

The Permanence of Pattern Books

On the Production of Architectural References

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The following argument concerns matters both obvious and simple: references are not encountered or discovered as references, but are produced. They are created through a more or less methodical process of selection from existing materials and are subsequently processed using different media. References are, in fact, made through communication. This communication is active both in what is already materially present—like individual buildings, building typologies, or documented theoretical principles—and current demands for utilizing references in the design process. Indeed, references require such communication as a necessary precondition: if it is not communicated that this or that building or this or that theory is a reference, then it will not be one. References thus only come into being in response to a present demand. In this respect, they resemble experiences, with which they bear some structural similarities. Just like experiences, references are only really “made” in new functional contexts. Before experiences or references are “made”—that is, before they are consciously available and relevant to the present—they exist simply as vague personal memories of the past, or unstructured acquired knowledge. The historian Reinhart Koselleck summarizes the difference between these forms of knowledge by contrasting two modalities of “active memories.” On the one hand, memories can be based on concrete lived, historical experiences; on the other, they can come about through “secondary acquired or compiled knowledge.”¹ Likewise, references

¹ Reinhart Koselleck, “Primärerfahrungen und sekundäre Erinnerungen,” in Geronnene Lava. Texte zu politischem Totenkult und Erinnerung, ed. Manfred Hettling, Hubert Locher, and Adriana Markantonatos (Berlin: Deutscher Kunstverlag, 2023), 335–45.

can be composed from primary experience or the secondary acquisition of knowledge. In either case, they necessarily require knowledge.

It is a further self-evident truth that all these operations involved in producing references occur self-referentially within the architectural system. In what follows, I will therefore focus on a specific line of thinking relating to self-referentiality: juxtaposing it with referentiality. The questions I will address are how self-referentiality is represented in architectural production and how it is inscribed in the contemporary. The immediate starting point for my reflections is a group of recent theories of architectural design in which historical buildings are reprocessed as references in a strangely alienated, pale, and blasé form. From here, we can also ask about older approaches that use pattern collections.

The answers I will propose consist primarily of three observations: 1) Architects have, in their profession, created institutions for a kind of in-house production of architectural references and established themselves in these institutions largely to the exclusion of the public. The professional self-referentiality of architectural production consists in the fact that architects themselves create their references for colleagues. Their interests here are promoting themselves, stabilizing discourse, and making discourse exclusive. I outline how these references are produced by examining published theories of architectural design and juxtapose them with other architectural publications, in particular architects' catalogues raisonnés. 2) This field of publications creates a self-referential canon whose forms of representation change historically. I propose that it operates in four different modes: the pattern building as reference; diagrammatic reference; systemic reference in the modernist period; and the blasé references of the present. 3) All these modes erase history. They de-historicize connections to the past and with them original, complex contexts. In this way, they make references available for the value chains of architectural production in the present.

Self-referentiality is at the center of my considerations. Following Niklas Luhmann's systems theory, I understand this to mean that certain practices

On the concept of experience, see also Dietrich Erben, "Erfahrung als Argument in Berufsautobiographien. Der Kunsthistoriker Michael Baxandall und der Architekt Louis Sullivan," in *Das eigene Leben als ästhetische Fiktion. Berufsautobiographien und Professionsgeschichte*, ed. Dietrich Erben and Tobias Zervosen (Bielefeld: transcript, 2018), 23–38.

generate themselves out of themselves, that they essentially refer to themselves, and that those involved in these practices largely only communicate with each other and observe themselves.² In the case of natural science, for example, self-referentiality consists in the fact that scientists cannot appeal to the authority of external references from other subsystems to justify their claims; they cannot refer to religion (e.g. holy scriptures, collections of rules), politics (e.g. constitutions, party platforms), justice (e.g. laws, court rulings) or public media (journalism, television). In the case of architectural production, the “self” of self-referentiality is the architectural system. This subsystem is concerned with operations for producing references that remain within the profession of architecture and which are also communicated almost exclusively within this domain. At the same time, however, self-reference always means self-reflection, as Luhmann also emphasizes. For it is only when a cultural practice, in this case architecture, is able to refer to itself that it develops its own characteristics and its own jurisdiction. In the end, we must ask what this ambivalence—of self-isolation on the one hand, and self-reflection on the other—means for architecture.

The Pattern Building as Reference

If we consider self-reference across the history of architecture, it quickly becomes clear that it is a process of appropriation with considerable historical depth. Looking back over the past five centuries or so of modern architectural theory, we immediately encounter published pattern collections. These collections contributed significantly to the stabilization and globalization of architectural knowledge. I will briefly explain these two aspects using the example of Palladianism.

The founding work of Palladianism is, of course, Andrea Palladio's *I quattro libri dell'architettura* (1570).³ These four books are inconceivable without Vi-

2 Niklas Luhmann, *Soziale Systeme. Grundriss einer allgemeinen Theorie* (Frankfurt am Main: Suhrkamp, 1984), 57–65; Niklas Luhmann, *Social Systems* (Stanford, CA: Stanford University Press, 1995); Giancarlo Corsi, “Selbstreferenz,” in *GLU. Glossar zu Niklas Luhmanns Theorie sozialer Systeme*, ed. Claudio Baraldi, Giancarlo Corsi, and Elena Esposito (Frankfurt am Main: Suhrkamp, 1997), 163–67.

3 From the extensive literature on Palladianism, see only Carsten Ruhl, *Palladio bears away the palm. Zur Ästhetisierung palladianischer Architektur in England* (Hildesheim:

truvius and without the various treatises of Sebastiano Serlio that were published from 1537 onwards (including the *Regole generali*). Palladio's *Quattro libri* contain both a systematization of ancient architecture based on Vitruvius and autopsies of buildings and, in the second of the four books, a catalog of Palladio's own buildings. These two related fields—antiquity, on the one hand, and his own oeuvre, on the other—make the question of reference and contemporaneity immediately evident. In the conceptual framework of the High Renaissance, it can be formulated as the opposition of “antiquus” and “modernus” (or “hodiernus”, i.e. the contemporary).⁴

Behind this contrast of old and new lies a fundamental typological conflict: the simple question of which building typologies known from antiquity could be adapted for modern times. This conflict presents itself as a problem of interruptions in the continuity between antiquity and modernity. Some ancient building types completely lost their functional relationship with people very clearly and completely—for example, when temples, baths, arenas, and theaters were neither used for their primary purposes, nor reactivated, at least for a time, as modern building types. Yet even these obsolete ancient spaces continued to function as cultural resources, as references.⁵

In his *Quattro libri*, Palladio takes a further pioneering and resolute step by addressing the conflict between tradition and modernity in his own oeuvre. In the buildings presented in the *Secondo libro*, he essentially adopts the ancient building types of palatium, villa, and basilica. However, he transposes them into his own time and presents them as exemplary solutions to the construction problems they each pose.⁶ These references are produced

Olms, 2003); Werner Oechslin, *Palladianismus*. Andrea Palladio—Kontinuität von Werk und Wirkung (Zürich: gta, 2008); Charles Hind and Irena Murray, eds., *Palladio and his legacy. A transatlantic journey* (Venezia: Marsilio, 2010); Guido Beltramini, ed., *Jefferson e Palladio. Come costruire un mondo nuovo* (Milano: Officina Libraria, 2015); Barry Bergdoll, “Some notes on Palladio's reputation in France, Germany, and Britain in the nineteenth century,” in *Annali di architettura* 34 (2022), 161–82.

4 Cornelia Klinger, “Modern/Moderne/Modernismus,” in *Ästhetische Grundbegriffe*, ed. Karlheinz Barck et al., vol. 4 (Stuttgart: J.B. Metzler, 2000), 121–67, especially 123–28.

5 Dietrich Erben, “Kommunikations- und Normenkonflikte in der europäischen Renaissancearchitektur—eine methodische Skizze,” in *kritische berichte*, special issue: *Architektur und Konflikt*, 51 (2023), 93–107.

6 Ursel Berger, “Palladio publiziert seine eigenen Bauten. Zur Problematik des ‘Secondo Libro,’” in *Architectura* 14 (1984), 20–40; Dietrich Erben, *Architekturtheorie. Eine Geschichte von der Antike bis zur Gegenwart* (Munich: C.H. Beck, 2017), 11–16.

solely by means of an image–text scheme. Let me briefly illustrate this using a page from the book (Fig. 1). The Villa Barbaro near the village of Maser in Veneto is one of Palladio's famous mansions, combining the main house in the middle of the complex with its agricultural outbuildings, courtyard, and gardens to form a harmonious ensemble. A short explanatory text at the top of the page corresponds to the view of the building's façade at the bottom, and both visually reinforce the text–image unit. In the middle of the page, the floor plan of the villa spreads out in an almost majestic expanse. Along with the buildings, the plan also shows the enclosing walls of the courtyard and the semi-circular nymphaeum behind the house. The façade view and floor plan are precisely coordinated in their width and internal dimensions, which makes it easier for the reader to find their way around given the high degree of abstraction in the depictions. The plan and façade are to be understood together in a synchronized reading. They relate to each other precisely, yet float together like lines of text against the backdrop of the paper. Palladio refrains from any illusionistic effects: he does not give the woodcut a pictorial framing, nor include any topographical details. The text does indeed contain references to topography, but in the case of the images, the site of the building has been completely silenced. By stripping his buildings from their historical contexts in this way, Palladio makes them available to his contemporary readership as *exempla* and as model solutions for future clients.

This approach to presenting buildings set the tone not only for Palladianism, but also for further diffusion of the style around the world. Palladianism established itself as an international style within endless loops of reference reproduction. As is well known, important stages in this process were the reproduction and variation of typologies and formal repertoires by Vincenzo Scamozzi in Italy, as well as by Inigo Jones and Colen Campbell in the seventeenth and eighteenth centuries. From there, they spread to North America and other British colonies. This globalization brought together a highbrow Palladianism on the part of the social establishment with a simple, lowbrow Palladianism that spread to some parts of the world through pattern collections, which flooded the market in a tidal wave of booklets.⁷

7 On the genre of the pattern collection, see most recently: Dal trattato al manuale. La circolazione dei modelli a stampa nell'architettura tra età moderna e contemporanea, ed. Aurora Scotti Tosini (Palermo: Caracol, 2013); on the more general context, see: Narrating the Globe: The Emergence of World Histories of Architecture, ed. Petra

The colonial interaction between builders, craftsmen, and architects in the construction sector is partly due to these English pattern books. For example, the original model of the one-story wooden suburban house and garden was first introduced to the American West Coast as a “cottage” or “bungalow,” and from there made its way to the colonies and overseas territories in the Pacific region, like New Zealand, through such pattern collections.⁸

In parallel to pattern books, another strand of pattern collections—again inspired by Palladio—unfolded in the context of communicating the bodies of work produced by particular architects. The German concept of “Werkpolitik” can be applied here. “Werkpolitik” refers to strategies of successive canon formation through the transmission of a “complete body of work,” which gains exemplary character through the authority of the author and the normative value of the work.⁹ A single body of work is thus made available as a reference. This can also be observed in the case of architecture, with the academic genre of the catalogue raisonné becoming established at the latest with Palladio’s *Secondo libro*—and in turn providing a pool of references. After Palladio, we should mention Johann Bernhard Fischer von Erlach’s inventory of works (*Entwurf einer historischen Architektur*, 1721). In the nineteenth century, Schinkel’s collection of architectural designs (begun in 1819) set the standard for works by Friedrich Weinbrenner, Leo von Klenze, Georg Moller, Christian Fredrik Hansen, Heinrich Hübsch, and Friedrich von Gärtner (among others). In the twentieth century, the spectrum extends from Frank Lloyd Wright’s *Wasmuth Portfolio* (1910) to Le Corbusier’s *Œuvre complète* (from 1929) and Robert Venturi’s *Complexity and Contradiction* (1966). Today, catalogue raisonnés are not just published as books, but are also available on the homepages of architecture firms—and, more than ever before, the self-presentation of these firms for the purpose of acquiring further com-

Brouwer, Martin Bressani, and Christopher Drew Armstrong (Cambridge, MA: MIT Press, 2023).

8 Ben Schrader, *The Big Smoke: New Zealand Cities 1840-1920* (Wellington: Bridget Williams Books, 2016), 77–80, 88–90, 343–46.

9 Steffen Martus, *Werkpolitik. Zur Literaturgeschichte kritischer Kommunikation vom 17. bis ins 20. Jahrhundert. Mit Studien zu Klopstock, Tieck, Goethe und George* (Berlin: De Gruyter, 2007).

missions is converging with the provision of pattern solutions in a manner we might describe as loyal to the profession.¹⁰

After 1800: The Diagrammatic Reference

After the aesthetic reforms of the eighteenth century and with the various historicisms of the nineteenth, the architectural reference gained a new status. Rather than referring to individual, unique buildings, references took on a standard, anonymous form. This is exemplified by the design theory of Jean-Nicolas-Louis Durand. In his publications, Durand thinks in terms of the scale of public buildings erected by architects and engineers in the civil service. Just as Durand's construction program is economic in nature, so is his method of representation: the diagram.¹¹ The images in Durand's publications serve to depict abstract, formal content, and he refuses to give them any of the pictorial aspects of traditional *scaenographia*. Instead, his *Recueil* and *Précis* are strictly limited to floor plans, elevations, and sections, which are presented comparatively in diagrammatic tables (Fig. 2). In *Recueil*, the synopsis, an older form of presentation, is developed further by arranging monuments of architectural history on the same scale and without any ranking in terms of historical importance.¹² Buildings from completely different eras and styles are placed together in objectivized constellations that no longer seem open to question. The reference takes on a scientific distance, and there is no normative preference for particular styles within the history of architecture. With his tabular arrangement of the material, Durand at-

10 On the genre of the catalogue raisonné, see: Alexander Marksches, "Das Architektenwerkverzeichnis," in *Das Buch als Entwurf. Textgattungen in der Geschichte der Architekturtheorie. Ein Handbuch*, ed. Dietrich Erben (Paderborn: Wilhelm Fink, 2019), 260–81.

11 Stil-Linien diagrammatischer Kunstgeschichte, ed. Wolfgang Cortjaens and Karsten Heck (Berlin: Deutscher Kunstverlag, 2014); Hubert Locher, "Eine Wissenschaft der Schaubilder? Vom anarchischen Potenzial der Diagrammatik," in "Methodische Turns, Hypes und Trends in der Kunstwissenschaft seit den 1960er Jahren," ed. Dietrich Erben and Christine Tauber, special issue, in *Kunstchronik* 77 (2024), 468–78.

12 Jean-Nicolas-Louis Durand, *Recueil et parallèle des édifices en tout genre, anciens et modernes, remarquables par leur beauté, par leur grandeur ou par leur singularité* (Paris: 1801; repr., Nördlingen: Uhl, 1986).

tempts to tame the superabundance of monuments in all their stylistic diversity, which was first brought to light by the archaeology of the Enlightenment era. His synopses are an admission that the chronological and geographical diversity of architectural history can only be conveyed in the form of a diagram. This also has political implications, since the informational images in Durand's publications adhere to the law of "égalité" imposed by the French Revolution. This objective, systematic approach corresponds to Durand's design process, which consists almost exclusively of the addition and combination of spatial units according to the requirements of a building program.

In Durand's theory, architectural design becomes formally state-controlled in the most literal sense. His focus is exclusively on large-scale public structures—administrative buildings, educational institutions, barracks, prisons, market halls, exchanges, hospitals, and factories. Durand aligns historical references with contemporary construction needs to serve the rapidly developing modern industrial and administrative state. His visualizations take the form of diagrams where both historical buildings and his own design proposals appear as objectively standardized datasets.

Systemic Reference in the Modernist Period

The "classical" modernism of the early twentieth century, as it has been called since around 1970, gave reference a systemic character. This means that references and comparisons occur between different cultural techniques. The term "cultural technique" (*Kulturtechnik*), which originates in late-nineteenth-century Germany and is somewhat tautological, refers to those fundamental practices and technologies through which humans shape both their material environment and cultural systems. It encompasses symbolic operations such as writing, reading, calculating, the invention and use of machines, and drawing or designing and planning in other media.¹³ For modern architecture, the primary intention behind systemic reference is to

13 Harun Maye, "Was ist eine Kulturtechnik?," in *Zeitschrift für Medien- und Kulturforschung* 1 (2010), 121–35; on architecture, though without reference to the concept of *Kulturtechnik*, despite its presence in the title, see: *Kulturtechnik Entwerfen. Praktiken, Konzepte und Medien in Architektur und Design Science*, ed. Daniel Gethmann and Susanne Hauser (Bielefeld: transcript, 2009).

inscribe building with wood, brick, and concrete—materials still considered technically backward—into the canon of contemporary technical innovations.

This form of systemic referencing was prefigured in Louis Henry Sullivan's 1896 essay "The Tall Office Building Artistically Reconsidered."¹⁴ Sullivan explains the typology of modern skyscrapers as emerging from the specific environment of the American metropolis with its distinctive productive forces. He is not interested in thinking of an office building as an "individual solution," but instead as a "true normal type." This type is shaped by business requirements, local building codes, the new structural techniques of steel-frame construction, and the design logic of architectural expression. Crucial to Sullivan's essay and his theory of architecture is his adoption of ideas inspired by earlier American transcendentalism, Charles Darwin's theory of evolution, and Hippolyte Taine's milieu theory. According to this theoretical framework, a building, like a living organism, is a product of its environment in both functional and formal aspects. By subjecting architecture to the laws of evolutionary and environmental theory, Sullivan provides a central argument for modernism. This conceptual bridge replaces history with evolution as an organizing principle. Modern architecture no longer legitimizes itself through references to contingent historical events, but through inevitable evolutionary processes.

References to other cultural techniques continue and evolve in Le Corbusier's architectural manifesto *Vers une architecture* (1923), where he develops comparisons to machines and illustrates them with well-known photographic juxtapositions (Fig. 3).¹⁵ However, systemic reference here is by no means limited to machine comparisons, but also takes place on the level of historical references. The collage of ancient Roman monuments (Fig. 4), for

14 Louis H. Sullivan, "The Tall Office Building Artistically Reconsidered" (first published 1896), in *The Public Papers*, ed. Robert Twombly (Chicago, 1988), 103–12. On Sullivan's theory, see Narciso Menocal, *Architecture as Nature: The Transcendentalist Idea of Louis Sullivan* (Madison, WI, 1981); Lauren S. Weingarden, *Louis H. Sullivan and a 19th-Century Poetics of Naturalized Architecture* (Burlington, VT, 2009); Dietrich Erben, "Der Renaissancehumanismus und die Idee einer 'humanen Architektur'. Florenz als Gründungsort in der Architekturgeschichte seit dem Zweiten Weltkrieg" (2014), in *Humanität und gebaute Umwelt. Essays und Studien zur Architekturgeschichte* (Bielefeld: transcript, 2023), 177–96, here 180–181.

15 Le Corbusier, *Vers une architecture* (Paris, 1923).

instance, demonstrates their rigorous abstraction into geometric stereometry: the hemisphere (Pantheon), the cylinder and cube (Castel Sant'Angelo), and the pyramid (Pyramid of Cestius). In this synopsis, Le Corbusier derives design principles for the distribution of mass by abstracting historical buildings to their basic geometric forms, thus overlaying historical reference with mathematical precision. A similar structural approach—this time derived from anatomy—appears in the chaise longue designed by Le Corbusier with Charlotte Perriand and Pierre Jeanneret in 1928, where the curves of the reclining surface inside the circular segment conform to the main joints of the human body (neck, hips, knees). In the fourth chapter of *Vers une architecture*, the machine comparisons ultimately unfold into an extensive systemic analysis, where Le Corbusier references three modern technological achievements through different architectural lenses: the ocean liner in terms of formal theory (ribbon windows, built-in furniture, minimal floor plans); the fighter plane in terms of material logic (with its non-tectonic outer skin); and the automobile in terms of standardization and industrial mass production. “Machines for living in must be mass-produced,” Le Corbusier concludes succinctly.¹⁶ He embraces contemporaneity through what he calls “l'esprit nouveau”—also the title of his magazine: “There is a new spirit: it is a spirit of construction and of synthesis guided by a clear conception. Whatever may be thought of it, it animates today the greater part of human activity.”¹⁷

I will only briefly note here that postmodern architectural theory also productively incorporated references to other cultural theories. Consider Aldo Rossi's adoption of “collective memory,” a concept popularized by Maurice Halbwachs, which Rossi uses to justify the citational reuse of building typologies like houses and towers, or the symbolic deployment of architectural elements such as windows, doors, and roofs.¹⁸ We cannot overlook, however, that Rossi's reference to Halbwachs is largely cursory, while simultaneously affirming his own ideas about the “memory of the city.” At the same time, postmodernism shifts reference back from the systemic and onto indi-

16 Le Corbusier, *Vers une architecture* (1923), 102; cf. 167.

17 Le Corbusier, *Vers une architecture* (1923), 77.

18 Aldo Rossi, *Architettura della città* (Padova: Marsilio, 1966); cf. Carsten Ruhl, *Magisches Denken – Monumentale Form. Aldo Rossi und die Architektur des Bildes* (Berlin and Tübingen: Ernst Wasmuth, 2013).

vidual buildings drawn from architectural history. There is considerable evidence to suggest that this prefigures today's modes of reference production.

The Blasé References of the Present

After pattern buildings, diagrams, and systems, today's architectural discourse indulges in catalogs of images—an approach that, I suggest, reflects an attitude of indifference or blasé detachment. I have in mind here three recent theories of design published over the last two decades that explicitly invoke the practice of referencing. These books emerge from the pedagogical context of design departments at the Berlin University of the Arts (UdK), TU Wien (Vienna University of Technology), and the Technical University of Munich (TUM).

All three theories of design share an exclusively immanentist approach—meaning that references remain entirely within the domain of architectural typologies and building element theory. The books mentioned here follow the trend of similar formalist design theories. Notable examples include John Hejduk's *Education of an Architect* (1971), Oswald Mathias Ungers's *Architecture As Theme* (1982), and Rem Koolhaas's *Elements of Architecture* (2014). The “varieties of reference” in these theories of design, to take Gareth Evans's phrase,¹⁹ never extend to the functional intentions and social dimensions of architectural production. In other words, their references do not engage with socio-political considerations, especially with regard to the everyday activities and uses associated with buildings as they materialize through building typologies and programs (dwelling, production, services, consumption, etc.). Instead, in these theories, architecture is emphatically reduced—in the literal sense—to “the building” as the ultimate focus of design intent.

In Alfred Grazioli's theory of design, historical references are deliberately formalized.²⁰ He provides two examples of Berlin apartment blocks (Alfred Messel, 1891/93 and an anonymous apartment building around 1900) and

19 Gareth Evans, *The Varieties of Reference*, ed. John McDowell (Oxford: Oxford University Press, 1982).

20 See Alfred Grazioli, *Der gedachte Raum. Methodik einer Architekturentwurfslehre*, ed. Antje Freiesleben (Berlin: Gebrüder Mann, 2013). In the following, page numbers from the theories of design are cited in the text, not in footnotes.

states that they are “based on different social and housing ideologies” (p. 58) without elaborating on what this means. Meanwhile, his proposed methods for processing these two references implicitly suggest that their historical “social and housing ideologies” are neutralized and erased. This is achieved through deliberate formal reduction: first, their historical floor plans are displayed symmetrically; second, they are standardized into grids across various layers. Rosalind Krauss’s observation about grids in modernism applies perfectly here: “The grid announces, among other things, modern art’s will to silence, its hostility to literature, to narrative, to discourse.”²¹ In Grazioli’s approach to references, grid-making effectively rejects any broader functional contextualization.

Krauss’s description of the grid’s indifference to narration corresponds exactly to Grazioli’s explicit rejection of language as a reference system: “Associative images are permitted as explanations, but not verbal or textual explanations.” (p. 39) The images on the double-page spread shown here (Fig. 5), owing to their small size and fragmentary nature, are incapable of conveying any detail in an argumentative manner—and in the schemes, communication is reduced entirely to variations on the grid. These images affirm their message through schematism and serial arrangement. These observations relating to just one sample can be generalized for the entire theory of design. One double-page spread, an urban spatial configuration—it is hard to believe one’s eyes—is based on nothing more than “Inspiration: Rome, 1590” (pp. 78–79). Grazioli’s notorious fondness for small-format figure-ground plans stems from his reverence for Colin Rowe and Fred Koetter’s postmodern urban critique in their book *Collage City* (1984). On another spread, anonymous city buildings in the Palazzo style are extrapolated into grid patterns (pp. 100–101).

We travel now from Berlin to Vienna, where a theory of icon design, published in 2018, was developed at the TU Wien.²² The book’s title and subtitle reveal its agenda: the term “icon,” in its somewhat naive everyday usage, suggests that references have a sacrosanct, relic-like, and venerable status.

21 Rosalind E. Krauss, “Grids,” in *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge, MA: MIT Press, 1985), 9–22, here 9.

22 Ikonen. Methodische Experimente im Umgang mit architektonischen Referenzen. Mit Textbeiträgen von Adolf Krischanitz und Ivica Brnic. Technische Universität Wien, Abteilung für Hochbau und Entwerfen, ed. Astrid Staufer, Thomas Hasler, and Lorenzo De Chiffre (Zurich: Park Books, 2018).

Yet the subtitle promises a methodical-experimental approach to working with references, not entirely consistent with the concept of icons. So the supposedly sacrosanct can be appropriated after all! The authors aim to “introduce a coherent design methodology whose primary goal is not only to free us from stylistic categorizations, but to sharpen our awareness in decision-making.” (p. 19). If we understand “style”—as seems reasonable—to mean the style of an era in the sense of the uniformity of its expressions of life,²³ then we find here an unqualified argument for rejecting contemporaneity altogether. On the contrary, references serve to make architecture independent of both contemporaneity and the past. This is why the icons must be “dissected and transposed into the future” (p. 21). The authors refer to the building researcher Jan Pieper, claiming references should convey “the ever-constant elementary aspects of architecture”—meaning the “perception of light and dark, place and path, narrowness and expanse, above and below, etc.” In this capacity, references in the theory of design are regarded as a “stock of images, formulas and gestures . . . that organize every significant form of architecture across epochs and styles” and create a “system of what has become cultural and what is anthropologically given” (p. 21). The main part of the book is devoted to the steps involved in working with references. There are three stages: references are “excerpted”—that is, tested for their suitability for a particular theme—then they are adapted to the current design subject in terms of both construction and the scale of the surrounding urban space (p. 53).

The individual student design projects presented in the book also show that references are not handled as selectively as the term “icon” might suggest. After all, the book includes an impressive 67 reference icons. Each reference gets two double-page spreads. The source material, i.e. the “icon”, is presented on the first spread alongside a partial model that students recently produced and a short interpretive text. These text vignettes are always second-hand quotations—preliminary interpretations by fellow architects rather than expressions of the project authors’ own views and intentions.

23 Selected from the extensive literature: *Stil. Geschichten und Funktionen eines kulturwissenschaftlichen Diskurselements*, ed. Hans Ulrich Gumbrecht and K. Ludwig Pfeiffer (Frankfurt am Main: Suhrkamp, 1986); Dietrich Erben and Christine Tauber, “Politikstile und die Sichtbarkeit des Politischen,” in *Politikstile und die Sichtbarkeit des Politischen in der Frühen Neuzeit*, ed. Dietrich Erben and Christine Tauber (Passau: Klinger, 2016), 1–16.

These quotations make the self-referential dimension quite obvious, as all the communication involved is circular, so to speak. The reference as a historical object is completely distanced and stripped of its historicity—both by the contemporary model and the textual interpretation. On the second double-page spread, two design projects are presented visually as studies exploring individual spatial themes (Fig. 6, Fig. 7). The projects' argumentation happens entirely on the visual level; while the reference building has been transfigured and given a special aura in preparation for the project—thanks to the model façade, which is always black and white, and shows a lifeless emptiness—the project images develop a life of their own, ultimately only asserting the practice of referencing, rather than making it comprehensible. The actual forms of reference are suspended in the images.

Let us now turn to the Technical University of Munich, the final stop on our brief design tour. The book discussed here was jointly developed by architects Andreas Hild and Barbara Brinkmann. Here too, the referencing process serves as the foundation for thinking about a “mechanics of design” that involves “seeking and rediscovering” references.²⁴ The self-referential nature of this project is immediately evident in the epigraph—a quotation from Fritz Schumacher about the Munich architect Gabriel von Seidl that concludes: “for the old motifs (in von Seidl’s case) always arranged themselves according to living thought, and in their execution they were created anew.” This sets a reverential tone that pervades the entire theory. The book is conceived as a text-image atlas with no intention of presenting its contents and arguments in a linear fashion (Fig. 8, Fig. 9). The presentation style prevents this by constantly interweaving short, aphoristic text blocks with an overwhelming surplus of images. The result is an entropy of images and texts across the book’s 456 pages. Text pages on the right consistently face plate pages on the left, where single illustrations alternate with multi-image plates. Shorter image sequences are also included. In total, there are nearly one thousand illustrations (937 to be exact). To put it simply, the book is quite entertaining to browse through precisely because it offers so many colorful images and surprising visual combinations. The methodological aspirations only become apparent in the second half of the book, which focuses on the

24 Andreas Hild and Barbara Brinkmann, *Vom Suchen und Wiederfinden. Die Mechanik des Entwerfens. On Seeking and Rediscovering. The Mechanics of Architectural Design* (Berlin: Gebrüder Mann, 2021).

“transformation” of references. As with the other two theories of design, several steps for working with references are proposed.

Even this brief overview should make clear that these design theories radically distance themselves from their historical source material. This occurs equally in the textual commentary, the visual presentation of objects, and, ultimately, in the objects that themselves adapt references. The material is engaged with strictly and exclusively at the level of form. This diagnosis could be extended beyond theories of design to contemporary architecture books dealing with historical material. Here too, we can observe what might be called a completely presentist approach to historical material.²⁵

The architectural historian Heinrich Klotz, in a critique of the architectural historiography of the time, sharply condemned the use of architectural images, and especially photographic images. This remains relevant to today’s theories of design. Klotz saw the isolated depiction of a building as a document of “relationlessness,” by which he meant that “the building’s relationship to people, environment, and society had been lost.” He argued that “the architectural image had been cleansed of all accoutrements, including people.”²⁶ Klotz was essentially concerned with this loss of social context, as a result of which the perception and communication of architecture unintentionally risk promoting the idea of a technocratic society free of social friction.

Overall, the referencing process apparent in these theories of design seems marked by a clear ambivalence. On the one hand, references are highlighted and canonized through methodical selection. On the other, their reality is diminished by the new representations produced by the authors (models, photos, drawings), and they are neutralized and made indifferent through a deluge of visual allusions. The flat style of representation evident in the publications could be described as blasé indifference. The historical progression from Durand’s diagrammatic approach through modernism’s

25 I refer here to *The Stones of Fernand Pouillon. An Alternative Modernism in French Architecture*. Texts by Adam Caruso, Jacques Lucan, Fernand Pouillon, Helen Thomas. Photography by Hélène Binet, ed. Adam Caruso and Helen Thomas (Zurich: gta, 2014), as well as to the book series *Materialien zu Geschichte, Theorie und Entwurf städtischer Architektur*, ed. Klaus Theo Brenner, Dietrich Fink, Arno Lederer, Carlo Moccia, Uwe Schröder, and Ilaria Valente (Tübingen: Wasmuth, 2015).

26 Heinrich Klotz, “Über das Abbilden von Bauwerken,” in *Architectura* 1 (1971), 1–14, quotations on 7 and 1.

systemic references makes such a developmental logic plausible. To stay within the architectural domain, we can turn to Georg Simmel's famous essay on urban sociology "The Metropolis and Mental Life" (1903), in which blasé indifference is placed at the center of the metropolitan experience. For Simmel, such indifference is motivated by the social anonymity of mass society and the capitalist economy of money and commodities—to which architecture also fundamentally belongs. Simmel writes:

The essence of the blasé attitude is an indifference toward the distinctions between things. Not in the sense that they are not perceived, but rather that the meaning and value of these distinctions, and hence of the things themselves, are experienced as meaningless. They appear to the blasé person in a homogeneously flat and gray tone; no object deserves preference over any other. This emotional state is the faithful subjective reflection of a completely internalized money economy. When money, with its colorlessness and indifference, becomes the common denominator of all values, it becomes the most frightful leveler. It hollows out the core of things, their peculiarities, their specific values, and their uniqueness and incomparability in a way that is beyond repair.

Das Wesen der Blasiertheit ist die Abstumpfung gegen die Unterschiede der Dinge, nicht in dem Sinne, dass sie nicht wahrgenommen würden (...), sondern so, dass die Bedeutung und der Wert der Unterschiede der Dinge und damit der Dinge selbst als nichtig empfunden werden. Sie erscheinen dem Blasierten in einer gleichmäßig matten und grauen Tönung, keines Wert, dem anderen vorgezogen zu werden. Diese Seelenstimmung ist der getreue subjektive Reflex der völlig durchgedrungenen Geldwirtschaft (...); indem das Geld, mit seiner Farblosigkeit und Indifferenz, sich zum Generalnenner aller Werte aufwirft, wird es der fürchterlichste Nivellierer, es höhlt den Kern der Dinge, ihre Eigenart, ihren spezifischen Wert, ihre Unvergleichbarkeit rettungslos aus.²⁷

27 Georg Simmel, "The Metropolis and Mental Life," in Georg Simmel on Individuality and Social Forms, ed. Donald Levine (Chicago: University of Chicago Press, 1971), 324–339, here 329. For the original German, see Georg Simmel, "Die Großstädte und das Geistesleben" (1903), in Gesamtausgabe in 24 Bänden. Band 7: Aufsätze und Abhandlungen 1901–1908, ed. Rüdiger Kramme, Angela Rammstedt, and Otthein Rammstedt (Frankfurt am Main: Suhrkamp, 1995), 116–31, here 120. See also

Taking Simmel's argument further, we could say that architectural references have now become a factor in the creative economy and aesthetic capitalism. There is much discussion today of "aesthetic capitalism" following the end of "true" capitalism in the form of commercial and industrial capitalism alongside financial, digital, and knowledge capitalism. Contemporary architectural references fit squarely within this value-creation strategy. They generally follow aesthetic capitalism's market-oriented use of aesthetic materials and goods. References are deployed according to their "staging value" (Gernot Böhme), behind which utility value takes a back seat. They have to prove their effectiveness as "surfaces," as shown in their summary relationship to their historical models. Last but not least, the relevance of references stems from their communication within an inner circle: references serve to stabilize aesthetic networks, in this case the architectural community.²⁸ This happens materially in such a way that architectural references become subject to the automatism of an apparently unlimited availability of such references as images. One hallmark of the contemporaneity of these theories of design is their advocacy of an architecture free from social concerns—one that is presented in media as a triumph of the practicability of image processing and image entropies.

Conclusion

To summarize my argument: References point back to the problem of self-referentiality within the architectural system and may even be one of the primary mechanisms for establishing and maintaining this self-referentiality. They function as agents of self-referentiality—alongside architects' common educational pathways, collective professional identity, shared professional

Steve Baker, "The Sign of the Self in the Metropolis," in *Journal of Design History* 3 (1990): 227–34.

28 Gernot Böhme, *Ästhetischer Kapitalismus* (Frankfurt am Main: Suhrkamp, 2016); also Michael Hutter, *Ernstes Spiel. Geschichten vom Aufstieg des ästhetischen Kapitalismus* (Munich: Wilhelm Fink, 2015); for a critical commentary on the concept, see Jan Loheit, "Die Erfindung des 'ästhetischen Kapitalismus': Andreas Reckwitz und die Schicksale von Ästhetik und Sozialkritik," in *Das Argument* 58 (2016), 54–67.

interests, and organized professional associations.²⁹ This role of references can be illustrated within a broader historical framework extending from the sixteenth century through the reorganization of the entire building industry during proto-industrialization around 1800 and on to contemporary social formations (information society, media society, creative society, and more).

Self-referentiality, in turn, represents a kind of absolute state of contemporaneity: while references open connections to the past and the external world, these openings are at the same time closed again through a radically formalist appropriation of the historical material. This applies at least to the core business of architectural design within the system discussed here. As far as I can see, it also applies to broad areas of architectural theory, such as Aldo Rossi's *L'architettura della città* and the theoretical contributions of Bernard Tschumi and Jean Nouvel. Both Tschumi and Nouvel draw on film as an external media reference by implementing design concepts analogous to directing techniques, yet they continue to operate almost entirely without social perspectives.³⁰ It seems that explicit social reference points remain confined to those areas of contemporary architectural theory that lie outside the theory of design (i.e. architectural criticism). We might think of the critical works of Manfredo Tafuri, Beatriz Colomina, Sylvia Lavin, or Hal Foster.

In my view, the status of references remains a fundamental problem—both in terms of how architects work with references and their significance in the context of the architectural system. With regard to how architects work with references, it is often unclear how we should assess their status: Are the cited references an authentic driving force for design decisions or merely a ceremonial, self-dramatizing decoration? How do they guide design decisions in the creative process? This is even more difficult to determine as references often seem excessively abundant, eclectic, and peculiarly cobbled together. The architects responsible for these references certainly have a sense of history, but they have necessarily acquired their knowled-

29 On this topic see Dietrich Erben, "Warum Architekten nicht lachen," in *Eine Hülle der Vernunft? Witz, Komik und Humor der Baukunst in historischer und philosophischer Perspektive*, ed. Julian Jachmann and Petra Lohmann (forthcoming).

30 Bernard Tschumi, *Architecture and Disjunction* (Cambridge, MA: MIT Press, 1996); Conway Lloyd Morgan, *Jean Nouvel: The Elements of Architecture* (London: Thames & Hudson, 1998).

ge as autodidacts in historical matters—as enthusiastic amateur readers at best—or through travel and browsing publications.³¹

The systemic relevance of references also remains an open question. Niklas Luhmann offers an initially reassuring statement: “Self-reference is nothing bad, forbidden or to be avoided.” But a caveat follows immediately: “if self-reference leads to paradoxes, additional precautions must be taken to ensure connectivity (for further operations).”³² This dilemma clearly applies to the architectural system as well: here too, professional self-referentiality provides the foundation for self-organization and self-reflection within architectural production. This explains why architects deliberately avoid external references from other subsystems that might question or undermine their independence. If self-referentiality in architecture avoids “connectivity,” the costs will be considerable not just for the architectural system itself. Architecture then risks losing its connections to the problems of contemporary society—with all its needs, expectations, and emergencies.

³¹ See also the considerations in the introduction to the present volume.

³² Niklas Luhmann, *Soziale Systeme*, 59.

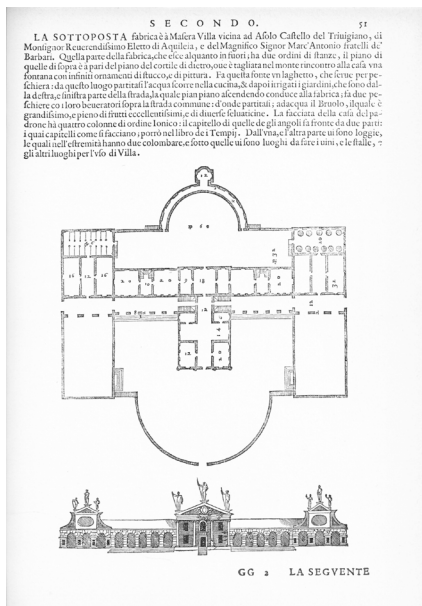


Fig. 1.
Andrea Palladio, Villa Barbarigo in Maser. Textual explanation, floor plan, and façade. From *Quattro libri dell'architettura* (Vicenza, 1570), book 2, plate 51.

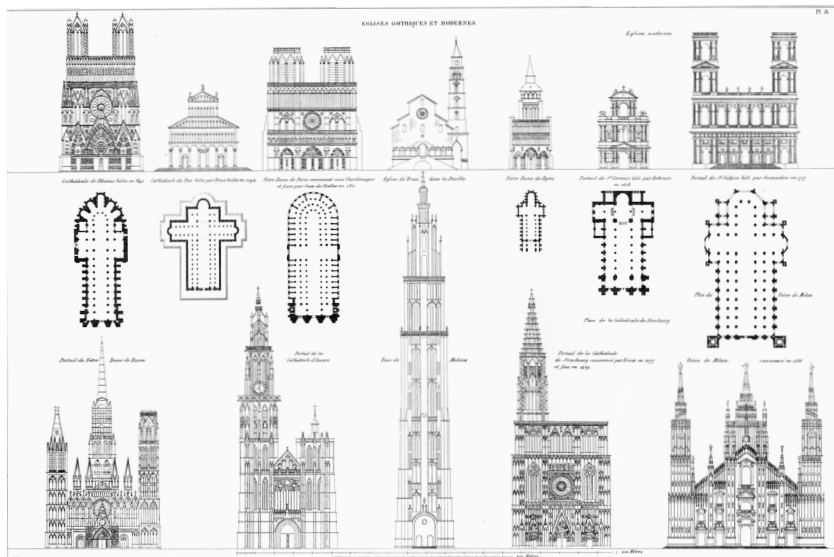


Fig. 2.
Jean-Nicolas-Louis Durand, Synopsis of Gothic and modern churches. From *Recueil et parallèle des édifices etc.* (Paris, 1801), plate 8.

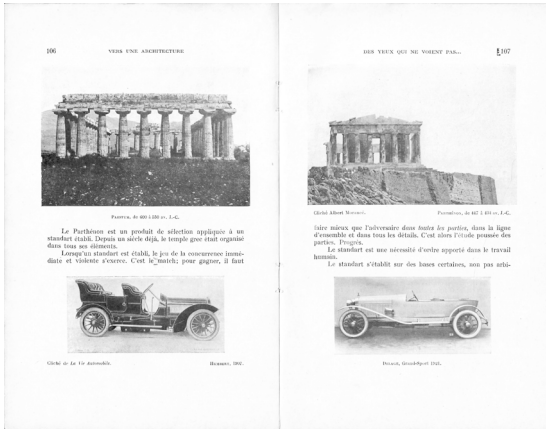


Fig. 3.
Le Corbusier, Machine comparisons. From *Vers une architecture* (Paris: Les Editions G. Crès, 1923), 106-107.



Fig. 4.
Le Corbusier, Stereometric reductions of ancient buildings in Rome. From *Vers une architecture* (Paris: Les Editions G. Crès, 1923), 128.

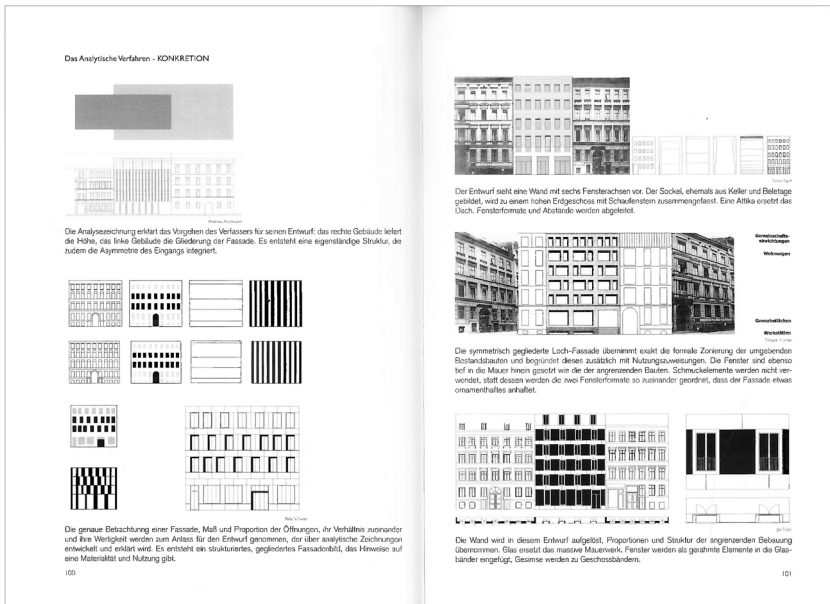


Fig. 5.
The analytical procedure – Concretion. From Anje Freisleben and Alfred Grazioli, *Der gedachte Raum. Methodik einer Architekturentwurfslehre* (2005) (Berlin: Gebrüder Mann Verlag, 2013), 100-101.

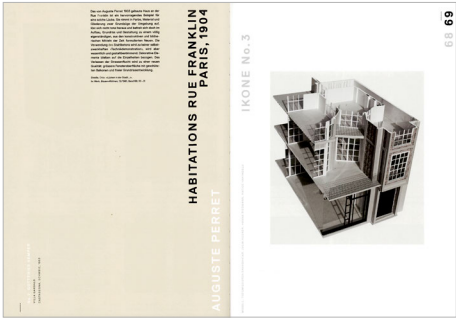


Fig. 6. Short text and model of the Habitations Rue Franklin in Paris by Auguste Perret. From Ikonen. Methodische Experimente im Umgang mit architektonischen Referenzen. Mit Textbeiträgen von Adolf Krischanitz und Ivica Brnic. Technische Universität Wien, Abteilung für Hochbau und Entwerfen, ed. Astrid Staufer, Thomas Hasler, and Lorenzo De Chiffre (Zurich: Park Books, 2018), 68-69.

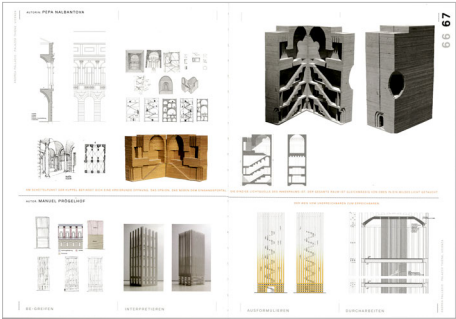


Fig. 7. Studies on the reference work of the Palazzo Thiene by Pepa Nalbantova. From Ikonen. Methodische Experimente im Umgang mit architektonischen Referenzen. (Zurich: Park Books, 2018), 66-67.



Fig. 8. Basic Operations of Referenciation. From Andreas Hild and Barbara Brinkmann, Vom Suchen und Wiederfinden. Die Mechanik des Entwerfens. On Seeking and Rediscovering. The Mechanics of Architectural Design (Berlin: Gebrüder Mann, 2021), 172-173.

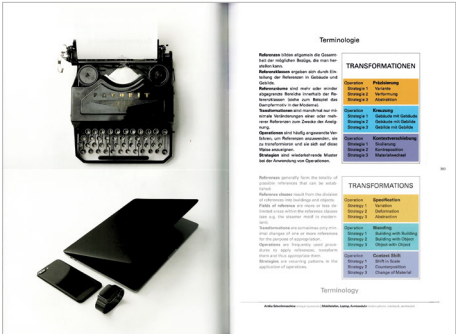


Fig. 9. Terminology of Transformations. From Andreas Hild and Barbara Brinkmann, Vom Suchen und Wiederfinden. (Berlin: Gebrüder Mann, 2021), 382-383.