the cultural politics of National Socialism rendered modern architecture a martyr, and the creation of two German states saw a further instrumentalization of architecture, now in rivaling political systems. The fall of the Berlin Wall and German reunification paved the way for an architectural culture rife with the memorialization and manipulation of history.

James-Chakraborty’s inquiry is predicated on the present-day cultural condition, i.e., the situation since Germany’s reunification. She presents architectural production as a practice intertwined with the moral and ethical framework stemming from post-war reconstruction and leading up to the fall of the Wall. Soon afterwards, when the parliament decided to make Berlin the capital once again, an unusual range of new memorials, public institutions, and government buildings were commissioned to mend the fractures between East and West. In this process architects in the capital were again burdened with the task of representing the nation. Such public commissions have already been described in recent architectural history of the western half of the country, but the way in which this thematic continuity is addressed is certainly one of the many merits of this book.

James-Chakraborty argues that beginning with the boom in museum construction around 1980, Germany began to open itself up to international talent, significantly broadening its architectural culture. This trend increased further after reunification when important competitions in Berlin were awarded to foreign firms — especially such highly symbolic ones as the extension of the Berlin Museum by Daniel Libeskind (1999), the Reichstag renovation by Norman Foster (1999), and the memorial to murdered Jews by Peter Eisenman (2005). Such international openness, comprising significant commissions to Peter Zumthor as well, can be understood as a welcoming attitude on behalf of Germany. Yet it also raises the question of why the country’s own architectural elite failed to succeed in competitions. Were German architects overwhelmed by the competition briefs, unable to deliver the necessary poetics, or simply too self-conscious? The fact that they were sidelined in all prominent public projects of the post-reunification years warrants further analysis. Nevertheless, James-Chakraborty’s gives an interpretation of the work of Foster, Eisenman, and Libeskind, all of whom, she believes, have successfully merged their
design philosophies with the memory and identity politics of the German state. The state even became accustomed to appropriating narratives proposed by the proponents of high-tech and deconstructivist architecture. However, the response to international tendencies was not always favorable. James-Chakraborty highlights a decisive moment when, in 1977, James Stirling’s competition entry for the extension of Stuttgart’s Staatsgalerie was awarded the first prize. The outcome of the competition unleashed a bitter debate in which Stirling was faulted for casually appropriating heavily loaded architectural symbols and for wilfully abandoning the architectural tradition of cultural building(s) in West Germany.

Completed by 1984, Stirling’s museum extension was attacked for replacing the iconography of public architecture with historicist spectacle. It was a manifestation of what was by then called ‘postmodern architecture’, the arrival of which was characterized by a particular nervousness in Germany. The conundrum surrounding postmodernism in Germany was that some of its elements — vernacularism, representation, historicism — clashed with a particular ethos in architectural culture shaped by 20th-century German history. In this ethos the codes of modern architecture held a specific meaning — modern architecture was a thread interwoven with national culture and its trauma. It was canonized after being exiled in 1933, and re-emerged in 1945 under two different regimes. Between vulnerability and heroism, the language of modernism functioned as a restrictive legacy. Beyond its own iconography it left little room for irony and historicism.

James-Chakraborty is an expert at weaving the different strands of modernity together in a way that the sequence of these political systems and political catastrophes underpins the architectural argument. This synthetic perspective is apparent when material iconography and, in particular, the recurrence of glass are addressed. Born out of the legacy of Expressionism, intertwined with the utopian moment that characterized pre-1920s in German architecture, glass took on properties ranging from mystic opacity to rational transparency, from Ruskinian craftsmanship to the industrial aesthetics endorsed by the Werkbund. The use and fate of this crystalline iconography is subsequently traced throughout the rest of the 20th century, when different generations of architects used glass and referred to different properties under various political and economic conditions, and finally at the behest of international authors flocking to post-unification Berlin.

There would be other questions, such as the evolving architectural imagination and its place within and tied to evolving post-war consumer societies, in particular in the Federal Republic, where a society had to come to terms with the aftermath of totalitarianism. These issues are addressed, although the focus on the post-war churches of Rudolf Schwarz, Gottfried Böhm, and Egon Eiermann — considered the pinnacle of architectural production in this period — conveys an overly spiritual picture of West Germany. Due to the book’s focus on other building typologies, housing — a key site of identity production under reconstruction — is not part of James-Chakraborty’s discussion of the 1950s and 1960s.

Returning to the issue of architectural imagination, in the period that Germany transitioned from reconstruction to consumer society, one would welcome comparisons to other contexts before and after 1968. Serving as the author’s primary system of references, the Federal Republic becomes somewhat of a closed circuit. However, we might also consider how the heritage of modernism was reflected and historicized in architectural production abroad. In particular, Britain and the United States played leading roles in rendering modern architecture as a text — and precisely its proponents were active in Germany over the past four decades: Stirling, Libeskind, Eisenman, and Zaha Hadid. Did their work become so successful because they transgressed the narrow confines and moralism of architectural culture in Germany? There can be no doubt that the German trauma granted no license to avant-garde narratives among domestic practitioners and theoreticians.

The architectural discourse of the Federal Republic positioned itself at the service of a democratic society. In contemporary Austria and Italy, however, the aftermath of fascism did not stifle the architectural avant-garde. Rather, the 1960s in both countries saw the rise of radical architecture — practices such as Archizoom, Haus Rucker Co., Atelier Hollein, Superstudio — that challenged the disciplinary framework of architecture. Italy in particular, where the cultural politics of fascism and the abuse of national identity left a tabula rasa after World War II, would afford a valuable comparison when discussing memory, especially neorealism and neorationalism, which were both informed by memory. Such an examination in a transnational framework would have been all the more valuable given the numerous references James-Chakraborty makes to Aldo Rossi’s work in Berlin, although she does not mention his design for the Deutsches Historisches Museum of 1988, one year prior to the fall of the Wall.

Rossi won the first prize in a competition for a site near the Reichstag where the chancellery would later be built. As a cultural program, the Deutsches Historisches Museum can be related to the memory politics prevailing under Helmut Kohl, the conservative prime minister and self-styled reincarnation of the patriarchal post-war prime minister Konrad Adenauer. The Kohl era (1982–98) saw the advent of a revisionist position, countering the critical examination that had held sway since 1968 under various social-democratic coalitions. In 1986 the centre-right climate witnessed its watershed debate with the so-called Historikerstreit. This controversy was triggered by historian Ernst Nolte’s essay ‘A Past that Refuses to Disappear’, published in 1986 in the Frankfurter Allgemeine Zeitung. Nolte appealed for an end to soul-searching and self-blame dominating recent discourse in the Federal Republic, for which Nolte blamed a coalition of left-leaning intellectuals in the tradition of the Frankfurt School, such as Jürgen Habermas. Speaking for a younger generation, Nolte called for a closure to Nazism — a rhetoric uncannily recurring
in statements by members of the ultra-right-wing party Alternative für Deutschland in 2018. According to Nolte, Germans had paid their dues, and it was therefore possible to contain this period as a singular catastrophe, and to move forward. In 1986 the Left deemed this attitude as revisionist, as unwilling to understand the broader arc of history in which the condition of a patriarchal society with a weak democratic tradition fuelled the structural logic that set in motion the events of 1933 to 1945.

If the Right and Left clashed around how history and memory should be processed in the Federal Republic, such opposite views also influenced the state-sponsored cultural politics during the 1980s. Which visibility should be given to which history? And which architectural iconography should be at the service of the institutions presenting this history? Rossi’s unbuilt design from 1988, a play with monumental fragments, begs to be read through the politics of memory, but also as the projection of a foreigner onto Berlin’s palimpsest. Controversial as an institution and as a design, Rossi’s project was superseded by an entirely new challenge to memory and identity: German reunification. In 1995, the commission for the Deutsches Historische Museum was awarded to I.M. Pei. He built the extension of the Zeughaus, a historical monumental building at Unter den Linden, where the institution was to be relocated and fused with its East German counterpart.

As the lengthy process of coming to terms with history and trauma was still underway in West Berlin, the miracle of reunification supplied an entirely new layer of references to totalitarianism. Along with this historic challenge came the annexation of the territory that had once been the core of the royal and imperial capital. James-Chakraborty addresses this legacy in the chapter called ‘Critical Reconstruction or Neomodernist Shards? Postunification Berlin’. Making culture accessible and profitable in a commodified urban environment has become part of the business model of architecture. Particularly in Germany’s touristic and political capital, this specialization includes tapping into registers that are layered and conflicted. The involvement of architects within the creative industries has been conducive to the refabrication of entire cities. Since 1989 spectacular shards — signature buildings with a symbolic dimension — have been inserted in the inconspicuous, ‘critically reconstructed’ urban landscape that has come to characterize Berlin.

James-Chakraborty’s deep reading of architecture in the context of Germany’s political history yields substantial insights. Multiple modernities throughout Berlin’s 20th century are revealed. The analysis of public architecture offers insights into the techniques and pedagogies of building memory and identity in different political and economic settings. At the same time, this runs the risk of isolating the architectural objects that it produces. The city, its governance, and its massive (re)development, along with the ideological battles over post-unification urbanism, are assigned a secondary role in the retrospective argument developed in ‘modernism as memory’. Moreover, the focus on the Federal Republic and its politics of memory comes at the expense of ignoring another heritage: the communist East. Its disappearance bestowed the Federal Republic with a new space of history with which to come to terms. After national socialism, communism was now the totalitarian system with which Germans had to grapple.

By erasing traces of GDR urbanism and architecture, numerous cities have edited out forty years of memory. In veering from a discussion of the physical legacy of East Germany, James-Chakraborty inadvertently reproduces this blind spot of reunification. The unwieldy, totalitarian modernism of the ‘other’ state is not taken into account as part of the German identity. But such a shortcoming is the price for the referential system developed by the author through her analysis of the Federal Republic’s architectural culture. A product of the West, this architectural culture participated in the building of identity and memory independently from the GDR. James-Chakraborty’s overview is most convincing in addressing the identity politics that have long since filtered into architectural production. Their omnipresence has profoundly altered the nature of the profession in all post-industrial, multicultural societies. The analysis extends to the curation of Germany’s industrial heritage, such as the Ruhr Region, and to contemporary landscapes of manufacturing, such as the BMW plant in Leipzig, again designed by a foreigner, Zaha Hadid. In both cases James-Chakraborty identifies the ongoing presence and reflection of modernist tropes. As the examples discussed indicate, addressing national identity is no longer the purview of German architects. Is this a sign for cultural openness? Or are international practitioners simply better equipped to deliver the necessary architectural services and to provide more compelling visual stimuli than their German peers? Or perhaps memory can no longer be distinguished from other commodities.

**Learning from the Survey**

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Long after the advent of print and the appearance of the first published architectural treatises, Renaissance architects continued to learn about venerable ancient buildings, as well as notable modern ones, through drawing. In the 16th and 17th centuries, architects from Italy and other parts of continental Europe visited Rome in growing numbers to study its buildings first-hand and produce measured drawings of its monuments. The direct surveys that resulted often served as intermediaries for further study and were frequently reproduced in derivative copies. In his well-known study of the effects of printing on the transmission of architectural theory, Mario Carpo acknowledged the marked persistence of drawing as a
medium that both complemented and competed with new printed sources, but neither engaged this phenomenon nor considered its implications at length (2001a: 11, 2001b: 227–28). Drawing After Architecture addresses this lacuna. In this intelligent and meticulous book, Carolyn Yerkes examines how architectural information was conditioned by practices of survey drawing and copying in the sixteenth and seventeenth centuries. Over a series of six chapters, Yerkes scrutinizes the results of draftsmen’s efforts to precisely reproduce pictorial statements, calling attention to problems such as interpolations of lost or imagined architectural elements, and the consolidation of multiple phases of a design into a single image. Through her analysis, Yerkes also aims to piece together how Renaissance architects and draftsmen employed drawing as a mode of inquiry. Because architectural survey practices are so rarely described in textual sources, she builds her study on a thorough and synthetic reading of anonymous sheets of drawings, conserved as single folios and in bound manuscripts.

Yerkes opens with a general discussion of the Renaissance practice of architectural survey drawing. Working collaboratively, a small team of architects would first produce annotated, measured sketches at a building site. These original studies were routinely reworked by an architect or his assistants in a studio, where they were also made available to other architects for study and reproduction. The workshop-produced surveys might be copied again, either as design prototypes for individual building elements or in the course of preparing a printed publication. What began as a simple site survey could, therefore, yield a theoretically endless chain of copies. Yerkes also parses the enduring value of the architectural drawing as a pedagogical tool and form of evidence in the age of print. Direct, autoptic surveys, she argues, afforded the richest and most accurate information about a building and permitted architects to study a structure in a highly subjective manner. Copying survey drawings, however, also had its merits. Beyond obviating the time and expense required to survey buildings in-situ, the study of drawings could reveal information about an original structure lost through subsequent alterations or ruination, and convey a particular architect’s critical interpretation of a structure or space.

These ideas are elaborated in case studies throughout the book. The chapters are divided into two parts. The first, which comprises chapters one to three, is dedicated to Renaissance surveys of ancient buildings, and in particular, the Pantheon. The second part of Drawing After Architecture examines how 16th- and 17th-century draftsmen surveyed modern structures. The focus here is not a single building, but rather the formative corpus of a single architect — namely that of Michelangelo Buonarotti.

As one of the most frequently studied of ancient buildings in the Renaissance, the Pantheon gave way to a wealth of 16th-century study drawings (Figure 2). In chapter one, Yerkes calls attention to a sheet in the Goldschmidt Scrapbook (Metropolitan Museum of Art, New York) that records obscure or lost elements of the Pantheon, including a metal apparatus that once encircled its oculus, a network of interior chambers and stairs, and a water drainage system integrated within its roof structure. These drawings, she argues, reveal the anonymous author’s interest in the Pantheon as a complex architectural system, not merely as a precedent for ornamental elements or the orders. Tracing the appearance of analogous architectural features in drawings in the contemporaneous Codex Destailleur D (Kunstbibliothek, Berlin) and Architettura civile album (Windsor Castle), and in the mid-seventeenth-century Worcester College Album (Oxford), Yerkes also identifies a series of possible derivative copies.

Chapter two homes in on another sheet within the Goldschmidt collection. This folio features detailed studies of the Pantheon’s pediment, which Yerkes examines to consider its draftsmen’s interpretation of the monumental inscription surmounting the frieze. In his drawings of this text, the draftsman took care to reproduce as closely as possible the appearance of the majuscule letterforms, recording their dimensions and relative positions across the façade. This treatment discloses a keen interest in the formal qualities of the pediment’s ancient text over the meaning of its words, which was anomalous in visual studies of the Pantheon from this era. While renewed interest in the forms of ancient Roman capitals began to surface in the 15th century, some of the earliest authorities on the topic, such as the scholars Felice Feliciano and Luca Pacioli, were more invested in uncovering the geometric and proportional basis of ancient letterforms than in studying them empirically. The Goldschmidt draftsman’s emphasis on the inscription’s materiality and physical context diverges from this approach, and as Yerkes suggests, might instead be linked to more recent efforts by Giovanni Francesco Cresci, a Vatican Library scribe in the 1560s, to treat ancient letters as ‘found artifacts’ (113). The discussion is illuminating in the disciplinary relations it draws between architectural topography and paleographic research in the latter half of the 16th century.

The visual evidence Yerkes interrogates in the third chapter supports a bold yet persuasive hypothesis about the lost ornamentation of the vault over the Pantheon’s interior entrance alcove. Several 16th- and 17th-century representations show this element to be covered with octagonal coffers that no longer exist today. These images vary widely, however: in some, the coffers are arranged in horizontal rows, while in others, they run diagonally across the vault. Yerkes carefully sifts through these representations to differentiate site surveys, which she frames as more accurate reflections of the vault’s ornamentation, from more distanced historical reconstructions. She isolates two roughly contemporaneous drawings from the Goldschmidt Scrapbook (folio 68.769.4v) and the Codex Destailleur A (Kunstbibliothek Berlin, folio 3r) as the only conclusive primary images of this vaulting element. Since these sheets present the octagonal coffers in diagonal rows, Yerkes suggests that the vaulting over the interior vestibule was originally decorated in this manner. She reinforces this idea with a convincing exposition of how this ornamental program would have harmonized with other extant aspects of the building program, including...
its massing, rotunda plan, and floor patterning. Although an earlier version of this chapter has been published elsewhere, the nuanced reading and patient analysis that Yerkes brings to all her subject matter is especially prominent in this section of the book (see Yerkes 2014).

Moving into the 16th and 17th centuries, the second part of Drawing After Architecture examines how draftsmen surveyed modern structures, in particular, those designed by ‘Il Divino’ Michelangelo. In the first chapter of this section, Yerkes explores how idiosyncratic representations can result from the inadvertent condensation of multiple architectural temporalities within a single image. Parsing a 17th-century drawing of an attic vault in the southern arm of St. Peter’s (Worcester College Album folios 64v–65r), Yerkes notes that the depiction does not match this portion of the basilica as it was initially built, nor as it appeared at the time the representation was made. A comparison of the drawing with multiple 16th-century source drawings in the Scholz Scrapbook (Metropolitan Museum of Art, New York) reveals that the image does not recover a single stage in the design of the attic vault, but rather layers successive phases, seamlessly combining them into a unified depiction. The creative reconstruction was never ‘corrected’ using the actual structure because the anonymous draftsman, who likely produced his study in France, was unable to travel to Rome.

The fifth chapter concentrates on sheets across the Scholz Scrapbook that depict architectural models of various projects by Michelangelo. Yerkes presents drawings based on physical, three-dimensional models as a distinct representational typology she terms ‘model-drawings’, and elaborates on the functions and general features of such images. These drawings, she shows, offer insight into the role physical models played in the design and construction processes. Serving as construction aids, evidence of building contracts, and tools for the production of scaled drawings, three-dimensional models were almost always produced in the final design phases, prior to construction. Given their fundamentally practical functions, models often did not survive long after a building was realized, but those that did were usually from projects that underwent dramatic alterations, or for which construction never

Figure 2: Anonymous French draftsman, View of a Pantheon Interior Rectangular Alcove, mid-16th century, pen and dark brown ink with black chalk, 16 1/4 x 11 7/16 in. (41.3 x 29 cm). The Metropolitan Museum of Art, New York, Purchase, Rogers Fund, Joseph Pulitzer Bequest, and Mark J. Millard Gift, 1968, 68.769.68 verso.
commenced. While the existence of drawings after models implies that the models themselves were regarded as monuments in their own right, the studies also reveal anxieties about the model’s destruction—that a drawing, in other words, might serve as a more permanent record of a design idea. As Yerkes remarks, the convention of producing drawings after models as scaled, orthogonal projections points to their possible use as generative sources for subsequent scaled drawings, models, and even buildings, and gives these documents a longevity beyond the brief lifetime of a model.

In the final chapter, Yerkes identifies a set of drawings of Michelangelo’s projects, primarily in the Scholz Scrapbook and in the Cronstedt Collection (Stockholm Nationalmuseum) but also scattered intermittently in other collections, as the remnants of a deliberate attempt to document the entirety of his architectural oeuvre. The drawings document projects that Michelangelo directed or assisted in, and even isolate discrete design elements that he contributed to larger projects. Yerkes points out, for example, that the series includes plans and elevations of the pedestal he designed for the statue of Marcus Aurelius at the Campidoglio, but omits the ancient statue itself, even though it is the focus of the piazza. Although the 16th century saw numerous comprehensive surveys of ancient monuments, the compendium of Michelangelo’s architecture conserved in the Scholz-Cronstedt group represents the first concerted effort to record the complete works of a contemporary architect. Measured orthographic plans, sections, and elevations are the dominant graphic modes used here, and suggest that the epistemic functions of these drawings were prioritized over aesthetic qualities. Ultimately, the Scholz-Cronstedt survey offers further testimony of Michelangelo’s towering reputation. In her concluding remarks, Yerkes reflects on how the effort to catalogue in drawing the entirety of Michelangelo’s architecture helped to canonize his works within the curriculum of architectural education in the 17th and 18th centuries. As his buildings became standard subjects of study, as at the French Académie Royale d’Architecture founded in 1691, they were continually reproduced in drawing as well as in print. Yet while these surrogates permitted the wider study of his models, their proliferation also impelled desires to verify the precision of copies by returning to the original building.

In the midst of cultural, global, and material turns in the fields of Renaissance art and architectural history, Drawing After Architecture exemplifies the rewards to be continuously reaped in the careful analysis of architectural drawings. Through a scrupulous examination of specific case studies, Yerkes elucidates the processes, intentions, and mentalities of a host of anonymous draftsmen, relying almost exclusively on the evidence of their surviving drawings. By focusing a lens on the work of unknown actors, the book broadens our knowledge of architectural practice in the 16th and 17th centuries. In the process, it also reveals new information about canonical, well-studied buildings. At times, lengthy, detailed descriptions can seem overly technical, but the insights that result are well worth a sustained reading. This book offers a productive model for thinking about how architectural information was processed, synthesized, and transmitted beyond the printed page in early modern Europe.

The Mediated Presence of Plaster Monuments

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Found throughout the world in museums and schools of art and architecture, plaster casts of ancient monuments do not usually retain much attention today. With the exception of remarkable places like the Cité de l’architecture et du patrimoine in Paris or the Carnegie Museum of Art in Pittsburgh, where such casts possess a spectacular character that is hard to miss, they are usually considered with indifference, as remnants of past and definitely obsolete ways to showcase distant and sometimes disappeared pieces of architecture.

With impeccable scholarship and a sure sense of narrative, Mari Lending embarks her reader on a fascinating exploration of what these casts, once considered as precious and certainly expensive to produce, represented for their 19th-century sponsors. The golden age of architectural casts is definitely behind us, but the problems they raise have never been so present in architectural discourse and practice. Among the very contemporary issues Lending deals with, one finds, for example, the complex relation between architecture and media. Although architecture seems to epitomize the irreplaceable character of physical presence, its agency is inseparable from a multiplicity of mediations. While we generally reflect on these mediations in reference to print or digital media, Lending brilliantly demonstrates how casts ranked among the privileged methods of architectural production in the 19th century.

Materiality is another much-discussed theme today, which the book engages with through the study of plaster casts, physical artefacts that reproduced volumes and shades while altering the weight, color, and the fine grain of matter. And there is of course the issue of Authenticity that we need to redefine in the age of digital reproduction, just as casts had forced their producers and spectators before us to deal this difficult question. In a striking analysis of Marcel Proust’s attitudes towards plaster monuments, Lending suggests that casts were sometimes preferred, for their clarity, over the actual remains of ancient architecture. Fittingly, Adam Lowe and his Factum Arte practice are among the final references in the book. Indeed, realizations such as Factum Arte’s facsimile of Paolo Veronese’s Wedding at Cana, which may in some ways be considered as more genuine than the compromised remnant kept by the Louvre, raise again the question of what authenticity means, an interrogation
triggered repeatedly by 19th-century casts that pretended to embody the truth of architecture with crisper details than the on-site originals after which they were molded.

This is a very rich book, rich because of the numerous questions and ideas it conveys, but also because of its in-depth study of the practice of casting, the market it constituted, and the problems raised by the display of plaster casts in galleries, museums and schools. The attention paid to the concrete details of cast production and commerce is definitely among the strong points of the book. The reader learns about the difficulty of casting, about the people and competences it involved, about the challenges of transportation and assemblage. Simultaneously, the theoretical and even epistemological issues implied by the use of plaster fragments and monuments are analyzed with remarkable subtlety. From Viollet-le-Duc’s conception of architectural history to the pedagogy of architecture materialized through the presence of casts at the Paris École des Beaux-Arts but also at Yale or Harvard, one understands better what is at stake in what appears retrospectively as a strange, fetishist practice.

The discourse is at times a bit labyrinthine. I mentioned the role played by Marcel Proust at a key moment in the book. Like his prose of *In Search of Lost Time* (1992), Lending’s developments may meander now and then at the risk of losing the reader. But this sinuous rhythm is in deep accordance with the fundamental ambiguity of the subject. Casting is indeed ambiguous, blurring all kinds of boundaries between original and copy, past and present, close and distant. The vertigo it generates is admirably rendered.

Some episodes are unavoidable. Not surprisingly, the book pays attention to the constitution of the large collections of casts at the Paris Musée des monuments français, now administered by the Cité de l’architecture et du patrimoine, the London Victoria and Albert Museum, and the New York Metropolitan Museum of Art. The importance given to other cases like the Carnegie Museum of Art Hall of Architecture is less predictable. The difficulties encountered by the curator of the latter at the turn of the 19th century to secure casts and to arrange them prove nevertheless highly revealing. The close reading of Paul Rudolph’s belated and subtle use of casts at the Yale Art and Architecture Building is even more instructive. Contrasting Josef Albers’ disdain for plaster casts with their masterful staging by Rudolph in his new building allows Lending to engage in a thorough discussion of the relationships between 19th-century...

**Figure 3:** Rebuilding the Castor and Pollux colonnade, Versailles, 1975–76. Courtesy of Christiane Pinatel, Musée du Louvre, Département des antiquités grecques, étrusques et romaines.
heritage, modernity, and the postmodern moment, as well as between European and American attitudes towards ornament. For ornament represents another thread in the rich argument developed in her book. The display of plaster casts showing Greco-Roman, Romanesque, and Gothic monuments in all their detail is indeed inseparable from the importance given to ornament by 19th-century architectural reflection (Figure 3).

Starting from an inquiry into a long-lost practice, Plaster Monuments: Architecture and the Power of Reproduction achieves much more than making its reader aware of what once was. It triggers important questions about architecture both as a discipline and as a mediated presence. Again, it is striking to observe how this innovative study of architectural casting resonates with some of our contemporary interrogations.

The Building of Finland: A Comprehensive but Familiar Success Story

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How does one select the essential from a nation’s long and multifaceted building history and work all that this entails into a single volume? This is the question that Harri Hautajärvi asked himself when initiating The Building of Finland, of which he is the editor (Figure 4). Originally, the publishers planned an expansive jubilee book to celebrate Finland’s rich building history on the occasion of its centenary of independence (the book was published by the Building Information Foundation RTS in cooperation with several national institutional partners from the fields of architecture and construction industries). The book’s initial purpose was to discuss how Finland had evolved from a poor, rural country into its current developed and prosperous state and the role of the architects, engineers, builders, and investors — the Finnish building industry at large — had played in this process. But the reader might be grateful that Hautajärvi ultimately pursued a more focused narrative.

Hautajärvi, who has long served as the editor-in-chief of The Finnish Architectural Review, set out to orchestrate a multidisciplinary collection of original scholarly texts, which together map out the modes of production integral to the creation of the built environment. The result is an exhaustive and profound chronicle about how Finland came to be a modern nation equipped with a good infrastructure and some great buildings. Laid out over 360 generously sized pages, lavishly illustrated, and published in Finnish, Swedish, and English editions, The Building of Finland is a majestic tome that celebrates the modernization of Finland. However, the book fails to deliver what is needed most: a concise yet comprehensive review of modern Finnish architecture.

In practice, The Building of Finland offers a general retrospective of the main developments in housing, public building, industrialization, and the general construction of progress. The eighteen articles by Hautajärvi and his sixteen co-authors, whose expertise ranges from civil engineering to art history, cover all the possible sub-fields of building a nation, including building history, the history of infrastructure, and the history of construction methods. This all-inclusive approach aims to provide something different than the traditional architecture book: an exhaustive study on the development and interdependence of architecture, infrastructure, and technology.

The book is arranged around three themes. The first, ‘how Finland was built’, offers a general overview of the country’s building history. The second section, ‘house design and construction in different periods’, deals with developments in construction methods, and the third, ‘Finland builds around the world’, discusses the history of architectural and construction know-how as an export product. In terms of scope and length, however, the thematic division is not equal. The first, on general building history, includes twelve articles, whereas the second section comprises just four, and the final section, on building abroad, has a mere two articles. The thematization thus appears preconceived and rigid, and throws the book’s contents out of balance. The emphasis is clearly on architectural history: how individual building types and urban structures took their contemporary form. Internationally renowned architects such as Carl
Ludwig Engel, Elie Saarinen, Reima Pietilä, and Alvar Aalto appear on these pages, but the architects and their careers are not in the limelight.

The grounding framework of The Building of Finland is itself strong. The collection of individual articles about specific types and aspects of Finnish architecture — schools, housing, cultural and administrative buildings, factories, military facilities, urbanization, building codes, renovation — represents an original and worthwhile contribution. The authors are experts within their field of scholarship, and all the topics receive adequate coverage. However, the articles are not chronologically ordered, each adopting its own historical starting point, usually around the late 19th century or in the first decade of the 20th. The resulting significant repetition of historical events and general facts makes the book arduous to plough through. Moreover, given the book's comprehensive agenda, the reader—a foreign one in particular—would appreciate the addition of several appendices, providing brief biographies for the individuals cited, concise accounts of the political, economic, and legislative history of Finland, and some solid, tabulated data about the development of living conditions in the country. As published, the book paints an arbitrary and tautological image of the prevailing societal conditions that grounded Finnish architecture.

Although Hautajärvi has done an admirable job in editing the articles into an elegantly exact and fluent body of writing, his editorial hand could have been even stronger. As a collection, the articles are not strongly linked, as they do not discuss or reference one another. There is also irritating inconsistency in the degree of detail provided about individual designers, and a dielentantish recital of years and names. Some articles introduce architects, engineers, and builders vividly, giving meticulous attention to their education and careers. But in other articles, the protagonists get only an encyclopaedic mention. The difference in treatment follows no obvious logic and appears to be just the result of an individual author's style. What is more, the absence of a coherent system that maps the relationships and hierarchies that united the individual protagonists makes it difficult to understand the greater social and cultural frameworks in which these great achievements took place. But perhaps even more disappointing are the book's lack of a clear agenda and its failure to fully elucidate why the modernization of Finland was so exceptional. The Building of Finland is not an academic anthology, but considering its hefty size and upmarket retail price, it is also not an everyman's guide to Finnish building history. The assumed originality of the Finnish situation is reiterated, and we are told again and again how significant it is that a peripheral and agrarian country could within just one century become an industrialised, highly-developed, democratic and egalitarian welfare society that exports its expertise abroad. However, the most intriguing details and truly original peculiarities of the modernization of Finland are mentioned only in passing. These include, for instance, the social and professional repercussions of the Finnish Civil War in 1918, international influences on post-1960s architectural ideals, and the romantic tendencies during post-war reconstruction and the post-modernist era (see, for example, Wilson 1992; Quantrell 1995; Čeferin 2003; and Pelkonen 2009). Furthermore, and with reference to national branding, with which this book clearly engages, the authors could have been more straightforward on the historiography of the exportation of Finnish exhibitions throughout the world. In the 19th and 20th centuries, art, architecture, and design were consistently used as a means to convey a positive image of Finland, encouraging general goodwill and luring prospective investors.

Having said this, The Building of Finland deserves credit for its erudite review of the history of 20th-century Finnish architecture. The inclusion of material on infrastructure and engineering, the comprehensive approach towards the definition of quality in the built environment, the editorial choice to discuss architecture in terms of building typology instead of style or era, the variety of themes discussed in the individual articles, and the abundance and excellent selection of images all make this book a significant contribution to the existing literature on the topic. English-language books on the history of Finnish architecture are limited. Riitta Nikula's Architecture and Landscape. The Building of Finland (Otava, 1993) has long been out of print, and J.M. Richards' 800 Years of Finnish Architecture (David and Charles Inc., 1978) is partly outdated. Yet, in comparison with more recent books on modern Finnish architecture, The Building of Finland falls short. In terms of overall aesthetic quality, the book cannot compete with Finland (Norri, Standertskjöld, and Wang, 2000) or Finnish Architecture 1900–2000 by Eija Rauske (Museum of Finnish Architecture, 2008). And while The Building of Finland is more comprehensive than these modern studies, it fails to attain the concision of Riitta Nikula's Wood, Stone and Steel: Contours of Finnish Architecture (Otava, 2005) and does not deliver the type of well-argued polemics that Roger Connah presents in Finland: Modern Architecture in History (Reaktion Books Ltd., 2005).

The Building of Finland also opens itself for comparison with similar though more academic and specialized anthologies on national architectural traditions. Are there any parallels between the development of 20th-century architecture in Finland and the contemporary developments in other Nordic and Baltic countries? Or is Finland entirely unique? In this sense, volumes such as Swedish Modernism: Architecture, Consumption and the Welfare State, edited by Helena Mattsson and Sven-Olov Wallenstein (Black Dog Publishing, 2010), or Marija Drėmačiūtė's fascinating Baltic Modernism: Architecture and Housing in Soviet Lithuania (DOM Publishers, 2017), about post-war modernist architecture in the so-called Soviet West, provide intriguing points of comparison. In never questioning the excellence of the Finnish national brand, The Building of Finland suggests that similar developments did not take place elsewhere. The international context seems to be irrelevant, leaving the reader with the impression of introspective patriotism.

Most surprisingly, The Building of Finland overlooks the obligation to reassess established canons and to challenge received views, and thus neglects questions about what history is and how it is used. While the book does address the problems of selective history-writing, it does not make explicit its ideological position, its definition of history, or
the general purpose of history-writing. The book emphasizes its multidisciplinary scope in comparison to previous studies, but unfortunately, the listing of past achievements is not enough for contemporary history-writing — comprehensive or not. As Adrian Forty has so accurately verbalized in his Words and Buildings, history is 'a product of the mind of the present': it orders and interprets past events, legitimizing particular ideologies of the present (2004: 203). Had the authors of The Building of Finland delineated these ideologies and the biases and concerns of the present moment, the book would not have only elucidated how modern-day Finland came to be, it would also have offered insight into how its built fabric might evolve going forward. The authors never ask in what direction they want the building of Finland to develop. A few articles comment on the status quo, but none of the authors provide any clue about the main challenges ahead.

As a carefully curated multi-institutional book project, The Building of Finland does well in updating the received view of the history of Finnish architecture. New material includes synopses of contemporary building projects, as well as invaluable histories of building production, renovation, infrastructure, and construction. The rise of the nation state of Finland was epic indeed, and the book celebrates the modernization of Finland with carefully edited texts and an array of instructive images. But still missing is why the already familiar Finnish version of the global story of modernism deserves to be retold, over and over again.

Notes
1 Finnish art, design and architecture were showcased in industrial sales events such as Success Story Finland, an export campaign for Finnish fashion trade, design, industry, and culture that toured the world between 1986 and 1990.

Competing Interests
The authors have no competing interests to declare.

References
The Burden of Production as Reflection

Learning from the Survey


The Mediated Presence of Plaster Monuments

The Building of Finland: A Comprehensive but Familiar Success Story


