

OPVS INCERTVM

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STORIA DELL'ARCHITETTURA
UNIVERSITÀ DEGLI STUDI
DI FIRENZE

LA STORIA DELL'ARCHITETTURA
E LE SFIDE DELL'INTERDISCIPLINARITÀ

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Architectural History and the Challenges of Interdisciplinarity

L'histoire de l'architecture et les défis de l'interdisciplinarité

a cura di
NADJA AKSAMIJA, ANTONIO BRUCCULERI E DENIS RIBOULLAULT

In copertina
Il Daibutsuden del Tōdai-ji, Nara, Giappone (foto M. Falsetti)

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REFLECTING ON INTERDISCIPLINARITY(IES)

This article serves as the introduction to a volume dedicated to the question of interdisciplinarity in architectural history. In view of the field's growing diversity and complexity – as well as the risk of its potential fragmentation – the authors emphasize the importance of engaging with interdisciplinarity in a critical and deliberate manner. The first section traces the history of the concept and considers how architectural history as a discipline has positioned itself in relation to it. The second section outlines the range of methodological approaches and theoretical reflections proposed by the volume's contributors across its various chapters. While not aiming to capture the full spectrum of contemporary interdisciplinary practices, these contributions offer a representative overview of the trajectories along which the field is currently developing. These include postcolonial frameworks; intersections with environmental history; the impact of digital technologies; the articulation of both material and immaterial histories of architecture; critical engagement with architectural representation and its relationship to visual studies; the transformation of the traditional monographic model; and the role of collaborative research as a driving force of interdisciplinarity, among others.

The discipline of architectural history has become increasingly difficult to define in simple terms. Once a relatively stable humanistic field rooted in the historiographies of style, form, function, and patronage, it has grown highly pluralistic and fragmented, shaped by diverse academic traditions and often propelled by research questions and methodologies native to other disciplines. Today, architectural history seamlessly integrates methods from the other humanities and the social sciences while also readily embracing the more scientific – e.g., technological and environmental – perspectives. Indeed, the rise of digital technologies and the incorporation of material, mechanical, and ecological aspects, among others, have significantly reshaped its disciplinary boundaries. This evolution has led to extraordinary heterogeneity in architectural history writing, raising questions about the field's identity. What – if anything – still unifies the discipline amid its ever-growing methodological diversity? How have theoretical and practical perspectives from other realms of knowledge production and new digital tools used for research and data visualization transformed its narrative frameworks? Have interdisciplinary approaches opened productive and meaningful avenues of study, or have they further fragmented an already diffuse discipline, contributing to confusion or even an identity crisis?

Just a few decades ago, interdisciplinarity was considered an innovative scholarly approach; today, it is virtually a given¹. Yet, the widespread

acceptance of this academic direction is rarely questioned – one wonders whether interdisciplinarity itself has become an unexamined assumption. The exponential growth of studies that engage with the issue in architectural history reflects both the inevitability of disciplinary intersections and the need for continuing critical examination of their practical, theoretical, and methodological implications. In their exploration of topics at the crossroads of architecture, fine art, design, construction technologies, architectural theory, and literature, recent volumes of the journal *Opus Incertum* concretely illustrate this dynamic. These include studies on exhibition design and museums (2024 and 2023); early modern “speaking facades” (2022); Dante and architecture (2021); construction techniques in early modern architectural treatises (2020); Renaissance villas and grottos (2019 and 2018); and early modern wooden ceilings (2017), among others. Drawing on these highly interdisciplinary investigations, the present volume directs its focus at the historiography and methodologies of interdisciplinary practice in architectural history today. By bringing together a curated selection of current perspectives from scholars across generations, geographical contexts, and academic backgrounds², it builds on previous publications around this theme that have thoughtfully confronted methodological developments in architectural history in an effort to invite a productive reflection on the ongoing evolution of the discipline³.

Defining interdisciplinarity

Before introducing the articles included in this volume, it may be beneficial to offer some preliminary considerations of interdisciplinarity and its place in contemporary architectural history. The term ‘interdisciplinarity’ derives from the prefix *inter-* (‘between’ or ‘among’) and the noun *discipline*, which originally referred to the transmission of knowledge from teacher to student⁴. Over time, the concept of ‘discipline’ expanded to encompass “the act of learning, the subject of instruction, and the philosophical system being transmitted”⁵. With the establishment of monastic orders in the Middle Ages, the term also took on connotations associated with penance, even denoting the whip used by monks for self-flagellation⁶. Michel Foucault reminds us that in the seventeenth and eighteenth centuries, ‘disciplines’ also functioned as instruments of power, regulating bodily operations through institutions such as schools, the military, and the state, which imposed various constraints, prohibitions, and obligations. The control and segmentation of time and the hierarchical organization of individuals within society were all mechanisms designed to enhance productivity and efficiency⁷. The subdivision and specialization of knowledge, formalized in the nineteenth century under the influence of Auguste Comte’s positivist philosophy, further reinforced this societal structuring through institutions⁸.

This narrow and confining vision of ‘discipline’ that centered on limits and boundaries persisted



Dessiné par C. N. Cochin fils, Chevalier de l'Ordre du Roi, de l'Académie des Beaux-Arts, 1764.

Gravé par B. L. Vieyra Graveur de S. M. le Roi, le 1772.

FRONTISPICE DE L'ENCYCLOPEDIE.

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Fig. 1 B.L. Prévost (after a drawing by C.N. Cochlin fils), Frontispiece of D. Diderot's *L'Encyclopédie, ou dictionnaire raisonné des sciences, des arts, et des métiers*, 1772 (© The Trustees of the British Museum, CC BY-NC-SA 4.0).

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¹ The literature on interdisciplinarity is vast. For English-language sources, see J. THOMPSON KLEIN, *Interdisciplinarity: History, Theory, and Practice*, Detroit 1990; A. KARLQVIST, *Going Beyond Disciplines: The Meanings of Interdisciplinarity*, "Policy Sciences", 32, 1999, 4, pp. 379-383; J. MORAN, *Interdisciplinarity*, Hoboken 2010; *Interdisciplinarity: Its Role in a Discipline-based Academy*, edited by J.H. Aldrich, New York 2014; H.J. GRAFF, *The 'Problem' of Interdisciplinarity in Theory, Practice, and History*, "Social Science History", 40, 2016, 4, pp. 775-803.

² Contributors to this volume range from early-career scholars, whose papers derive from their dissertation research, to more senior scholars, whose studies reflect a longer career of exploring these and other topics. They come from various countries around the world, including Belarus, Belgium, Bosnia and Herzegovina, Canada, China, France, Italy, and the United States.

³ See, for example, *Méthodes en histoire de l'architecture*, "Cahiers de la Recherche Architecturale et Urbaine", 9-10, 2002; and *Learning from Interdisciplinarity*, "Journal of the Society of Architectural Historians", 64, 2005, 4.

⁴ For the etymology of the prefix 'inter-', see É. MÉCHOU-LAN, *Intermédialités: le temps des illusions perdues*, "Intermédialités. Histoire et Théorie des Arts, des Lettres et des Techniques", 1, 2003, pp. 9-27, <https://doi.org/10.7202/1005442ar> (last accessed 27 March 2025). On the history of the formation of the disciplines, see *Qu'est-ce qu'une discipline?*, sous la direction de J. Boutier, J.C. Passeron, J. Revel, Paris 2006, <https://doi.org/10.4000/books.editionsehess.20041> (last accessed 25 March 2025).

⁵ "L'action d'apprendre, la matière d'enseignement ainsi que le système philosophique transmis". M. LECLERC, *La notion de discipline scientifique et ses enjeux sociaux*, "Politique", 15, 1989, pp. 23-51: 24, <https://doi.org/10.7202/040618ar> (last accessed 27 March 2025).

⁶ Ivi, p. 25.

⁷ M. FOUCAULT, *Les corps dociles*, in *Surveiller et punir*, Paris 1993, pp. 159-199 (first ed. Paris 1975), <https://shs.cairn.info/surveiller-et-punir-naissance-de-la-prison-9782070729685-page-159?lang=fr> (last accessed 30 March 2025).

⁸ LECLERC, *La notion de discipline...* cit., pp. 27-34.

⁹ "La discipline est une catégorie organisationnelle au sein de la connaissance scientifique ; elle y institue la division et la spécialisation du travail et elle répond à la diversité des domaines que recouvrent les sciences. Bien qu'englobée dans un ensemble scientifique plus vaste, une discipline tend naturellement à l'autonomie, par la délimitation de ses frontières, le langage qu'elle se constitue, les techniques qu'elle est amenée à élaborer ou à utiliser, et éventuellement par les théories qui lui sont propres". E. MORIN, *Sur l'interdisciplinarité*, in *Carrefour des sciences*, actes du colloque (Paris, Palais de l'UNESCO, 12-13 février 1990), Paris 1990, <https://cicret-transdisciplinarity.org/bulletin/b2c2.php> (last accessed 27 March 2025).

¹⁰ "Corps de connaissances inscrit dans des textes, des exemples paradigmatiques et des formes d'instrumentation, qui fait l'objet d'une transmission pédagogique. [...] Ce qui nécessite une mise en forme, ou conformation du savoir à

until the late twentieth century. Edgar Morin's 1990 definition reflects this when he describes 'discipline' as "an organizational category within scientific knowledge" that

institutes the division and specialization of labor and corresponds to the diversity of domains covered by the sciences. Although part of a broader scientific framework, a discipline naturally tends toward autonomy by defining its own boundaries, developing its own language, creating or adopting specialized techniques, and, in some cases, establishing its own theories⁹.

Similarly, in 2006, Jean-Louis Fabiani characterized 'discipline' as

a body of knowledge embedded in texts, paradigmatic examples, and forms of instrumentation, transmitted pedagogically, necessitating a structured organization of knowledge for instructional purposes, a progressive gradation of teaching methods from simple to complex, and an academic program that forms [...] a 'programmatic space'¹⁰.

In response to this paradigm, interdisciplinarity has emerged largely *against* the disciplines perceived to be overly rigid. It has sought to critique and challenge the dominant structures and values of knowledge transmitted through traditional disciplinary configurations¹¹. Its goal has been to transform, transgress, and deconstruct disciplinary forms of knowledge and the boundaries that define them, in order to generate, as Roland Barthes observed in 1971, new ways of understanding and new epistemological inquiries into the very nature of disciplinary expertise:

Indeed, it seems that *interdisciplinarity*, today considered a key value in research, cannot be achieved by the mere juxtaposition of specialized bodies of knowledge; interdisciplinarity is not an easy task: it begins *effectively* (and not merely as an expression of wishful thinking) when the solidarity of the traditional disciplines breaks down – perhaps even violently, through the tremors of fashion – in favor of a new object, a new language, which belongs neither to one nor to the other of the sciences that were

supposed to be peacefully brought into dialogue. It is precisely this discomfort with classification that allows us to diagnose a certain mutation¹².

Even after half a century, the widespread embrace of interdisciplinarity remains evident, particularly among funding bodies, where 'being interdisciplinary' continues to be regarded as inherently valuable¹³. However, interdisciplinarity also raises significant concerns, and the concept itself risks becoming increasingly diluted. Art historian Rosalind Krauss offers a critical perspective on what she terms the "post-disciplinary" era, identifying two major issues: first, the potential erosion of specialized technical skills within traditional disciplines – an "atrophy of expertise"; and second, the instrumentalization of interdisciplinary practices by institutions that consolidate faculties and departments into broad, more generalized study programs. For instance, art history has frequently been subsumed under the broader category of 'visual studies'. Under the pretext of dismantling outdated, rigid, and self-referential disciplines, universities, according to Krauss, often view such consolidations as a convenient solution to budgetary shortfalls¹⁴. Nevertheless, while funding agencies continue to favor interdisciplinarity, it does not necessarily facilitate academic hiring, as university positions remain largely tied to discipline-based departments¹⁵. Navigating between being "well-disciplined" and being "un-disciplined" is thus a precarious balance, especially for early-career researchers¹⁶.

Furthermore, for interdisciplinarity to be truly productive, it requires a deep understanding of the discrete disciplines it seeks to bring together, thus often making collaboration essential. Simply applying conceptual frameworks from other fields to a research subject is insufficient; as Jérôme Bourdon points out, this would be more accurately described as "inter-methodology"¹⁷ or, in Harvey Graff's terms, "interdisciplinarity

within a discipline”¹⁸. Given that the definition of disciplines themselves is fluid, some scholars have advocated not only for “un-disciplinarity” but also for “anti-disciplinarity”¹⁹. This perspective seeks to clarify the conceptual confusion surrounding the term and its many variations (e.g., multi-disciplinarity, trans-disciplinarity, etc.) while recognizing that interdisciplinarity has always been an intrinsic part of the intellectual enterprise, as exemplified by institutions as venerable as the academies of ancient Greece and by projects as revolutionary as Denis Diderot’s *Encyclopédie*. Indeed, the frontispiece of the second folio edition of Diderot’s *L’Encyclopédie, ou dictionnaire raisonné des sciences, des arts, et des métiers* presents a floating pantheon of the principal disciplines (as they were understood in the late eighteenth century), with a veiled figure of naked *Truth* presiding over a gathering of female personifications symbolizing the various *Sciences, Arts, and Crafts* (fig. 1)²⁰. Among them is the figure of *Architecture*, its instruments prominently displayed near the center of the composition. In this allegorical assembly, the different disciplines – though clearly distinct – are shown clustering together, touching, and embracing one another, as if to call attention to the interconnected nature of the realms of knowledge they represent.

Interdisciplinarity in architectural history

Architectural history has been actively engaged with many of the debates outlined above. Academic journals, which play a key role in shaping the field, began addressing the issue of interdisciplinarity over twenty years ago. They noted that architectural history had gradually expanded its focus beyond formal and stylistic issues to include the technical, social, political, and environmental dimensions of the built fabric. The parameters that define architectural history’s narratives and establish the legitimacy of its

sources ultimately determine the extent to which it draws upon other disciplines²¹. In this regard, the range of disciplines that architectural historians might engage with appears almost limitless, as Mario Carpo has noted²². Consequently, the debate revolves around how to define the field’s boundaries – which ultimately becomes a political question²³. The core issue is no longer what other disciplines can contribute to architectural history but rather what architectural history can offer to other fields²⁴.

When considering how interdisciplinarity may become part of a scholar’s operational toolkit, it is important to recognize that most methodological and writing decisions are not entirely premeditated but are molded by individual academic trajectories, the unpredictable contingencies of research, and the specific requirements of the subjects being studied. In fact, scholars across the field of architectural history often have little in common with each other in terms of training and methodology²⁵. National academic cultures and the structure of available educational programs also significantly influence career paths²⁶. Moreover, the meaning of interdisciplinarity in architectural history varies depending on whether one has studied in an art history department or an architecture school – two academic cultures that are often contrasted. Likewise, each chronological, typological, and geographical specialization (e.g., ancient, modern, contemporary, digital, vernacular, African, Asian, or European architecture) has its own historiographical tradition that sets it apart from the others, sometimes quite sharply.

Today, the anxieties of the late twentieth century regarding the field’s “epistemological heterogeneity”²⁷ have largely subsided. The inherently interdisciplinary nature of architectural history is now seen less as a challenge and more as a catalyst for innovative and stimulating approaches to both studying architecture and understanding its

des fins d’inculcation, une gradation des traductions pédagogiques du corpus qui va du simple au complexe, et un programme d’enseignement qui forme [...] un ‘espace du programme’”. J.L. FABIANI, *À quoi sert la notion de discipline?*, in *Qu’est-ce qu’une discipline...* cit., pp. 11-34; par. 1 and 11.

¹¹ J. THOMPSON KLEIN, *A Taxonomy of Interdisciplinarity*, in *A History of Knowledge: Past, Present and Future*, edited by C.L. Van Doren, New York 1991, pp. 15-30.

¹² “On dirait en effet que l’interdisciplinaire dont on fait aujourd’hui une valeur forte de la recherche, ne peut s’accomplir par la simple confrontation de savoirs spéciaux; l’interdisciplinaire n’est pas de tout repos: il commence effectivement (et non par la simple émission d’un vœu pieux) lorsque la solidarité des anciennes disciplines se défait, peut-être même violemment à travers les secousses de la mode, au profit d’un objet nouveau, d’un langage nouveau, qui ne sont ni l’un ni l’autre dans le champ des sciences que l’on visait paisiblement à confronter; c’est précisément ce malaise de classification qui permet de diagnostiquer une certaine mutation”. R. BARTHES, *De l’œuvre au texte* [1971], in *Le Bruissement de la langue. Essais critique*, IV, Paris 2011, pp. 71-80: 71.

¹³ See, for example, W.J.T. MITCHELL, *Interdisciplinarity and Visual Culture*, “Art Bulletin”, 77, 1995, 4, pp. 540-544: 540 (this is a special issue on interdisciplinarity); and GRAFF, *The ‘Problem’ of Interdisciplinarity...* cit.

¹⁴ R. KRAUSS, *La mort des compétences*, in *Où va l’histoire de l’art contemporain*, actes du congrès (Paris, École Nationale Supérieure des Beaux-Arts, 16-18 février 1995), sous la direction de L.B. Dorléac, Paris 1997, pp. 241-247: 243.

¹⁵ R. FINI et al., *A New Take on the Categorical Imperative: Gatekeeping, Boundary Maintenance, and Evaluation Penalties in Science*, “Organization Science”, 34, 2022, 3, pp. 1090-1110, <https://doi.org/10.1287/orsc.2022.1610> (last accessed 25 March 2025).

¹⁶ Y. GINGRAS, *Formation fondamentale et multidisciplinarité à l’Université: rhétorique et réalité*, in *Entre culture, compétence et contenu. La formation fondamentale, un espace à redéfinir*, sous la direction de C. Gohier, S. Laurin, Montréal 2001, pp. 343-354: 348-349.

¹⁷ J. BOURDON, *L’interdisciplinarité n’existe pas*, “Questions de Communication”, 19, 2011, pp. 155-170, <https://doi.org/10.4000/questionsdecommunication.2652> (last accessed 25 March 2025).

¹⁸ GRAFF, *The ‘Problem’ of Interdisciplinarity...* cit., p. 800. See also H.J. GRAFF, *Undisciplining Knowledge: Interdisciplinarity in the Twentieth Century*, Baltimore 2017.

¹⁹ Among the many studies that invoke the notion of “un-discipline”, see especially J.M. BESNIER, J. PERRIAULT, *Interdisciplinarité: entre disciplines et indisciplines*, “Hermès. La Revue”, 67, 2013, 3, <https://shs.cairn.info/revue-hermes-la-revue-2013-3?lang=fr> (last accessed 25 March 2025); L. LOTY, *Pour l’indisciplinarité*, in *The Interdisciplinary Century: Tensions and Convergences in 18th-century Art, History and Literature*, edited by J. Douthwaite, M. Vidal, Oxford 2005, pp. 245-259. For the idea of anti-disciplinarity, see in particular J. MOWITT, *Text: The Genealogy of an Antidisciplinary Object*, Durham 1992.

²⁰ Diderot’s explanation of the frontispiece reads: “Sous un Temple d’Architecture Ionique, Sanctuaire de la Vérité, on voit la Vérité enveloppée d’un voile, & rayonnante d’une lumière qui écarte les nuages & les disperse. / A droite de la Vérité, la Raison & la Philosophie s’occupent l’une à lever, l’autre à arracher le voile de la Vérité. / A ses pieds, la Théologie agenouillée reçoit sa lumière d’en-haut. / En suivant la chaîne des figures, on trouve du même côté la Mémoire, l’Histoire Ancienne & Moderne; l’Histoire écrit les fastes, & le Temps lui sert d’appui. / Au-dessous sont groupées la Géométrie, l’Astronomie & la Physique. / Les figures au-dessous de ce groupe, montrent l’Optique, la Botanique, la Chymie & l’Agriculture. / En bas sont plusieurs Arts & Professions qui

émanent des Sciences. / A gauche de la Vérité, on voit l'Imagination, qui se dispose à embellir & couronner la Vérité. / Au-dessous de l'Imagination, le Dessinateur a placé les différents genres de Poésie, Épique, Dramatique, Satyrique, Pastorale. / Ensuite viennent les autres Arts d'Imitation, la Musique, la Peinture, la Sculpture & l'Architecture". D. DIDEROT, J.B. LE ROND D'ALEMBERT, *L'Encyclopédie, ou dictionnaire raisonné des sciences, des arts, et des métiers*, Geneva 1777-1779 (2nd in-folio ed.), frontispiece explanation.

²¹ D.M. ABRAMSON, Z.C. ALEXANDER, M. OSMAN, *Introduction: Evidence, Narrative, and Writing Architectural History*, in *Writing Architectural History: Evidence and Narrative in the Twenty-First Century*, Pittsburgh 2021, pp. 3-16.

²² M. CARPO, *Architecture: Theory, Interdisciplinarity, and Methodological Eclecticism*, "Journal of the Society of Architectural Historians", 64, 2005, 4, pp. 425-427.

²³ A. PICON, *Repenser les limites de l'architecture : un acte politique*, in *Repenser les limites : l'architecture à travers l'espace, le temps et les disciplines*, édité par A. Thomine-Berrada, B. Bergdol, Paris 2005, <https://doi.org/10.4000/books.inha.2034> (last accessed 27 March 2025); D. HARRIS, *That's Not Architectural History! Or What's a Discipline For?*, "Journal of the Society of Architectural Historians", 70, 2011, 2, pp. 149-152.

²⁴ N. STIEBER, *Architecture between Disciplines*, "Journal of the Society of Architectural Historians", 62, 2003, 2, pp. 176-177. See also *À quoi sert l'histoire de l'architecture aujourd'hui?*, sous la direction de R. Klein, Paris 2018.

²⁵ *Être historien de l'architecture dans la France des XXe et XXIe siècles. Des Ego-histoires et des Vies*, sous la direction de A. Timbert, Turnhout 2023.

²⁶ *Report on the international Symposium of the Technische Universität Dresden at the Accademia Nazionale di San Luca in Rome, in cooperation with the Ecole Pratique des Hautes Études, Paris Sciences & Lettres University: 'The history of architectural history. The genesis and development of a scientific discipline between national perspectives and European models'* (Rome, 8 and 9 November 2022), "Journal of Art Historiography", 27, 2022, pp. 1-31. <https://arthistoriography.wordpress.com/wp-content/uploads/2022/11/karge-frommel-walter-report.pdf> (last accessed 26 March 2025).

²⁷ F. HAMON, W. SZAMBIEN, *Qui a peur de l'histoire de l'architecture?*, "Histoire de l'Art", 31, 1995, pp. 3-13, <https://doi.org/10.3406/hista.1995.2669> (last accessed 25 March 2025); P. BOURDON, *Pourquoi l'histoire de l'architecture ferait-elle peur?*, "Histoire de l'Art", 33-34, 1996, pp. 91-92.

²⁸ See, for example, *Rethinking Architectural Historiography*, edited by D. Arnold, E.A. Ergut, B.T. Özkaya, New York 2006; A. LEACH, *What is Architectural History?*, Cambridge 2010.

²⁹ HAMON, SZAMBIEN, *Qui a peur...* cit., p. 12. The material, spatial, and conceptual aspects of architecture can themselves play a role in stimulating interdisciplinarity in academic contexts, as argued in F. LI VIGNI, *Architecture et interdisciplinarité. Le cas d'étude des instituts de la complexité*, "Natures Sciences Sociétés", 28, 2020, 3-4, pp. 306-313, <https://doi.org/10.1051/nss/2021005> (last accessed 25 March 2025).

history²⁸. Rather than deepening the divide between 'practitioners' and 'historians', interdisciplinarity can serve as a unifying force. It has the potential to create a more inclusive, collaborative, and experimental "science of architecture"²⁹, one that embraces a broader range of perspectives, methodologies, and participants, thus ensuring the field's continual renewal³⁰.

This volume aims to contribute to these ongoing discussions by offering a broad – and by no means exhaustive – 'snapshot' of interdisciplinarity in architectural history today. Rather than advocating for or against it, the volume demonstrates how intersections with select other fields – from environmental studies, to digital humanities – have expanded architectural history's methodological scope and reshaped its research priorities. To avoid superficiality and steer clear of the rhetorical pitfalls often associated with the concept, the editors have sought to address both the historiographical and applied dimensions of interdisciplinarity while also engaging in a critical reflection on their own research practices.

Navigating the field

The collection of essays included in this issue of *Opus Incertum* took shape through a rigorous selection process and extensive discussions – not only about the subjects explored by the authors but, more importantly, about the approaches they adopted and the ways in which they interpreted our call for papers. The volume reflects a wide-ranging and diverse spectrum of engagements with the notion of interdisciplinarity, which vary according to the chronological and geographical contexts examined. In the course of putting this issue together, the peer-review phase proved especially critical, serving as a catalyst for dialogue and debate that allowed the authors' ideas to evolve and deepen throughout the revision process. The final product reinforces the opening statement of our call for papers, which recognized the variety of potential inter-

pretations of the very concept we wished to interrogate³¹. Some of the questions we initially posed resonated strongly with the scholars who responded to the call, while others – such as the role of critical theory, feminist perspectives, the history of construction, and considerations of different national traditions – remained more marginal. Nevertheless, the fourteen selected essays engage with many of the central themes we had hoped to highlight: post-colonial approaches; the dialogue with environmental history; the impact of digital technologies; the definition of both material and immaterial histories of architecture; the problematization of architectural representation and its relationship with visual studies; the evolution of the traditional model of the monograph; and the role of collaborative research as a driving force of interdisciplinarity. Some authors explicitly linked their papers to specific themes raised in the call from the very opening of their essays. For instance, Joseph Siry directly addressed one of the central questions posed: "Is the growing interest in hyper-contemporaneity a problem or an opportunity for the architectural historian? Are there chronological limits that should not be crossed to preserve the necessary critical distance or is the study of hyper-contemporaneity a stimulating challenge that could lead to methodological innovations and open new interdisciplinary horizons in the field?". The reference here to the importance we placed on collaborative and interconnected research was explored by Siry through a historiographical consideration of contemporary design practices, in this case those associated with the concept of 'integrated design' in the realm of sustainable architecture, where architects, engineers, contractors, and clients, work together "to combine both passive material and active mechanical systems in larger buildings that aspire to be green or energy-conserving".

The volume as a whole presents a polyphonic picture of how architectural history today inter-

sects with other disciplinary fields and grapples with the question of interdisciplinarity. This is evident not only in the essays dealing with historiography, but also in those developed around objects (i.e., drawings, prints, buildings) and working methods that draw on diverse areas of expertise both outside and within the field of architecture, which is itself inherently trans-disciplinary. In this regard, the essay by Giusi Ciotoli and Marco Falsetti merits particular attention. Through a comparative analysis of the Western notion of architecture and the Japanese concept of *kenchiku*, the authors underscore the relevance of a non-Eurocentric historiographical approach to the study of interdisciplinarity in architecture. Their inquiry extends into the postwar Japanese context, with particular emphasis on the theoretical production of architects trained within the school of Kenzo Tange, such as Arata Isozaki.

In this issue of *Opus Incertum*, moreover, the pairing of interdisciplinarity and architectural history unfolds with varying degrees of complexity in response to the “challenges of interdisciplinarity” that extend beyond the *hortus conclusus* of architectural culture. These degrees of complexity readily dissolve the binary division of the volume’s table of contents into two broad categories, Forms of Narration and Historiography, instead inviting a fluid reconfiguration of the order in which the papers were presented in favor of other, equally valid ways of organizing the interdisciplinary dialogues they explore. Such alternative structures, one of which is delineated in the paragraphs that follow, can be easily imagined because of the heterogeneous nature of the methods and study materials examined in this collection. Indeed, those methods and materials serve as fertile experimental ground that offers multiple pathways through the concept of interdisciplinarity depending on the different scales of observation employed by the contributors³².

To begin, a dialogue with adjacent disciplinary fields emerges from within the discipline of architectural history itself. Sim Hinman Wan’s essay situates interdisciplinarity in architectural historiography in a broader historiographical framework, addressing global history from perspectives that range from postcolonial critique to ecocritical approaches, while acknowledging the complexities and ambiguities inherent in the former. His analysis moves from a historical reading of the Anthropocene to a decolonialized history of ecology to suggest that a truly ‘planetary’ history of architecture would benefit from engaging more deeply with some of the questions central to those fields. Reflecting on the evolution of chronological architectural surveys, Wan argues that such a ‘planetary’ approach must consider “the built environments in their ecological contexts”, recognizing them as both “historically specific” and closely interconnected with “other architectural variables”.

Other authors focus specifically on the relationship between architectural history and distinct yet interconnected disciplinary areas. Carlo Tosco, for example, explores the interaction between architectural and landscape histories through the concept of “comparative historiographies”, focusing on a case study of the Clitunno Springs in Umbria. Landscape history, a relatively young discipline that emerged in the mid-nineteenth century, finds a key figure in postwar Italy in Emilio Sereni, the originator of the concept of the historical ‘agricultural landscape’. Tosco differentiates landscape history from environmental history, framing the former as a form of cultural history that analyzes territorial transformations using parameters that intersect with those applied to the study of architectural changes. In his reading, landscape history is a history “that stands out for its reading of the relationships established over time between settled populations and their environments”. Similarly, Joseph Siry structures his historiographical contribution around an encounter between

³⁰ For some of these ideas, see I. DOUCET, N. JANSSENS, *Transdisciplinary Knowledge Production in Architecture and Urbanism: Towards Hybrid Modes of Inquiry*, Dordrecht 2021; *Interdisciplinary Design Thinking in Architecture Education*, edited by J.J.Y. Kim, Abingdon 2024, <https://doi.org/10.4324/9781003296355> (last accessed 25 March 2025).

³¹ “It is nearly impossible to define the discipline of architectural history in simple terms today. The field has become pluralistic and fragmented, marked by multi-, trans-, inter-, and even anti-disciplinarity”. <https://journals.fupress.net/call-for-paper/architectural-history-and-the-challenges-of-interdisciplinarity> (last accessed 15 January 2025).

³² On this question, see *Jeux d’échelles. La micro-analyse à l’expérience*, sous la direction de J. Revel, Paris 1996.

two clearly defined disciplinary fields: architectural history – specifically the history of modern architecture – and the history of energy use and environmental controls, building on the early investigations by pioneering scholars such as Reyner Banham. A comparable approach also characterizes Marie-Madeleine Ozdoba’s exploration of the relationship between architectural history and visual studies. Drawing on methodological models that range from Ernst Gombrich’s theories to more recent perspectives, such as those of Gottfried Böhm, Ozdoba cautions against reducing architecture to a mere visual medium and instead mobilizes concepts from visual studies such as “écologie des images” (image ecology), “pouvoir de la représentation” (power of representation), and “performance des images” (performativity of images).

A substantial portion of the contributions in this volume explore interdisciplinarity through an engagement with specific research ‘objects’ and case studies, which provide concrete opportunities to identify and test potential interdisciplinary pathways³³. Here, the question of the research object and its multiple scales – from the micro, to the macro – emerges as a central driver of interdisciplinary inquiry³⁴. Two particularly compelling examples at the smaller scale focus on the analysis of drawings and prints. Maria Cristina Loi, building on her ongoing investigation of early modern and contemporary architectural drawings, examines four very different case studies. These range from a well-known study drawing by Francesco Borromini for the plan of the chapel of the Magi in the palazzo di Propaganda Fide in Rome to a less familiar sketch by the Spanish architect Rafael Moneo for his Kursaal project in San Sebastián. Through these examples, Loi reflects on architectural drawing as both an expression of multiple competencies and a tool serving diverse purposes, describing it as an “interdisciplinary laboratory of architectural history”. In contrast, Carolyn Yerkes discusses monumental

prints depicting the final military campaigns of Charles V in the mid-sixteenth century, which led to the creation of some of the largest encampments ever built. These little-known images provide a compelling lens for assessing the impact of siege warfare on all aspects of early modern daily life. Focusing on what she terms “the architecture of attrition”, Yerkes brings architectural history in dialogue with a constellation of related disciplines, including military history, urban history, the history of technology, and cartography. A double shift in scale – expanding to the level of urban and rural territories – emerges from the interdisciplinary research of Charlotte Duvette and Alessandra Panicco, which spans, respectively, from a Parisian district to the rural landscape of the Val di Susa in Piedmont. Duvette, as part of a recent research project at the Institut National d’Histoire de l’Art (INHA) in Paris, presents a multifaceted cultural history of architecture through her analysis of a Parisian neighborhood between the palais Royal and the place de la Bourse, focusing on its transformation from the mid-eighteenth to mid-twentieth centuries. Duvette’s approach relies on a variety of visual, cartographic, and textual sources and is structured around two key historiographical models. The first, the ‘spatial turn’, leads to an understanding of the neighborhood as an intersection of places, socio-economic processes, and professional and personal networks. The second, the integration of digital technologies like GIS, allows for a more nuanced analysis of the spatial and cultural dynamics of the district. Duvette’s work exemplifies the fruitful dialogue between architectural history and disciplines such as urban history, art history, geography, and digital humanities. Panicco’s study, on the other hand, examines the relationship between humans and their environment, leading to a multidisciplinary investigation that incorporates ecology, environmental history, and climate science. Her study of landscapes and their transformations over time necessitates a plurality of approaches, which inevitably coa-

³³ On the use of case studies as a methodological tool, see in particular *Penser par cas*, sous la direction de J.C. Passeron, J. Revel, Paris 2005 (esp. pp. 9-44), <https://books.openedition.org/editionshess/19901?lang=en> (last accessed 31 March 2025).

³⁴ Issues of scale in architecture and architectural history are the subject of a recent conference at Harvard’s GSD, <https://www.gsd.harvard.edu/event/cambridge-talks-acts-of-scaling/> (last accessed 8 April 2025), as well as the volume *Collaborations, collaborazioni*, “Studi e Ricerche di Storia dell’Architettura”, IX, 17, 2025, 1, <https://www.aistarch.org/studi-e-ricerche-di-storia-dellarchitettura-numero-17-2025/> (last accessed 8 August 2025).

lesce into an interdisciplinary framework. One key method in landscape studies – and particularly in analyzing architectural structures – is regressive analysis. Building on Carlo Tosco's work, Panicco applies this approach to a broader territorial scale. She reconstructs the multi-dimensional evolution of the Susa Valley in Piedmont, moving from the most recent phases to the earliest. Similar to Tosco's analysis of the temple and springs at Clitunno, her study of the church of Madonna del Ponte in Susa – now home to the Museo Diocesano di Arte Sacra – provides an opportunity to trace the building's transformations in relation to climate events documented in archival sources from the seventeenth to the nineteenth centuries. This category of contributions – those that begin with a specific object or theme before expanding into interdisciplinary dialogue – also includes the essays by Aliaksandr Shuba and Marie-Luce Pujalte-Fraysse. Both authors emphasize the socio-cultural dimensions of architectural networks, albeit in two vastly different historical contexts. Shuba's research spotlights the international working group 'History of Urbanism and Construction in Historic Cities', which played a pivotal role in shaping architectural and urban planning history in state socialist countries during the immediate post-WWII period. The group articulated new methodologies and priorities for these fields, as well as for addressing restoration and monument preservation practices. At the same time, it initiated international discussions and debates aimed at bridging the growing divide between architectural theory and practice – an issue that remains highly relevant for contemporary architectural historians and their interdisciplinary pursuits. Pujalte-Fraysse's paper takes us back two centuries to the case study of the French architect Jean-Arnaud Raymond, questioning the ongoing relevance of the traditional monographic approach centered on a single architect. Rather than privileging the individual, Pujalte-Fraysse redirects attention to the pro-

fessional and intellectual community to which Raymond belonged – a *koine* of architects who shared formative experiences and professional practices within a common cultural, socio-economic, and political context. With this slight adjustment in focus, the architectural monograph itself reemerges as a potential conduit for interdisciplinarity.

Beyond the different interpretations of interdisciplinarity arising from the various research subjects, it is also crucial to consider an architectural historian's working method as a fundamental tool for developing an interdisciplinary perspective through a critical reassessment of the disciplinary boundaries within which the field operates. Three contributions – by Emmanuel Château-Dutier, Gianmario Guidarelli, and Nele De Raedt *et alii* – offer a compelling cross-section of methodological considerations that open innovative paths to interdisciplinary inquiry. Château-Dutier's paper explores the methodological impact of applying discourse analysis to architectural texts. He provides a historiographical overview of the relationship between language and architecture, while also examining the use of digital tools for processing manuscript texts on architecture. Tracing the development of automated text processing, Château-Dutier highlights how Automatic Text Recognition (ATR) enables the structuring of digital texts from manuscript images. This technology allows researchers to process large collections of handwritten architectural documents – such as critical essays, correspondence, and administrative records – thereby enhancing both accessibility to these materials and their subsequent analysis. His paper explains that architectural history has become a key component of digital humanities through the use of software interfaces that collect vast amounts of annotated data and generate highly effective handwriting recognition models.

Guidarelli offers a different yet complementa-

ry perspective, exploring how digital technologies themselves can promote interdisciplinarity. As discussed in his essay, these technologies provide collaborative platforms where researchers from various fields – including architectural history, art history, archaeology, and conservation – can investigate common research questions, even when approaching them from very different disciplinary positions. A significant development today is that digital tools are no longer used primarily for visualizing research results; they function on a more structural level, as operational frameworks for interdisciplinary exploration. In this regard, they have become indispensable not only for data processing but also for methodological experimentation. Digital technologies, in fact, provide a basis for testing new research protocols capable of simultaneously transforming both the epistemological approach and the narrative methods in architectural history. To demonstrate the practical application of these ideas, Guidarelli presents the “CoenoB(i)UM” project, an ongoing research initiative in which the innovative use of Building Information Modeling (BIM) generates digital architectural models integral to the research process. Bibliographic data and archival sources related to a network of Cassinese Benedictine monasteries are systematically compared with other forms of documentation (visual, material, etc.), allowing for the seamless integration of multidisciplinary expertise from the different members of the research group.

The practical application of this type of collaboration also comes to the forefront in the essay co-authored by Nele De Raedt, Anne-Françoise Morel, Ralph Dekoninck, Renaud Pleitinx, Cécile Chanvillard, and Agnès Guiderdoni, which opens this volume. Their paper is the product of genuine teamwork, centered on a single research subject: the Désert de Marlagne, a site near Namur, Belgium, distinguished by its

complex topographical, hydrographic, and landscape diversity. The project brings together researchers from diverse disciplinary backgrounds, further demonstrating that collaboration and methodological experimentation are both intrinsic to interdisciplinary inquiry. However, they also represent some of the defining challenges of interdisciplinarity – challenges that present both opportunities and limitations. De Raedt and colleagues offer an epistemological and methodological reflection on the conditions necessary for developing a successful collaborative research project, with the aim of defining the architectural historian’s role alongside specialists from other fields. Two observations from their paper stand out as particularly illuminating: “Interdisciplinarity”, the authors write, “can challenge the identity of the disciplines involved and thus pose a critical challenge to them. However, an interdisciplinary collaboration that respects autonomy and values the expertise of each discipline can also provide an opportunity to clarify their objectives and examine the porous boundaries of their knowledge”. They further emphasize: “It is, in a sense, about investing in these border zones, as they allow for the exploration of all spaces of passage, transfer, transition, and movement”. The team goes to the heart of the matter when they assert that “the added value of interdisciplinarity does not correspond to an increase in certainty but rather consists of an experience of uncertainty – temporarily disorienting, yet methodologically necessary to achieve what one might call an augmented historical reality”. If this issue of *Opus Incertum* has succeeded in capturing some of the paths and modalities for constructing this “augmented historical reality” in architectural history, then we, as editors, have fully achieved the objective we set for this publication.

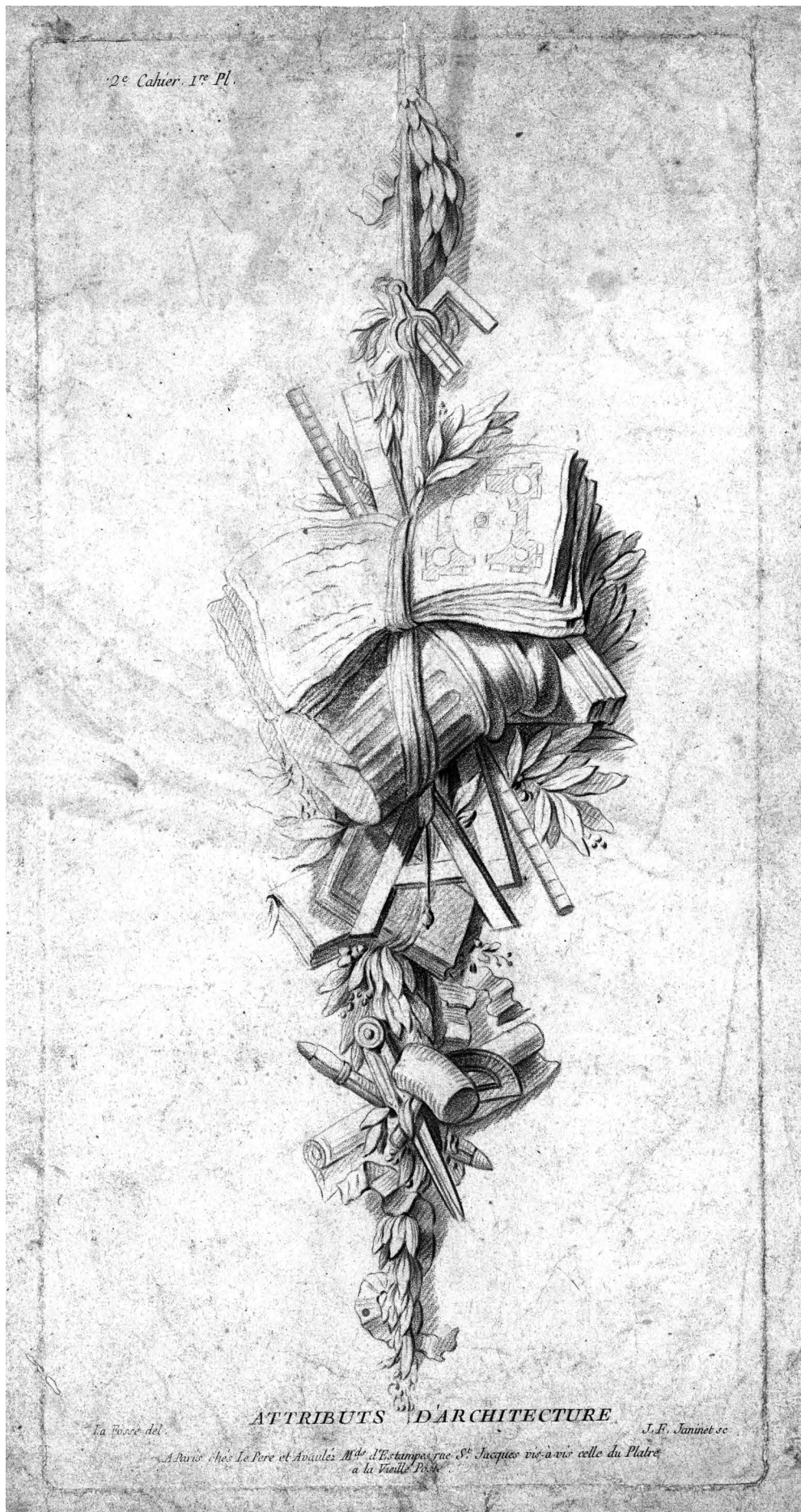


Fig. 2 J.-F. Janinet (after J.-C. Delafosse), *Attributs d'architecture*, 1772-1779 (Amsterdam, Rijksmuseum, RP-P-1964-4255; public domain).

SEZIONE I
FORME DI NARRAZIONE

PARCOURS INTERDISCIPLINAIRES DU DÉSERT DE MARLAGNE

This article explores interdisciplinarity in architectural history by reflecting on its epistemological and methodological challenges, requirements, and possibilities. It presents a range of collaborative methods – such as research via iteration, embodied research, and interpretative modeling – through a study conducted by six researchers from UCLouvain and KU Leuven on the Desert of the Discalced Carmelites, founded in 1619 in Marlagne, Belgium. This study sought to understand the Marlagne desert as a site of spiritual betterment during the early modern period. This required approaching it as a layered historical ‘object’ and a multi-sensory environment integrating natural topography, built infrastructure, and biblical and spiritual references. The research combined disciplines that aligned with the existing sources, including architectural history, architectural theory, art history, and literary history. The project succeeded by transcending individual objectives, methods, and results, instead prioritizing a shared endeavour and mutual exchange that required continuous self-reflection and (inter)disciplinary positioning. Throughout the process, the travelling concept of “parcours” (journey) served as both a hermeneutic and heuristic framework that guided an iterative exploration of the object of study. Though time-intensive, this interdisciplinary approach pushed researchers beyond their comfort zones while creating opportunities for serendipitous discovery, knowledge exchange, and methodological innovation – all crucial for tackling the complexity and stratification of expansive historical sites.

Considérant de manière réflexive le déroulement d'un projet de recherche en cours de réalisation, cet article analyse les conditions et les conséquences d'une collaboration interdisciplinaire effective entre historiens de la littérature, historiens de l'art, théoriciens de l'architecture et historiens de l'architecture¹. Le projet rassemble les chercheurs autour d'une même problématique : les parcours physiques et spirituels dans les Déserts Carmes de la première modernité. Le travail s'est concentré en particulier sur le Désert de Marlagne, établi près de Namur en Belgique à l'instigation des archiducs Albert et Isabelle en 1619². Les Saints Déserts, institutions religieuses appartenant à l'ordre des Carmes déchaussés, sont de vastes domaines enclos, au milieu desquels se trouve un couvent et à la périphérie desquels sont disposés des ermitages³. Séparé de l'extérieur par un mur d'enceinte, chaque domaine est censé présenter une diversité paysagère. Les Déserts ont pour but de fortifier la foi des Carmes qui s'y retirent pour une durée d'un an. Inventés par Thomas de Jésus (fig. 1-2) à la fin du XVI^e siècle et ayant essaimés à travers le monde catholique en suivant un modèle assez stable, leur originalité tient au fait de combiner les avantages de la vie cénobitique et de la vie érémitique, en évitant toutefois leurs inconvénients, à savoir : la distraction, pour la première, et l'acédie, pour la seconde. Pour saisir toute la complexité, paysagère et architecturale, temporelle et spirituelle, imagi-

naire et symbolique, de ces espaces, une approche interdisciplinaire s'impose. Mais, il ne suffit pas de dire qu'un objet d'étude multidimensionnel appelle nécessairement une approche interdisciplinaire. L'articulation des disciplines concernées doit être pensée en profondeur, sachant qu'il ne s'agit pas de les additionner au titre que chacune serait responsable d'un 'chapitre' de l'histoire à raconter. C'est à cette articulation que se sont attelés les chercheurs impliqués dans ce projet, à commencer par le choix de son objet d'étude. Plus qu'un objet, ils ont retenu un concept susceptible de penser et rendre opérationnels les nœuds liant les disciplines ; une forme de "travelling concept" selon la terminologie adoptée par Mieke Bal dans une étude séminale pour le champ des humanités, et en particulier pour celui de l'analyse culturelle⁴. Un 'concept itinérant' n'appartient à aucune discipline, mais voyage entre plusieurs disciplines permettant précisément de les interconnecter. Le concept retenu ici, qui, comme la plupart des concepts envisagés par Bal, se situe à l'articulation entre langage courant et langage théorique, est celui de 'parcours', concept itinérant par essence et que nous envisageons de trois façons complémentaires : en tant que réalité architecturale et paysagère observable dans les tracés laissés sur le site étudié, mais aussi en tant que réalité vécue ou imaginaire dont témoignent les textes et les images ; en tant qu'outil heuristique, permettant de découvrir des interactions entre

bâtiments, paysages, images, textes et pratiques religieuses, négligées par les recherches disciplinaires ; enfin, en tant qu'objet théorique permettant d'interroger les ressorts anthropologiques de l'expérience multisensorielle (vécue, prescrite et décrite) des corps en mouvement au sein et au travers du site, des images et des textes⁵.

Le présent article rend compte de cette réflexion épistémologique et méthodologique sur les conditions nécessaires au développement d'un projet interdisciplinaire comme le nôtre, et en particulier sur le rôle que l'histoire de l'architecture peut y jouer. Il s'agit de montrer que, si l'interdisciplinarité peut mettre en crise l'identité des disciplines impliquées et peut constituer ainsi un défi critique pour celles-ci, une collaboration interdisciplinaire qui respecte l'autonomie et valorise les expertises de chaque discipline, peut aussi être l'occasion d'une clarification de leurs objectifs et d'une interrogation sur les frontières poreuses de leurs savoirs. Il s'agit en quelque sorte d'investir ces zones frontières au titre qu'elles permettent justement d'investiguer tous les lieux de passages, de transferts, de transitions et d'itinérances. Nous nous attacherons à montrer comment, à travers cette expérience de la recherche – recherche qui porte précisément sur l'expérience du parcours, ce dernier étant donc tout à la fois l'objet et la méthode – la valeur ajoutée de l'interdisciplinarité ne correspond pas à un surcroît d'assurance, mais consiste plutôt en une expérience d'incertitude, passagèrement déconcer-



1796 mta Julij Liber Fratrum minorum Carmelitarum
pro Conventu Zopienicensi Curia Potnij Potolani Orzyenki

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Fig. 1 T. DE JÉSUS, *Opera Omnia V.P.N Thomae A Iesu. Carmelitae Discalceati*, Anvers, XVII^e siècle. Frontispice (© Vilnius University Library, Digital collection, réf. VUB06_000004109).

Fig. 2 T. DE JÉSUS, *Opera Omnia... cit.* Frontispice, détail du Saint Désert de Marlagne (© Vilnius University Library, Digital collection, réf. VUB06_000004109).



tante et pourtant méthodologiquement nécessaire pour atteindre ce que l'on pourrait appeler une réalité historique augmentée.

Le Désert de Marlagne

Le site du Désert de Marlagne (fig. 3-4) se trouve à six kilomètres à vol d'oiseau au sud-ouest de la ville de Namur. Entouré par une enceinte de 2,60 m de haut et de 0,6 m de large, il présente une topographie contrastée, incluant différentes strates paysagères, des ruisseaux et des étangs. Au nord, le site se caractérise par la présence d'un relief accusé et d'une forte déclivité. Au sud, par contre, le terrain profite d'un très faible relief. Certaines zones sont boisées, d'autres sont constituées de prairies, de champs et de jardins. Cette variété topographique, hydrographique et paysagère a été choisie à dessein par Thomas de Jésus (1529-1582), fondateur du Désert, qui cherchait un site dont la diversité puisse permettre aux frères Carmes de contempler la nature et d'en faire ainsi une échelle vers Dieu⁶.

Au centre du domaine, le couvent s'organise en deux parties ; la première incluant l'église et les cellules des frères, la deuxième accueillant les fonctions nécessaires à la vie du couvent et donnant accès à la partie productive du Désert. Le long du mur d'enceinte se trouvent les ermitages, permettant aux frères de se séparer de la vie cénobitique et de trouver "la sainte solitude" dont parle Albert de Saint-Jacques (m. 1680)

dans son traité sur le sujet⁷. Disséminés dans le Désert, de nombreuses croix monumentales, des petites fontaines et autres sémiophores, c'est-à-dire des signes matériels porteurs de sens, participent à la transformation du Saint Désert en un paysage biblique.

Cette description du Saint Désert de Marlagne se base sur la reconstitution du site réalisée par l'équipe à partir de visites effectuées sur le terrain et de l'analyse de nombreuses et diverses sources : cartes topographiques et historiques, gravures, documents d'archives (comme des lettres et contrats), descriptions poétiques. Si la disponibilité d'un tel éventail de ressources documentaires a pu fournir une première raison d'étudier le Désert dans le cadre d'un projet de recherche interdisciplinaire, elle n'a pas été, tant s'en faut, la seule motivation.

Défis de l'approche interdisciplinaire du Désert de Marlagne

Le cumul des incertitudes

L'interdisciplinarité du projet résulte de la volonté de travailler ensemble sur un objet commun (un site paysager et bâti, représenté en textes et en images), et plus encore sur une question partagée (les parcours corporels et spirituels au sein de ce site) qui a orienté, jusqu'à un certain point, le choix du cas d'étude. Ainsi rassemblés autour d'un objet commun et d'une question partagée, les chercheurs ont voulu, avec leurs exper-

¹ Le langage épiciène est ici adopté. Mais, nous tenons à insister sur le fait que l'équipe des promoteurs de ce projet regroupe quatre chercheuses et deux chercheurs. Par ailleurs, il réunit trois centres de recherche et deux universités, l'une néerlandophone et l'autre francophone.

² Entre autres, C. PHILIPPART, *Les Carmes déchaux. L'essor d'un village sous l'influence des Carmes, Wépion 1618-1796*, Wépion 1986 ; M.S. DUPONT-BOUCHAT, F. JACQUAET-LACHIER, *Le Saint Désert de Marlagne à Wépion. De l'histoire à la tradition*, Bruxelles 1983 ; J.F.C. GRANDGAGNAGE, *Le Désert de Marlagne*, "Annales de la Société Archéologique de Namur", I, 1849, 1, pp. 1-244.

³ Sur les Saints Déserts Carmes, S. STURM, *Reformed Carmelites' Patronage in Italian and European Seventeenth-Century Architecture: Urban and Desert Sanctuary Typologies*, "Explorations in Renaissance Culture", 38, 2012, 1-2, pp. 123-148 ; Id., *Liturgia e architettura nel Carmelo riformato. Archetipi, miti, modelli*, "Revue d'Histoire Ecclésiastique", 106, 2011, 1, pp. 61-96 ; Id., "Il più povero, il più religioso, il più sano". *Modelli architettonici dei Carmelitani Scalzi tra '500 e '600*, in *Il Carmelo e l'arte*, a cura di A. Cazzago, "Quaderni Carmelitani", 24, 2009, pp. 79-124 ; Id., *L'architettura dei Carmelitani Scalzi in età barocca*, 1 (Principii, norme e tipologie in Europa e nel Nuovo Mondo), Roma 2006 ; T. JOHNSON, *Gardening for God: Carmelite Deserts and the Sacralization of Natural Space in Counter-Reformation Spain*, in *Sacred Space in Early Modern Europe*, edited by W. Coster, A. Spicer, Cambridge 2005, pp. 193-210 ; S. STURM, *L'architettura dei Carmelitani Scalzi in età barocca*, 3 (L'eremo di Montevirginio e la tipologia del Santo Deserto), Roma 2002 ; J.M. MUÑOZ JIMÉNEZ, *La arquitectura Carmelitana (1562-1800). Arquitectura de los Carmelitas Descalzos en España, México y Portugal durante los siglos XVI a XVIII*, Ávila 1990 ; B. ZIMMERMAN, *Les saints Déserts des Carmes déchaussés*, Paris 1927.

⁴ M. BAL, *Travelling Concepts in the Humanities: A Rough Guide*, Toronto-Buffalo-London 2002, trad. fr. *Concepts itinérants. Comment se déplacer dans les sciences humaines*, Dijon 2023.

⁵ Nous tenons à remercier Jean Stillemans, qui a joué un rôle important dans le choix du 'parcours' comme 'concept itinérant' de ce projet de recherche.

⁶ *De fundatione eremi Sancti. P.M. Joseph de Monte Carmelo in provincijs Belgij*, Archives de l'État de Namur, *Archives ecclésiastiques*, 3578, cc. 1r-2r.



Fig. 3 A. Pauwels (A. Pauli), *Le Saint Désert de Marlagne*, gravure, ca. 1630 (© Alamy Stock Photo).

tises disciplinaires et leurs intérêts scientifiques propres, s'engager dans ce projet où les multiples points de vue s'entrelacent afin de mieux comprendre comment le Désert, en tant que lieu et par ses représentations, a pu soutenir les Carmes dans leurs pratiques spirituelles.

Au fil de la collaboration effective, il est apparu que chaque discipline rappelait aux autres la relative autonomie de son point de vue et de son objet propres : l'histoire de l'architecture rappelle la contingente pluralité et diversité, à travers l'histoire, des incidences qu'ont les savoirs, les arts, les usages et les règles sur l'architecture et sur les parcours qu'elle induit ou qui la déterminent ; la théorie de l'architecture rappelle, quant à elle, la pluralité et la diversité des formes, des usages et des visées de l'architecture et des parcours (en dehors d'un contexte historique spécifique) ; l'histoire de l'art, à son tour, rappelle que toute représentation visuelle, déployant ses propres ressorts graphiques, transforme son référent et qu'elle se comprend à travers d'autres représentations ; l'histoire de la littérature, enfin, rappelle qu'un texte,

à travers ses moyens linguistiques et poétiques, 'transfigure' l'objet dont il parle ou, dans le cas qui nous occupe, qu'il décrit, et qu'il se lit, lui aussi, au prisme d'autres textes et d'une tradition.

La mise à l'épreuve de cette interdisciplinarité montre que le travail en équipe ne conduit pas, comme on pourrait s'y attendre, au cumul d'expertises savantes, mais plutôt à celui des incertitudes et des incomplétudes inhérentes aux objets et au point de vue de chaque discipline. Cela se marque particulièrement pour l'histoire de l'architecture de la première modernité, une discipline qui, par la nature de son objet (des bâtiments largement altérés au cours de leur histoire), s'appuie toujours sur une multitude de sources, étudiées par les autres disciplines (dans ce cas, par exemple, des représentations gravées et des descriptions poétiques du Désert). En effet, la nature fondamentalement interdisciplinaire de l'architecture implique que l'expertise, les connaissances et les méthodes déployées par l'historien de l'architecture seront toujours insuffisantes⁸.

Fig. 4 Vue aérienne du site de l'ancien Désert de Marlagne, 1971. Reconstitution du tracé de la première enceinte et des emplacements du couvent et des ermitages (élaboration graphique des auteurs ; © Service public de Wallonie).



L'analyse architecturale du Saint Désert de Marlagne et des parcours qui le traversent se fonde sur les traces laissées dans le paysage, sur les textes prescriptifs et descriptifs, sur les images du site, mais ces appuis se dérobent ou se révèlent incertains au regard de la lecture faite de ces traces, textes et images par les historiens de l'art et les historiens de la littérature. Les monuments comme les documents – qui sont intervertibles, puisqu'en fonction du point de vue disciplinaire un monument peut devenir un document, et inversement – les objets comme les sources, sont des prismes dont les multiples facettes génèrent plusieurs lectures possibles⁹. Loin de constituer des inconvénients, ces incertitudes et ces incomplétudes présentent, au contraire, un avantage méthodologique. Leur cumul conduit en effet à la mise en œuvre d'une critique mutuelle qui constitue non seulement un opérateur efficace de réfutation, mais aussi un puissant moteur de recherche. Pour l'histoire de l'architecture de la première modernité, en particulier – toujours confrontée au problème de l'interprétation de sources éparses et diverses – la collaboration avec des chercheurs d'autres disciplines lui rappelle

son inhérente interdisciplinarité et l'oblige à repenser sa propre autonomie.

La définition de l'architecture et le positionnement vis-à-vis de disciplines annexes

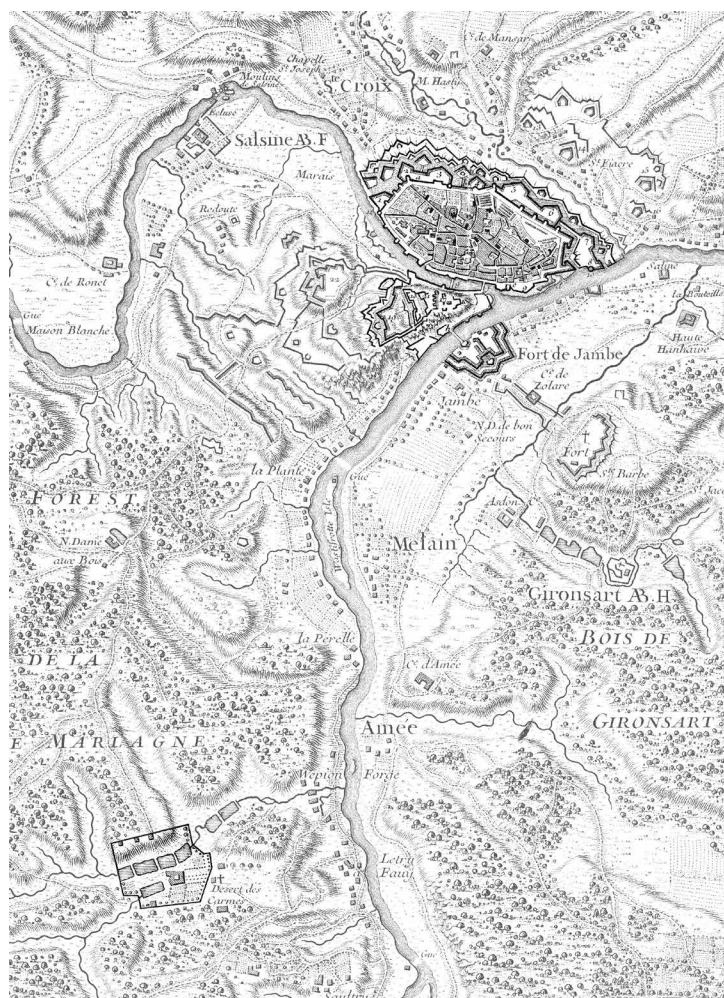
Les enjeux de ce projet pour l'histoire de l'architecture se reflètent également dans la nature de l'objet d'étude, à savoir les Saints Déserts des Carmes déchaussés. Ces Déserts sont des sites paysagers dotés d'une topographie et d'une hydrographie caractéristiques. Le choix, au début du XVII^e siècle, du site du Désert de Marlagne n'a pas été aléatoire. Thomas de Jésus, provincial de la province carmélitaine de Belgique, a exploré les environs de la ville de Namur durant plusieurs jours, car il avait entendu dire que ceux-ci se caractérisaient par un paysage diversifié¹⁰. Il cherchait un site vaste, permettant de créer de la distance (entre le Désert et la ville de Namur, mais aussi entre l'enceinte et le couvent, le couvent et les ermitages, les ermitages entre eux) et d'englober une grande diversité phénoménale (fig. 5). Cette distance et cette diversité étaient nécessaires pour soutenir les Carmes dans leurs quêtes spirituelles, l'équilibre entre solitude et

⁷ A. DE SAINT-JACQUES, *La sainte solitude ou les bonheurs de la vie solitaire avec une description poétique du Saint Désert de Marlagne proche Namur, habité par les RR. Pères Carmes Deschaussez*, Bruxelles 1644, p. 199.

⁸ M. CARPO, *Architecture: Theory, Interdisciplinarity, and Methodological Eclecticism*, "Journal of the Society of Architectural Historians", 64, 2005, 4, pp. 425-427.

⁹ La différence entre monument et document est reprise de M. FOUCAULT, *L'Archéologie du savoir*, Paris 1969, pp. 14-15. Voir également J. LE GOFF, *Documenta/monumenta*, in *Enciclopedia Einaudi*, V, Torino 1978, pp. 38-48.

¹⁰ *De fundatione eremi Sancti...* cit., 1r-2r. Voir aussi A. DE SAINT-JACQUES, *La sainte solitude...* cit., pp. 119-120.



contemplation de la nature créant les conditions optimales pour faire de ce site une échelle vers Dieu, comme y insistent les textes¹¹.

Notons donc que dans le cadre de ce projet de recherche, le vocable ‘architecture’ est à considérer selon une définition étendue qui inclut tout le site du Désert ainsi que ses aménagements : le paysage, les bâtiments, mais aussi les objets plus petits, tels que, par exemple, les croix monumentales qui jalonnent les parcours. L’architecture est ainsi comprise comme toute intervention physique sur le paysage par les Carmes en vue de configurer leur Saint Désert. L’extension de la définition de ‘l’architecture’ aux paysages et objets physiques est un fait bien acquis pour la discipline de l’histoire de l’architecture (attesté par l’omniprésence de la formule ‘environnement construit’ ou *built environment* dans des articles spécialisés en histoire de l’architecture) et il peut dès lors sembler superflu de le mentionner ici¹². En revanche, si la collaboration avec les historiens de l’art et les historiens de la littérature, ainsi que les discussions avec les théoriciens de l’architecture, confortent ces ouvertures de la discipline, elles obligent aussi à repenser les mé-

thodes utilisées dans le projet de recherche. Il en va de même pour l’élargissement aux méthodes et aux expertises issues de disciplines annexes – et non annexées – telles que les *landscape studies*, mais aussi l’archéologie (dans le Désert, il ne reste que quelques ruines, comme celles de l’ermitage de Saint-Bernard) et l’anthropologie (avec, par exemple, l’analyse par la marche ou la théorie des ‘affordances’) (fig. 6)¹³. Les méthodes de l’histoire de l’architecture ont donc dû être repensées en relation avec ces disciplines et ces courants de recherche.

Les conditions pour une interdisciplinarité effective

Travelling concept

Au travers de nos propres expériences, il apparaît que certaines conditions doivent être remplies pour atteindre une interdisciplinarité effective. Le choix d’un ‘concept itinérant’ comme celui du parcours a été un point de départ. Une fois ce choix posé et réfléchi, le projet s’est vite orienté vers un objet d’étude qui apparaissait suffisamment riche pour les différentes disciplines impliquées. Les Saints Déserts sont non

Fig. 5 J. Géographe, Extrait de Plan et Environs de Namur, Paris, 1746. Le Saint Désert de Marlagne est situé (en bas à gauche) au sud-est de la ville de Namur (élaboration graphique des auteurs ; © Société Archéologique de Namur, réf. MAR-SAN-B-Pl-117).

Fig. 6 Vestige de l’ermitage de Saint Bernard sur le site de l’ancien Désert de Marlagne, 2022.

¹¹ T. DE JESÚS, *Instruction spirituelle pour ceux qui pratiquent la vie érémitique*, trad. fr. É. De Saint-Elie, Toulouse 2009, p. 20. Voir aussi A. DE SAINT-JACQUES, *La sainte solitude...* cit., pp. 119-120.

¹² Il suffit, par exemple, de parcourir les titres et les contenus des articles publiés au cours des vingt dernières années dans des revues spécialisées telles que “Architectural Histories”, “Architectural History” ou le “Journal of the Society of Architectural Historians” pour constater à quel point l’étude du *built environment* s’est ancrée dans la discipline. Sur l’impact de cette définition étendue sur la discipline de l’histoire de l’architecture, voir aussi M. TRACHTENBERG, *Some Observations on Recent Architectural History*, “The Art Bulletin”, 70, 1988, 2, pp. 208-241 : 211-213.

¹³ *The Routledge Companion to Landscape Studies*, edited by P. Howard et al., Abingdon 2019 ; *Landscape and Agency: Critical Essays*, edited by E. Wall, T. Waterman, Abingdon 2017.

seulement des lieux parcourus rituellement, ce dont témoignent les tracés encore observables aujourd'hui, mais sont aussi pensés et vécus d'abord et avant tout comme des espaces parcourus spirituellement, selon des cheminements dont rendent compte les textes et les images. En ce sens, les sites, les images et les textes sont conçus 'pour être parcourus'. Les parcours physiques et spirituels reflètent donc les choix qui ont sous-tendu la création et la composition des sites, des images et des textes. Le parcours se transforme dès lors en un outil heuristique, deuxième dimension au cœur de notre projet. Il permet de découvrir des interactions potentielles entre bâtiments, paysages, images, textes et pratiques religieuses. C'est à travers le parcours que ces interactions peuvent être observées et étudiées. Enfin, le parcours, en tant qu' "objet théorique" – au sens que Louis Marin a donné à cette expression, désignant non pas une théorie appliquée à un objet, mais un objet qui génère sa propre théorie¹⁴ – permet de conceptualiser l'expérience multisensorielle des corps en mouvement au sein et au travers du site, physiquement, en marchant dans le Désert de Marlagne, mais aussi spirituellement, en parcourant les images qui le représentent ou les textes qui le décrivent.

Autonomie des disciplines

En plus de cette problématique et de cet objet commun qui permettent aux disciplines de se rencontrer, l'autonomie disciplinaire apparaît comme une autre condition nécessaire pour mettre pleinement en œuvre l'interdisciplinarité. Celle-ci consiste bien, dans le cadre de notre projet, en la rencontre de quatre disciplines dont aucune ne prend le pas sur les autres, et dont aucune n'est considérée comme 'auxiliaire'. Ces quatre disciplines sont, pour rappel, l'histoire de la littérature, l'histoire de l'art, l'histoire de l'architecture et la théorie de l'architecture. Le choix de considérer ces quatre disciplines

comme distinctes les unes des autres n'est pas anodin. Nombreux sont ceux qui considèrent que l'histoire de l'architecture fait partie de l'histoire de l'art, ou que l'histoire de l'architecture et la théorie de l'architecture sont étroitement liées¹⁵. Cependant, les périmètres respectifs de ces 'quatre disciplines' se sont précisés en cours de recherche, et ce au travers de la division et de la répartition des différentes tâches à accomplir. Partant des méthodes, objets et finalités de chaque chercheur, la distribution des tâches est étroitement liée à des profils et des expertises spécifiques. Dans le cadre du projet en question, les observations des théoriciens de l'architecture portent sur les constituants (types et éléments), les principes d'organisation (modèles et compositions) et les modes d'exécution et d'occupation inhérents à la production architecturale. Ces observations sont recoupées par celles des historiens de l'architecture, qui cherchent à replacer toutes ces caractéristiques dans leur contexte historique, prêtant une attention soutenue aux causes externes à l'architecture, à savoir les incidences théoriques (textes, notions, etc.), imaginaires (littérature, images), d'usage (témoignages) et juridiques (prescriptions, règles, etc.) qui contraignent ou confortent la production architecturale¹⁶. L'histoire de l'art et l'histoire de la littérature procèdent de la même manière en travaillant, cette fois, sur les représentations en image et en texte. Le périmètre d'investigation de l'histoire de l'architecture, en tant que discipline, se définit ainsi au contact des apports des autres disciplines qui l'incitent à préciser son angle d'approche et son apport au projet global.

Le temps

À toutes ces conditions s'ajoute une dernière condition déterminante : le temps¹⁷. La recherche interdisciplinaire a, de fait, réclamé un temps considérable pour choisir la problématique et l'objet d'étude, mais aussi, et surtout

¹⁴ L. MARIN, *Opacité de la peinture. Essais sur la représentation au Quattrocento*, Paris 2006.

¹⁵ Pour une discussion approfondie de la relation entre histoire de l'art et histoire de l'architecture, mais aussi la relation de l'histoire de l'architecture avec la théorie (et la critique), voir A.A. PAYNE, *Architectural History and the History of Art. A Suspended Dialogue*, "Journal of the Society of Architectural Historians", 58, 1999, 3, pp. 292-299.

¹⁶ D. HARRIS, *That's Not Architectural History! Or What's a Discipline For?*, "Journal of the Society of Architectural Historians", 70, 2011, 2, pp. 149-152 : 150.

¹⁷ Voir, entre autres, M. BERG, B.K. SEEGER, *The Slow Professor: Challenging the Culture of Speed in the Academy*, Toronto 2016 ; I. STENGERS, *Another Science is Possible: A Manifesto for Slow Science*, Cambridge 2018 ; H. DE DIJN et al., *Een Noodzakelijk Goed: Over het blijvende belang van de geesteswetenschappen*, Koninklijke Vlaamse Academie van België voor Wetenschappen en Kunsten Standpunten, 83, Bruxelles 2023, p. 19.

¹⁸ DE DIJN et al., *Een Noodzakelijk Goed*... cit., pp. 10-11.

pour ‘accorder les violons’, c’est-à-dire ajuster les perspectives de chacun sur une réalité historique et matérielle par essence multidimensionnelle. Si l’idée de la *slow science* résonne à travers le monde académique, elle s’impose tout particulièrement dans le cas d’une recherche interdisciplinaire et plus impérativement encore lorsque celle-ci mobilise les démarches herméneutiques propres aux sciences humaines.

Modes d’interactions

Itération

Afin de parvenir à une interdisciplinarité effective, il ne suffit pas de ‘respecter’ les conditions de bases évoquées ci-dessus. Il s’agit aussi de penser, de manière approfondie, aux modes d’interactions entre les chercheurs pour qu’ils puissent se rencontrer autour de l’objet d’étude et autour du concept itinérant choisi. En effet, la progression de la recherche suppose non pas un travail séparé, par discipline, pour une mise en commun finale, mais un échange constant, notamment *in situ*. L’expérience de terrain s’est avérée déterminante, que ce terrain soit le site étudié, une bibliothèque ou encore un centre d’archives. Forte de la documentation rassemblée et analysée ensemble, l’équipe a pu progresser en confrontant ainsi ses idées à la matérialité et à la spatialité de ses objets d’études. Les résultats partiels obtenus par les chercheurs ont été partagés à chaque étape. On peut à cet égard parler d’un mode de travail itératif (récuratif et cumulatif). Cette démarche non rectiligne se situe aux antipodes du *teamwork* prescrit par le *new public management* qui domine depuis les années 1990 l’organisation de la recherche universitaire (et les modèles d’allocation de financements) préconisant un travail linéaire régi par les *time sheets*, *work packages* et *milestones* et où, dès la conception du projet, des objectifs spécifiques menant à des résultats mesurables doivent être définis au regard d’une analyse des risques.

Le caractère contraignant de ce type d’approche laisse en effet peu de place à une approche ‘essais et erreurs’, où la remise en question est constante et où chaque discipline est amenée à recalibrer en permanence ses méthodes et ses objectifs en tenant compte de l’apport des autres disciplines¹⁸.

Bien que chaque étape de la recherche soit réfléchie et discutée par tous les membres de l’équipe, le travail itératif crée les conditions de possibilité d’une certaine sérendipité. Il s’agit d’un parcours heuristique et herméneutique où la multipli(cation)cité des points de vue invite à (re-)découvrir plusieurs fois le même objet d’étude. Contrairement à une recherche linéaire, où le parcours est balisé dès la conception du projet, la recherche itérative permet d’écrire une ‘histoire ouverte’, seule à même d’appréhender la stratification et la complexité d’un objet d’étude comme le Désert de Marlagne.

Incarnation

En plus de se réunir régulièrement sur place et de discuter des observations faites par chacun, l’équipe explore de nouvelles méthodes telles que l’analyse par la marche ou la recherche par le dessin et l’écriture, afin de comprendre comment le site, les images et les textes ont été (ou ont pu être) physiquement et mentalement parcourus par les frères Carmes, et comment site, images et textes ont pu façonner leur expérience religieuse. Tout en reconnaissant les limites méthodologiques de l’analyse par la marche pour étudier une réalité historique éloignée dans le temps et une expérience extrêmement personnelle, l’équipe a parcouru le site à plusieurs moments de l’année, dans des circonstances météorologiques variées, pour prendre la mesure du temps qu’il faut pour aller d’un endroit à un autre, pour découvrir les points de vue et les perspectives dans le paysage, pour expérimenter la multisensorialité des parcours. Suivant ces mé-

thodes, issues de la ‘recherche incarnée’ (*embodied research*), une connaissance par le corps a pu se construire¹⁹.

Interprétation modélisante

Un autre moyen de comprendre et d’étudier le parcours est de recourir au dessin et à l’écriture (non seulement du site, mais aussi du parcours en lui-même). L’équipe expérimente ces outils de représentations graphiques et narratives, historiques mais aussi contemporains, comme moyen d’étude et d’analyse des parcours réels, potentiels et imaginaires du site. Johanna Drucker parle d’“interprétation modélisante” (*interpretative modeling*) pour insister sur le fait que le mode de représentation retenu vise tout autant à mettre en œuvre l’interprétation qu’à la représenter. Il est, autrement dit, le mode principal de production de connaissance, et non l’expression secondaire de données préexistantes²⁰. En d’autres termes, l’enjeu est du côté de la visualisation de l’analyse même du parcours et non de ses seuls résultats. Si le médium n’est pas au sens strict le message, il en détermine largement la nature, non pas comme seule détermination technique, mais comme opportunité herméneutique.

Ces expérimentations font l’objet d’une réflexion méthodologique permanente et spécifique des membres de l’équipe. Dans ce travail, chacun s’appuie sur ses expertises et connaissances. Ces expérimentations méthodologiques permettent aux chercheurs de se rencontrer autour de méthodes inconnues pour une grande partie d’entre eux, mais assez proches pour pouvoir être un lieu de partage de leurs observations.

Contributions des disciplines

Organisé de cette manière, le projet permet à chaque discipline d’apporter sa propre contribution à l’analyse du Saint Désert de Marlagne. Les théoriciens de l’architecture cherchent à com-

prendre, d’un point de vue interne à la discipline architecturale, quelles sont les logiques formelles et fonctionnelles qui régissent la configuration et l’occupation d’un Saint Désert. D’une part, sur un plan formel, ils s’emploient à identifier et à distinguer les composants du Désert (enclos, portes, couvents, ermitages, sentiers, etc.) pour mettre en évidence des principes de variation et des règles d’articulation (les distances, les alignements, etc.). D’autre part, sur un plan fonctionnel, ils tâchent de reconstituer le fonctionnement du Désert, en y localisant les différentes activités et en y retraçant les parcours. Conduite au moyen du dessin, outil privilégié des architectes, cette analyse vise en définitive à caractériser l’idée du Désert, son ‘parti architectural’, ainsi que sa mise en œuvre par Thomas de Jésus. À cet égard, le Saint Désert de Marlagne, comme tous les Déserts, présente des caractéristiques propres à la catégorie d’hétérotopie forgée par Michel Foucault : clôture et ouverture négociée, temporalité éternitaire et chronique, fonction d’illusion et de compensation, etc. Sur un plan architectural, les Déserts possèdent en particulier “le pouvoir de juxtaposer en un seul lieu réel plusieurs espaces, plusieurs emplacements qui sont en eux-mêmes incompatibles”²¹ et de constituer ainsi un microcosme qui concentre en un lieu toute la diversité du monde.

Les historiens de l’architecture veillent à ancrer le Saint Désert de Marlagne dans son contexte historique en rassemblant des sources susceptibles de fournir une vision plus large des causes, externes à l’architecture, qui ont contribué à façonner le site. Les textes théologiques de Thomas de Jésus sur la contemplation divine ou le traité sur “la sainte solitude” écrit par le Carme Albert de Saint-Jacques, comprenant une description poétique du site de Marlagne, sont étudiés afin de reconstruire les enjeux spirituels qui sous-tendent la création des Saints Déserts (fig. 7)²². Cette étude des textes permet d’identifier

¹⁹ Voir, entre autres, *Le génie de la marche. Poétique, savoirs et politiques des corps mobiles*, actes de colloque (Cerisy-la-Salle, 31 mai-7 juin 2012), sous la direction de G. Amar, M. Apel-Muller, S. Chardonnet-Darmaillacq, Paris 2016.

²⁰ J. DRUCKER, *Visualisation. L’interprétation modélisante*, trad. fr. M.M. Bortolotti, Paris 2020.

²¹ M. FOUCAULT, *Des espaces autres*, “Empan”, 54, 2004, 2, pp. 12-19 : 17.

les conditions nécessaires à la contemplation de Dieu (silence et isolement, mais aussi confrontation avec la nature) et leurs impacts directs sur le choix du site, la position de l'enceinte, l'étendue du domaine, l'implantation du couvent et des ermitages, etc. Les archives des Carmes déchaussés de Marlagne sont passées au crible, faisant apparaître que le mur d'enceinte avait été prolongé en 1667-1668 à cause des regards indésirables des passants dans le domaine²³. Ces observations sont croisées avec celles des théoriciens de l'architecture permettant de distinguer l'essentiel de l'accidentel et d'arriver à une lecture plus profonde des différentes causes – internes et externes à l'architecture – qui ont façonné le site. En s'appuyant sur le traité de *La sainte solitude* d'Albert de Saint-Jacques, les historiens de l'architecture entrent aussi dans le domaine des historiens de la littérature, surtout dans l'analyse de la description poétique du lieu²⁴. Les deux lectures faites du même poème, par les historiens de l'architecture et les historiens de la littérature, enrichissent, mais aussi remettent en cause certaines observations. Pour les historiens de l'architecture, l'évocation des vues, des odeurs, des sons dans le texte montre l'importance du vécu par les sens des frères du Saint Désert, tandis que pour les historiens de la littérature ces évocations relèvent de *topoi* littéraires dont l'application au Désert de Marlagne a pour but de transformer celui-ci en une représentation du paradis terrestre. En effet, au regard de l'histoire de la littérature, la *Description* d'Albert de Saint-Jacques s'inscrit dans une longue tradition topique qu'il importe d'identifier, afin de définir la source idéale ou traditionnelle à laquelle le texte se réfère, et d'examiner ainsi l'intertextualité qui l'imprègne. Ces éléments topiques forment comme un référent second, universalisant, car proposant une représentation idéale du site, le premier référent étant bien entendu le site que le texte décrit. En d'autres termes, il s'agit d'analyser d'une

part la manière dont ces éléments universalisants sont insérés dans le cadre situé du Désert de Marlagne, et donc modifiés et singularisés, et d'autre part, comment les particularités ou les singularités du site sont liées aux composantes essentielles des *topoi*.

Dans l'analyse du texte, une attention particulière est accordée à l'association entre les éléments paysagers et architecturaux, à l'expression de certains affects, ainsi qu'à l'expression de la perception de cet environnement extérieur. Par exemple, le texte d'Albert de Saint-Jacques puise dans la tradition poétique profane le *topos* bien connu du *locus amoenus*. Dans ce cadre, il mobilise les sens pour évoquer les éléments agréables qui composent le *topos* : la douceur de l'air, le bruit délicat de l'eau, le chant des oiseaux, l'ombre bienfaisante, etc. Sur ce point, une discussion féconde s'est engagée avec les historiens de l'architecture pour déterminer si le texte poétique devait être lu comme le fruit d'une expérience vécue par son auteur ou comme un exercice poétique s'appuyant sur une riche tradition littéraire ; et si ces deux lectures s'excluent mutuellement ou peuvent au contraire coexister : le site informe-t-il la lecture du texte ou, à l'inverse, le texte informe-t-il la lecture du site, non seulement pour les chercheurs aujourd'hui, mais aussi pour les Carmes à l'époque ? Il nous a semblé qu'il n'est pas possible de répondre à cette question, d'autant plus que posée en ces termes, elle se trompe de cible. De manière plus pertinente, en envisageant le problème du point de vue théorique de notre objet – le parcours – les deux analyses articulées contribuent à comprendre la manière dont se développe une circulation dynamique et changeante entre un paysage extérieur, un paysage perçu et un paysage intérieur, produisant une expérience à la fois immersive et transformatrice.

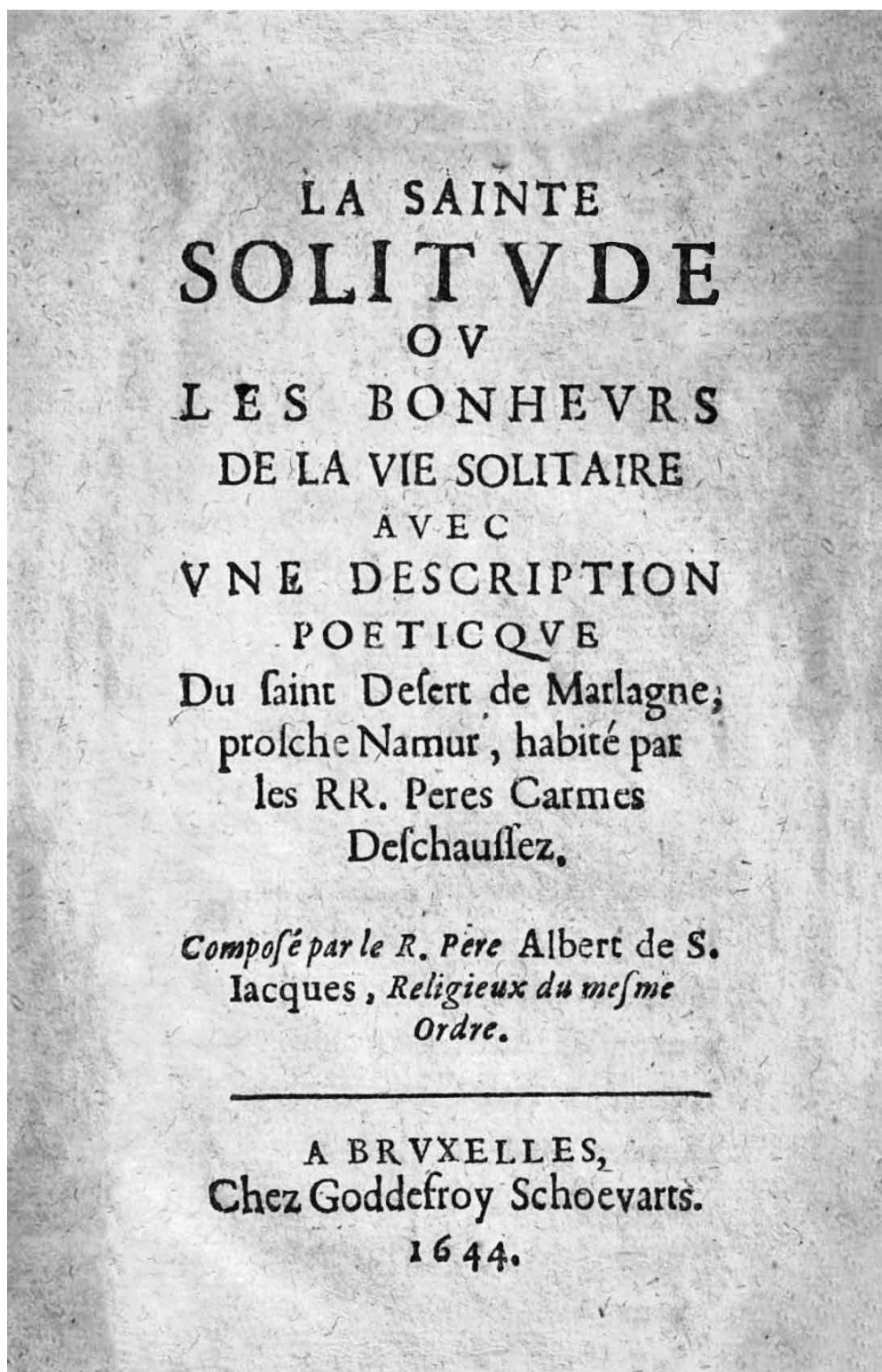
Enfin, l'apport de l'histoire de l'art s'articule étroitement à celui des trois autres disciplines. Il

²² T. DE JESÚS, *Instruction spirituelle*... cit. ; A. DE SAINT-JACQUES, *La sainte solitude*... cit.

²³ Le document d'archives atteste de la donation aux Carmes déchaussés d'un terrain situé au nord du domaine. Ce terrain leur a été donné après qu'ils aient demandé l'extension du domaine. En réparant le mur, ils avaient en effet remarqué que les passants pouvaient voir dans le domaine depuis un rocher plus élevé. L'extension du mur a permis d'incorporer ce rocher dans le domaine et d'empêcher ainsi de futurs regards intrusifs. Archives du Séminaire de Namur, ms. 70, cc. 34r-35v.

²⁴ A. DE SAINT-JACQUES, *La sainte solitude*... cit., pp. 213-245.

Fig. 7 A. de Saint-Jacques, *La sainte solitude ou les bonheurs de la vie solitaire avec une description poétique du Saint Désert de Marlagne*, Bruxelles 1644 (© Bibliothèque de la ville de Lyon).



concerne principalement la façon dont les représentations visuelles des Saints Déserts, et en particulier de celui de Marlagne, se construisent ; représentations qui forgent un imaginaire du Désert, plus ou moins éloigné de la réalité concrète de ce dernier, mais qui n'en participe pas moins à son vécu. Pour ce faire, la mise en scène graphique de la topographie est explorée tout comme la manière dont elle est investie par les personnes qui la parcourent. Sur la base d'une typologie de

ces représentations (*veduta* du site, carte, vue aérienne, etc., en plus de figurations combinant différents points de vue), l'analyse de chaque image s'attarde sur les relations entre le bâti et son environnement naturel. Il s'agit de comprendre ce que chaque type de représentation veut nous dire de l'appréhension du paysage et des itinéraires qui le traversent, depuis des représentations qui cherchent à rendre compte aussi fidèlement que possible de la réalité du terrain à parcourir



jusqu'aux représentations qui s'apparentent à de pures fictions dont le message est d'ordre plus spirituel que cartographique ou topographique (fig. 8). Il s'agit donc ici d'investiguer l'imaginaire qui fonde ces représentations. Pour ce faire, il faut se tourner du côté des modèles dont elles s'inspirent. Une des hypothèses de travail est qu'elles sont sous-tendues par une forme d'archi- ou archè-représentation, celle de la Terre sainte, et en particulier celle du Mont Carmel (fig. 9). L'attention de l'historien de l'art se porte également sur les images (peintures et sculptures) présentes sur le site – seconde peau de l'architecture, tant à l'intérieur qu'à l'extérieur – qui contribuent à orienter et à instruire le visiteur, et, d'autre part, sur les images qui jalonnent les cheminements non plus dans, mais vers ces lieux. Il s'agit d'appréhender ces images – tel le tableau de Rubens qui occupait originellement le maître-autel de l'église du couvent de Mar-

lagne et que l'on ne connaît plus que par une gravure – comme autant de sémaphores et de sémiophores, c'est-à-dire tout à la fois comme des signaux qui guident le regard et le corps en mouvement et comme des signes porteurs de sens (fig. 10). Ils peuvent être dits aussi stimulateurs des sens, car le projet comprend ce dernier terme polysémique de 'sens' de trois façons qui sont interreliées : la première est celle qui touche à la question des significations, en lien étroit avec la question du programme iconographique qui peut être compris comme un 'discours' plus ou moins complexe et aux finalités variées. La seconde (le sens comme direction) renvoie aux parcours induits dans l'espace, à la direction du regard comme du corps orienté par ce plus ou moins dense réseau d'images. Enfin, il fait référence à la sensibilité, aux affects, aux émotions qui font sens, selon les deux premières acceptions du terme et qui sont en lien avec d'autres

Fig. 8 Saint-Joseph et l'Enfant Jésus, Église de Crans, 1621-1633. À l'arrière-plan figure le Désert de Marlagne (© Ministère de la Culture, France, Médiathèque du patrimoine et de la photographie, réf. AP39W00804).

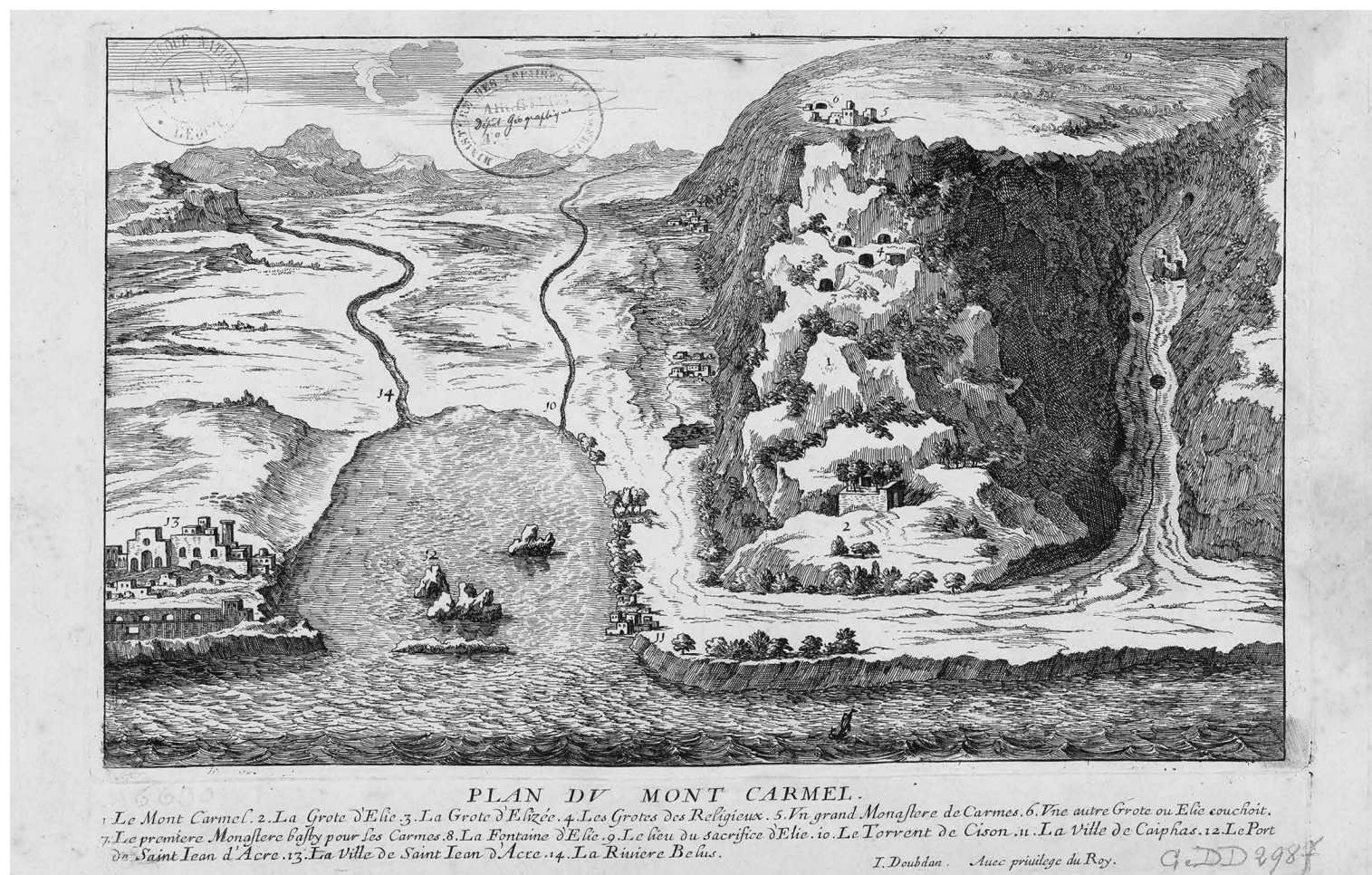


Fig. 9]. Doubdan, Le mont Carmel, 1661 (Bibliothèque Nationale de France, département Cartes et plans, GE DD-2987 [6630]).

stimulations sensori-motrices (auditives, olfactives et tactiles). Les dimensions sémantique, kinésique et esthétique (au sens premier de l'*aesthesis* qui renvoie au sensible), telles sont les coordonnées de notre objet d'étude auxquelles toutes les disciplines impliquées apportent leurs éclairages complémentaires.

Conclusion

Les résultats de notre projet s'appuient et débouchent sur une interdisciplinarité à ne pas confondre avec un *melting pot*, car elle suppose la reconnaissance de l'autonomie de disciplines aux compétences (objets, points de vue et méthodes) spécifiques. Dans ces conditions, l'interdisciplinarité peut être l'occasion d'une définition, sinon d'une redéfinition, des enjeux et des objets propres aux disciplines.

Cependant, bien que le projet définisse clairement les tâches assignées à chaque discipline, force est de constater que les historiens de l'architecture de l'équipe nourrissent finalement des sentiments quelque peu mitigés. D'une part, la confrontation avec d'autres disciplines a bien permis de préciser les objectifs et les méthodes

de l'histoire de l'architecture (dans le cadre du projet, l'étude des causes externes à l'architecture, pour tracer les incidences historiques sur la production architecturale). D'autre part, cette définition peut sembler être une réduction de leurs activités en tant que chercheurs, puisqu'ils ont également l'habitude d'intégrer dans leurs recherches les causes internes de l'architecture (tâche ici attribuée aux théoriciens de l'architecture), ainsi que l'analyse des représentations textuelles et visuelles de leurs objets d'étude (certes avec une certaine prudence, étant conscients des défis méthodologiques propres à l'histoire de la littérature et à l'histoire de l'art). L'histoire de l'architecture semble donc être interdisciplinaire par défaut, une observation qui peut remettre en cause la valeur ajoutée d'un projet de recherche interdisciplinaire comme celui-ci. Pourquoi se lancer dans un tel projet, si l'histoire de l'architecture peut y arriver seule ?

Une partie de la réponse a déjà été évoquée. Bien que les historiens de l'architecture soient à même de s'appuyer sur des sources diverses, leurs connaissances et leurs méthodes restent toujours insuffisantes. Il ne s'agit donc pas de



Fig. 10 G. Donck (d'après P.P. Rubens), Saint-Joseph, patron des Carmes, tenant l'Enfant Jésus, 1636-1645 (© The Trustees of the British Museum ; CC BY-NC-SA 4.0).

faire autrement, mais de faire mieux grâce à l'interdisciplinarité, c'est-à-dire d'affiner la compréhension d'une grande variété de sources documentaires et de traces matérielles, analysées sous différents prismes disciplinaires capables d'en diffracter le sens, partant du principe que tout objet d'étude est un prisme. Les observations se précisent et s'enrichissent ainsi ; les interactions encourageant la remise en question de certaines conclusions et la réfutation de certaines hypothèses. C'est dans ces interactions constantes et grâce à des conditions prédéterminées et concertées (le temps, un bagage conceptuel partagé, le respect de l'autonomie des disciplines, etc.) qu'il est possible d'arriver à une véritable profondeur

d'analyse historique. Le projet confirme donc l'interdisciplinarité inhérente à l'histoire de l'architecture, mais confirme également la nécessité de poursuivre le dialogue et la collaboration avec des chercheurs d'autres disciplines.

ARCHITECTURAL HISTORY AND DIGITAL TECHNOLOGIES: NARRATIVE POTENTIAL AND EPISTEMOLOGICAL CHALLENGES

In recent years, architectural and urban historians have increasingly embraced digital tools, from big data management to Historical Building Information Modeling (HBIM). Initially employed for visualization, digitalization has evolved into an essential research tool. In cases where buildings or sections of cities no longer exist, 3D models have become crucial to the research process, allowing the integration of archival sources with other types of documentation (visual, material, etc.), and enabling the creation and comparison of alternative reconstruction hypotheses within a framework of continuous updating and sharing of data ('open data' and 'open science'). This is an inherently interdisciplinary type of research where languages, heuristic processes, and protocols from different disciplinary fields (e.g., computer science, data visualization, architectural restoration, etc.) must dialogue and operate on a common platform. The use of tools from different disciplines can only be effective under two conditions: the sharing of aligned objectives and the pursuit of research questions that can be answered through methodological experimentation. These principles underpin the 2022 PRIN-funded research project "CoenoBI(u)M. Art and architecture of the Cassinese Benedictine Congregation (XV-XVIII centuries): digital and spatial analysis strategies through BIM models". Here, the need to study the architecture of an entire network of monasteries to identify their shared features has necessitated an interdisciplinary approach and innovative applications of digital modeling.

This paper explores the epistemological and narrative potential of digital technologies for architectural history, examining the different ways in which these tools have been used over the past two decades. Digital technologies have proven particularly effective in both the research phase – especially for reconstructing virtual spaces and managing geo-localized historical data – and in the publication and presentation of findings. Digital and multimedia platforms can now effectively represent even highly complex spaces for audiences that are often non-experts. However, in the case of buildings that no longer exist, virtual reconstructions serve not only to visualize lost structures but are also an integral phase of the research process itself.

By using a digital model as a starting point rather than the final result, researchers can create a network of sources – visual, archival, and bibliographic. In recent years, the adoption of digital technologies such as geographic information systems, geospatial mapping techniques, and data management and modeling platforms has brought about a series of opportunities that have led architectural historians to reflect on the narrative possibilities of their discipline and experiment with their own research protocols. To understand how this approach has influenced historical research in architecture (including the methodologies, findings, and even the very choice of study topics) and to provide an initial assessment, this paper considers several recent

case studies (some of which, I duly acknowledge, involve my own work). One of the most important and innovative characteristics of this new approach is its multi-disciplinarity, which requires a collaborative research model. To better understand its evolution, I begin by reviewing the activities of two of the longest-running research centers that have made significant investments in IT tools, tracing how their approach has progressively developed and changed over the years.

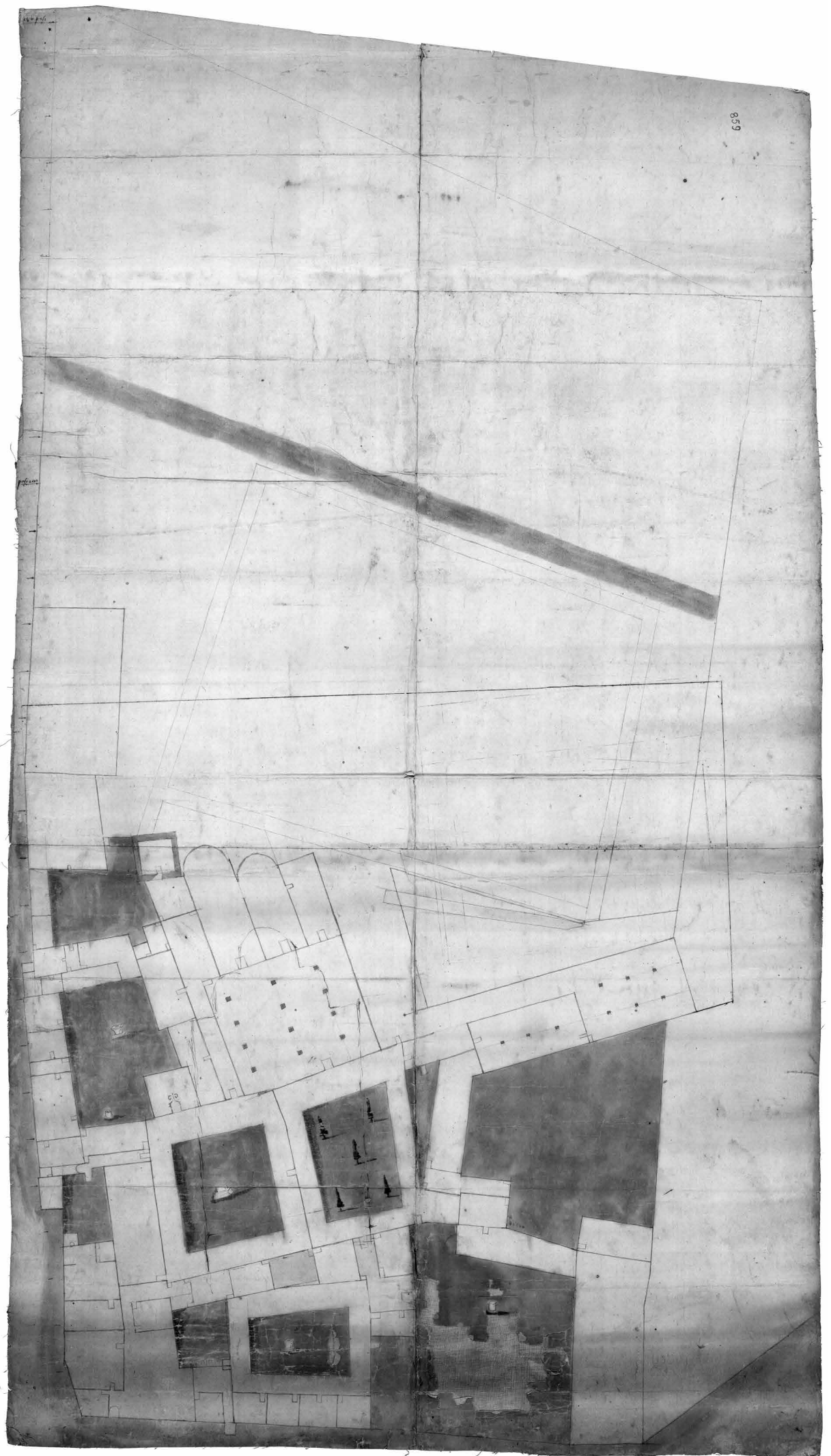
The use of digital technologies in architectural history

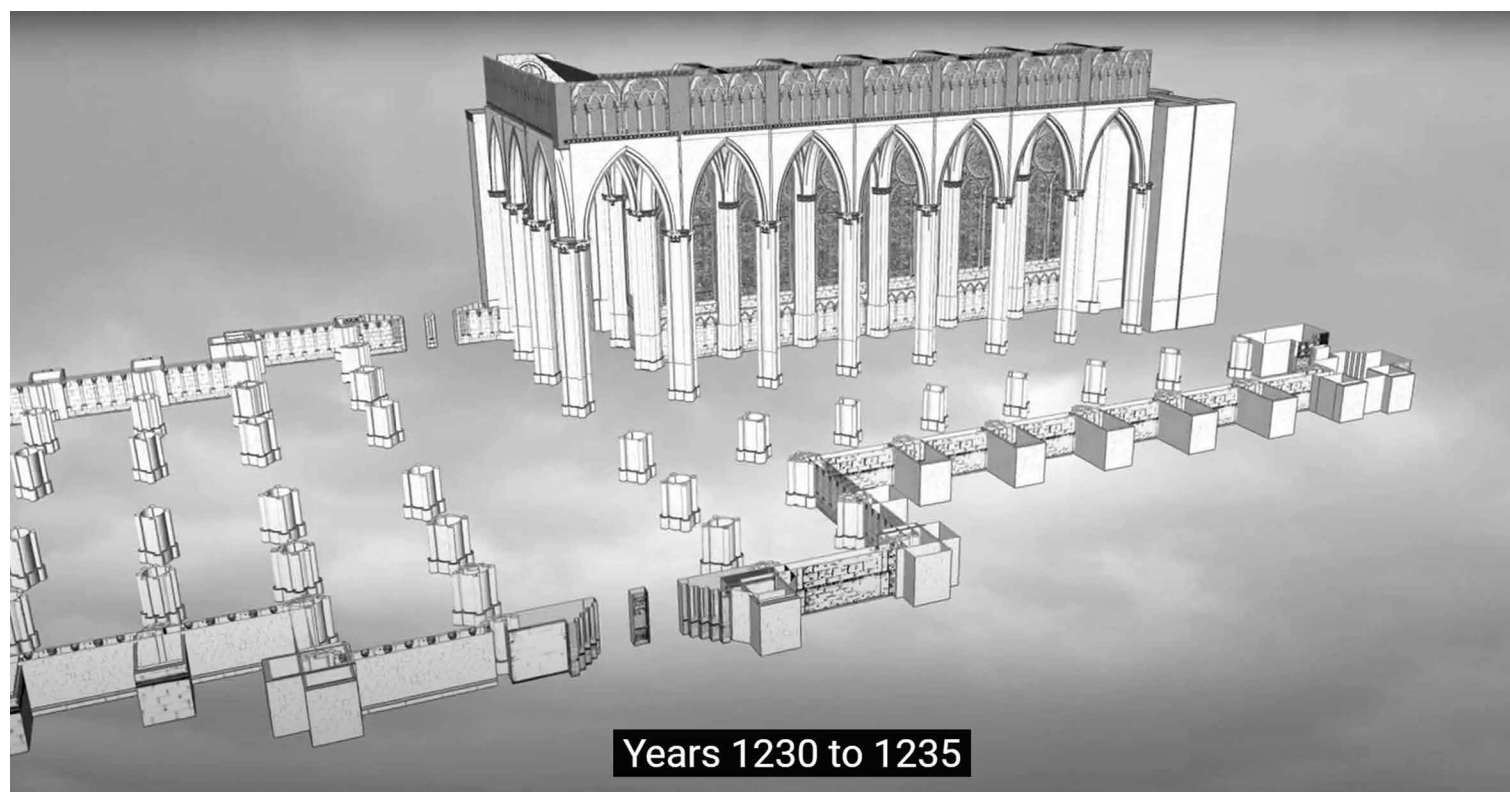
The field of digital humanities applied to architectural and urban history has become quite vast, making it difficult to provide a comprehensive overview in a short paper. However, it is useful to highlight some foundational projects and ongoing research initiatives in the United States and Europe emblematic of the different methodological approaches.

One of the earliest experimental hubs in this arena was the Media Center for Art History at Columbia University, founded in 1993¹. One of the center's first research projects, coordinated by Stephen Murray, focused on the cathedral of Amiens. To support his historical research, Murray created an image database, and a multimedia website designed to complement his monograph with drawings and photographs of the cathedral (fig. 2)². Building on this initial experiment, the Media

Center launched the "History of Architecture – Real Virtual, Representing Architectural Time and Space" webpage, whose main purpose was to provide digital resources for teaching architectural history to undergraduates. In 2008, this vertical integration of research, teaching, and dissemination of results led Murray and Andrew Tallon to set up the "Mapping Gothic France" webpage, which serves as a database of two hundred Gothic cathedrals in France and England, offering detailed information sheets with plans, elevations, history, and bibliographies for each building.

The digitization of resources and their presentation through GIS-based maps and the related management of big data contributed to the establishment of the Digital Art History & Visual Culture Research Lab (formerly Wired!) at Duke University in 2009, initially coordinated by Caroline Bruzelius³ and currently by Paul Jaskot. From the start, the activities of this lab – which was founded with the goal of bringing together architectural and art historians with archaeologists and computer scientists – have focused on the diachronic representation of architectural, artistic, and urban phenomena. In the latter half of its first decade, Wired! saw the formation of various collaborative research groups, including "Digital Athens" in 2014. The initial goal of that project was "to produce a comprehensive digital map" – geo-referenced in ArcGIS – "of the archaeological remains of ancient Athens" while simulta-





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Fig. 1 Map of the abbey of San Giorgio Maggiore, Venice, 1490 ca. (Archivio di Stato di Venezia, *Miscellanea Mappe*, dis. 859).

Fig. 2 S. Murray, *Visualization of the construction phases of the Amiens Cathedral*, video still (<https://www.youtube.com/watch?v=b77XFALHNXw>; last accessed on 29 October 2025).

*This study was conducted as part of a 2022 PRIN project funded by the European Union – NextGenerationEU under the National Plan for Recovery and Resilience (PNRR) – Mission 4: Education and Research – Component 2: From research to enterprise – Investment 1.1, Prin 2022 Notice issued by DD N. 104 on 2/2/2022, entitled “CoenoBI(u)M. Art and architecture of the Cassinese Benedictine Congregation (XV–XVIII centuries): digital and spatial analysis strategies through BIM models”, proposal code 20228Z4LX3 – CUP J53D23013040006. The English translation was provided by Teodora Ott. I am grateful to Lorenzo Buonanno and the volume editors for their assistance in revising this text.

¹ <https://learn.columbia.edu> (last accessed 29 October 2025).

² <https://projects.mcah.columbia.edu/amiens-arthum/> (last accessed 29 October 2025). See also S. MURRAY, *Notre-Dame, Cathedral of Amiens: The Power of Change in Gothic*, Cambridge 1996; Id., *Notre-Dame of Amiens: Life of the Gothic Cathedral*, New York 2021. Stephen Murray also directed the research project “Mapping Gothic”: <https://mcid.mcah.columbia.edu/collection/mapping-gothic> (last accessed 29 October 2025), on which see Id., *Mapping Gothic*, in *Progetti digitali per la storia dell’arte medievale. Digital projects in medieval art history*, a cura di P. Vitolo, Firenze 2018, pp. 143–153.

³ <https://emac.duke.edu/labs/digital-art-history-visual-culture-research-lab> (last accessed 29 October 2025). W. BROOM, *Caroline Bruzelius and an Early Digital Image Study Resource*, in *The Medieval Kingdom of Sicily Image Database: A Tribute to Caroline Bruzelius*, edited by P. Vitolo, Roma 2022, pp. 39–45.

⁴ <https://dahvc.org/project/digital-athens/> (last accessed 29 October 2025).

neously providing a dynamic visualization of the city’s transformation over the centuries⁴.

Among the most recent outcomes of the lab at Duke is the project “The Medieval Kingdom of Sicily Image Database”, coordinated by Paola Vitolo and Caroline Bruzelius. This initiative has similarly focused on mapping visual and bibliographic resources related to principal monumental buildings constructed in Southern Italy between 1100 and 1450⁵. Once again, a website interface has proven to be the most effective way to organize and present the enormous amount of data. In this case, the platform was developed alongside an edited scholarly volume that outlines its methods and presents the main research results to date⁶. In both cases, the projects at Duke have focused on the mapping of digital resources, but also on the visualization of historical processes related to architecture.

Building on these initial experiments and supported by prestigious institutions such as the Hertziana Library in Rome, digitally oriented research groups in the field of architectural and urban history have multiplied in recent years. One example is the “Naples Digital Archive”, directed by Alfredo Buccaro and Tanja Michalsky (fig. 3)⁷. Additionally, the Hertziana Library has been one of the engines behind the CENSUS program⁸, as well as an even more ambitious initiative aimed at coordinating major research

centers engaged in digitization – the Consortium for Open Research Data in the Humanities, which was established to harmonize data standards and infrastructures and facilitate the interoperability of different databases.

In the broader movement toward collaboration and open-access resource management, digital technologies are radically changing how we narrate the history of architecture and cities. A notable example is the “Paris Past & Present” project at UCLA, which creates “interactive digital 3D digital models of ‘great’ lost monuments, architectural complexes, and diverse quarters of medieval Paris”⁹. The ability to visualize these structures has been a key area of study in recent decades, and one that has most urgently required the definition of a rigorous methodology to clearly differentiate the varying degrees of hypothetical reconstruction¹⁰. This is a challenge that spans multiple dimensional scales – from the spatial organization of interiors, such as sacred spaces, to entire city sections – and extends to the public dissemination of research findings, for instance through exhibitions.

A notable example of such public engagement is a recent series of exhibitions on the city of Carpi, curated by Elena Svalduz, Andrea Giordano, and Manuela Rossi. The 2016 exhibition explored the construction of the cathedral¹¹, while the 2020 one focused on the church of San



Nicolò¹². In the latter exhibition, a multi-scalar approach – necessary for interpreting the role of the structure within the urban fabric and its transformations over time – was translated into museum displays, including panels and models, both derived from digital reconstructions (fig. 4). Shifting to a smaller scale, different communication tools have been adopted over time. For example, an interactive 3D model visualizing the geometric genesis of Renaissance architect Baldassarre Peruzzi's distinctive protruding corner pillars was integrated into an app designed to evoke the layout of the original project¹³. By pointing a special tablet at the project plan, visitors could see and explore the 3D model in real time. The progressive shift from individual research to collaborative, interdisciplinary teams is significantly reshaping the profession of the architectural historian and the training of new generations of specialists. This shift is evident in the "Florence 4D" initiative, where the integration of spatial methodologies (in particular, the mapping and 3D visualization of the city of

Florence) is aimed at reinterpreting existing data to develop diachronic narratives for both the scholarly community and the broader public¹⁴. One of the first significant results of this research group, coordinated by Fabrizio Nevola and Donal Cooper, is the integration of architectural data with fragments of pictorial decoration, now housed in a museum. Here, a laser scanner survey of the building's current state has enabled a virtual reconstruction of the lost structure, allowing researches to hypothesize its original layout, including the placement of the polyptych on the high altar. This modeling process facilitated interoperable visualizations that allowed a virtual recovery of the original spatial layout in front of the painting (currently decontextualized in its museum location), as well as a digital recreation of the lost church in its original urban setting. These projects demonstrate the remarkable versatility of digital technologies on the narrative level, especially as regards multimedia integration, the interplay between real and virtual environments, and the representation of the tem-

Fig. 3 Digital cartographic layer showing the "Catasto Storico d'impianto (1895-1905)" on a map of Naples (<https://indd.adobe.com/view/d1d7ba9b-b5de-499c-b96e-0f7201b82631>; last accessed 29 October 2025).

⁵ <https://koseodiah.org/people.php> (last accessed 29 October 2025). See also: C. BRUZELIUS, P. VITOLO, J. WILLIAMS, *Historical Images and the Recovery of the Past. The Medieval Kingdom of Sicily Image Database*, in *Patrimoni culturali nell'era digitale. Memorie, culture umanistiche e tecnologia / Cultural Heritage in the Digital Age. Memory, Humanities and Technologies*, conference paper (Bari, 31 January-2 February 2018), edited by D. Spampinato, Bologna 2018, pp. 135-138.

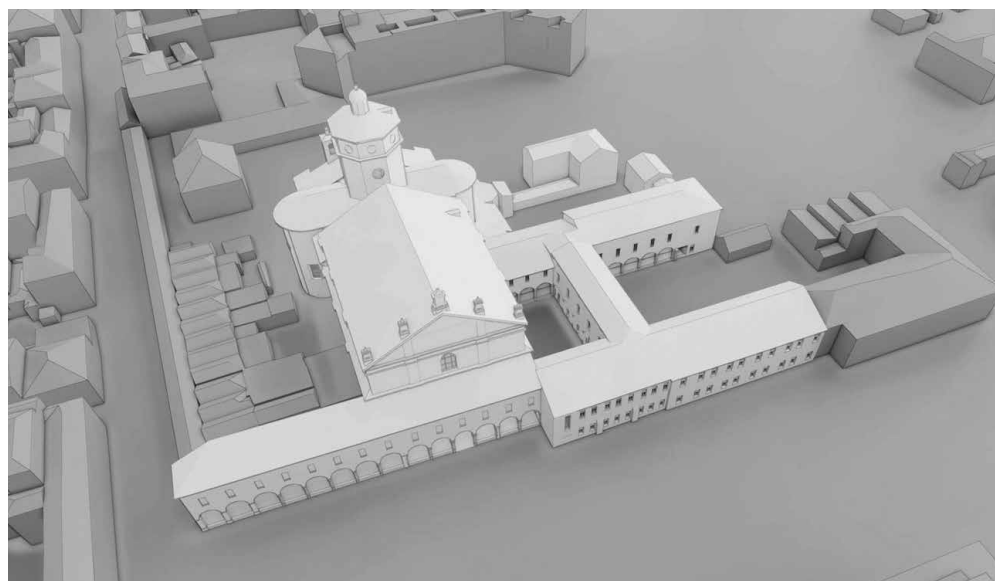
⁶ *The Medieval Kingdom of Sicily...* cit.

⁷ <https://www.biblherz.it/it/dept-michalsky/naples-digital-archive> (last accessed 29 October 2025). T. MICHALSKY, *Retorica dell'ordine urbanistico sotto i vicere spagnoli: la veduta di Napoli di Alessandro Baratta (1629/1670) e il suo pendant digitale*, in EAD., *Napoli in scala. Le rappresentazioni della città (XIV-XXI secolo). Saggi scelti su pratiche e media*, a cura di A. Bremenkamp, A. Magnago Lampugnani, E. Scirocco, Milano 2024, pp. 39-57. See also the most recent project "Mapping Sacred Spaces: Forms, Functions, and Aesthetics in Medieval Southern Italy", directed by Manuela Gianandrea, Ruggero Longo, Elisabetta Scirocco, Tanja Michalsky, (Bibliotheca Hertziana, Sapienza Università di Roma, Università degli Studi di Siena).

⁸ <https://www.censusus.de/> (last accessed 29 October 2025).

⁹ <http://paris.cdh.ucla.edu> (last accessed 29 October 2025).

Fig. 4 Digital reconstruction of San Nicolò, Carpi (R.A. Bernardello).



¹⁰ *Digital Crossroads: New Directions in 3D Architectural Modeling in the Humanities*, edited by A.R. Flaten, A.A. Gill, "Visual Resources: An International Journal of Documentation", 25, 2009, 4; M. COHEN, *Visualizing the Unknown in the Digital Era of Art History*, "Art Bulletin", 104, 2022, 2, pp. 6-19; D. PEÑA PASCAL, *Modelling Uncertainty in Archaeological Spatial Data*, conference paper, (Santiago de Compostela, September 2015), https://www.researchgate.net/publication/299845868_Modelling_Uncertainty_in_Archaeological_Spatial_Data?channel=doi&linkId=57062d6c08aebcf68ba85982&showFulltext=true (last accessed 29 October 2025); U.U. SCHÄFER, *Uncertainty Visualization and Digital 3D Modelling in Archaeology. A Brief Introduction*, "International Journal for Digital Art History" 3, 2018, pp. 86-106, <https://doi.org/10.11588/dah.2018.3.32703> (last accessed 29 October 2025); *Imagerie numérique et patrimoine culturel: enjeux scientifiques et opérationnels*, edited by P. Liévaux, L. De Luca, "In Situ. Revue des Patrimoines", 39, 2019, <https://journals.openedition.org/insitu/21240> (last accessed 29 October 2025). For the case of the reconstruction of the Notre-Dame in Paris, see L. DE LUCA, *Un ecosistema digitale per lo studio interdisciplinare di Notre-Dame de Paris. A digital ecosystem for the interdisciplinary study of Notre-Dame*, "Disegnare. Idee Immagini", XXXIV, 66, 2023, pp. 16-31.

¹¹ *Costruire il tempio. Alla ricerca del progetto di Baldassarre Peruzzi per il Duomo di Carpi*, catalogo della mostra (Carpi, Musei di Palazzo dei Pio, 18 settembre 2015-6 gennaio 2016), a cura di A. Giordano, M. Rossi, E. Svalduz, Carpi 2015.

¹² *Il principe e la sua chiesa. San Nicolò e il convento dei Frati a Carpi*, catalogo della mostra (Carpi, Musei di Palazzo dei Pio, 9 aprile-26 giugno 2022), a cura di M. Rossi et al., Modena 2022.

¹³ A. GIORDANO, *Guardare/Fruire una mostra: il ruolo delle nuove tecnologie di rappresentazione*, in *Costruire il tempio...* cit., pp. 48-51.

¹⁴ F. NEVOLA et al., *Bringing Together Geospatial Information, 3D Modeling, Experiential Learning and Research Data. The Ospedale degli Innocenti: A Case Study of the Florence 4D Project*, in *Visualizing Complexities. Practices and Heuristics of Digital Models in Art History*, edited by N. Camerlenghi, T. Michalsky, E. Scirocco, "Hertziana Studies in Art History", 2, 2023, pp. 54-60; Id. et al., *Research-Based 3D Modeling of Santa Maria degli Innocenti: Recovering a Context for the Quattrocento Altarpieces*, in *Lost and Found: Locating Foundations in the Early Modern World*, edited by N. Terpstra, Firenze-Roma 2023, pp. 109-134.

¹⁵ A collaboration between Duke University, Università IUAV di Venezia, and Università degli Studi di Padova. "Visualizing Venice" has recently expanded into "Visualizing Cities", with the aim of applying the same research methodologies to a broader range of international sites, such as Padua, Paris, Athens, Durham, and Krakow.

¹⁶ *Visualizing Venice: Mapping and Modeling Time and Change in a City*, edited by K.L. Huffman, A. Giordano, C. Bruzelius, London-New York 2018. See also W. DORIGO, *Venezia romanica, la formazione della città medievale fino all'età gotica*, Verona 2003.

poral dimension. When applied during the research phase, these capabilities become even more evident at the urban scale. This has been the case of the "Visualizing Venice" project, active since 2010, which focuses on reconstructing the urban transformations of some of the city's islands¹⁵. The first case study – the area of SS. Giovanni e Paolo – served as a testing ground for a platform designed to digitize and geo-reference both published and unpublished sources related to the island's urban spaces and buildings¹⁶. By leveraging GIS technology, researchers were able to project 2D reconstructions of urban transformations (such as the maps published by Wladimiro Dorigo) into three- and four-dimensional representations. In this instance, 3D modeling served as the common platform for both research and the narrative outcome in the various outputs and communication channels that have been adapted from time to time to reach different audiences.

The epistemological potential of digital tools becomes even more pronounced in smaller-scale cases, especially when researchers investigating lost buildings must assess the coherence of their reconstructions and test the different degrees of plausibility of alternative hypotheses¹⁷. This approach is effective at both at the urban scale and for individual structures. A compelling example is the lost former Venetian cathedral of San Pietro di Castello, where 3D modeling enabled not only the systematic collection of all archival, visual, and archaeological data (such as the geo-radar surveys of the lost crypt), but also facilitated dimensional verification of two alternative reconstructions of the presbytery, an area for

which very few sources exist. In fact, the digital model proved even more essential for the study of the church's interiors, for which there is no surviving visual documentation but only a series of heterogeneous and highly specific archival references (fig. 5)¹⁸. The redrawing of the floor plan and primary cross-sections was the starting point for the development of a 3D model of both the church and the entire patriarchal complex. The coherent interrelation of all the data was made possible through the use of the 3D model as a platform for verifying each hypothesis. This extended study process – greatly enhanced by the possibility of immediate visualization of the object under examination – ultimately led to the discovery of the building's internal and external configurations.

The contributions of archaeology and the history of construction techniques are also becoming increasingly important in this line of research. These digital tools, in fact, allow for the progressively refined and effective integration of data related to the materiality of buildings and construction processes, providing a way to consistently represent different hypotheses regarding construction phases and a basis for further investigation. In this regard, the methods employed by the research team of the Wesleyan-Brown Monastic Archaeology Project (MonArch) have been exemplary. The team conducted a comprehensive investigation of the Abbey of Notre-Dame d'Ourscamp – a building reduced to a state of ruin – by intertwining archaeological analysis of the structure with various historical sources. The outcome is a virtual reconstruction in which varying degrees of certainty, along

with the types of sources informing each assessment, were visualized within a 3D model using non-realistic colors. This is a highly effective method that combines scientific rigor with clear, ‘user-friendly’ communication of research findings¹⁹.

Another case study where digital technologies have significantly aided in coordinating multidisciplinary research is the monastery of San Giorgio Maggiore in Venice. Best known for Andrea Palladio’s design of the church, refectory, and second cloister, the monumental complex of San Giorgio Maggiore is often studied with a narrow focus on Palladio’s contributions. In truth, however, his intervention was only one phase of a broader reconstruction of the medieval monastery, which began in the late fifteenth century and continued even after Palladio’s death in 1580. Until now, Palladio’s project has been examined without adequately considering the physical constraints imposed by the pre-existing monastery, which was gradually demolished as new construction progressed. Reconstructing the earlier building’s form will provide a greater understanding of Palladio’s design strategy in relation to its context, opening an entirely new avenue of study²⁰.

Knowledge of the state of the Benedictine complex of San Giorgio Maggiore in Venice before its Renaissance transformation can now benefit from the study of an exceptional dossier of architectural drawings related to the monastery and an impressive documentary corpus, primarily housed in the State Archives of Venice. Through geo-referencing and digital redrawing, we have been able to systematically parse out the different construction phases of the monastery for the first time.

The monastery was founded in the thirteenth century following the donation of the island by Doge Tribuno Memmo to Giovanni Morosini, who established the monastery and later be-

came its first abbot. At the beginning of the thirteenth century, a fire and an earthquake almost certainly prompted the reconstruction of the tenth-century complex. The full reconstruction of the buildings started when the monastery joined the Benedictine “De Unitate” Congregation in 1429. If we compare Jacopo de Barbari’s *View of Venice* (which depicts the monastery at the end of the fifteenth century) with the present-day structure, we can clearly see how radical its reconstruction actually was. A map, recently discovered in the State Archives of Venice, shows the monastery before the entire complex was rebuilt at the beginning of the sixteenth century (fig. 1)²¹. The project was analyzed by identifying the main lines and the construction lines. We cataloged the information from the drawing by breaking down and cataloging these indicators. By isolating numerous elements – classified by AutoCAD software and separated into layers that, when superimposed, became visible – we were able to hypothesize the chronological sequence of the graphic execution and trace the successive phases of the drawing’s use.

By comparing this two-dimensional image with other three-dimensional views of the same period and a variety of archival sources, we were able to create a digital model of the monastery and the entire island (fig. 6). We discovered that the building’s layout later became a base plan for subsequent interventions. In particular, the central portion of the drawing includes a sketch of the plan for a new church, which coincides with the one designed in 1520. The geo-referencing of the map was useful for understanding the geographical context of the historical visual data and for comparing the fifteenth century layout with the present-day situation. As a result, we successfully demonstrated that the plan of the medieval monastery was completely different from its current layout, which dates back to the late Renaissance. This finding will allow us to identify the

¹⁷ G. GUIDARELLI, *I Predicatori dei Santi Giovanni e Paolo e Venezia. Strategie di insediamento e dinamiche urbane*, in *La città medievale è la città dei frati? Is the medieval town the city of the friars?*, a cura di S. Beltramo, G. Guidarelli, Sesto Fiorentino 2021, pp. 186-205, <https://www.insegnadelgiglio.it/wp-content/uploads/2022/03/archimed-1-ebook-CORR.pdf> (last accessed 29 October 2025).

¹⁸ G. GUIDARELLI, *I patriarchi di Venezia e l’architettura. La cattedrale di San Pietro di Castello nel Rinascimento*, Padova 2015, pp. 19-43.

¹⁹ S. BONDE, A. COIR, C. MAINES, *Construction-Deconstruction-Reconstruction: The Digital Representation of Architectural Process at the Abbey of Notre-Dame d’Ourscamp*, in *The Digital Middle Ages*, edited by D.J. Birnbaum, S. Bonde, M. Kestemont, “Speculum: A Journal of Medieval Studies”, 92, 2017, S1, pp. S288-S320; see also J. HILLSON, A. BUCHANAN, N. WEBB, *Tracing the Past: A Digital Analysis of the Choir Vaults at Wells Cathedral and Ottery Saint Mary*, in *The Analysis of Gothic Architecture: Studies in Memory of Robert Mark and Andrew Tallon*, edited by R. Bork, Leiden 2022, pp. 212-237.

²⁰ G. GUIDARELLI, G. LIVA, S. MUSETTI, *Il complesso medievale di San Giorgio Maggiore a Venezia. Architettura, scultura, strumenti digitali per l’analisi e l’interpretazione*, “Ateneo Veneto”, 3 s., CCVI, 18, 2019, 2, pp. 59-93, <https://ateneoveneto.org/wp-content/uploads/2023/06/Guidarelli-1.pdf> (last accessed 29 October 2025).

²¹ G. GUIDARELLI, *Una mappa inedita del complesso di San Giorgio Maggiore a Venezia (XV secolo, ante 1494)*, “Ateneo Veneto”, 3 s., CCVI, 18, 2019, 1, pp. 181-186, https://ateneoveneto.org/wp-content/uploads/2023/06/AteneoVeneto_CCVI.18.1_Guidarelli.pdf (last accessed 29 October 2025).

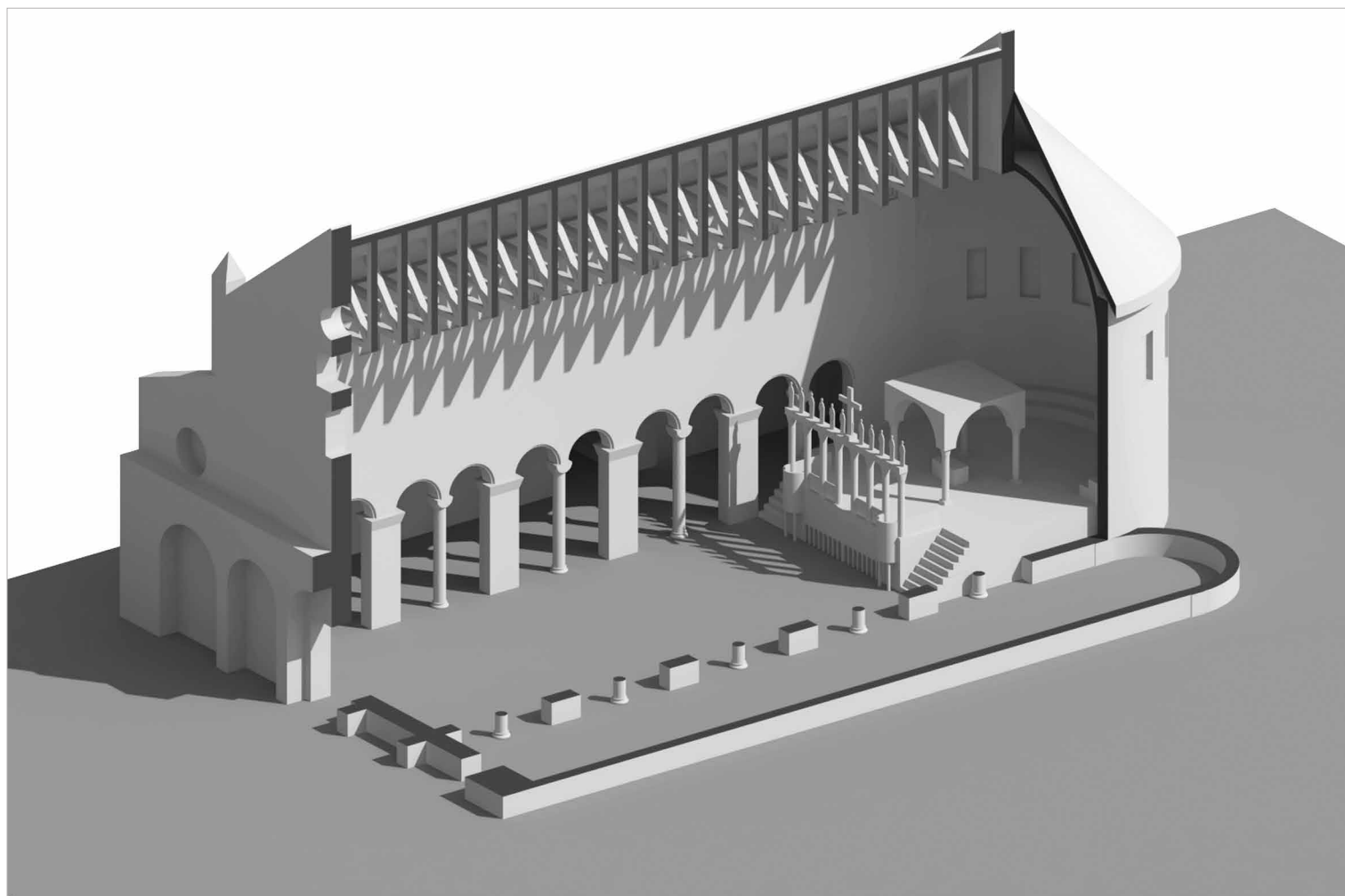


Fig. 5 Digital reconstruction of the Romanesque church of San Pietro di Castello, Venice (A. Surdulescu, A. Necoloiu, M. Pedron).

areas of the island most suitable for archaeological excavations by the Superintendency for the Protection of Architectural, Natural, Historic, Artistic, and Ethno-Anthropological Heritages in Venice and its Lagoon, a collaboration that started a few months ago. Additionally, through the analysis of archival data, we were able to accurately reestablish all the phases of reconstruction of the monastery up to the 1564 Palladian project for the church. By having a realistic plan and a workable hypothesis for the 3D shape of the medieval complex, we managed to study and model its intermediate historical phases. Our team also recognized that the designers and craftsmen had to navigate a very particular construction site, as the new interventions had to coexist with the earlier, medieval structures. Throughout this phase of the research, the digital clone of the medieval monastery was progressively refined to account for the gradual transformations that occurred before and after the Palladian renovation.

The most immediate result of this work has been a deeper understanding of a medieval Venetian building of great significance that has remained unknown until now. Furthermore, thanks to the

digital analysis of the drawing, we were able to study the techniques of architectural representation in late fifteenth-century Venice. Most importantly, we succeeded in reconstructing, in detail, all the phases of a complex and lengthy construction process, examining how the monks managed to build a structure that remained accessible and inhabited throughout its transformation. In this way, San Giorgio Maggiore provided an opportunity to experiment with the application of digital technologies to study a Renaissance construction site in great detail. This methodology could then be applied to other analogous case studies, particularly to other monasteries of the Congregation of Santa Giustina, built in Italy between the fifteenth and eighteenth centuries and discussed below.

Monastic architecture and digital technologies: the “CoenoBI(u)M” project

The monastery of San Giorgio was part of the reformed Congregation of Santa Giustina. The architecture of the Congregation is the focus of the research project “CoenoBI(u)M. Art and architecture of the Cassinese Benedictine Congre-

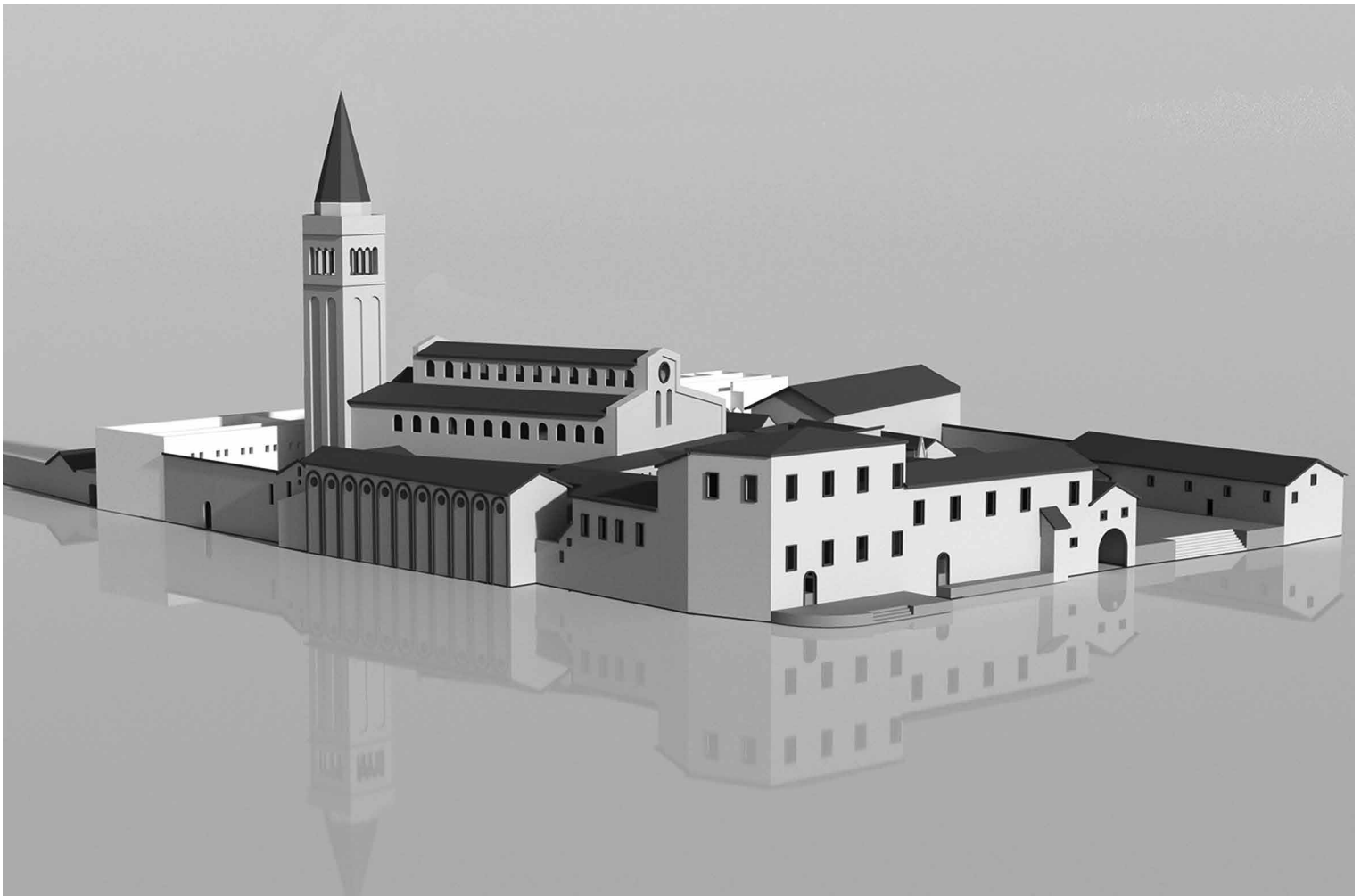


Fig. 6 Digital model of the appearance of the abbey of San Giorgio Maggiore, Venice, 1490 ca. (G. Liva).

gation (XV-XVIII centuries): digital and spatial analysis strategies through BIM models”²². This highly interdisciplinary project, funded by the Italian Ministry of University and Research, involves the universities of Padua, Bologna, and Brescia, under my direction as Principal Investigator and Sonia Cavicchioli and Paolo Borin as Associated Investigators. A key aspect of the project is the adoption of an innovative digital tool: Building Information Modeling (BIM).

BIM allows us to simultaneously organize data on a three-dimensional model of the building (generated from a survey and point cloud data) and project it in a diachronic dimension by tracing the succession of construction phases. This constitutes, on the one hand, a continuously implementable collaborative and open-access platform and, on the other, a versatile tool for developing verifiable and correctable reconstruction hypotheses. In this way, the research process comes full circle. Thus, the creation of a 3D model is no longer merely the ‘final product’ but an integral component of the research process with an operational mode that allows the incorporation of archival sources with other types

of documentation (visual, material, etc.)²³. We have chosen to experiment with this versatile and high-performance tool to answer some specific historiographical questions: Was there a distinctive architecture of the Congregation? Can we reconstruct the original decorative schemes of its churches and monasteries? How can we visually retrace the different construction phases of a monastery in 3D?

In 1408, the Benedictine monk Ludovico Barbo became abbot of the monastery of Santa Giustina in Padua. Within a few years, he founded a group of monasteries that revolutionized monastic life, which was in deep crisis at the time. Barbo urged the monks to study, meditate, and dedicate themselves to personal prayer. He also restructured the monastic network: the abbeys were no longer independent but became part of a cohesive system, a ‘family’ of monasteries that spread throughout Italy in the span of just a few decades. Whenever a monastery joined the Congregation, the number of resident monks increased, necessitating the rebuilding of the complex. From the second half of the fifteenth century, dozens of construction sites opened simul-

²² <https://www.digitalcoenobium.eu/> (last accessed 29 October 2025).

²³ L. BARAZZETTI et al., *Cloud-to-BIM-to-FEM: Structural simulation with accurate historic BIM from laser scans*, “Simulation Modelling Practice and Theory”, 57, 2015, pp. 71-87; P. BORIN, R.A. BERNARDELLO, A. CRIGOLETTO, *Connecting Historical Information with BIM Ontologies. HBIM Methods for the Visualization of Harris Matrix for the Torrione in Carpi*, in *Graphical Heritage, I (History and Heritage)*, conference proceedings (Zaragoza, 24-25 September 2020), edited by L. Agustín-Hernández, A. Vallespín Muniesa, A. Fernández-Morales, Cham 2020, pp. 757-770; S. BRUNO, M. DE FINO, F. FATIGUSO, *Historic Building Information Modelling: performance assessment for diagnosis-aided information modelling and management*, “Automation in Construction”, 86, 2018, pp. 256-276; A. GIORDANO et al., *Time and Space in the History of Cities*, in *Digital Research and Education in Architectural Heritage: 5th Conference, DECH 2017, and First Workshop, UHDL 2017, Dresden, Germany, March 30-31, 2017, Revised selected papers*, edited by S. Münster et al., Berlin-New York 2018, pp. 47-62; L. DE LUCA, *Methods, formalisms and tools for the semantic-based surveying and representation of architectural heritage*, “Applied Geomatics”, 6, 2014, pp. 115-319; M. MURPHY, E. MCGOVERN, S. PAVIA, *Historic Building Information Modelling - Adding intelligence to laser and image based surveys of European classical architecture*, “ISPRS Journal of Photogrammetry and Remote Sensing”, 76, 2013, pp. 89-102; C. PYBUS et al., *New Realities For Canada's Parliament: A Workflow for Preparing Heritage BIM for Game Engines and Virtual Reality*, conference paper (Ávila, 1-5 September 2019), “The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences”, XLII, 2019, pp. 945-952.



Fig. 7 Interior of the abbey church of San Pietro Apostolo, Modena (photo S. Cavicchioli).

²⁴ On the Congregation, see J. LECLERCQ, *Ludovico Barbo e la storia dell'immaginario*, in *Riforma della Chiesa. Cultura e spiritualità nel Quattrocento veneto*, atti del convegno (Padova-Venezia-Treviso, 19-24 settembre 1982), a cura di F.G.B. Trolese, Cesena 1984, pp. 385-400; M. ZAGGIA, *Mantova e la Sicilia nel Cinquecento, II (La congregazione benedettina cassinese nel Cinquecento)*, Firenze 2003; *Dalla riforma di S. Giustina alla Congregazione Cassinese: genesi, evoluzione e irradiazione di un modello monastico europeo (sec. XV-XVI)*, atti del convegno (Padova, Abbazia di Santa Giustina, 18-21 settembre 2019), a cura di E. Furlan, F.G.B. Trolese, Cesena 2022.

²⁵ On the architecture of the Congregation of Santa Giustina, see J. ACKERMAN, *L'architettura religiosa veneta in rapporto a quella toscana del Rinascimento*, "Bollettino del Centro Internazionale di Studi di Architettura Andrea Palladio", XIX, 1977, pp. 135-164; G. BELTRAMINI, *Architetture di Andrea Moroni per la Congregazione Cassinese: due conventi bresciani e la basilica di Santa Giustina a Padova*, "Annali di Architettura", 7, 1995, pp. 63-94; M.A. WINKELMES, *Form and Reform: Illuminated, Cassinese Reform-style Churches in Renaissance Italy*, "Annali di Architettura", 8, 1996 (1997), pp. 61-84; B. ADORNI, *Alessio Tramello*, Milano 1998, pp. 63-67; B. PAUL, *Nuns and Reform Art in Early Modern Venice: The Architecture of Santi Cosma e Damiano and its Decoration from Tintoretto to Tiepolo*, Farnham 2012, pp. 121-140; G. PENCO, *Funzione e significato dell'architettura monastica nell'età del Rinascimento*, "Benedictina", 59, 2012, pp. 59-76; G. BELTRAMINI, *Modelli antichi e alcuni disegni per i monasteri del-*

tanously, and architects and craftsmen – as well as architectural drawings – began to circulate between the different locations. Decisions regarding individual construction sites required approval from the Chapter General, which met once a year²⁴. The most important consequence of this centralization was the formation of a common architectural culture that had a profound impact on the architecture of the Italian Renaissance more broadly. Furthermore, the systematic replacement of common dormitories with individual cells during these reconstructions forced the monks to invent a new monastic layout²⁵. The solutions adopted were essentially of two types. The first saw the introduction of a linear dormitory plan with a long central corridor flanked by rows of cells, a model previously tested in the convents of the mendicant orders, where common dormitories had been subdivided by partitions or sheets of fabric into individual spaces for sleeping and study as early as the thirteenth century. The second solution arranged the cells in a ring around a cloister.

This standardization of cloister and church construction, driven by the continuous exchange of

architectural and structural solutions between the different sites, can only be studied by gathering a vast amount of data on lots of case studies. To analyze this enormous corpus of buildings, documents, and drawings under a unified research theme requires a coordinated research team working on an integrated digital platform. A simple database is insufficient to manage such diverse and complex information. For this reason, we plan to use Building Information Modeling, which has been increasingly employed in recent years to organize data from archaeological excavations and for research in architectural history. By integrating historical, archival, and bibliographic research with digital representational methods, BIM will provide a multidisciplinary knowledge base of these buildings. Within the "CoenoBI(u)M" project, the platform will connect multiple BIM models of different yet interrelated structures through a device that will allow us to consult the various models in a comparative way. We intend to verify whether similar technological and spatial solutions (including walls, ceiling vaults, roofs, etc.) were consistently adopted in their construction, potentially reflect-



Fig. 8 *Chiostro del Capitolo, Abbey of Santa Giustina, Padua* (photo G. Guidarelli).

ing the particular context of the Congregation of Santa Giustina where architectural decisions were made at a centralized level. Through specific queries, we will be able to identify patterns and similarities in the layout of the different environments around the cloister and in their respective spatial relationships (refectory, chapter hall, library, etc.). It will also be possible to verify whether there are common solutions in the dimensioning of community spaces (churches, refectories, etc.) and individual monks' cells. By leveraging BIM, we can test the hypothesis that there was an exchange of solutions between the different building sites. Furthermore, by integrating various relational databases, this methodology will allow us to combine all archival and bibliographic data related to these places. For example, we will be able to trace the circulation of building materials, craftsmen, and architects, focusing initially on three case studies: the abbeys of San Pietro in Modena, Santa Giustina in Padua, and Santa Maria Assunta in Praglia (figs. 7-9). Finally, we plan to conduct a comparative analysis of the construction processes on the different sites, examining how small me-

dieval monasteries evolved into expansive, multi-cloistered complexes. This project aligns with an established field of study that has successfully employed multidisciplinary research and experimented with 4D modeling²⁶. In the case of the "CoenoBI(u)M" project, we have applied this methodology to monastic architecture, investigating a network of buildings to uncover shared design principles and construction processes. Our goal has been to bring together skills, expertise, and findings from different disciplines into a single interpretative framework, where research data is structured to be shared and is always accessible, thus enhancing both the understanding and management of architectural and artistic heritage. By creating a shared virtual environment that integrates heterogeneous visual and non-visual data, this approach enables the definition of historical, architectural, and engineering simulations by coordinating all knowledge related to a single object (e.g., a Benedictine monastery). Consequently, the standardization of information facilitates the generation and comparison of consistent data sets. The process unfolds in four key phases: 1) data acquisition,

la congregazione benedettina di Santa Giustina poi Cassinese nel Quattrocento, in *Renaissance Studies in Honor of Joseph Connors, I* (Art history), edited by M. Israëls, L.A. Waldman, Firenze 2013, pp. 253-266; B. ADORNI, *L'architettura benedettina cassinese in area padana nel Rinascimento fra koinè locale, ritorni al medioevo e disposizioni generali*, in *Cinquecento monastico italiano*, atti del convegno (San Benedetto Po, 18-21 settembre 2008), a cura di G. Spinelli, Cesena 2013, pp. 321-340; J. GRITTI, *Echi albertiani. Chiese a navata unica nella cultura architettonica della Lombardia sforzesca*, Venezia-Padova 2014, pp. 233-254; G. GUIDARELLI, *Vita spirituale, pratica liturgica e architettura: verso un nuovo modello architettonico di monastero benedettino cassinese (XV-XVI secolo)*, in *The Network of Cassinese Arts in Renaissance Italy*, edited by A. Nova, G. Periti, Roma 2021, pp. 81-94; G. GUIDARELLI, *La formazione di una cultura architettonica comune della congregazione di Santa Giustina nel XV secolo: cantieri, normativa e soluzioni spaziali*, in *Dalla riforma di S. Giustina alla Congregazione Cassinese...* cit., pp. 701-716.

²⁶ *Visualizing Complexities. Practices and Heuristics...* cit.; S. MÜNSTER et al., *Handbook of Digital 3D Reconstruction of Historical Architecture*, Cham 2024.



Fig. 9 Aerial view of the abbey of Santa Maria Assunta di Praglia, Teolo.

Fig. 10 Digital model of the monastery of San Nicolò, Lido (V. Merlo).

gathering all existing information related to the case study; 2) reconstruction, involving the creation of BIM models and the development of hypotheses based on the collected data; 3) conservation, focusing on actions that ensure the long-term usability use of the structure in question; and 4) dissemination, aimed at developing and sharing knowledge with third-party users²⁷.

The case of the monastery of San Nicolò al Lido illustrates how the BIM methodology combines building surveys, 3D modeling, and the linkage of historical data collected by scholars to specific architectural elements. This approach promotes the creation of a dynamic, continuously expand-

able 3D database (fig. 10)²⁸. This system also allows the visualization of architectural transformations over the centuries, grounding the virtual reconstructions in historical documentation and in the analysis of surviving decorative, architectural, and structural traces. The need to formulate interpretations and hypotheses not only through written text but also via a 3D model implies the localization of spaces and structures. In this way, the BIM model transcends mere replication of reality, serving as an interactive research tool and a shared platform where historical hypotheses can be tested and refined. By associating each monastery with a BIM model

containing both historical records and data on its current condition, it becomes possible to interconnect these models into a networked database that mirrors the organizational structure of the Congregation itself. This framework allows for the systematic comparison of architectural and artistic similarities across monasteries and the study of material, craft, and architectural exchanges, thus progressively reconstructing the architectural and artistic culture of the Congregation. This research model can then be adapted and applied to other fields of study.

Conclusion

From an initial phase in which digitalization was primarily used for the dissemination of research findings, we have gradually moved to an operational use of IT tools that have enabled the creation and comparison of alternative reconstruction hypotheses within a framework of continuous updating and sharing of data ('open data' and 'open science'). In this phase, the work of scholars who engaged in pioneering interdisciplinary research—transferring cognitive processes and investigative tools across disciplinary boundaries—proved essential. Among them, Robert Mark's contribution was particularly significant. Mark experimented with photoelastic analysis (originally developed for the design of nuclear reactor components) and holographic interferometry to formulate a technique that, when combined with digital modeling, could assist in identifying the construction phases of French Gothic cathedrals²⁹.

The new approach that has developed is an inherently interdisciplinary type of research where languages, heuristic processes, and protocols from different disciplinary fields (e.g., computer science, data visualization, architectural restoration, etc.) must communicate and operate on a common platform and with common objectives. Yet, some important questions remain. For

example, do the results obtained through digital methodologies justify the effort, the scale of collaboration, and the increasing complexity of interdisciplinary research groups? Within such groups, how can the architectural historian effectively coordinate heterogeneous disciplinary tools and approaches and meaningfully steer the results toward core historiographical questions? Furthermore, is the digitalization of cognitive processes and narrative protocols merely a trend—one often driven by funding incentives—or does it offer a genuine opportunity to better conceptualize our research and make it more effective? In short, how is our profession evolving in response to the digital tools?

I think that historicizing—that is, retracing the history of this particular approach to architectural history—demonstrates how the process has become increasingly economical, versatile, and productive over the last two decades. It also shows that the transition from simple data mapping to digital narration and, ultimately to complex and interoperable 3D modeling represents, despite all potential misgivings, a significant conceptual advancement. However, this progress must continue to be refined while remaining increasingly attuned to the material reality of the built environment it seeks to understand.

²⁷ Building Information Modeling (BIM) originated as a digital representation of a building that integrates multiple types of data, enabling interoperability and data sharing across different models and databases. Its most widely accepted definition, as stated in ISO/DIS 6707-2(en), is: "use of shared digital representation to facilitate design, construction, and operation processes to form a reliable basis for decisions". Initially developed as a tool for designing and maintaining new constructions, BIM has since been adapted for use in the context of historic buildings—commonly referred to as Historic Building Information Modeling (HBIM). When applied to heritage sites, BIM facilitates the integration of inherently heterogeneous data, organized according to distinct historical phases. In this way, interdisciplinary collaboration becomes possible, allowing BIM to be used as a research tool. In archaeological contexts, Archaeological BIM (A-BIM) enables the structuring of fragmented and diverse data within a stratigraphic framework, effectively creating a 'digital twin' of the actual excavation. See BORIN, BERNARDELLO, GRIGOLETTO, *Connecting Historical Information...* cit., pp. 757-770; L. SBROGIO et al., *Design Criteria and Procedures for Archaeological Shelters: Towards Flexibility Thanks to Algorithmic Modelling*, conference paper (SAHC online, 29 September-1 October 2021), edited by P. Roca, L. Pelà, C. Molins, 2021, https://www.scipedia.com/public/Sbrogio_et_al_2021a (last accessed 29 October 2025).

²⁸ R.A. BERNARDELLO, V. MERLO, *Nuovi metodi per l'analisi storica. Processi Bim per la catalogazione e lo studio del monastero di San Niccolò del Lido*, "Ateneo Veneto", 3 s., CCVIII, 20, 2021, 2, pp. 51-82.

²⁹ R. MARK, *Experiments in Gothic Structure*, London 2014; ID., *Structural Archaeology, Photoelastic and Finite-element Modeling of Historic Architecture*, in *Stable-unstable? Structural Consolidation of Ancient Buildings*, edited by R.M. Lemaire, K. Van Balen, Leuven 1988, pp. 79-91.

REGARDS CROISÉS SUR L'ESPACE URBAIN : MATÉRIALITÉ ET IMMATÉRIALITÉ DES ARCHITECTURES D'UN QUARTIER

This article explores an interdisciplinary approach to the architectural history of a Parisian neighbourhood between 1750 and 1950, integrating multiple disciplines including architectural history, urban history, art history, geography, and digital humanities, and drawing on a range of visual, cartographic, and textual sources. As part of the “Richelieu. Histoire du quartier” project, it examines how digital tools contribute to analyzing the spatial and cultural dynamics of the area. The study highlights the value of a multi-scalar analysis of the district, conceived as a network of interactions between architecture, social practices, and representations. Visual documentation, both as a record and a reflection of contemporary perceptions, reveals the complexity of urban spaces. GIS-based data visualization brings to light the connections between buildings, activities, and professional figures. The case study of the Palais Brongniart illustrates this approach: beyond its physical presence, the building’s integration into broader economic and cultural dynamics emerges through representations linking it to the fictional character Robert Macaire. By examining materiality, uses, and mental constructs, this research demonstrates how micro-historical analysis, visual culture studies, and data modeling can deepen our understanding of urban spaces.

Pour une histoire culturelle et multifactorielle de l'architecture

Entreprendre l'étude d'un quartier de Paris au dix-neuvième siècle suppose d'emblée de multiplier les points de vue. L'historien Christophe Charle rappelle que Paris, en tant que capitale culturelle, est “un objet multidimensionnel et inséré dans plusieurs temporalités”, dont les constantes structurelles et les variations conjoncturelles doivent être observées “à des échelles différentes ou à partir de points de vue très divers”¹. Suivant cette définition, le quartier est perçu comme une fenêtre sur la ville, un échantillon de l'hypercentre européen qui “détient au plus haut niveau tous les attributs d'une ville rayonnante et attractive”². La forte concentration de ressources humaines, sociales, artistiques et économiques dans la cité se reflète à travers ses représentations. Ces dernières, qui relèvent du domaine de l'histoire de l'art, constituent une documentation précieuse pour les autres disciplines, notamment l'histoire de l'architecture. En effet, considérant le point de vue du sociologue Howard Becker, ces images du quartier illustrent l'aspect collaboratif lié à la création de la ville réelle, mais aussi de la ville perçue³. L'ambition du projet de recherche “Richelieu. Histoire du quartier”, mené à l'Institut national d'histoire de l'art (INHA, Paris) grâce à une collaboration institutionnelle (2018-2024), était de développer une approche interdisciplinaire appliquée à l'étude d'un quartier de la ville⁴. Si-

tué au centre de Paris, ce quartier a été examiné grâce à des sources cartographiques et iconographiques numérisées pour une période comprise entre 1750 et 1950 (fig. 2-3)⁵. De façon empirique, il s'agissait de se demander de quelle manière un croisement de sources, de méthodes et de disciplines pouvait contribuer à enrichir les connaissances sur la ville au dix-neuvième siècle⁶. Autrement dit, quel discours peut-on porter sur la complexité de l'histoire architecturale d'un quartier lorsque les sources sont mises à l'épreuve de plusieurs échelles d'observations ? Ce travail a reposé sur trois piliers. D'abord l'objet d'étude, le quartier, pris dans sa dimension historique, urbaine et architecturale, puis les documents liés à ce dernier, abordés à partir de la discipline de l'histoire de l'art, eux-mêmes enrichis, spatialisés, et exposés grâce au troisième élément, le développement d'outils numériques adaptés⁷. Une fois les limites de l'espace définies, les équipements, les bâtiments et leurs activités économiques et humaines identifiés, les événements qui s'y sont déroulés recensés, une collecte systématique de cartes et d'images associés a pu être lancée dans les fonds d'institutions publiques. Des plus techniques aux plus artistiques ou anecdotiques, les images sélectionnées dans l'iconographie pléthorique de la ville forment un corpus hétérogène riche d'informations selon plusieurs échelles, celle de la rue ou de la marchandise par exemple. Photographies, des-

ins, jetons, menus de restaurant, cartes postales, images de presse, décors, gravures de recueils d'architecture, partitions, affiches publicitaires, maquettes, etc., offrent une vision éclatée et désaccordée d'une rue, d'un bâtiment ou d'un événement du quartier. Ces images fournissent ainsi des renseignements directs et indirects. Elles illustrent à la fois la matérialité de l'architecture, à travers des reportages photographiques, des documents techniques ou vues topographiques, et ses usages humains, par les représentations de marchandises, la publicité, les billets de théâtre, et bien plus encore.

Parmi les nouvelles orientations qui émergent dans les études d'histoire urbaine, Nancy Stieber cite les liens avec l'histoire sociale, culturelle ou économique, qui se matérialisent par un intérêt pour le contrôle social dans la ville, l'identité, la mémoire collective, et plus largement la vie quotidienne⁸. L'auteure insiste également sur les nouvelles directions de la recherche architecturale incluant des analyses visuelles et spatiales. Cette importance conférée à la notion d'espace, public ou architectural, s'inscrit dans le courant du *spatial turn*⁹. Dans cette perspective, le quartier est vu comme un enchevêtrement de lieux, résultat de processus socio-économiques et de réseaux professionnels et interpersonnels. Pour qui s'engage dans cette voie, il s'agit de proposer une compréhension de l'espace et des bâtiments fondée sur la perception humaine¹⁰. À cet égard, l'iconographie, influencée par les manières dont les contemporains ont observé la ville, constitue

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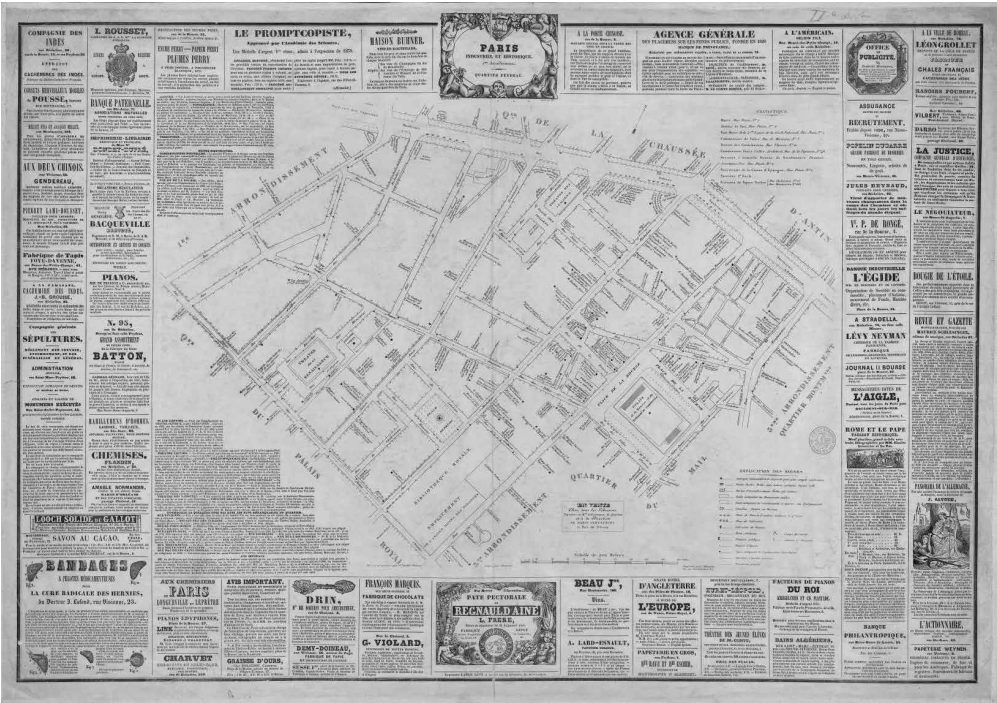
L'incomparable, la vraie, l'unique mine d'or, L'ETERNELLE GOGOFONTAIN, je donne à volonté !!!

Dessin de Jean VEBER.

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Fig. 1 Illustration de périodique de J. Veber, 1895 (Bibliothèque Nationale de France, Département Estampes et Photographie, FOL-EF-490).

Fig. 2 Feuillet-Dumas, J.N. Henriot (sculp.), Masson (impr.), Paris industriel et historique. 2^e arrondissement. Quartier Feydeau, plan et publicités, vers 1840 (Bibliothèque Historique de la Ville de Paris, Paris, Gr B 7).



un réservoir d'informations inépuisable¹¹. À titre d'exemple, les architectes, absents des images en tant qu'individus représentés, peuvent être identifiés dans les sources par les bâtiments qui leurs sont attribués, et qu'il est possible de spatialiser. Cette démarche révèle l'existence d'un réseau d'architectes de quartier, acteurs d'une architecture de proximité. Citons notamment M.A. Habert dit Thibierge (1756-1836), auteur de plusieurs aménagements de cafés au Palais-Royal, ainsi que du tout proche passage Feydeau, ou encore Jean-Louis Pascal (1837-1920), actif dans les chantiers de la Bibliothèque nationale de France et de la Banque de France¹². À cette thématique architecturale s'ajoutent les vues de chantiers, incendies, démolitions, et expérimentations autour de l'équipement de la ville, autant de sujets relevant de l'histoire des techniques et de la construction, qui complètent cette recherche sur la fabrique urbaine¹³. Au croisement de l'histoire des mentalités et des sensibilités, les vues de la vie quotidienne - plusieurs centaines pour une rue, une place, ou un monument tel le Palais-Royal - révèlent un univers sensoriel d'une grande richesse, quadrillé de systèmes de communications multimodales. Certaines formes architecturales captent le regard, en écho aux affiches et enseignes qui, tout en renseignant sur les activités économiques, habillent quotidiennement les façades de l'espace public¹⁴. C'est, au final, une histoire culturelle de l'architecture qui naît de ce corpus. À l'heure du numérique, le quartier est réévalué par un dialogue

entre histoire, géographie, histoire de l'art et de l'architecture, illustrant la complexité et les limites d'une étude à la micro-échelle. Afin de rendre accessibles les apports de cette méthode d'analyse, le site internet du projet Richelieu est pensé à l'image d'une coupe anatomique du quartier. Ses fonctionnalités reflètent l'évolution des axes de recherches et favorisent une lecture progressive et interconnectée des sources. La base de données qu'il contient a été élaborée à partir des sources, et rend compréhensibles les réseaux de connexions qui sous-tendent la ville en s'appuyant sur des séries de relations dynamiques. La modélisation des données fait de ce corpus un centre névralgique d'informations : les 4217 sources iconographiques sont connectées par plus de 40.000 relations distinctes à un ensemble de thèmes, entités nommées et lieux. Dans une perspective de géohistoire, l'iconographie est spatialisée sur ses lieux de production et de représentation localisés dans un système d'information géographique¹⁵. Plus qu'un support de visualisation, cette approche multiscalaire de la ville située constitue une clef de lecture utile à la compréhension des formes et fonctions qui constituent les tissages urbains¹⁶. Un système de parcelles connectées donne également à voir les bâtiments qui sont représentés conjointement sur les documents, et ceux dont les activités et sociabilités sont partagées. Ainsi se croisent et s'entrelacent la ville conçue, la ville vécue et la ville perçue. Cependant, cette approche granulaire et très documentée révèle l'insaisissable exhaustivité

¹ C. CHARLE, *Paris, 'capitales' des XIX^e siècles*, Paris 2021, p. 20.
² Ivi, p. 16.
³ Howard Becker a démontré l'importance des acteurs et actrices des mondes de l'art, transposable au monde de la ville et de l'architecture : H.S. BECKER, P.M. MENDER, J. BOUNIORT, *Les mondes de l'art*, Paris 2024 (première éd. Oakland 1982).
⁴ Pour une analyse de l'interdisciplinarité à l'œuvre dans le projet Richelieu, entre *Digital humanities* et *spatial humanities*, voir M. HERVIEU, *La cartographie Web : un 'nouveau' retour vers le futur ? Cas d'étude : contexte, réalisation et perspectives de la plateforme cartographique du projet Richelieu. Histoire du quartier*, mémoire de master, École Nationale des Chartes, Paris 2024. Sa définition s'appuie sur M. STEMBER, *Advancing the social sciences through the interdisciplinary enterprise*, "The Social Science Journal", 28, 1991, 1, pp. 1-14.
⁵ La plateforme web du projet Richelieu et une série d'articles rédigés par les membres de l'équipe illustrent sa dimension fortement interdisciplinaire : <https://quartier-richelieu.inha.fr> (consulté le 30 octobre 2024). Voir C. DUVERTE, *Le quartier 'Richelieu' : spécialisation et spatialisation de la ville moderne, "Profil"*, 4, avril 2025, pp. 152-163.
⁶ Pour d'autres études de quartiers, voir C. RHEIN et al., *Regards sur les quartiers parisiens. Contextes spatiaux, usages politiques et pratiques citadines*, Paris 2008, halshs-00464678 (consulté le 30 août 2025).
⁷ Sur la question de la cartographie numérique et de la base de données relationnelles liées au projet Richelieu, voir Paul Kervegan, Charlotte Duvette, Loïc Jeanson, Colin Prudhomme, Justine Gain et al., *'La marque du lieu' dans le 'quartier Richelieu' : Implications de la notion de lieu pour la modélisation et la visualisation d'un corpus iconographique, cartographique et textuel* (Paris, 1750-1950), "Humanistica. Association francophone des humanités numériques", actes du congrès (Genève, 26 juin 2023), Genève 2023, <https://hal.science/hal-04108218> (consulté le 30 octobre 2024).
⁸ N. STIEBER, *Microhistory of the Modern City: Urban Space, Its Use and Representation*, "Journal of the Society of Architectural Historians", 58, 1999, 3, pp. 382-391: 384.
⁹ Y. ALLWEIT, *Beyond the Spatial Turn: Architectural History at the Intersection of the Social Sciences and Built Form*, in UC Berkeley: *The Proceedings of Spaces of History / Histories of Space: Emerging Approaches to the Study of the Built Environment*, conference paper (Berkeley, University of California, 30 April-1 May 2010), Berkeley 2010, pp. 1-9, <https://escholarship.org/uc/item/9rt7c05f> (consulté le 29 octobre 2024).
¹⁰ C. HILGER, *Vernetzte Räume. Plädoyer für den Spatial Turn in der Architektur*, Bielefeld 2010.
¹¹ J. CRARY, *Techniques de l'observateur : vision et modernité au XIX^e siècle*, Bellevaux 2016 (première éd. Nîmes 1994).

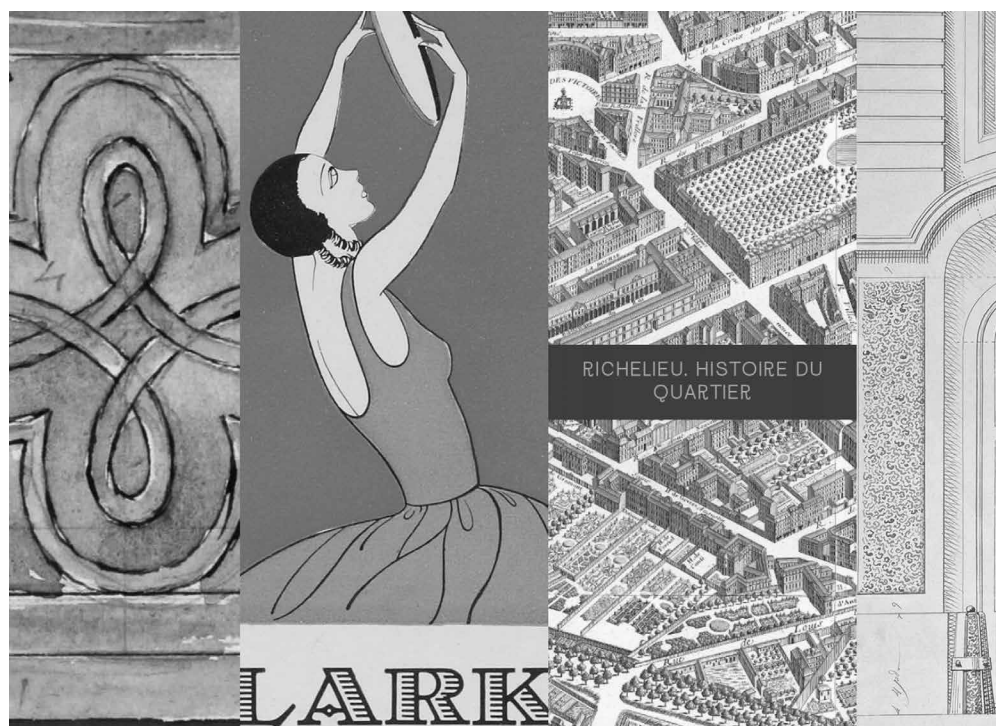


Fig. 3 Détails d'œuvres extraites de Paris Musées, "Projet Richelieu. Histoire du quartier", montage (élaboration graphique de l'auteur).

té de l'étude multifactorielle du quartier. La multiplication des sources disponibles n'empêche pas l'existence de zones d'ombre, dans la mesure où plusieurs espaces et activités intrinsèquement liés à la 'vie' du quartier ne sont pas ou très peu représentés. Antoine Picon a d'ailleurs bien souligné la difficulté de définir des limites spatiales, temporelles et disciplinaires dans ce type de travaux¹⁷. Les points de rupture de cette approche fractale de l'architecture du quartier se révèlent lorsqu'il faut retranscrire la complexité de chaque cas, du monument à la boutique.

'Faire monument' dans la ville

Un édifice peut se décomposer en une quantité de sources et d'interprétations dont la variété illustre celle des méthodes d'analyse propres à chaque discipline. Le cas d'un bâtiment public comme le Palais Brongniart est, à cet égard, révélateur¹⁸.

Centre névralgique des activités financières du dix-neuvième siècle parisien, le palais de la Bourse trône au centre d'une place configurée en ce sens¹⁹. Entre le Palais-Royal et les Grands Boulevards, la place de la Bourse a été ouverte en 1809 dans le prolongement de la rue Vivienne, elle-même prolongée entre 1824 et 1830 à la suite de l'ouverture de la place. Le monument influence l'évolution de la trame urbaine, mais aussi les pratiques des habitants, des promeneurs et des consommateurs (fig. 4)²⁰. La Bourse a changé régulièrement d'emplacement pendant un siècle, entre la rue Vivienne et ses alen-

tours (au Louvre, à l'église des Petits-Pères ou au Palais-Royal), avant de trouver cet ancrage monumental. Bien que le choix de cet emplacement ait été motivé par la réutilisation de l'espace occupé par le couvent des Filles-Saint-Thomas laissé vacant, il est probable que l'association historique du secteur avec la finance ait influencé cette décision²¹.

L'inscription territoriale du monument devient évidente grâce à la mise en relation et à la spécialisation des sources. La façade principale de ce temple de l'argent, dessinée par Alexandre-Théodore Brongniart, fait face au point où la rue Vivienne se fond dans la place. Conçu comme l'épicentre du quartier, ce carrefour est marqué par les marches monumentales du palais, dressées comme une invitation à entrer dans le monde des affaires. Un coup d'œil sur les images représentant les parcelles avoisinantes met en lumière la prolifération d'affiches et d'enseignes stratégiquement regroupées sur les façades visibles depuis l'embranchement de la Bourse. Réciproquement, la situation centrale du palais, renforcée par son environnement architectural, ses réseaux de transport, l'effervescence des activités humaines, les guides, la presse, la publicité et la toponymie des commerces adjacents, en font un objet visible et sensible, une sorte d'icône. Grâce au croisement des sources, on saisit davantage l'impact du monument sur son environnement. Il attire notamment l'attention des artistes, des journalistes et des caricaturistes qui en font un symbole identifiable, utile à la dif-

¹² Il participe dans les années 1890 aux travaux de la salle Ventadour, rachetée par la Banque de France, A. RICHARD-BAZIRE, Jean-Louis Pascal (1837-1920), *architecte : la tradition de l'École des Beaux-arts à l'épreuve du romantisme*, thèse de doctorat, École Pratique des Hautes Études, Paris 2009.

¹³ L. THIROUX, *Les vespasiennes parisiennes entre 1835 et 1907 : l'architecture et la technique au service des redéfinitions des normes du corps pissant dans le Paris hygiéniste*, mémoire de master, École Pratiques des Hautes Études, Paris 2023.

¹⁴ Au siècle précédent : L. CUVELIER, *La ville captivée : affichage et économie de l'attention à Paris au XVIII^e siècle*, thèse de doctorat, Institut d'Études Politiques, Paris 2019.

¹⁵ Dans le cadre de ce projet, la cartographie numérique est l'un des outils de valorisation des axes de recherches appliqués à l'étude iconographique. Nous sommes partis du postulat que l'ancrage topographique était essentiel à la compréhension des réseaux que nous abordons. Cependant, le SIG n'est pas au cœur de nos travaux, c'est un chantier secondaire. Colin Prudhomme en a proposé une analyse dans *Du corpus d'images à la modélisation 3D*, <https://quartier-richelieu.inha.fr/documentation/methodologie> (consulté le 29 octobre 2024).

¹⁶ De nombreux projets de recherche s'articulent autour des SIG, citons les autres projets associés du *Projet Time Machine* avec lesquels nous collaborons, ainsi que ceux portés par la Università Roma Tre : K. LELO, *A GIS Approach to Urban History: Rome in the 18th Century*, "ISPRS International Journal of Geo-Information", 3, 2014, 4, pp. 1293-1316.

¹⁷ A. PICON, *Repenser les limites de l'architecture : un acte politique*, dans *Repenser les limites : l'architecture à travers l'espace, le temps et les disciplines*, sous la direction de A. Thomin-Berrada, B. Bergdol, Paris 2005).

¹⁸ C. DUVETTE, *La Bourse et sa place. Le temple de l'argent en perspectives : vues, caricatures et activités au XIX^e siècle*, "Richelieu. Histoire du quartier", Paris 2024, <https://quartier-richelieu.inha.fr/article/bourse> (consulté le 30 octobre 2024).

¹⁹ Alexandre-Théodore Brongniart, 1739-1813 : *architecture et décor*, catalogue de l'exposition (Paris, Musée Camavalet, 22 avril-13 juillet 1986), Paris 1986.

²⁰ *Histoire de la rue. De l'Antiquité à nos jours*, sous la direction de D. Tartakowsky, Paris 2022, pp. 238-245 et 280-286.

²¹ La Banque de France s'installe au même moment dans l'hôtel de Toulouse, à quelques rues de là, selon le décret du 5 mars 1808 : Alexandre-Théodore Brongniart... cit., pp. 142-147.



Fig. 4 Anonyme, Paris : place de la Bourse, Paris et ses environs, 1890-1900 (Bibliothèque nationale de France, Paris PETFOL-VE-1356).

fusion de leurs idées (fig. 1). À cet égard, la figure de Robert Macaire, 'héros-dandy-bandit', invention littéraire populaire et théâtrale ancrée dans la société de la Monarchie de Juillet, apparaît souvent liée à ce monument bien qu'elle soit rarement associée au quartier (fig. 5)²². La silhouette du palais Brongniart figure régulièrement en toile de fond des représentations de Robert Macaire, mettant en exergue le système économique incarné par la Bourse. Le lien entre le héros et le palais se retrouve aussi dans l'importante activité théâtrale du secteur, ainsi que dans 'la mythologie du flâneur' liée à la naissance de Robert Macaire et trouvant naturellement sa place dans ce quartier propice à la badauderie²³. Cet exemple tend à démontrer l'utilité de la spatialisation dans la mise en place d'"une autre forme de compréhension des activités et des imaginaires littéraires"²⁴.

À l'architecture et l'esthétique du monument s'ajoutent sa richesse symbolique et humaine.

Le palais de la Bourse est perçu à différentes échelles, à la fois lieu de pratiques financières, comme l'agiotage, et source d'inspiration pour la production culturelle. En plus de son empreinte physique dans la ville, l'édifice, fragmenté et schématisé sur le papier, donne lieu à des milliers de représentations graphiques, à l'image d'un kaléidoscope architectural multidimensionnel. Les outils numériques facilitent la prise de mesure de l'écart entre l'emprise spatiale d'un monument et la multitude de représentations et de commentaires qu'il a suscités.

Cette relecture interdisciplinaire des lieux, fondée sur une analyse micro-historique, ouvre de nouvelles perspectives d'études architecturales. Les programmes et les formes architecturales de certains bâtiments, souvent étudiés isolément, pourraient être réexaminés au prisme de leurs représentations, des réseaux humains et économiques qu'ils engendrent, ainsi que de leurs environnements immédiats. Quel discours, par

²² S. BERTHELOT, *Robert Macaire ou le brouillage satirique*, dans *Mauvais genre, la satire littéraire moderne*, sous la direction de S. Duval, J.P. Saïdah, Bordeaux 2008, pp. 255-269.

²³ S. LE MEN, *Les images sociales du corps*, dans *Histoire du corps*, sous la direction de A. Corbin, J.J. Courtine, G. Vigarello, II (*De la Révolution à la Grande Guerre*), Paris 2011², pp. 119-143 : 135.

²⁴ J.M. BESSE, *Approches spatiales dans l'histoire des sciences et des arts*, "L'Espace Géographique", 39, 2010, 3, pp. 211-224 : 212.



Fig. 5 A.J. Lorentz, *Monument à Robert Macaire*, 1856 (Musée Carnavalet, Paris, D. 9170).

exemple, pourrait-on porter sur les façades des immeubles entourant les principales stations d'omnibus parisiennes ? Afin de clarifier certaines zones d'ombres du quartier, il serait envisageable d'agréger un corpus d'imprimés, des romans aux guides ou articles de presse qui lui sont associés, à condition d'ouvrir de nouvelles perspectives.

En réponse à Sabine Frommel, qui déplorait à juste titre que la diversité méthodologique en histoire de l'architecture ne reflète 'qu'imparfaitement' l'actualité de la discipline, ce projet de recherche explore une multitude de nouvelles approches²⁵. L'objectif principal était de prendre un objet ciblé et d'analyser un maximum de composantes historiques sous des angles très divers. Cette méthode invite à un élargissement disciplinaire et à explorer d'autres dimensions moins évidentes de l'architecture. En écho à Robert Macaire et la Bourse, plusieurs sujets émergent : des thèmes aussi variés que l'étude des

lieux de prédilections des performeurs qui se produisent dans l'enceinte du Palais-Royal, la relation entre les menus architecturés et l'architecture des restaurants, ou encore les différents types d'espaces verts visibles et invisibles au sein d'une rue²⁶.

²⁵ S. FROMMEL, *Pourquoi s'intéresser aux méthodes*, "Les Cahiers de la Recherche Architecturale et Urbaine", 2002, 9-10, pp. 5-11 : 6.

²⁶ L. THIROUX, *Les marginaux du Palais-Royal, donner à voir ce que l'on ne souhaite pas voir*, "Richelieu. Histoire du quartier", Paris 2024, <https://quartier-richelieu.inha.fr/article/marginaux> (consulté le 29 octobre 2024).

VERS UNE ANALYSE AUTOMATIQUE DU DISCOURS EN HISTOIRE DE L'ARCHITECTURE

This contribution examines the methodological potential of automated discourse analysis in architectural history. Language, a fundamental component of architectural practice, can now be approached through digital methods derived from corpus linguistics and natural language processing. Starting with a historiographical overview of the relationship between architecture and language since the 1960s, the paper shows how figures such as Summerson, Zevi, and Jencks conceptualized architecture as a linguistic system. Yet, despite these early insights, few studies have applied computational methods to the analysis of architectural texts. The pioneering work of Alexander Tzonis in the 1970s on “conceptual systems” in French architectural texts laid the groundwork for the computerized study of architectural discourse. Today, the widespread digitization of sources and major technological advances make it possible to assemble large textual corpora suitable for automated discourse analysis. Approaches developed in the digital humanities – such as textometry, topic modeling, argument analysis, and the use of large language models – have proven particularly fruitful. They have opened up a promising interdisciplinary field, offering new ways to trace the evolution of deontic discourse and theoretical conceptions of architecture, as well as the formulation of aesthetic judgments and the documentation of the reception of architectural works.

La question de la littérature artistique a retenu de longue date l'attention des historiens d'art¹ et plus récemment des historiens de l'architecture², mais peu de travaux ont jusqu'à présent eu recours à l'analyse de discours. Au-delà de la théorie et de ses contenus déictiques³, le discours occupe pourtant une place fondamentale dans la pratique architecturale. Qu'il s'agisse de la présentation du projet, de la délibération sur l'opportunité des solutions apportées par les architectes, ou encore de la réception critique d'un édifice, le langage est sans cesse mobilisé dans la pratique (fig. 1)⁴. Ainsi, une large part des sources de l'historien sont le résultat d'actes de langage. Acquérir une meilleure connaissance sur le discours architectural, ses modalités et ses évolutions est donc déterminant tant pour pouvoir mener une réelle critique des sources que pour en produire l'analyse.

Dans cette contribution, nous nous proposons de montrer comment les approches informatiques développées ces dernières années, au croisement des domaines disciplinaires de la linguistique computationnelle⁵ et de la textométrie, présentent un potentiel déterminant pour l'histoire de l'architecture. À partir d'une historiographie des relations entre langage et architecture et du recours à l'informatique pour le traitement des textes architecturaux, il s'agira d'aborder les enjeux épistémologiques soulevés par l'application des méthodes d'analyse du discours en architecture. Au-delà de la stricte dichotomie entre lecture distante et rapprochée fréquemment signa-

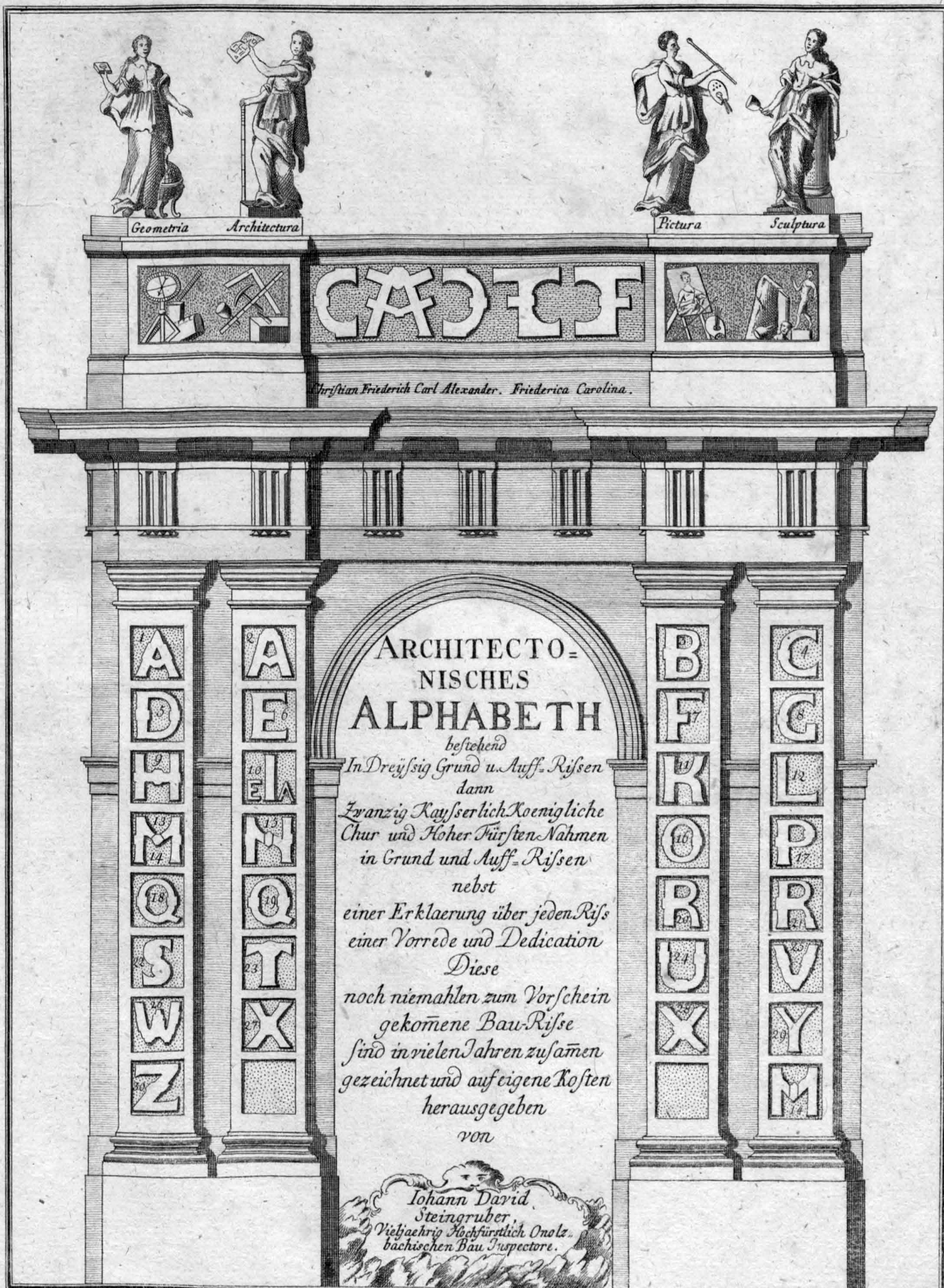
lée par le champ des humanités numériques⁶, ou de problématiques de fouille et de restructuration de corpus grâce à la reconnaissance d'entités nommées ou de *topics*⁷, il convient de déterminer comment arriver à saisir des notions architecturales pertinentes dans le contexte d'une recherche historique. L'apparition récente des grands modèles de langue (LLM) nous paraît, en effet, rendre désormais possible l'étude des conceptualisations architecturales et leur saisie diachronique⁸.

L'architecture et la langue

Il n'y a pas d'architecture sans discours. L'omniprésence du langage dans le processus de création architecturale est patente. Que ce soit pour exprimer un programme ou présenter le projet, ou encore pour communiquer sur la réalisation, chacune des étapes du processus de production architecturale mobilise le langage. Il n'est pas surprenant que la théorie, en tant qu'entreprise scripturale, ait toujours fait grand cas du langage⁹. L'analogie entre l'architecture et la langue, qui apparaît dès le traité de Vitruve, est reprise à la Renaissance par Leon Battista Alberti. Elle devint, par la suite, un lieu commun du discours théorique, tout particulièrement sur les ordres. Plusieurs auteurs ont exploré ces dernières années les rapports entre la rhétorique et l'architecture dans les traités¹⁰. Toutefois, ces travaux n'abordent pas le matériau textuel proprement dit, mais des questions esthétiques concernant l'art de bâtir et ses effets.

Parler d'architecture et de langage renvoie immédiatement à la littérature. D'autres recherches, engagées dans le courant des années quatre-vingt du vingtième siècle, se sont plus particulièrement penchées sur la représentation de l'architecture dans la littérature. Dès 1981, Philippe Hamon organisait à l'Université de Rennes un colloque consacré au texte et à l'architecture. Cette veine a, depuis, nourri de nombreuses publications en France¹¹. Toutefois, ce n'est pas le point de vue littéraire qui nous intéresse ici, mais plus spécifiquement la dimension linguistique de l'architecture.

Trois ouvrages majeurs dans l'historiographie présentent des titres symptomatiques d'une conception langagière de l'architecture. En 1964, John Summerson publiait *Le langage classique de l'architecture*¹². Bruno Zevi faisait paraître une contrepartie contemporaine avec *Le langage de l'architecture moderne* en 1973¹³. Enfin, la même année, Charles Jencks publiait *Le langage de l'architecture postmoderne*¹⁴. À des niveaux différents, ces trois livres dénotent un intérêt particulier pour la langue et peuvent être mis en rapport avec le tournant linguistique observé à partir des années soixante dans les sciences humaines¹⁵. Si l'influence de Ferdinand de Saussure était sensible, c'était principalement dans la volonté d'identifier une syntaxe et une grammaire architecturale. Issu d'une série de conférences sur la BBC, l'*opus* de John Summerson était avant tout un texte d'introduction sur l'architecture moderne.



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Fig. 1 J.D. Steingruber, *Architectonisches Alphabet...*, Schwabach 1773. Frontispice (ETH-Bibliothek Zürich, Rar 10420, domaine public).

¹ J. VON SCHLOSSER, *La littérature artistique : manuel des sources de l'histoire de l'art moderne*, Paris 1984.

² M. CARPO, *Architecture in the Age of Printing: Orality, Writing, Typography, and Printed Images in the History of Architectural Theory*, Cambridge 2001 ; *La construction savante : les avatars de la littérature technique*, actes du colloque (Paris, mars 2005), sous la direction de J.P. Garric, V. Negre, A. Thomine-Berrada, Paris 2008 ; *Le Livre et l'architecte*, actes du colloque (Paris, 31 janvier-2 février 2008), sous la direction de J.P. Garric, E. d'Orgeix, E. Thibault, Wavre 2011 ; M. HVATTUM, A. HULTZSCH, *The Printed and the Built: Architecture, Print Culture, and Public Debate in the Nineteenth Century*, New York 2018 ; H. JANNIÈRE, *Critique et architecture : un état des lieux contemporain*, Paris 2019 ; R. WITTMAN, *Architecture, Print Culture, and the Public Sphere in Eighteenth-Century France*, New York-London 2007.

³ A. TZONIS et al., *Les systèmes conceptuels de l'architecture en France de 1650 à 1800*, Paris 1975.

⁴ C.G. CRYSLER, *Writing Spaces: Discourses of Architecture, Urbanism and the Built Environment 1960-2000*, London 2003 ; T.A. MARKUS, D. CAMERON, *The Words between the Spaces: Buildings and Language*, London 2002.

⁵ F. RASTIER, *La mesure et le grain : sémantique de corpus*, Paris 2011, p. 20.

⁶ F. MORETTI, *Distant Reading*, London 2013 ; M. PIOTROWSKI, *Natural Language Processing for Historical Texts*, San Rafael 2012.

⁷ *Doing Digital Humanities: Practice, Training, Research: Open Approaches to Creation, Growth, and Development*, edited by C. Crompton, R. Lane, R. Siemens, London 2016 ; P.J. ORTIZ SUÁREZ et al., *Establishing a New State-of-the-Art for French Named Entity*, in *Proceedings of the Twelfth Language Resources and Evaluation Conference*, conference proceedings (Marseille, 11-16 may 2020), edited by N. Calzolari et al., Marseille 2020, pp. 4631-4638.

⁸ *L'intelligence artificielle des textes : des algorithmes à l'interprétation*, sous la direction de D. Mayaffre, L. Vanni, Paris 2021 ; C. ZIEMS et al., *Can Large Language Models Transform Computational Social Science?*, "Computational Linguistics", 50, 2024, 1, pp. 237-291, <https://aclanthology.org/2024.cl-1.8.pdf> (consulté le 30 août 2025).

⁹ W. SZAMBIEN, *Symétrie, goût, caractère : théorie et terminologie de l'architecture à l'âge classique 1550-1800*, Paris 1986.

¹⁰ *Architecture and Language: Constructing Identity in European Architecture, c. 1000 -c. 1650*, edited by G. Clarke, P. Crossley, Cambridge-New York 2000 ; A.A. PAYNE, *Ut Poesis Architectura: Tectonics and Poetics in Architectural Criticism circa 1570*, in *Antiquity and Its Interpreters*, edited by Ead., A. Kuttner, R. Smick, Cambridge 2000, pp. 145-158 ; C. VAN ECK, *Classical Rhetoric and the Visual Arts in Early Modern Europe*, Cambridge 2007 ; A.A. PAYNE, *The Architectural Treatise in the Italian Renaissance: Architectural Invention, Ornament and Literary Culture*, New York 2011.

¹¹ P. HAMON, *Expositions : littérature et architecture au XIX^e siècle*, Paris 1989 ; *Architecture et littérature : une interaction en question, XX^e-XXI^e siècles*, acte du colloque (Cerisy, Centre Culturel International, 1-8 Septembre 2009), sous la direction de P. Hyppolite, A. Leygonie, A. Verlet, Aix-en-Provence 2014 ; F. MOULIN, *Embellir, bâtir, demeurer : l'architecture dans la littérature des Lumières*, Paris 2017 ; D. ROUILLARD, *Les monuments de la langue : architecture, mémoire, écriture*, Genève 2021.

¹² J.N. SUMMERSON, *The Classical Language of Architecture*, London 1964.

Néanmoins, il proposait une stylistique de l'architecture classique et en définissait les emplois et les variations au cours des époques. Si toute trace de linguistique y est absente, il témoigne néanmoins d'un intérêt particulier pour la langue. Bruno Zevi cherchait, quant à lui, à mettre à jour un "code anticlassique" en faisant plus directement appel à la linguistique et à la sémiotique. Il s'agissait pour lui d'une tentative d'énonciation des principes non-écrits qui sous-tendent la conception moderne de l'architecture. Cet objectif était principalement pédagogique, mais il confinait l'architecture à la forme ; une idée que reprit directement Charles Jencks pour son architecture postmoderne.

Au cours des années soixante et soixante-dix, plusieurs chercheurs en histoire de l'architecture embrassèrent plus directement la linguistique et la sémiologie (ou la sémiotique) comme une nouvelle manière d'accéder et de révéler des niveaux de signification dans leurs objets d'étude. Toutefois, la transposition de ces approches aux arts visuels posait des difficultés particulières. Les tentatives initiales pour articuler l'architecture à la sémiologie remontent au milieu des années trente. Mais ce fut surtout en Italie, dans l'immédiate après-guerre, que s'élaborèrent les premiers concepts d'une sémiologie architecturale, notamment autour de l'École d'architecture de Florence¹⁶.

La thèse de doctorat de Robert G. Hershberger, soutenue à l'Université de Pennsylvanie en 1969, *A Study of Meaning and Architecture*, constitua visiblement un jalon important dans l'application de l'informatique à des corpus architecturaux¹⁷. Menée sous la direction de Holmes Perkins, assisté par le spécialiste de sémantique différentielle Percy Tannenbaum, l'approche déployée était principalement sémiotique.

Dans l'ouvrage collectif de 1970, *Meaning in Architecture*, Charles Jencks et George Baird, se proposaient de démontrer comment la sémiolo-

gie, la linguistique, l'anthropologie structurelle et la cybernétique ou la théorie de l'information pouvaient être appliquées à l'analyse et l'interprétation de l'architecture¹⁸. L'objet central de la sémiologie est "l'étude des systèmes de signes institués par la société dans des contextes donnés destinés à comprendre les conventions culturelles sur lesquelles le processus de signification est basé"¹⁹. Une telle approche suppose donc de considérer l'architecture comme un 'langage' de formes avec l'objectif de capturer sa dimension de communication et de signification sociale. En tant que discipline, la sémiologie s'intéresse aux signes et symboles verbaux et non verbaux, et elle intègre les théories de la communication et la linguistique comme des sous-divisions. Mais, en dépit de tentatives destinées à fonder une sémiotique proprement visuelle, ou architecturale, cette approche reste fondamentalement centrée sur les mots.

Le domaine fut d'abord dominé, on l'a vu plus haut, par l'influence du *Cours de linguistique générale* de Ferdinand de Saussure, traduit en anglais en 1959, qui établissait une théorie générale du signe qu'il appela *sémiologie*. Dans ses écrits, il relevait une distinction entre des phénomènes diachroniques et synchroniques qui déboucha sur le paradigme intellectuel du structuralisme. Au cours des années soixante, Donald Preziosi, qui avait étudié la linguistique avec Roman Jakobson, développa une approche strictement visuelle des espaces bâtis qui découlait des réductions élémentaires développées par la linguistique²⁰. D'autres auteurs s'inspirèrent de la sémiotique de l'américain Charles Sanders Pierce comme Geoffrey Broadbent ou Robert Venturi.

Cette veine donna lieu à plusieurs colloques et publications en France. Les actes du colloque d'Albi *Espace et représentation : sémiotique de l'architecture* de 1981 accueillent une contribution du célèbre linguiste et sémioticien Algirdas Julien

Greimas²¹. Cette approche se retrouve également dans la *space syntax* de Bill Hillier²². Sa manière de considérer les formes de l'architecture et de distinguer le bâti et le non-bâti peut apparaître comme le prolongement des postulats saussuriens sur le rapport entre signifiants et signifiés. On peut aussi en retrouver la trace dans le concept de *pattern language* de Christopher Alexander²³ ou même les recherches de George Stiny²⁴.

Les premières applications de l'informatique aux textes architecturaux

Il n'est guère étonnant que ce soit la théorie architecturale qui ait donné lieu aux premières applications de l'informatique à l'architecture. Le texte se prête en effet facilement à des manipulations computationnelles. À cet égard, l'approche développée sous la direction d'Alexander Tzonis dans *Les systèmes conceptuels de l'architecture en France de 1650 à 1800*, un ouvrage publié en 1975, fut tout à fait pionnière²⁵. Enseignant à la Graduate School of Design d'Harvard depuis 1968 au sein d'un Institut des sciences de la planification, il y avait développé des recherches dans le domaine des méthodes de conception avec l'aide de Walter Isard et Ovidia Salama. En 1972, le chercheur fut invité par le ministère de la Culture en France pour une année d'étude à Strasbourg. Il mena ce projet collectif multidisciplinaire au ministère de l'Équipement en 1974 et 1975, bénéficiant du soutien du Comité pour la recherche et le développement en architecture (CORDA) (fig. 2).

La recherche de Tzonis et de ses collègues se distingue des nombreux autres travaux publiés à l'époque sur la théorie architecturale par l'emploi d'une méthodologie formelle utilisant le traitement informatique. Les auteurs formulaient l'hypothèse que les textes étaient porteurs de "systèmes conceptuels" qui servent de "modèles décisionnels" pour les constructeurs dans des situations réelles. L'étude rassemble donc

une investigation épistémologique des modèles décisionnels de design ainsi qu'une analyse historique. Puisque le matériel examiné est constitué par des textes directement et indirectement liés aux décisions de design, les techniques de la linguistique moderne, de l'analyse du discours et de l'analyse du contenu sont mobilisées conjointement.

Au sein de cette recherche collaborative, Michael Freeman de l'université Harvard avait étudié l'interface entre la linguistique et les modèles décisionnels. Liane Lefaivre avait travaillé les problèmes liés à la mise en rapport de l'analyse du discours et du matériel historique. Ovidia Salama de l'université Columbia avait contribué à la méthodologie générale du projet et à la théorie des modèles décisionnels. Robert Berwick, qui était alors l'étudiant de Tzonis, s'était penché sur les rapports entre l'intelligence artificielle et la méthode d'analyse. De nombreux chercheurs avaient, par ailleurs, contribué au projet conçu, semble-t-il, avec René Tabouret à Strasbourg²⁶. À partir d'une analyse serrée des textes, il s'agissait de pouvoir mettre à jour et identifier des châssis décisionnels qui permettaient en retour de classifier les textes les uns par rapport aux autres. Cette recherche s'inscrivait dans un cadre plus large visant à développer des outils de prise de décision en matière de conception architecturale. Étonnamment, les propositions de Tzonis eurent peu de suite. L'auteur, qui se consacra par la suite plus spécifiquement aux systèmes de décisions, ne prolongea pas cette approche textuelle qui apparaissait peut-être trop coûteuse à l'époque, ou qui ne présentait pas aux yeux des spécialistes des résultats suffisamment convaincants.

Il fallut ensuite attendre la fin des années 90 et le début des années 2000, pour que plusieurs publications qui s'inscrivaient dans le courant de l'histoire intellectuelle s'emparent à nouveau du discours architectural comme objet

¹³ B. ZEVI, *Le Langage moderne de l'architecture*, Paris 1981.

¹⁴ C. JENCKS, *The Language of Post-modern Architecture*, New York 1977.

¹⁵ C. GAILLARD, *Du paradigme linguistique en architecture : Illusion, désillusion, abandon*, article en ligne, section 'Philosophie générale (anciens articles)', 2019, pp. 1-19, <https://www.clementgaillard.com/articles/philosophie/duparadigmelin-guistiqueenarchitecture> (consulté le 28 mars 2025).

¹⁶ I. CAMBERINI, *Per una analisi degli elementi dell'architettura: introduzione ai corsi propedeutici di architettura nella Facoltà di Firenze*, Firenze 1953 ; ID., G.K. KOENIG, *Introduzione al primo corso di elementi di architettura e rilievo dei monumenti: gli elementi di architettura come parole del linguaggio architettonico*, Firenze 1959.

¹⁷ R.C. CLEMENTS, R.G. HERSHBERGER, *A Study of Meaning and Architecture [Abstract and Review]*, "Review of Research in Visual and Environmental Education", I, 1973, 1, pp. 75-82 ; R.G. HERSHBERGER, *Architecture and Meaning*, "Journal of Aesthetic Education", IV, 1970, 4, pp. 37-55. Malheureusement, nous n'avons pas pu consulter cette thèse.

¹⁸ *Meaning in Architecture*, edited by C. Jencks, G. Baird, New York 1970.

¹⁹ *Signs, Symbols, and Architecture*, edited by G. Broadbent, R. Bunt, C. Jencks, Chichester 1980.

²⁰ D. PREZIOSI, *Architecture, Language and Meaning: The Origins of the Built World and its Semiotic Organization*, Berlin-Boston 1979.

²¹ *Espace et représentation : sémiotique de l'architecture*, sous la direction de A. Renier, Paris 1982.

²² B. HILLIER, J. HANSON, *The Social Logic of Space*, Cambridge 1984.

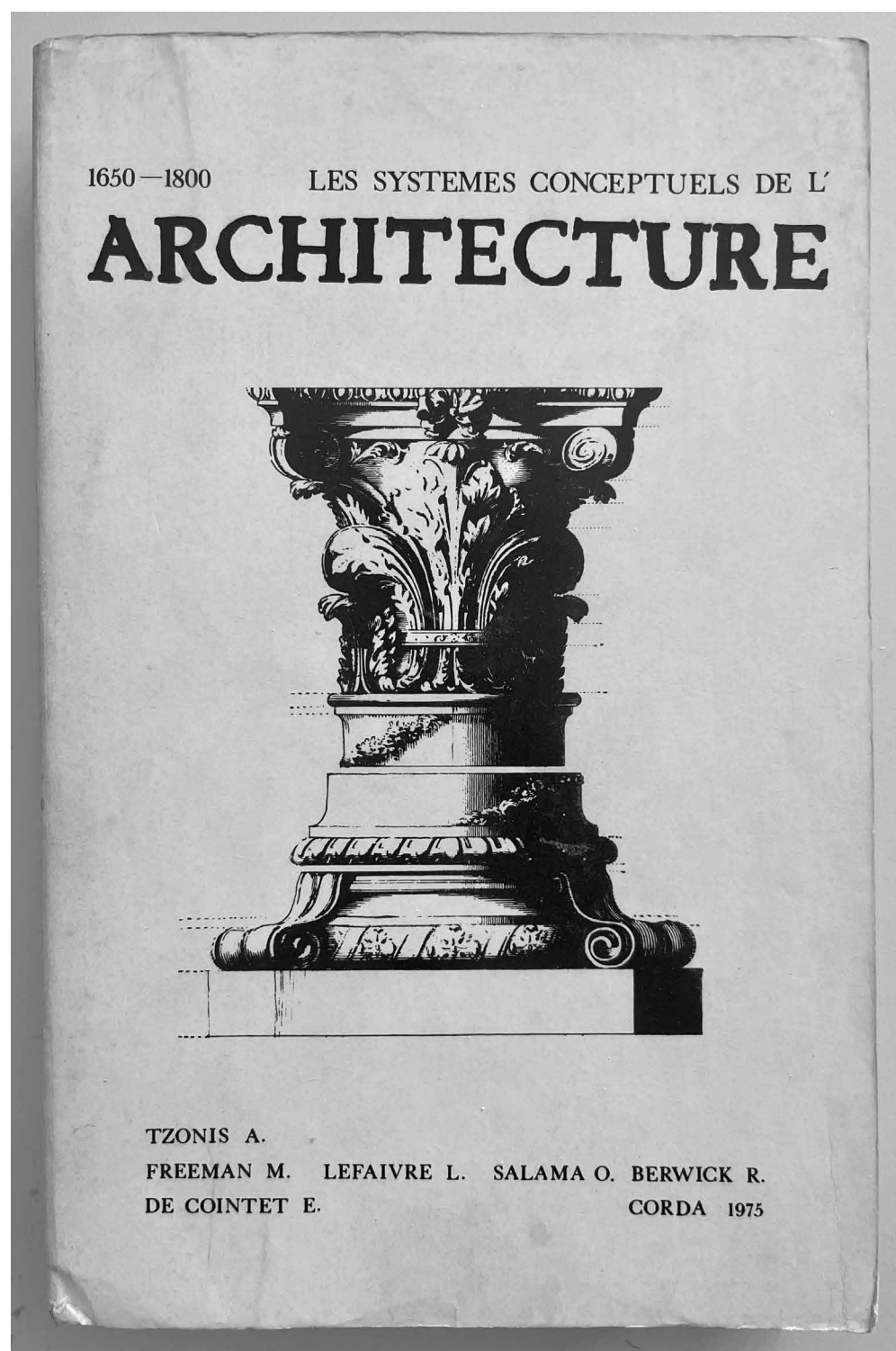
²³ *A Pattern Language: Towns, Buildings, Construction*, edited by C. Alexander, S. Ishikawa, M. Silverstein, New York 1977.

²⁴ G. STINY, W.J. MITCHELL, *The Palladian Grammar*, "Environment and Planning B: Planning and Design", V, 1978, 1, pp. 5-18.

²⁵ Tzonis et al., *Les systèmes conceptuels de l'architecture...* cit.

²⁶ *Ibidem*.

Fig. 2 Tzonis et al., *Les systèmes conceptuels de l'architecture... cit.*, 1975 (photo E. Château-Dutier).



d'étude mais, cette fois-ci, sans recours à l'outil informatique. En s'intéressant aux changements de signification de termes clefs du modernisme, Adrian Forty identifiait, dans *Words and Buildings*, leur rôle structurant tant en dedans qu'en dehors de la profession²⁷. Thomas Markus et Deborah Cameron, dans *The Words between the Spaces*, montraient également que les édifices n'étaient pas de simples représentations autonomes en ayant extensivement recours à l'analyse du discours²⁸. La lecture rappro-

chée des textes révélait à quel point notre compréhension de l'environnement est déterminée par le langage. De même, Greig Crysler, en se consacrant plus particulièrement à la théorie de l'environnement bâti dans les revues d'architecture au cours de la seconde moitié du vingtième siècle, montrait l'importance des discours et l'effet déterminant des textes sur la manière dont on comprend, imagine et agit sur le monde²⁹. Ces approches peuvent donc être rattachées au *linguistic turn* et à l'analyse critique du discours, un

²⁷ A. FORTY, *Words and Buildings: A Vocabulary of Modern Architecture*, London 2000.

²⁸ MARKUS, CAMERON, *The Words between the Spaces... cit.*

²⁹ CRYSLER, *Writing Spaces... cit.*

“courant qui assigne aux langages un rôle décisif dans la construction de la réalité sociale, en particulier des mouvements collectifs”, et qui eut un impact considérable dans la culture anglo-saxonne³⁰. Mais plutôt que d’une exploration distributionnelle des textes, il s’agissait avant tout d’une herméneutique³¹.

Juan Pablo et Sylvia Bonta furent parmi les rares chercheurs à appliquer des traitements informatisés aux textes architecturaux dans *American Architects and Texts* publié en 1996. L’ouvrage était issu d’une analyse assistée par ordinateur de près de quatre cents textes sur l’architecture américaine et s’accompagnait d’un complément numérique sous la forme d’une base de données³². La préface de William J. Mitchell (1944-2010) soulignait à quel point cette étude méticuleuse permettait de dégager des mécanismes de construction de la notoriété, ainsi que l’intérêt de l’utilisation de graphiques et de statistiques. La mise à disposition des données et du logiciel développé pour les besoins du projet, permettant de rejouer soi-même les résultats, ce qui annonçait des changements dans les pratiques de lecture. En réalité, les auteurs s’étaient contentés de produire une analyse des index des ouvrages pour des raisons d’accessibilité au matériau textuel.

Néanmoins, les deux auteurs identifiaient plusieurs enjeux relatifs à l’application des approches automatiques d’analyse du discours aux corpus architecturaux. La plupart des termes utilisés dans le discours architectural classique, tels que ‘colonne’ ou ‘entablement’, disposaient d’un référent formel univoque. Il était donc possible d’étudier la fréquence de leur emploi en recherchant les occurrences des termes associés et en les mettant en rapport avec la connaissance architecturale. Mais plusieurs mots employés par les architectes comme la logique, la vérité, ou la justice n’avaient pas d’équivalents formels. Même si la fréquence et l’évolution de

termes esthétiques tels que la beauté, le fonctionnalisme et certaines idées connexes, pouvaient être explorées, les auteurs pointaient un certain nombre de limitations technologiques, mais également méthodologiques. Comment rendre compte de la fréquence d’un terme en tenant compte des termes associés, et aussi de la diachronie ? S’ils identifiaient bien l’efficacité de l’analyse automatique pour mesurer la répétition, l’application de ces méthodes réclamait l’examen d’un volume important de publications, ce qui exigeait une numérisation à grande échelle du patrimoine écrit qui n’était encore que balbutiante.

Lorsqu’en 2012, Diane Zorich constatait l’ambivalence de l’histoire de l’art à l’égard du numérique dans son rapport sur l’histoire de l’art numérique pour Ithaka S+R, la situation n’était guère différente en histoire de l’architecture³³. Malgré l’engagement de longue date des architectes avec l’ordinateur, ce champ de recherche avait peu investi les humanités numériques et un nombre restreint de projets avaient jusqu’à porté sur les textes architecturaux ou la production de corpus textuels³⁴. Or, la disponibilité de grands ensembles textuels était déterminante pour rendre possible des approches automatiques de la langue. Ainsi, en 2007, Stephen Ramsay pouvait expliquer que la révolution numérique n’avait pas encore pénétré le cœur des études littéraires faute de l’existence de tels corpus. Mais dix ans plus tard, Matthew L. Jockers et Ted Underwood suggéraient que l’effet conjoint de la création d’archives numériques massives et de nouveaux outils prometteurs changeait radicalement la donne³⁵.

Aujourd’hui, l’industrialisation de la numérisation des collections patrimoniales, de même que les progrès réalisés du côté de la reconnaissance automatique de textes lèvent en grande partie le verrou de la disponibilité des corpus. En effet, des avancées extraordinaires ont été faites dans

³⁰ S. CERUTTI, *Le linguistic turn en Angleterre. Notes sur un débat et ses censures*, “Enquête, Anthropologie, Histoire, Sociologie”, V, 1997, pp. 125-140.

³¹ J.E. TOEWS, *Intellectual History after the Linguistic Turn: The Autonomy of Meaning and the Irreducibility of Experience*, “The American Historical Review”, 92, 1987, 4, pp. 879-907.

³² J.P. BONTA, S. BONTA, *American Architects and Texts: A Computer-Aided Analysis of the Literature*, Cambridge 1996.

³³ D.M. ZORICH, *Transitioning to a Digital World. Art History, Its Research Centers, and Digital Scholarship*, Report to the The Samuel H. Kress Foundation et The Roy Rosenzweig Center for History and New Media, George Mason University, juin 2012, <https://www.kressfoundation.org/Resources/Sponsored-Research/Research-Items/Transitioning-to-a-Digital-World> (consulté le 25 mars 2025).

³⁴ E. CHÂTEAU-DUTIER, *Des éditions numériques pour l’histoire de l’art : deux décennies d’expérimentations*, “Histoire de l’Art”, 87, 2021, 1, pp. 77-90.

³⁵ M.L. JOCKERS, T. UNDERWOOD, *Text Mining the Humanities*, in *A New Companion to Digital Humanities*, edited by S. Schreibman, R. Siemens, J. Unsworth, Chichester 2016, pp. 291-306.

³⁶ B. GATOS *et al.*, *Ground-Truth Production in the Transcriptorium Project*, in 2014 11th IAPR International Workshop on Document Analysis Systems, conference proceedings (Tours, 7-10 April 2014), Tours 2014, pp. 237-241.

³⁷ F. MORETTI, *Conjectures on World Literature*, "New Left Review", 2000, 1, pp. 54-68.

³⁸ M. BOILLET *et al.*, *HORAE: an Annotated Dataset of Books of Hours*, in *Proceedings of the 5th International Workshop on Historical Document Imaging and Processing*, conference proceedings (Sydney, 20-21 September 2019), New York 2019, pp. 7-12 ; A. CHAGUÉ *et al.*, *Deux siècles de sources disparates sur l'industrie textile en France : comment automatiser les traitements d'un corpus non-uniforme ?*, dans *DHNord* (2019) "Corpus et archives numériques", présentation de colloque (Lille, 16-18 octobre 2019), <https://inria.hal.science/hal-02448921> (consulté le 25 mars 2025) ; A. CHAGUÉ, L. TERRIEL, L. ROMANY, *Des images au texte : LECTAUREP, un projet de reconnaissance automatique d'écriture*, dans *DHNord2020: The Measurement of Images: Computational Approaches in the History and Theory of the Arts*, présentation de colloque (Lille, novembre 2020), <https://hal.science/hal-03008579v1> (consulté le 25 mars 2025) ; M. GOHIER, *Nouvelle-France numérique : l'Intelligence artificielle au service de l'analyse du patrimoine documentaire*, Midiconférence de l'Association of Critical Heritage Studies, Université du Québec en Outaouais, 1^{er} février 2023, <https://nouvellefrance-numerique.info> (consulté le 25 mars 2025) ; P. KAHLE *et al.*, *Transkribus - A Service Platform for Transcription, Recognition and Retrieval of Historical Documents*, in 14th IAPR International Conference on Document Analysis and Recognition (ICDAR), conference proceedings (Kyoto, 9-15 November 2017), IV, Kyoto 2017, pp. 19-24 ; D. STUTZMANN, J.F. MOUFFLET, S. HAMEL, *La recherche en plein texte dans les sources manuscrites médiévales : enjeux et perspectives du projet HIMANIS pour l'édition électronique*, "Médiévales. Langues, Textes, Histoire", 73, 2017, pp. 67-96.

³⁹ KAHLE *et al.*, *Transkribus*... cit. ; B. KIESSLING *et al.*, *eScripta: A New Digital Platform for the Study of Historical Texts and Writing*, in *Digital Humanities 2019*, conference paper (Utrecht, July 2019), <https://ephe.hal.science/hal-02310781v1> (consulté le 25 mars 2025).

⁴⁰ F. MORETTI, *Graphes, cartes et arbres : modèles abstraits pour une autre histoire de la littérature*, Paris 2008 ; *Id.*, *Distant Reading*... cit. ; *La littérature au laboratoire*, sous la direction de F. Moretti, Paris 2016.

⁴¹ S. RAMSAY, *In Praise of Pattern*, "TEXT Technology", 14, 2005, 2, pp. 177-190 ; *Id.*, *Reading Machines: Toward an Algorithmic Criticism*, Champaign 2011.

⁴² M.L. JOCKERS, *Macroanalysis: Digital Methods and Literary History*, Champaign 2013 ; JOCKERS, UNDERWOOD, *Text Mining the Humanities*... cit.

⁴³ G. ROCKWELL, *What is Text Analysis, Really?*, "Literary and Linguistic Computing", 18, 2003, 2, pp. 209-219 ; *Id.*, S. SINCLAIR, *Hermeneutica: Computer-Assisted Interpretation in the Humanities*, Cambridge-London 2016.

⁴⁴ PIOTROWSKI, *Natural Language*... cit.

⁴⁵ T. POIBEAU, *Traitement automatique du contenu textuel*, Paris 2011 ; *Id.*, *Le traitement automatique des langues pour les sciences sociales. Quelques éléments de réflexion à partir d'expériences récentes*, "Réseaux", 188, 2014, 6, pp. 25-51 ; RASTIER, *La mesure et le grain*... cit.

le domaine de la numérisation des textes tant imprimés que manuscrits. La reconnaissance automatique de textes (*Automatic Text Recognition-ATR*, en anglais) consiste en l'acquisition d'un texte numérique plus ou moins structuré à partir d'images numérisées. Il s'agit d'un processus automatisé qui permet de traiter de larges masses documentaires en réduisant le temps nécessaire à leur traitement et les coûts humains relatifs à la transcription³⁶. Ceux-ci permettent l'indexation d'un fonds et la création d'un accès plein-texte, la mobilisation de fouille de texte et de lectures distantes³⁷, ou encore plus simplement l'édition et la publication de textes.

Ces dernières années, plusieurs initiatives de grande ampleur ont ainsi fait sortir la reconnaissance des écritures manuscrites du strict domaine expérimental de la recherche sur la vision par ordinateur pour prendre une place plus affirmée au sein des programmes de numérisation industriels conduits par les institutions patrimoniales ou dans le cadre de projets en humanités numériques³⁸. Ces différentes réalisations ont notamment permis de réunir d'importantes données d'annotation et la constitution de modèles de reconnaissance d'écritures manuscrites très efficaces pour les écritures anciennes. Parallèlement, les modèles et les outils de segmentation des pages pour les documents écrits se sont considérablement perfectionnés ainsi que les chaînes de traitement documentaire destinées à passer d'un format à l'autre.

La création de plusieurs logiciels interfacés a beaucoup facilité la mobilisation de ces différentes techniques pour le traitement des corpus patrimoniaux. Le projet européen *Transkribus* ou le projet français *eScriptorium* ont, par exemple, permis la mise au point d'outils qui rendent la prise en main et l'application de ces techniques relativement aisées sur de grands corpus manuscrits³⁹. En outre, l'initiative *HTR United* permet le partage de modèles de recon-

naissance d'écritures manuscrites anciennes. Ce n'est donc plus le seul corpus théorique imprimé, mais potentiellement l'ensemble des écrits architecturaux auquel il est désormais possible d'appliquer des lectures distantes : critiques architecturales, correspondance, délibérations administratives, etc.

Plusieurs types de traitements automatiques peuvent être aujourd'hui mobilisés pour analyser les évolutions du discours architectural. De très nombreuses questions deviennent explorables à travers les textes, qu'il s'agisse – cette liste n'est pas limitative – de la définition des types architecturaux ou de la convocation des précédents, de la formulation des énoncés stylistiques et des références historiques, en passant par la formation des énoncés déontiques et de l'argumentation architecturale. Chaque fois, l'historien de l'architecture dispose de méthodes et d'outils bien éprouvés dans d'autres domaines d'étude.

Des méthodes d'analyse automatique du discours en architecture

Les travaux conduits dans le champ des humanités numériques au cours des deux dernières décennies ont clairement démontré l'intérêt de l'analyse automatique du discours en littérature et dans les sciences historiques. Franco Moretti⁴⁰, Stephen Ramsay⁴¹, Matthew L. Jockers et Ted Underwood⁴², Geoffrey Rockwell et Stefan Sinclair⁴³ et Michel Piotrowski⁴⁴ ont contribué à fixer plusieurs méthodologies qui relèvent à la fois de la critique littéraire et de la linguistique de corpus⁴⁵. Souvent quantitatives, ces approches ne se limitent pas à la description de la langue dans des corpus donnés. Elles permettent aussi de travailler sur la sémantique ou encore l'argumentation. En effet, l'objet de l'histoire de l'architecture ne concerne pas à proprement parler les phénomènes textuels ou langagiers. Si ceux-ci ont une place dans l'analyse, il

s'agit plutôt de comprendre comment le langage peut nous informer sur la pratique architecturale. De ce point de vue, utiliser ces techniques ne fait pas disparaître l'interprétation, il s'agit plutôt d'une méthode complémentaire qui permet d'accéder aux contenus des textes et de réunir des faits qui sont soumis dans un second temps à la sagacité de l'historien.

Parmi les techniques à notre disposition, plusieurs nous semblent particulièrement pertinentes dans notre discipline. Il peut s'agir de méthodes supervisées ou non supervisées, par exemple le *topic modeling*, la textométrie, l'analyse de l'argumentation et l'utilisation de grands modèles de langue. De nombreux algorithmes sont d'ores et déjà disponibles pour les chercheurs et les chercheuses et sont intégrés dans des logiciels comme Weka ou MALLET, TXM, ou encore disponibles par l'intermédiaire de bibliothèques de code informatique. Cependant, ces outils ne suffisent pas pour parvenir à des résultats, puisqu'il est souvent nécessaire de préparer et standardiser les données, de rassembler des métadonnées et des corpus, et enfin de disposer de compétences statistiques.

Depuis les années soixante-dix, l'introduction de méthodes et de techniques issues de la linguistique a véritablement renouvelé l'approche historique⁴⁶. Cependant, celles-ci ont largement pâti de la remise en question du structuralisme quantitatif dans le domaine des sciences humaines par rapport au domaine des sciences sociales. Pourtant, l'approche textométrique a notamment su se faire une place en histoire dans le domaine de l'analyse des discours politiques. C'est une méthode de comparaison des textes, réunis en corpus, sur la base d'un comptage des unités de sens : la forme, le lemme, le groupe de formes. La lexicométrie constitue donc avant tout un ensemble de méthodes de description. Différentes échelles permettent de multiplier les prismes d'analyse et ces indicateurs ne sont ni in-

terprétatifs ni explicatifs ; c'est le chercheur qui fait l'interprétation et procède à la constitution des catégories. Il s'agit en somme d'étudier les textes du corpus non pas avec des classifications prédéfinies, mais avec des classifications créées spécifiquement pour le corpus à partir du corpus lui-même.

L'intérêt de l'approche textométrique est donc qu'elle contribue à se défaire de l'idée que les textes auraient un sens qu'il faudrait dévoiler. Elle ne remplace pas l'historien et l'interprétation mais fournit une aide et des outils à l'historien pour l'interprétation. Par exemple, en architecture, elle peut permettre d'identifier l'évolution de certaines occurrences dans le discours ou de contraster les énoncés théoriques de tel ou tel auteur. Cette approche n'est pas toujours pertinente selon la nature des corpus. Elle est appropriée pour les contenus qui varient les uns des autres selon les critères appliqués dans l'analyse factorielle de correspondance. En revanche, lorsque le champ lexical général est relativement similaire et les contenus explorés emploient des formules stéréotypées, l'analyse peut apparaître triviale.

C'est la raison pour laquelle il peut être utile de s'orienter vers d'autres méthodes d'analyse automatisées. À cet égard, le domaine de l'analyse d'arguments (*argument mining*) a récemment connu un certain essor avec l'émergence de techniques d'analyse de textes plus puissantes fondées sur l'utilisation des réseaux neuronaux. L'argumentation est une activité sociale dans laquelle des agents cherchent à convaincre des interlocuteurs qu'une déclaration est vraie ou fausse en mettant en avant des arguments. Là où le raisonnement concerne la recherche de la vérité d'une déclaration, l'argumentation vise à persuader des agents⁴⁷. Ce domaine de recherche interdisciplinaire avait déjà été profondément renouvelé dans la seconde moitié du vingtième siècle par les travaux d'Hamblin, de Rescher, de

⁴⁶ *L'analyse textuelle des idées, du discours et des pratiques politiques*, sous la direction P.M. Daigneault, F. Pétry, Paris-Québec 2017 ; *Histoire de mots. Saisir le passé grâce aux données textuelles*, sous la direction de L. Dumont, O. Julien, S. Lamassé, Paris 2023 ; L. LEBART, A. SALEM, *Statistique textuelle*, Paris 1994 ; D. MAYAFFRE, *Analyses logométriques et rhétorique du discours*, dans *Introduction à la recherche en SIC*, sous la direction de S. Olivesi et al., Grenoble 2007, pp. 153-180 ; ROCKWELL, SINCLAIR, *Hermeneutica...* cit.

⁴⁷ F.H. VAN EEMEREN et al., *Handbook of Argumentation Theory*, Dordrecht 2014, p. 7.

Chaïm Perelman et Lucie Olbrechts-Tyteca⁴⁸ ou de Stephen Toulmin⁴⁹. Un système d'analyse d'arguments a pour objectif la génération automatique d'un graphe d'arguments à partir de textes non structurés, et peut généralement être divisé en une séquence d'étapes comportant notamment la détection d'arguments et la modélisation des liens unissant ces derniers⁵⁰.

Plusieurs sources qui intéressent l'historien, même si elles ne sont pas fondamentalement dialogiques (au sens où elles ne mettent pas directement en rapport des avis contradictoires), peuvent être assimilables dans le champ rhétorique au domaine du discours délibératif, au sens aristotélicien du terme. En prolongeant l'analyse classique des *topoi* de la rhétorique antique, Chaïm Perelman et Lucie Olbrechts-Tyteca ont notamment mis en avant l'idée de schèmes d'argumentation qui jouent un rôle important dans l'analyse et l'évaluation des discours argumentatifs⁵¹. Une telle approche débouche sur de fines classifications argumentaires qui intéressent évidemment l'historien d'architecture que ce soit pour l'analyse du discours déontique que pour celle de la critique d'art, ou des délibérations des jury de concours.

Nous souhaitons enfin évoquer diverses technologies d'analyse automatique des textes qui reposent sur des stratégies de vectorisation plus ou moins complexes⁵². D'abord, l'utilisation d'extraction de contenus thématiques (*Topic maps*, ISO/IEC 13250 2003) constitue une méthode classique. Ces méthodes fondées sur la similarité sémantique peuvent s'avérer utiles pour classer les textes. D'autres solutions d'analyse automatisées peuvent être pertinentes lorsque les champs lexicaux sont trop similaires. L'utilisation de trigrammes peut, par exemple, aider à effectuer des alignements de séquences et identifier des passages similaires. Ces dernières années, les méthodes de traitement naturel de la langue ont considérablement évolué avec l'apparition

des prolongements lexicaux (*word embeddings*) et des transformateurs (*transformers*) ou encore les grands modèles de langue⁵³. Qu'il s'agisse de Word2Vec ou de BERT, ces représentations des documents permettent notamment de retrouver des passages qui expriment les mêmes idées de façons complètement différentes et potentiellement de repérer les paraphrases et les allusions⁵⁴. Ils ont donc un potentiel énorme pour étudier la transformation des idées ou les idées analogues à travers des grands corpus de textes.

Conclusion

En conclusion, bien que le paradigme langagier ait été abondamment mobilisé pour l'étude des objets architecturaux, peu de travaux se sont réellement intéressés à la matière même du texte architectural. Plus rares encore sont les recherches qui ont eu recours à des moyens informatiques pour aborder le discours. À cet égard, les recherches conduites au début des années soixante-dix par Alexander Tzonis apparaissent tout à fait singulières. Cela s'explique, en partie seulement, par un accès limité aux corpus. Le même phénomène peut d'ailleurs s'observer en histoire de l'art. C'est plutôt l'approche sémiologique qui mobilise les chercheurs puisqu'elle paraît plus à même de rendre compte de la spécificité de leurs objets d'étude. Si l'on observe une influence marquée du tournant linguistique en histoire de l'architecture, c'est principalement dans les approches critiques.

Étonnamment, le domaine de l'analyse automatique du discours reste très peu investi en architecture, alors que ce domaine de recherche pourrait fortement bénéficier de l'apport de la linguistique de corpus. Les campagnes de numérisation massive engagées depuis le milieu des années quatre-vingt-dix du vingtième siècle ainsi que le perfectionnement des techniques d'acquisition automatisée des textes mettent aujourd'hui à disposition des historiens de l'archi-

⁴⁸ C. PERELMAN, L. OLBRECHTS-TYTECA, *Traité de l'argumentation : la nouvelle rhétorique*, Bruxelles-Paris 2009 ; C. PERELMAN, *Rhétoriques*, Bruxelles 2012.

⁴⁹ S.E. TOULMIN, *Les usages de l'argumentation*, Paris 1993.

⁵⁰ J.C. MENSONIDES et al., *Analyse automatique d'arguments et apprentissage multi-tâches : un cas d'étude*, "Revue Ouverte d'Intelligence Artificielle", 3, 2022, 3-4, pp. 201-222, <https://imt-mines-ales.hal.science/hal-03638222/document> (consulté le 11 mars 2024).

⁵¹ VAN EEMEREN et al., *Handbook of Argumentation Theory*... cit., p. 20.

⁵² C.C. AGGARWAL, *Machine Learning for Text*, Cham 2018 ; PIOTROWSKI, *Natural Language Processing*... cit.

⁵³ L. MARTIN et al., *CamemBERT: a Tasty French Language Model*, in *ACL 2020. Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics*, conference proceedings (Seattle, 5-10 July 2020), pp. 7203-7219, <https://inria.hal.science/hal-02889805v1> (consulté le 25 mars 2025) ; R. MILLIÈRE, *Language Models as Models of Language*, in *The Oxford Handbook of the Philosophy of Linguistics*, edited by R. Nefdt, G. Dupre, K. Stanton, Oxford, à paraître, <https://arxiv.org/abs/2408.07144> (consulté le 25 mars 2025).

⁵⁴ J. EISENSTEIN, *Introduction to Natural Language Processing*, Cambridge 2019 ; J. GRIMMER, M.E. ROBERTS, B.M. STEWART, *Text as Data: A New Framework for Machine Learning and the Social Sciences*, Princeton 2022.

itecture des corpus étendus pour l'étude du discours architectural. Il devient donc désormais possible de tirer parti des approches développées dans d'autres disciplines en analyse automatique du discours, que ce soit en littérature ou en histoire, dans le contexte des humanités numériques.

Sur la question de l'interdisciplinarité en histoire de l'architecture sur laquelle porte ce volume, précisons que les acteurs des humanités numériques ont le plus souvent évité de se qualifier de manière disciplinaire, parlant plus volontiers de la constitution d'un champ voire d'une méta-discipline. L'adoption de cette bannière avait un intérêt stratégique ; c'était en quelque sorte un slogan pour ouvrir les disciplines traditionnelles aux transformations engendrées par l'irruption des outils numériques. En fait, l'utilisation des moyens informatiques dans les sciences historiques ou dans les disciplines littéraires existait déjà de longue date sous l'appellation *computing humanities*. Dès l'immédiate après-guerre, les premiers travaux du père jésuite Roberto Busa avaient mobilisé le traitement automatique du texte, tout comme ceux de Jean-Claude Gardin quelques années plus tard. Toutefois, investir l'analyse automatique du discours en architecture c'est bel et bien pratiquer une double interdisciplinarité, puisqu'il s'agit de mobiliser tout à la fois l'apport de la linguistique de corpus et celui du traitement automatique de la langue qu'autorise l'informatique.

Cette interdisciplinarité ne constitue pas seulement une commodité méthodologique, elle est porteuse de conséquences épistémologiques importantes. D'abord, elle implique de s'intéresser au discours et à la langue plutôt qu'aux objets dessinés ou construits qui retiennent habituellement l'intérêt des historiens d'architecture. Ensuite, le transfert de ces technologies en histoire de l'architecture suppose des approches quantitatives et descriptives qui ne constituent pas seu-

lement des résultats, mais aussi des points de départ pour interroger les textes à partir d'un questionnement architectural. Si les textes ont des effets qu'il s'agit de révéler et de mettre à jour, il convient de ne pas oublier non plus le caractère construit des corpus sur lesquels on travaille ou des techniques utilisées. Enfin, en abordant la matière langagière des discours architecturaux, ce n'est pas seulement la langue de l'architecture qui doit nous intéresser. Comme l'ont montré de nombreux travaux sur le discours architectural, le sens d'un texte est toujours en négociation dynamique avec une pragmatique qu'on ne peut ignorer dans l'analyse.

LA MONOGRAPHIE D'ARCHITECTE, UN MODÈLE ÉPISTÉMOLOGIQUE DÉPASSÉ ? RÉFLEXIONS AUTOUR DU CAS DE L'ARCHITECTE JEAN-ARNAUD RAYMOND (1738-1811)

While a compartmentalized approach to architectural history writing is gradually fading, many challenges of interdisciplinarity remain, particularly when addressing topics as divisive as a monographic focus. Through a case study of a single architect, this article explores how disciplinary cross-fertilization can meaningfully contribute to biographical analysis. Anchored in a research framework structured around chronology – spanning the late Ancien Régime to the First Empire – and professional status – that of the ‘architecte du Roi’ – it demonstrates how diverse methodologies provide a more nuanced understanding of an architect’s career strategies in all their complexity.

To illustrate this, the paper examines the figure of Jean-Arnaud Raymond (1738-1811), heir to a long dynasty of Toulouse-based carpenters and an architect simultaneously serving the king and the province of Languedoc. By situating Raymond within the broader collective portrait of his generation, this study considers his career through the lens of micro-history and the history of cultural interactions between Paris and the provinces. This approach highlights the distinctiveness of Raymond’s trajectory while keeping it grounded in the larger professional landscape of his time. In this case, interdisciplinarity sheds light on overlooked aspects of an individual’s life and work while preserving a holistic perspective on the professional networks and shared practices that shaped his career.

Dorénavant, la plus-value du chercheur en histoire de l’architecture ne doit plus résider dans son ingéniosité dans l’enquête sur les sources ni dans sa capacité énergétique à produire d’importants rassemblements documentaires mais dans la pertinence de sa problématique, dans sa puissance de synthèse, dans l’ingéniosité de ses mises en situation, dans sa volonté de prendre du champ¹.

En 2014, Estelle Thibaut et Jean-Philippe Garric s’interrogeaient, à l’occasion d’un numéro sur les *Trajectoires doctorales*, sur l’architecture en tant que discipline plurielle et ses déclinaisons multiples en regard des différentes traditions pédagogiques et méthodologiques². Au-delà du thème central de l’interdisciplinarité qui donne son identité à l’histoire de l’architecture depuis plusieurs décennies, se pose aujourd’hui en France la question de comment aborder l’exercice de la monographie d’architecte (fig. 1).

À partir d’une recherche thématisée autour d’une chronologie, de la fin de l’Ancien Régime et de l’Empire, et d’un statut, celui d’architecte du Roi, cet article propose ainsi de repenser les modalités d’écriture de l’exercice monographique, en interrogeant, au-delà des enjeux de l’interdisciplinarité, l’idée de cohérence narrative et de démonstration historique au prisme de la diversité des productions et des trajectoires professionnelles. Un bref aperçu sur la génération d’architectes nés dans les années 1740 nous permettra d’individualiser la figure de Jean-Arnaud Raymond, fils de charpentier issu d’une longue dynastie d’artisans toulousains, qui exer-

ça de manière exceptionnelle deux fonctions officielles, au service du Roi, dès son accès à l’Académie en 1784 et au service de la province de Languedoc dès 1787 – officieusement dès 1784. Sans faire de lui l’archétype d’une série malgré les points de fusion qui revêtent à bien des égards une valeur autoréférentielle, il ressort de son parcours l’impérieuse nécessité de mobiliser des approches méthodologiques décloisonnées pour mieux saisir ses choix de carrière entre le sud de la France et sa mise en lumière dans le milieu parisien de premier plan (fig. 2).

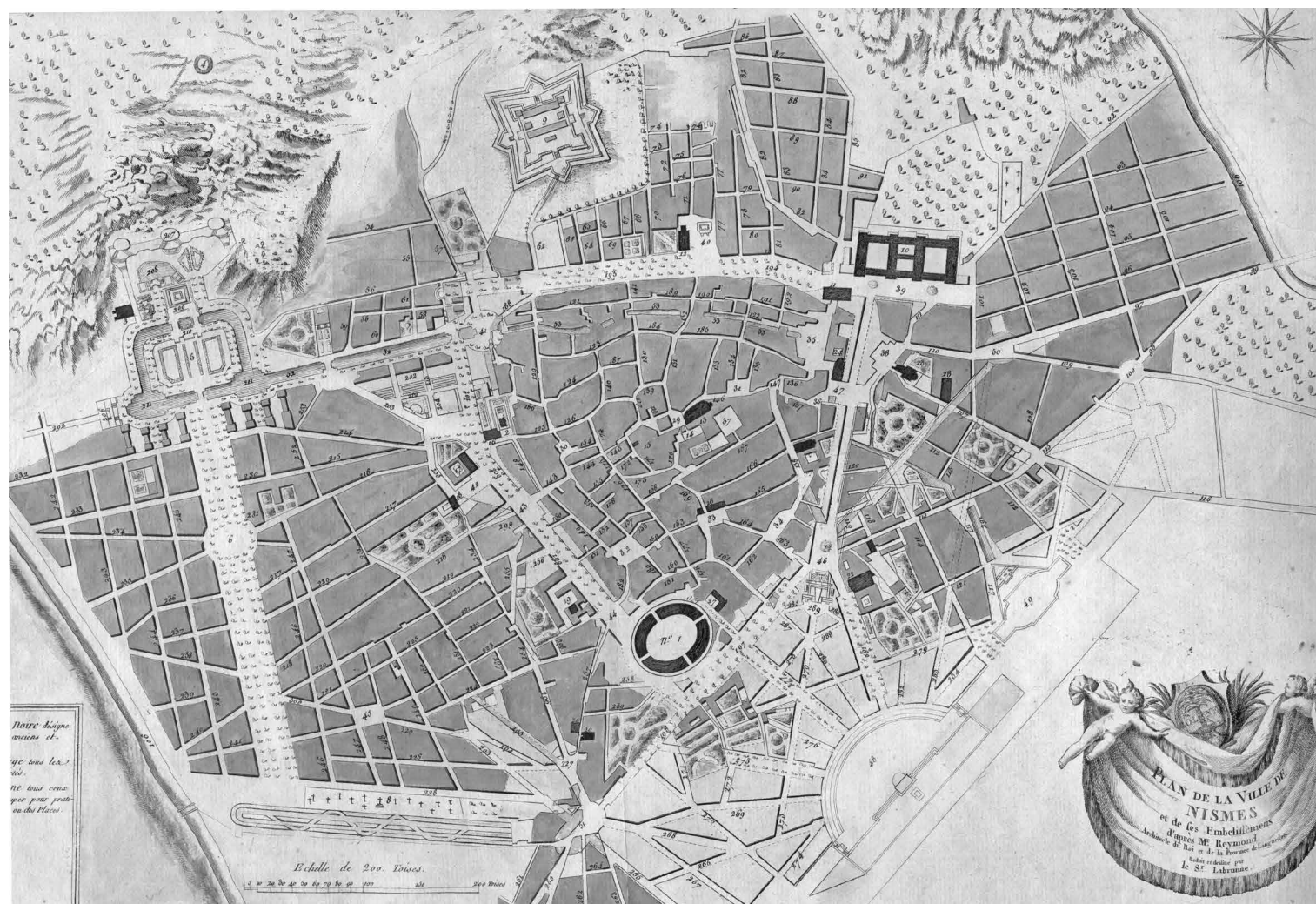
L’exercice de la monographie d’architecte : une lente évolution

Très commenté depuis l’école des Annales, l’exercice de la monographie d’architectes a connu en France, depuis les années 1930, une longue période de désaffection voire de rejet en raison d’une posture idéologique radicale, contrairement à l’Italie ou à l’Angleterre, où le modèle est resté très vivace³. En repensant les limites de la méthode qui consistait à évoquer l’artiste par sa vie et son œuvre séquencées dans une approche très binaire, l’historiographie contemporaine a cependant fait surgir graduellement un nouveau modèle épistémologique fondé sur l’approche monographique traditionnelle combinée à une pluralité de questions connexes, s’intéressant en particulier à l’histoire culturelle et sociale de l’art, dans le sillage des travaux d’Aby Warburg et de la mouvance micro-historienne portée dès les années 1970-1980 par les Ita-

liens Giovanni Levi, Carlo Ginzburg et Edoardo Grendi. Une telle inflexion par le détail, qui s’inscrit progressivement dans une démarche micro-historique réactualisée et que Daniel Arasse avait expérimentée dès le début des années 1990 pour “une histoire rapprochée de la peinture”, prit sens à travers la construction d’un discours global et hiérarchisé, qui permit d’isoler des singularités, des emblèmes mais aussi des contradictions voire des paradoxes⁴. En 2016, Jean-Philippe Garric n’hésitait pas à dissocier par exemple Percier et Fontaine, les architectes de Napoléon, pour souligner la carrière indépendante de Percier. Cette méthode exigea alors “de renoncer aux anciennes classifications en écoles statiques, en styles monolithiques au profit d’approches infiniment plus nuancées”⁵.

Tandis que la transversalité des propos permettait d’augmenter les connaissances sur la figure et le métier de l’architecte, notamment pour la période moderne ainsi que sur sa condition sociale⁶, ce changement de paradigme eut pour conséquence immédiate un intérêt nouveau pour des personnalités, longtemps restées dans l’ombre des architectes de premier plan⁷, sans compter le renouvellement des études sur les figures architecturales imposantes⁸. Grâce au décentrement des recherches, ce qui paraissait insignifiant, car lu à l’aune des grands schémas, fut perçu comme facteur de connaissance⁹. Inscrite au sein d’une réflexion sur la longue tradition des vies d’artistes, cette remarque de Christian Michel mérite à cet égard d’être relevée pour la





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Fig. 1 M.M. Drolling, *Portrait de l'architecte Claude-Nicolas Ledoux (1736-1806)*, 1785 (© Paris Musée Carnavalet-Histoire de Paris).

Fig. 2 J.A. Raymond, *Plan général d'embellissement de la ville de Nîmes*, 1785 (© Musée du Vieux Nîmes).

¹ J.M. LENIAUD, *Conclusions*, "Bâtir et Orner", 21, 2011, pp. 139-143.

² J.P. CHUPIN, *Dans l'univers des thèses, un compas théorique*, dans *Trajectoires doctorales 2*, "Les Cahiers de la Recherche Architecturale et Urbaine", sous la direction de J.P. Garric, E. Thibault, 2014, pp. 23-39 : 30-31.

³ C. MIGNOT, *La monographie d'architecte à l'époque moderne en France et en Italie : esquisse d'historiographie comparée*, "Perspective", 2006, 4, pp. 629-636.

⁴ D. ARASSE, *Le détail. Pour une histoire rapprochée de la peinture*, Paris 1992.

⁵ *Le grand atelier. Chemins de l'art en Europe (V^e-XVIII^e siècles)*, catalogue d'exposition (Bruxelles, Palais des beaux-arts, 5 octobre 2007-20 janvier 2008), sous la direction de R. Recht, Arles 2007, p. 17. Voir aussi J. REVEL, *Jeux d'échelles. La microanalyse à l'expérience*, Paris 1996.

⁶ Voir les publications de C. MIGNOT, *Vingt ans de recherche sur l'architecture française (1540-1708)*, "Histoire de l'Art", 54, 2004, pp. 3-11 ; ID., *La monographie d'architecte...* cit. Sur la monographie d'architecture, voir aussi le numéro spécial de la revue "In Situ. Revue des Patrimoines", 2002, 2 et "Les Cahiers de la Recherche Architecturale et Urbaine", 2002, 9-10, consacrés aux méthodes en histoire de l'architecture.

déconstruction du schéma traditionnel qu'elle suggère : "Il me paraît utile – écrit-il – de s'interroger pour savoir si une étude monographique – ou d'ailleurs toute autre étude – doit être un système rationnel et donc clos visant à une démonstration ou une source de renseignements présentant même ce qui ne lui est pas indispensable, à l'usage des autres chercheurs"¹⁰.

L'inclusion de l'objet marginal au champ des possibles se superposa ainsi à une remise en question de la hiérarchie des genres, ce qui ouvrit un large éventail de perspectives. L'interdisciplinarité, en tant que rituel de recherche attentif au croisement des entrées, des méthodes et des champs disciplinaires, le dialogue de plus en plus fréquent avec les historiens du livre, du politique et de l'économique, du droit ou encore des techniques, ont joué au cours du temps un rôle essentiel dans les approches multiscalaires et contrastées que les chercheurs s'autorisent désormais. Une première tendance s'est dessinée au milieu des années 2000, avec l'inscription explicite de l'architecte dans son temps à défaut

de proposer un panorama sur l'ensemble de la vie et de l'œuvre de l'artiste. À titre d'exemple, les auteurs de l'ouvrage consacré à Jean-François-Thérèse Chalgrin spécifient que "les travaux sur Chalgrin lui-même sont jusqu'ici bien minces et ce volume n'a pas vocation à remplacer une monographie de l'architecte mais plutôt à replacer son œuvre dans une époque complexe" (fig. 3)¹¹. Décliné autour de quatre axes directeurs – l'œuvre de Chalgrin, la carrière de six de ses contemporains, les programmes architecturaux et les institutions de son temps – l'ouvrage met l'accent davantage sur un contexte que sur un homme. La nouvelle publication en ligne sur *Pierre-Contant d'Ivry (1698-1777) et les architectes de son temps* s'inscrit dans cette continuité bien que six articles sur sept soient centrés autour de la personnalité en propre de Contant d'Ivry¹². Pour François-Joseph Bélanger, qualifié de polyarchitecte, Alexia Lebeurre et Claire Ollagnier ont pris le parti de se laisser guider par la diversité de l'œuvre de l'artiste dont témoigne la liste des contributeurs¹³ (fig. 4). Sans multiplier

les exemples, il est intéressant de noter qu'en Italie, Tommaso Manfredi a choisi récemment de présenter Borromini sous l'angle de la profession d'architecte, offrant un panorama large du milieu romain du dix-septième siècle¹⁴.

C'est à la faveur d'ajustements successifs des modes d'analyse, qu'on peut ouvrir aujourd'hui un nouveau chantier méthodologique qui s'intéresse moins à l'individu qu'au groupe, pensé dans le sens de génération historique, produit d'un contexte et de pratiques communes¹⁵. Dans ce cadre, la légitimité des résultats part du postulat que la cohérence narrative n'est pas interrompue par la diversité du corpus et des échelles d'observation. Toutefois, l'échelle d'observation n'est pas celle de la méthode prosopographique, qui sous-tend des études collectives et le traitement quantitatif de données statistiques aux rubriques standardisées en vue de construire des ensembles, des séries ou encore des typologies. Lorsque l'artiste est marginalisé dans l'historiographie contemporaine comme le sont Raymond et nombre de ses confrères, il est nécessaire d'infléchir l'ordre traditionnellement établi dans la monographie ou la biographie. Observer les caractéristiques saillantes et l'évolution du groupe représente ainsi un moyen objectif, mais non dénué d'ambiguïté et d'approximations, pour combler plusieurs zones d'ombre sur la vie et les activités de l'individu, surtout lorsque celui-ci n'a pas préparé sa postérité et qu'il devient difficile de retracer sa trajectoire professionnelle. Dans cette construction intellectuelle, le protagoniste principal peut jouer un rôle prééminent, se fondre dans le collectif ou encore se révéler l'égal de ses confrères. Dès lors, la réflexion s'inverse en commençant avec les portraits croisés d'une génération pour s'achever sur la figure particulière, ce qui revient à cerner un individu par une société et à déborder largement sur un essai de biographie collective et générationnelle. L'interdisciplina-

rité joue dans ce cas un rôle essentiel pour l'enrichissement des méthodes car elle permet de penser les objets d'études en termes d'entrecroisements et quelquefois en termes d'intersectionnalité.

Si alterner entre le parcours d'un individu et le portrait d'une génération reste le fil narrateur, le risque premier serait toutefois de créer un corpus clos qui empêcherait de déplacer les points de vue et d'inclure des personnages périphériques à la sélection initiale. Dans l'étude pivot présentée ici autour d'une génération née autour des années 1740, le choix de constituer le groupe selon une catégorisation inductive fondée sur des dates de naissance proches, sur le statut d'architecte du Roi et sur la poursuite des carrières sous l'Empire permet de proposer un cadrage solide, étayé par une méthode comparative et ouverte sur des objets très différents.

Cette manière de structurer la recherche, évidemment téléologique, qui consiste à isoler un nom, puis à le réintégrer à l'ensemble, fait d'autant plus sens dans le contexte de l'histoire de l'architecture française de la seconde moitié du dix-huitième siècle et du début du dix-neuvième siècle pour deux raisons essentielles. La première est intrinsèque aux ambiguïtés de la période. Préparée à un autre destin, l'élite architecturale, devenue la cible de critiques à la fin de l'Ancien Régime a conservé grâce à son expertise un monopole certain sur la commande du début de l'Empire. La complexité du moment entre rupture et continuité fait que certains voient leur carrière s'achever ou au contraire s'accélérer, ou encore être pénalisée. Dans ces conditions, il est tout autant impossible de retracer les trajectoires dans une perspective monolithique que d'écraser la chronologie dans une perspective linéaire, soumise aux effets de la périodisation. La seconde raison est directement associée aux manques d'études sur les figures d'architectes qui ont survécu aux années charnières

⁷ Jean-Jacques Lequeu, *bâtisseur de fantasmes*, catalogue de l'exposition (Paris, Petit Palais-Bibliothèque Nationale de France, 11 décembre 2018-31 mars 2019), sous la direction de L. Baridon, J.P. Garric, M. Guédron, Paris 2018.

⁸ Pour comprendre l'ampleur du phénomène, il suffit de citer les trois monographies majeures consacrées à Claude-Nicolas Ledoux en vingt ans : M. GALLET, *Claude-Nicolas Ledoux (1736-1806)*, Paris 1980 ; A. VIDLER, *Claude-Nicolas Ledoux. Architecture and Social Reform at the End of the Ancien Régime*, Cambridge 1990 ; D. RABREAU, *Claude-Nicolas Ledoux (1736-1806). L'architecture et les fastes du temps*, Bordeaux 2000. Il convient d'ajouter l'ouvrage plus récent sur la Saline d'Arc-et-Senans de D. MASSOUNIE, *Arc-et-Senans. La saline royale de Claude-Nicolas Ledoux*, Paris 2016 ; et Id., *Le musée de maquettes Claude-Nicolas Ledoux. Saline royale d'Arc-et-Senans*, Saline royale d'Arc-et-Senans 2016.

⁹ Voir les numéros 3 et 4 sur *Le détail* de la revue "Écrire l'Histoire", 2009.

¹⁰ C. MICHEL, *Les vies d'artistes aux XVII^e et XVIII^e siècles et l'élaboration biographique en histoire de l'art*, dans *Problèmes et méthodes de la biographie*, actes du colloque (Paris, Sorbonne, 3-4 mai 1985), Paris 1985, pp. 41-50 : 48.

¹¹ *Chalgrin et son temps, architectes et architectures de l'Ancien Régime à la Révolution*, sous la direction de B. Baudez, D. Massounie, Bordeaux 2017, p. 13.

¹² *Pierre-Contant d'Ivry (1698-1777) et les architectes de son temps*, journée d'études (Saint-Cloud, 2006), sous la direction d'A. Bornet, F. Guidoboni, Vanves 2024.

¹³ *François-Joseph Bélanger, Artiste architecte (1744-1818)*, sous la direction d'A. Lebeurre, C. Ollagnier, Paris 2021.

¹⁴ T. MANFREDI, *Borromini e la professione dell'architetto a Roma nel primo Seicento*, "ArchHistoR Extra", 10, 2022.

¹⁵ À ce propos, voir les travaux de Claudine Attias-Donfut.

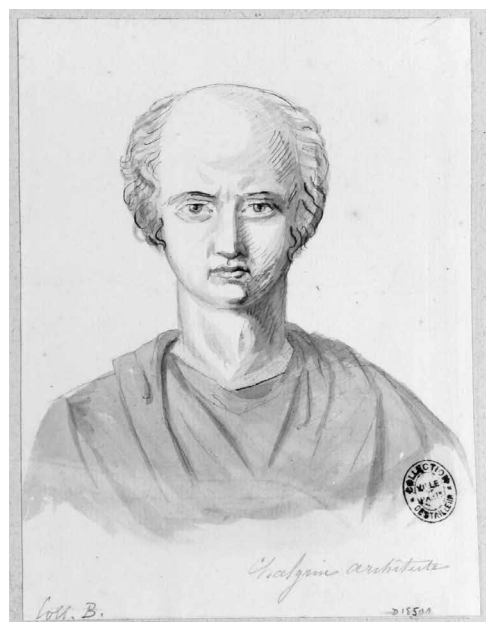


Fig. 3 Anonyme, Portrait de l'architecte Jean-François-Thérèse Chalgrin (1739-1811) (© Paris Musée Carnavalet-Histoire de Paris).

de la Révolution et qui demandent à être mieux documentées.

Comme dans toute étude historique, les lacunes des sources archivistiques contraignent souvent le potentiel d'analyse et orientent le questionnement. Au-delà d'une telle évidence concernant les traces et une documentation parcellisée et hétérogène, le jeu sur les sources crée des équilibres inégaux entre la connaissance des personnages que l'interdisciplinarité peut combler. Dans ce type d'enquêtes, la source inédite n'est pas nécessairement la source absolue, principe qui peut être revendiqué comme une posture intellectuelle au même titre que l'application systématique de la méthode comparative ou la variabilité des focales d'observation. Le modèle monographique à auteur unique acquiert de ce fait une nouvelle légitimité et ouvre une voie alternative qui sans recourir à une recherche collaborative effective en mobilise plusieurs ressorts. En 1948, Bruno Zevi dénonçait dans son livre culte *Apprendre à voir l'architecture*, l'approche purement esthétique que l'histoire de l'art appliquait pour étudier l'architecture, en des termes sans équivoque : "Quant aux études sur l'architecture, dans les histoires de l'art traditionnelles, leur principal défaut est que les œuvres bâties y sont jugées comme si elles n'étaient que sculpture ou peinture, c'est-à-dire qu'elles sont étudiées d'une façon toute extérieure, superficielle comme de purs phénomènes plastiques"¹⁶. Depuis, les historiens de l'art tout comme les historiens de l'architecture se sont ouverts à des champs méthodologiques pluriels, en pensant la discipline comme pivot des études transversales¹⁷. Loin d'être spécifique à la France, ce positionnement réflexif innervé depuis plus de vingt ans l'ensemble des débats intellectuels et idéologiques à l'échelle de l'Europe et Outre-Atlantique, en dépit de la diversité des pratiques nationales. Dès les premières années du vingt-et-unième siècle, l'approche de plusieurs universi-

taires américains concentrée sur la question des savoirs et savoir-faire a poussé à instaurer un dialogue entre architecture et culture artisanale, plaçant les arts techniques au cœur de la création dans la lignée de John Ruskin ou Aloïs Riegl, les précurseurs du dix-neuvième siècle¹⁸. Depuis la fin des années 2010, les travaux de Liliane Hilaire-Pérez et Valérie Nègre attestent d'un même intérêt en France¹⁹. Forte de sa double expérience d'architecte et d'historienne de l'art, Ali-na Payne continue, pour sa part, à revisiter la notion traditionnelle de la division des arts, en portant une attention particulière à la matérialité des objets et à leur agentivité sur l'œuvre bâtie²⁰. D'autres, comme Andrew Saint, se sont davantage intéressés aux rapports entre architectes et ingénieurs²¹ ou aux interactions entre sciences et arts²². C'est dire combien les études actuelles repoussent de plus en plus loin les frontières de la connaissance à l'intersection de l'art, de l'architecture et des techniques. On ne saurait oublier l'ouverture sur l'art du chantier et "la dimension anthropologique de l'acte d'édifier"²³ ou encore l'apport du numérique dans le champ des humanités.

Il ne s'agit pas, dans cet article, de prétendre retracer l'épistémologie de ces évolutions fondamentales ni de commenter la fragmentation que certains voient entre architecture et histoire de l'art, mais de comprendre, au contraire, comment, à travers l'histoire de la création architecturale et l'histoire sociale de l'architecte, il est possible de lever certaines résistances scientifiques, en franchissant les limites disciplinaires et en articulant réalités historiques et phénomènes artistiques²⁴. Les vastes enquêtes menées sous la direction de Manfredo Tafuri au sein de l'Institut universitaire d'Architecture de Venise (IUAV) et ses propres travaux, dont son célèbre ouvrage *Venezia e il Rinascimento*, qui reposait sur l'analyse pointue de quelques édifices du seizième siècle à Venise confrontés au milieu culturel de la la-

¹⁶ B. ZEVI, *Apprendre à voir l'architecture*, Paris 1959 (première éd. Turin 1948), p. 10.

¹⁷ A. COJANNOT, A. GADY, *Dessiner pour bâtir. Le métier d'architecte au XVII^e siècle*, catalogue d'exposition (Paris, Musée des Archives Nationales, 13 décembre 2017-12 mars 2018), Paris 2017 ; *Le métier de l'architecte au XVIII^e siècle. Études croisées*, sous la direction d'Y. Plouzenec, Vanves 2020.

¹⁸ *Ways of Making and Knowing: The Material Culture of Empirical Knowledge*, edited by P.H. Smith, A.R.W. Meyers, H.J. Cook, New York 2014.

¹⁹ *L'Europe des sciences et des techniques. Un dialogue des savoirs XV^e-XVIII^e siècle*, sous la direction de L. Hilaire-Pérez, F. Simon, M. Thébaud-Sorger, Rennes 2016 ; V. NÈGRE, *L'art et la matière. Les artisans, les architectes et la technique (1770-1830)*, Paris 2016.

²⁰ A.A. PAYNE, *L'Architecture parmi les arts. Matérialité, transferts et travail artistique dans l'Italie de la Renaissance*, Paris 2016.

²¹ A. SAINT, *Architect and Engineer: A Study in Sibling Rivalry*, New Haven 2008.

²² *Art, science et technologie*, "Histoire de l'Art", 67, 2010 ; *Réduire en art. La technologie de la Renaissance aux Lumières*, sous la direction de P. Dubourg-Glatigny, H. Vérin, Paris 2008.

²³ *L'art du chantier. Construire et démolir du XVI^e au XXI^e siècle*, sous la direction de V. Nègre, Gand 2018.

²⁴ Voir à ce propos la mise en perspective d'Arnaud Timbert : *Être historien de l'architecture dans la France des XX^e et XXI^e siècles. Des Ego-histoires et des Vies*, sous la direction d'A. Timbert, Turnhout 2023. Pour une vision plus globale voir M. DECOMMER, *Les architectes au travail. L'institutionnalisation d'une profession, 1795-1940*, Rennes 2019.

²⁵ M. TAFURI, *Venezia e il Rinascimento: religione, scienza, architettura*, Torino 1985.

gune²⁵, ont, par exemple, ouvert la voie à une histoire de la création articulée à l'espace social et aux traditions vernaculaires qui reste fondatrice encore aujourd'hui pour tout chercheur s'intéressant au phénomène vernaculaire et à la réception du modèle exogène en contexte local. De ce point de vue, les stratégies de carrière, largement sous-évaluées, méritent un nouveau regard.

L'exercice de la monographie et l'interdisciplinarité : le poids d'une histoire située

Si l'on revient au portrait collectif de l'échantillon ciblé dans cet article, il s'avère que Jean-Arnaud Raymond et ses confrères, Jacques-Denis Antoine, Alexandre-Théodore Brongniart, Jean-François-Thérèse Chalgrin, Mathurin Cherpitel, Charles-François D'Arnaud, Jacques Gondoin, Charles-Axel Guillaumot, Jean-François Heurtier, Pierre-Adrien Pâris, Antoine-François Peyre, Bernard Poyet, Jean-Augustin Renard et Claude-Nicolas Ledoux²⁶, tous architectes du Roi, partagent de multiples points de convergence – position hégémonique, proximité avec le pouvoir royal, culture commune et déterminisme identique – ce qui n'empêche pas la diversité des destinées.

Apparaissant comme un élément dominant pour plusieurs d'entre eux, leur origine provinciale interroge les différentes spatialités urbaines qui innervent la France de l'Ancien Régime et incite à mieux penser les relations entre Paris et les villes de province. Si les cas du Toulousain Jean-Arnaud Raymond (1738-1811), du Nantais Mathurin Crucy (1749-1826) ou du Bordelais Louis Combes (1757-1818) (fig. 5) font figure d'exemplarité dans ce questionnement, les deux derniers étant revenus s'installer dans leur ville natale après une brillante formation à l'Académie royale de Paris, la trajectoire de Claude-Nicolas Ledoux (1736-1806), l'architecte surplombant des Lumières, ne laisse pas indifférent (fig. 1). Architecte des Eaux et Forêts de la maîtrise

de Sens dès 1764, il se fait connaître simultanément sur la scène parisienne auprès d'une riche clientèle privée avant d'accéder à l'Académie et à la Ferme générale, en 1773²⁷. En dépit de cette carrière liée aux fastes de la monarchie, ses projets provinciaux dans le Sud de la France ou dans l'Est du pays avec son projet de ville idéale à Chaux, autour de la Saline d'Arc-et-Senans ont ajouté à son influence sur la commande architecturale.

L'étude des mobilités des hommes, des objets et des idées montre une variété des pratiques et des circulations qui oblige à opérer des décentrement²⁸, hors du schéma de domination entre centre / périphérie et marges, conceptualisé dès la fin des années 1970²⁹. Il est fondamental aujourd'hui de dépasser la fragmentation traditionnelle entre capitales et provinces et la vision d'une simple histoire régionaliste pour proposer une nouvelle configuration des phénomènes d'appropriation qui peuvent s'étendre de l'ancrage local à l'insertion dans des réseaux européens. Au-delà du strict déterminisme spatial, la dimension territoriale offre, en effet, la possibilité d'engager une réflexion sur l'espace culturel de ces artistes qui ont vécu l'affaiblissement d'un royaume centralisateur rayonnant depuis Paris, nettement perceptible à partir de la seconde moitié du dix-huitième siècle et que l'historiographie a longtemps relativisé par méconnaissance des contextes. L'étude de ces flux inversés revient à s'interroger sur l'intérêt de construire une histoire située dans l'espace, dans le temps et face à ses acteurs. La vision d'un centralisme parisien ne résiste pas au poids des localisations, notamment lorsqu'il s'agit de ces artistes aux trajectoires très particulières qui revendiquent à la fois un enracinement local puissant et leur inscription dans des réseaux parisiens et européens de première importance. L'approche transversale centrée sur l'écriture de l'histoire urbaine et plus largement du territoire et de la vie urbaine de-

²⁶ Pour un premier aperçu des carrières, voir M. GALLET, *Les architectes parisiens du XVIII^e siècle : dictionnaire biographique et critique*, Paris 1995.

²⁷ RABREAU, Claude-Nicolas Ledoux... cit.

²⁸ Pour une vision globale, voir *L'art de l'Ancien Régime. Sortir du rang!*, sous la direction de T. Kirchner, S. Raux, M. Schneider, Heidelberg-Paris 2022.

²⁹ E. CASTELNUOVO, C. GINZBURG, *Domination symbolique et géographie artistique dans l'histoire de l'art italien*, "Actes de la Recherche en Sciences Sociales", 40, 1981, pp. 51-72 ; T. DACOSTA KAUFMANN, *Toward a Geography of Art*, Chicago 2004 ; M. AGULHON, *Le centre et la périphérie*, dans *Les lieux de mémoire*, III (Les France. Traditions), sous la direction de P. Nora, I, Paris 1992, pp. 825-850.

vient, dès lors, une nécessité, car elle permet de repenser les rapports de force entre pouvoir central et pouvoir local au prisme de la puissance des élites politico-culturelles et des institutions publiques qui forment réseau en province à un moment charnière de l'histoire de France à la fin de l'Ancien Régime. En outre, c'est un moyen d'atteindre les savoirs dits 'ordinaires' liés à la vie quotidienne des habitants, les savoirs techniques liés aux corporations et métiers ou aux corps bâtisseurs implantés dans la cité et encore très méconnus³⁰. Se pencher sur l'urbanisme des Lumières, c'est enfin tenter de concilier deux disciplines historiquement distinctes, l'architecture et le droit dont Vitruve soulignait déjà la complémentarité³¹.

De manière globale, il est important de rappeler, sans les citer tous, les grands travaux de la tradition française, ceux, pionniers, de Georges Duby, Pierre Lavedan ou Emmanuel Le Roy Ladurie³², ainsi que ceux, plus récents, qui s'intéressent plus directement au fait urbain dont témoigne notamment la revue *Histoire Urbaine*, ou au fonctionnement des institutions et élites urbaines, remettant en question le paradigme classique de l'État moderne³³. Parmi ces enquêtes, celles de Marie-Laure Legay sur le rôle politique des assemblées d'États, de la noblesse et des 'pouvoirs intermédiaires', confrontés aux effets de la décentralisation³⁴ sont toujours sources d'inspiration, de même que celles de Julian Swann sur les États de Bourgogne, comparables aux États de Languedoc pour leur puissance³⁵. À cela, s'ajoutent les études qui modernisent les approches croisées à l'instar du projet de recherche ACA-RES sur les académies de Province portée par Anne Perrin-Khelissa et Emilie Roffidal³⁶ ou celles qui sortent du champ historien tel l'ouvrage *Une histoire de la ville pour repenser la société* de Paul Blanquart³⁷.

S'il est impossible d'évoquer l'ensemble de la génération ciblée dans l'enquête, le profil polygra-

phique de Raymond avive la question de l'origine provinciale de ces hommes de l'art qui ont marqué le paysage architectural à l'échelle du royaume. La province de Languedoc offre, en effet, un terrain d'analyse original, par son organisation administrative partagée entre les États de Languedoc bénéficiant d'une quasi-autonomie, les intendants et les institutions locales, partagées également entre ses deux grandes capitales, Toulouse et Montpellier. Par sa forte identité provinciale, ce territoire, qui cristallise la vision d'une monarchie contestée dans son absolutisme et son centralisme, illustre un aspect seulement partiellement connu de la gouvernance administrative royale³⁸.

Éloignée de Paris, la province de Languedoc demeure au dix-huitième siècle un pôle économique dynamique stimulé par la politique ambitieuse des États et un milieu humaniste très actif depuis la Renaissance³⁹. Pays d'États, la province de Languedoc jouissait d'une grande autonomie sur deux plans : en matière de fiscalité et d'aménagement du territoire. Principale instance de la province, les États de Languedoc fonctionnaient grâce à une assemblée, composée de membres du clergé, de la noblesse et du tiers-état. Face à cet appareil administratif au pouvoir décisionnaire fort, le Parlement de Toulouse demeurait un contre-pouvoir prépondérant en raison de l'étendue de son ressort, qui couvrait la région actuelle d'Occitanie. Enfin, depuis la Contre-Réforme, les institutions cléricales s'étaient multipliées dans la ville pour affirmer la puissance de l'Église, qui se trouva renforcée au dix-huitième siècle grâce aux fastueux archevêques. Privée de la présence de l'intendant de la province, Toulouse offrait une scène politique contrastée, dominée par le Capitoulat, le Parlement et l'autorité royale, incarnée par le subdélégué de l'intendant. À ces forces essentielles, s'ajoutaient dans les prises de décisions le sénéchal, l'archevêque et les influents États provinciaux.

³⁰ *L'art du chantier...* cit. ; NÈGRE, *L'art et la matière...* cit.

³¹ R. CARVAIS, *La littérature juridique du bâtiment. L'invention et le succès d'un genre doublement technique, 1748-1950*, dans *La construction savante, les avatars de la littérature technique*, sous la direction de J.P. Garric, V. Nègre, A. Thomine-Berrada, Paris 2008, pp. 89-102 ; J.L. HAROUEL, *L'embellissement des villes. L'urbanisme français au XVIII^e siècle*, Paris 1993.

³² G. DUBY, *Histoire de la France urbaine*, Paris 1980-1985 ; E. LE ROY LADURIE, *La ville des temps modernes*, III (*De la Renaissance aux Révolutions*), Paris 1980 ; P. LAVEDAN, J. HUGUENEY, PH. HENRAT, *L'urbanisme à l'époque moderne, XVI^e-XVIII^e siècles*, Genève 1982.

³³ Je retiendrai en particulier *Élites urbaines et constructions territoriales XVI^e-XVIII^e siècles*, "Histoire Urbaine", 40, 2014, 2, p. 40.

³⁴ *L'invention de la décentralisation. Noblesse et pouvoirs intermédiaires en France et en Europe XVII^e-XIX^e siècle*, sous la direction de M.L. Legay, R. Baur, Villeneuve d'Ascq 2009.

³⁵ J. SWANN, *Provincial Power and Absolute Monarchy. The Estates General of Burgundy, 1661-1790*, Cambridge 2003. A citer également l'ouvrage déjà ancien d'A. RÉBILLON, *Les États de Bretagne de 1661 à 1789, leur organisation, l'évolution de leurs pouvoirs, leur administration financière*, Rennes 1932.

³⁶ *Réseaux et académies d'art au siècle des Lumières en province*, sous la direction de É. Roffidal, A. Perrin Khelissa, Heidelberg 2024, <https://hal.science/hal-04320248v1> (consulté le 15 novembre 2024).

³⁷ P. BLANQUART, *Une histoire de la ville pour repenser la société*, Paris 1997.

³⁸ A. JOUANNA, S. DURAND, E. PÉLAQUIER, *Des États dans l'État. Les États de Languedoc, de la Fronde à la Révolution*, Genève 2014.

³⁹ La province du Languedoc s'étendait de la Garonne au Rhône, de la Méditerranée à l'Albigeois et des contreforts pyrénéens jusqu'à la haute vallée de la Loire. Voir E. PÉLAQUIER, *Atlas historique de la province de Languedoc*, <https://pierresvives.herault.fr/935-atlas-historique-de-la-province-de-languedoc.htm> (consulté le 15 novembre 2024).

Face à Toulouse, Montpellier, la deuxième ville du Languedoc, formait un relais provincial de première importance. L'assemblée des États ainsi que la cour des Comptes, Aides et Finances siégeaient à Montpellier ; l'intendant de la province ainsi que le gouverneur y résidaient. L'intense compétition politique et économique que se livrèrent les deux capitales provinciales se doubla d'une rivalité sociale et culturelle qui marqua durablement l'espace urbain. L'histoire de la province, de ses institutions et de ses cultures politiques permet ainsi de comprendre les motivations qui animèrent Raymond, en-dehors des contingences financières et des liens affectifs qu'il ne cessa jamais de cultiver avec sa terre natale et en dépit de l'obligation pour tout architecte du Roi de demeurer à Paris. Sans l'effacement des frontières entre les disciplines, il serait en effet difficile de saisir les choix de carrière de Raymond.

Les deux grands pôles urbains que formaient Toulouse et Montpellier et leur territoire développèrent un ensemble d'actions incitatives qui couvraient un large maillage de compétences en termes de travaux publics, d'artisanat, de productions manufacturières et d'économie. C'est ce dynamisme qui valut à Raymond l'obtention de grands chantiers civils. De Montpellier à Toulouse, d'Aix-en-Provence à Bordeaux, il sut se rendre incontournable dans le paysage méridional, notamment grâce aux commandes des archevêques du Midi de la France, présidents-nés des États de Languedoc dont le libéral archevêque de Toulouse, Étienne Charles Loménie de Brienne, constitue la figure de proue. Le rayonnement de cette puissante aristocratie cléricale qui débordait largement la province en raison de ses liens avec la cour et de son rôle de relais entre Paris et la France méridionale, illustre un mécénat de premier plan irradiant à l'échelle du royaume dont Raymond a bénéficié abondamment. L'archevêque de Narbonne,

Arthur Richard Dillon, qui tenta d'imposer son architecte dans plusieurs projets publics dont le palais des États à Montpellier, lui confia par exemple le réaménagement de l'hôtel familial parisien rue du Bac en 1768, seulement deux ans après le succès de Raymond au Grand prix, ce qui eut pour effet de le faire connaître à Paris et simultanément de lui conférer une nouvelle stature dans sa ville natale. Dans les dernières décennies du dix-huitième siècle, la province n'est donc plus un 'substitut' comme le laissait entendre Pierre-Jean Mariette à propos de l'architecte parisien D'Aviler, parti s'installer dans le sud de la France : "las de ne se pouvoir faire connaître à Paris par quelque grand ouvrage de réputation, il accepta l'offre qu'on lui fit d'aller à Montpellier"⁴⁰.

Au-delà de l'examen du contexte politique et social, ce sont les tensions entre le local et le national, les points de crispation ou les mesures de conciliation entre le pouvoir central et la province, les liens de prépondérance ou de rivalités d'une ville à une autre qui ouvrent, au sein de l'histoire de la création artistique, de nouvelles pistes de travail considérées comme interstitielles depuis trop longtemps par une historiographie condensatrice. Ces problématiques devraient intégrer désormais toute approche spatiale de l'art pour retracer plus finement les interactions culturelles.

Le deuxième élément qui me semble important de relever pour mieux saisir la réalité de l'architecte au service de l'État appartient à l'histoire globale du royaume de France lorsque les événements politiques de la fin du dix-huitième siècle mirent un frein aux ambitions des élites de l'Ancien Régime. Dans l'histoire du monde occidental, peu de périodes ont, en effet, subi une telle suite de discontinuités, inhérentes à l'épisode révolutionnaire. Avant le lent retour à l'ordre, les réformes transformèrent brutalement les institutions séculaires de la vie artistique. Heurtés dans

⁴⁰ P.J. MARIETTE, *Abecedario*, II, p. 66, cité dans T. VERDIER, *Augustin-Charles d'Aviler, architecte du roi en Languedoc 1653-1701*, Montpellier 2003, p. 249.

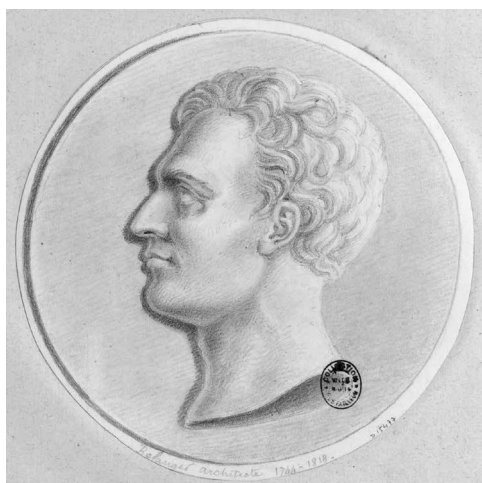


Fig. 4 Anonyme, Portrait de l'architecte François-Joseph Bélanger (1744-1818) (© Paris Musée Carnavalet-Histoire de Paris).

leur pratique et leur destinée, témoins des ruptures et recompositions qui frappèrent la société dans son intégralité, les artistes durent se réinventer afin de traverser ce contexte inédit. Dans le cas des architectes du Roi, l'approche institutionnelle donne une légitimité aux trajectoires bien plus que le fait politique. Car, après les temps de trouble dont on ne peut nier l'impact, les architectes du Roi, implantés au cœur de l'ancien appareil monarchique se tournèrent vers les nouvelles institutions de l'Empire, en intégrant massivement l'Institut de France et le Conseil des Bâtiments civils. Observer ces mobilités conduit à instruire une histoire des milieux professionnels en interrogeant les hiérarchies, les équilibres précaires, le sentiment de déclassement social pour ceux qui ont incarné les ambitions architecturales de plusieurs siècles. La vulnérabilité des trajectoires, majorée par les crises politiques se pose pour les architectes du Roi moins en termes de rupture selon l'expression d'une certaine tradition historiographique française qu'en termes de bouleversement des valeurs et de capacité d'adaptation, au-delà des invariants de leurs parcours professionnels qui sont l'excellence de leur pratique et la maîtrise de leur art⁴¹.

Conclusion

Si la pratique d'une histoire dissociée tend à disparaître, les défis de l'interdisciplinarité ne sont pas entièrement résolus lorsqu'il s'agit de sujets aussi clivants que l'exercice de la monographie. Pierre Rosenberg écrivait en 2006 que malgré la diversité des formes de la monographie qui ont pour lui comme point nodal de présenter des écrits centrés sur un seul sujet, on attend toujours les trois parties de la monographie classique : un essai critique, une biographie-chronologie et un répertoire de documents⁴². Historiens de l'architecture comme historiens de l'art sont aujourd'hui convaincus de l'intérêt de faire voi-

siner l'histoire de la création avec l'histoire culturelle, sociale, politique, économique, matérielle et technique. Ces habitudes communes associant champs disciplinaires connexes et souvent transhistoriques sont devenues d'une telle évidence qu'elles ne posent plus question pour la majorité. Toutefois, malgré ces convictions largement partagées et en dépit de l'imbrication d'hypothèses de recherche plurielles, les incertitudes liées à l'interprétation des intentions de l'artiste restent prégnantes dans l'écriture biographique⁴³. Aujourd'hui, la monographie n'est plus tant une fin en soi qu'un simple outil de connaissance pour documenter la vie d'un artiste ou d'une œuvre, qualité que lui reconnaît l'Occident depuis les *Vies* de Giorgio Vasari. En acceptant l'interdisciplinarité, le chercheur s'émancipe d'un objet monographique circonscrit par définition pour jouer sur la perméabilité des domaines. Pourtant, l'exercice nourrit dans un effet de réciprocité la validité scientifique des méthodes croisées en repensant les catégories historiques à partir d'un préalable solide qui par le jeu des emboîtements et des regards réflexifs doit demeurer modulable pour une histoire en mouvement.

Le deuxième problème qui découle de la construction intellectuelle des savoirs au prisme de l'interdisciplinarité réside dans l'articulation à trouver entre l'enquête en solitaire et la recherche collaborative dont l'actuel paradigme épistémologique demande à être retravaillé, notamment dans le cas de la monographie à plusieurs auteurs. La confrontation des méthodes mobilise certes un vaste champ de compétences mais le risque n'est-il pas de déstructurer les valeurs heuristiques de la discipline princeps sans tirer avantage du décloisonnement des champs opératoires ? Pour équilibrer les chemins d'enquête et éviter l'éparpillement, il est donc essentiel d'insister sur la cohérence narrative, en établissant une réflexion ordonnée autour de lignes

⁴¹ A rebours des études anglo-saxonnes qui récusent cette périodisation réductrice et ses partis pris : R. MIDDLETON, D. WATKIN, *Neoclassical and 19th Century Architecture*, I-II, New York 1987.

⁴² P. ROSENBERG, *La monographie, un outil indispensable*, "Perspective", 2006, 4, pp. 497-498.

⁴³ M. BAXANDALL, *L'œil du Quattrocento*, "Actes de la Recherche en Sciences Sociales", 40, 1981, pp. 10-49.

⁴⁴ A. FARGE, *Le goût de l'archive*, Paris 1989.

de force clairement identifiées dans les attendus de la recherche. Ce cadrage méthodologique normatif doit pourtant laisser une marge de liberté qui appartient autant au registre des émotions qu'à celui de l'intellect. Pour toutes ces raisons et quelle que soit la forme donnée à l'approche biographique et à la finalité de l'exercice (ouvrage, thèse, catalogue d'exposition, catalogue raisonné), l'essai problématisé s'impose comme un manifeste préliminaire où les sources et la mise en abîme des regards tiennent un rôle structurant pour éviter la sacralisation de l'œuvre et de son créateur, souvent décriée par les détracteurs de la monographie. Pour paraphraser Arlette Farge, le 'goût de l'archive' comme les pratiques de terrain autorisent ce vagabondage raisonné, au-delà de l'autonomie de pensée du chercheur⁴⁴.

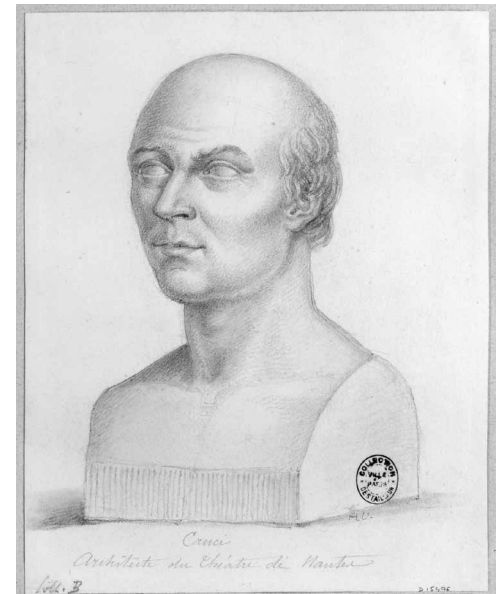


Fig. 5 H.U., Portrait de Mathurin Cruci (1749-1826), architecte du théâtre de Nantes (© Paris Musée Carnavalet-Histoire de Paris).

IL DISEGNO COME LABORATORIO INTERDISCIPLINARE DELLA STORIA DELL'ARCHITETTURA

The field of architectural history, shaped by a growing interest in interdisciplinary perspectives, has seen a recent multiplication of viewpoints and methodological tools. Within this context, this paper reflects on the enduring significance of one of the discipline's most traditional subjects: the architectural drawing. As is well known, drawing has always played a central role in analyzing the design process behind architectural projects. Its richness and intrinsic complexity can reveal the project's intent – but not only that. With increasingly sophisticated tools, it is now possible to reconstruct the genesis and development of a drawing – dating its support, identifying the instruments used, and tracing its different execution phases – while also providing valuable clues regarding its attribution. Architectural drawings are precious documents that bring together multiple narratives: those of the author, whether presumed or real; of the building depicted on the sheet; of representational techniques; and today, of the evolving tools of analysis, conservation, and preservation. The drawing – specifically the original, not its reproduction – stands as a truly interdisciplinary object of study. It offers a unique window into the various phases of the design process, providing access to the architect's mind at the pivotal creative moment when an idea was first conceived and then given tangible form.

Potente mezzo espressivo, il disegno ha da sempre soddisfatto l'esigenza primaria dell'uomo di comunicare. Nelle sue differenti forme, evolute nel tempo in molteplici direzioni, l'esercizio del disegno ha reso possibile la trasmissione di concetti, messaggi e significati spesso complessi e non sempre univocamente interpretabili, e dunque oggetto di diversificate letture da parte dell'osservatore. La sua complessità lo ha reso documento prezioso, spesso insostituibile, necessario, in molteplici campi di studio tra cui, primariamente, la pittura, la scultura e l'architettura, le tre arti nate sotto la sua egida¹.

Se è possibile affermare che è stata la pittura, inizialmente, a riconoscere al disegno un ruolo insostituibile per lo sviluppo delle arti figurative², è ugualmente importante sottolineare che le molteplici potenzialità di uso e di sviluppo di questa pratica si sono evolute significativamente, definendosi nei secoli con caratteristiche proprie in ciascuna disciplina. La centralità del disegno, quale strumento di analisi, verifica, sperimentazione, dallo schizzo preparatorio allo studio dei dettagli, dalle diverse elaborazioni fino al compimento dell'opera, è sempre stata riconosciuta negli studi di storia dell'arte e di storia dell'architettura. Per quest'ultima in particolare, da quando il disegno è diventato pratica comune e irrinunciabile nel lavoro dell'architetto, sempre più importante è stato seguire la sua continua e sostanziale evoluzione nell'uso, negli esiti, nel metodo. Un processo in cui la rivoluzione avvenuta con l'"invenzione" rinascimentale della prospettiva e – probabilmente unico paragone possibile

nel mondo contemporaneo – i radicali cambiamenti occorsi dall'avvento del CAD fino all'Intelligenza Artificiale, hanno trasformato e moltiplicato le potenzialità di analisi e i conseguenti esiti delle stesse.

Vi è una specificità, una unicità nel disegno di architettura: a partire dal tipo di rappresentazioni che rientrano in questa tecnica, come ad esempio le piante, "arbitrary diagrams of a nonexistent footprint"³ (diagrammi arbitrari di una impronta inesistente)³, o il passaggio dai progetti preliminari alle tavole esecutive o, ancora, i salti di scala, dagli assetti planimetrici fino ai dettagli al vero.

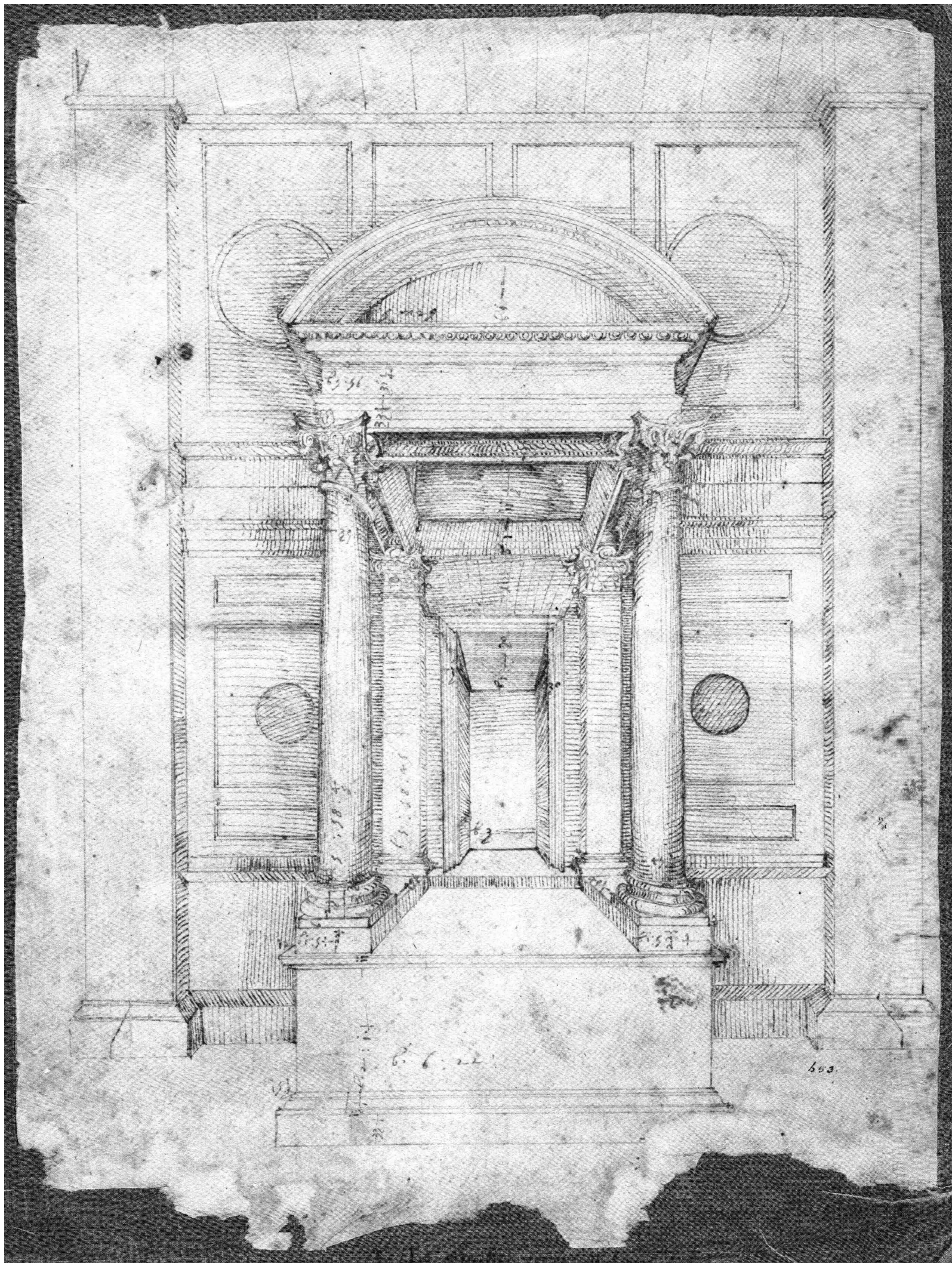
Una intima, intrinseca relazione tra il disegno e l'architettura è sempre esistita. Può sembrare persino inutile sottolineare ancora una volta che il disegno di architettura, nelle sue molteplici tipologie, è uno strumento preziosissimo e mai superato. Tuttavia, ricostruire ed evidenziare, attraverso alcuni esempi, la molteplicità di informazioni che lo studio di uno soltanto, o di un gruppo, di questi preziosi documenti può restituire, rimane un utile esercizio. A ricordarci, oggi, in un futuro a tratti incerto sulle prospettive di utilizzo e sul destino della pratica del disegno, la sua insostituibilità.

L'osservazione dei mutamenti, nel tempo, dei metodi di rappresentazione, e l'analisi del variare e accrescersi delle tipologie di disegno offrono fondamentali chiavi di lettura per cogliere le finalità dei diversi elaborati grafici nel lavoro dell'architetto. L'uso sistematico del disegno, già avviato nel Quattrocento, diventerà sempre

più cruciale nelle fasi di progettazione, richiedendo un processo formativo specifico, sviluppato nell'ambito di apposite scuole. A tal proposito, un ruolo decisivo è stato svolto dalle Accademie di Roma e Firenze, in un lungo processo che portò alla istituzionalizzazione del suo insegnamento per pittori, scultori e architetti, diventando parte fondante dei programmi didattici. Tale cambiamento non condusse alla riduzione dell'atto creativo e istintivo a puro esercizio formale, ma offrì l'opportunità di precisare un metodo di lavoro e di sperimentazione⁴.

La ricchezza e la intrinseca complessità del disegno possono svelare l'intenzione del progetto. Ma non solo. Una vera e propria ricostruzione della genesi e dello sviluppo di un elaborato nella grande maggioranza dei casi può oggi, avvalendosi di strumenti d'indagine sempre più complessi, essere effettuata completamente o comunque con accresciuta esattezza, risalendo alla datazione del supporto, agli strumenti utilizzati, alle diverse fasi di esecuzione, ai materiali previsti, fornendo inoltre dati significativi per quanto riguarda l'attribuzione, laddove – ed è il caso di un numero indefinito di disegni – l'autore non sia certo. E anche quando di un disegno possiamo risalire con certezza ad autore, soggetto, datazione, media⁵, la precisione di queste informazioni non esaurisce le potenzialità di studio e apre, al contrario, ulteriori orizzonti di ricerca (fig. 2).

Lo studio dell'incommensurabile patrimonio di disegni di architettura giunto fino a noi ha permesso di sviluppare conoscenze approfondite ed



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Fig. 1 Anonimo, *Edicola del Pantheon, con misure e annotazioni*, 1500-1550 circa (© Victoria and Albert Museum, London. Prints, Drawings & Paintings Collection, Moody Collection).

Fig. 2 F. Juvarra, *Progetto per un Regio Palazzo in Villa per il diporto di tre personaggi. Pianta, prospetto e spaccati*, 1705 (Accademia Nazionale di San Luca, Roma. Gabinetto Disegni & Stampe, Inv. 141; © Accademia Nazionale di San Luca, Roma).

* Il presente testo restituisce alcuni aspetti di una ricerca in corso centrata sullo studio di disegni di architettura italiani di età moderna e contemporanea in collezioni londinesi e statunitensi. In particolare, attraverso una selezione di casi studio, scelti tra i moltissimi possibili, si intendono proporre in questa sede alcune riflessioni sul disegno quale depositario di molteplici aspetti del progetto di architettura, oggetto di studio interdisciplinare, potente strumento di comunicazione, e in senso più esteso, di 'transfer culturale'. Non essendo possibile riportare qui anche solo in minima parte la ricchissima letteratura sul tema, si rimanderà a quegli studi – e alle indicazioni bibliografiche ivi fornite – cui si è fatto diretto riferimento per gli specifici casi presi ad esempio. Ringrazio le istituzioni che hanno permesso la consultazione e la pubblicazione dei disegni citati: The Albertina Museum di Vienna, la Pierpont Morgan Library di New York, il Victoria and Albert Museum di Londra, lo studio Rafael Moneo di Madrid, l'Accademia Nazionale di San Luca di Roma, la Civica Raccolta delle Stampe Achille Bertarelli di Milano. Ringrazio anche gli studiosi che, nel corso degli anni, hanno contribuito con le loro acute osservazioni alla comprensione e interpretazione del disegno di architettura in età moderna e contemporanea, offrendo continui e nuovi stimoli di ricerca.

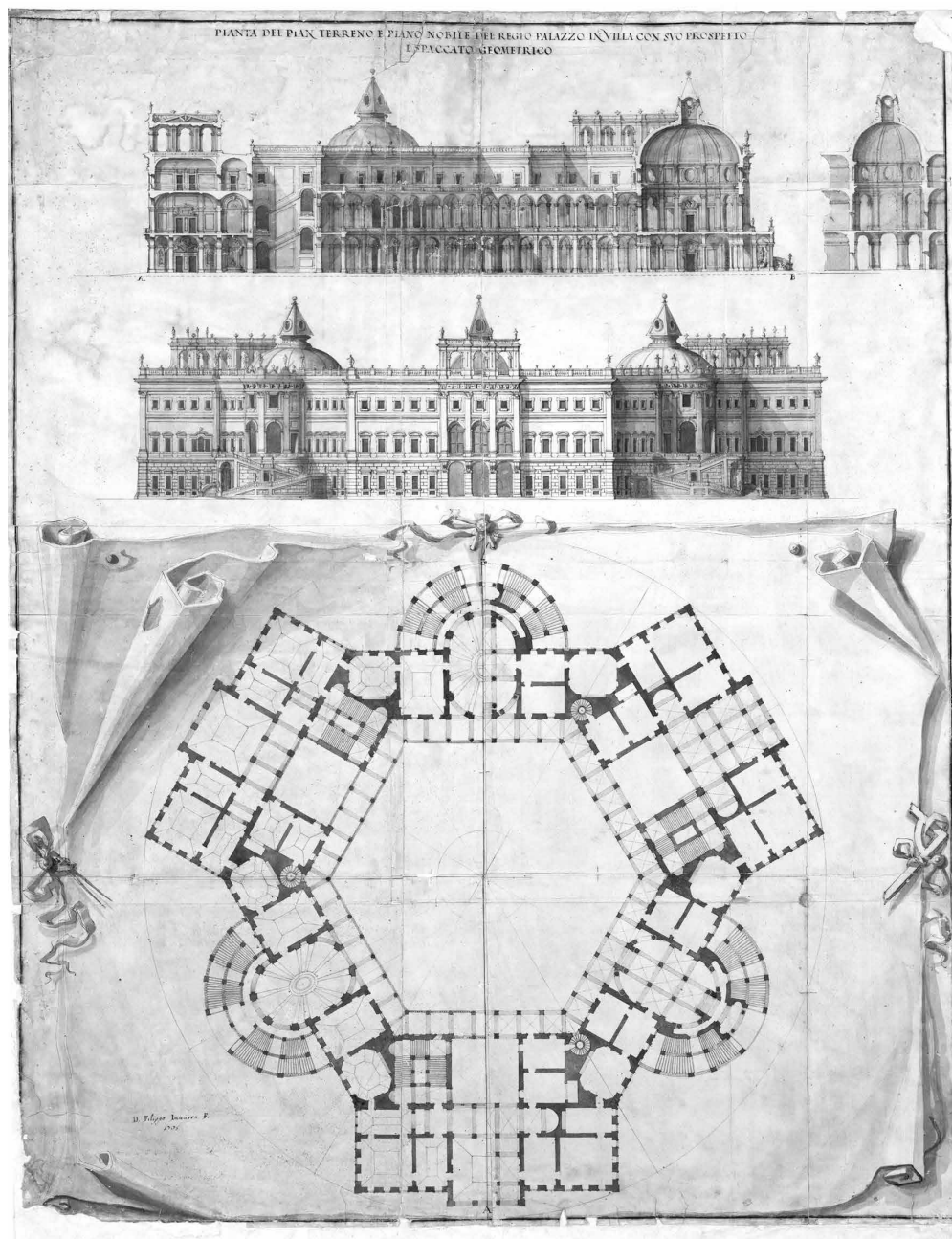
¹ Sul disegno come azione ed espressione artistica, si rimanda al denso saggio di D. ROSAND, *Drawing Acts: Studies in Graphic Expression and Representation*, Cambridge 2002, con ricchissima bibliografia. Più direttamente sull'architettura, si veda J. ACKERMAN, *Architettura e disegno. La rappresentazione da Vitruvio a Gehry*, Milano 2003, con estesi riferimenti bibliografici.

² Il ruolo svolto dalla pittura nella *Universitas picturae ac miniaturae* e nei primi decenni di vita delle accademie di Roma e Firenze è stato fondamentale nella definizione stessa del ruolo del disegno. Un primato, come osserva Rafael Moneo, ancora ravvisabile in età contemporanea, quando l'uso del computer si è rapidamente diffuso negli studi di architettura e "ancora una volta sono stati gli artisti a intuire il potenziale di questo nuovo strumento. Infatti, ad esempio, le esperienze artistiche di Vasarely troveranno nel computer un terreno fertile": R. MONEO, *Ideare, rappresentare, costruire... e ritornare agli schizzi*, in James Ackerman e Rafael Moneo, *Il Disegno di Architettura per la Storia e il Progetto*, giornata di studio (Roma, Accademia Nazionale di San Luca, 29 maggio 2013), a cura di M.C. Loi, F. Moschini, "Annali delle Arti e degli Archivi, Pittura, Scultura, Architettura", II, 2016, pp. 19-26; 23.

³ J. ACKERMAN, *Introduction: The Conventions and Rhetoric of Architectural Drawing*, in *Conventions of Architectural Drawings: Representation and Misrepresentation*, edited by Id., W. Jung, Cambridge 2000, pp. 8-36; 11.

⁴ Riferendosi a questa evoluzione dell'uso del disegno, per quanto riguarda il Settecento, si potrebbe parlare di una tipologia a sé stante, sviluppata soprattutto nell'ambito delle due Accademie di Roma e di Firenze. Attraverso lo studio della loro storia è possibile ritracciare i principali passaggi nell'uso e insegnamento del disegno per i pittori, gli scultori, gli architetti. Per una trattazione generale sul tema, si veda, ad esempio, oltre alla storia delle Accademie, D. RABREAU, *Les dessins d'architecture au XVIIIe siècle / Architectural Drawings of the Eighteenth Century / I Disegni di Architettura nel Settecento*, Paris 2001.

⁵ Se i progetti contemporanei, spesso eseguiti in formati elettronici, possono offrire elementi di studio pressoché completi, altrettanto non può dirsi di elaborati eseguiti fino alla metà del Novecento. Esistono tuttavia anche casi precedenti di disegni di cui conosciamo paternità, soggetti, dati tecnici. Ci riferiamo ad esempio a quelli elaborati in occasione dei Concorsi dell'Accademia di San Luca.



estese a più campi di indagine. In un singolo disegno possono convergere molti aspetti e molte storie: quella dell'autore, presunto o reale; quella dell'edificio il cui progetto è delineato sul foglio; quella delle tecniche di rappresentazione; infine, quella dell'evoluzione degli strumenti di analisi, di cura, di tutela del foglio. In questo senso è possibile affermare che il disegno di architettura è veramente oggetto di studio interdisciplinare, grazie al quale le varie fasi del processo creativo sono intellegibili, permettendo di 'entrare' nella mente del progettista e risalire alla vera essenza del momento creativo, quando la mente concepì l'idea originaria e la mano le diede forma concreta.

Intento di questo breve saggio è proporre alcune

riflessioni sul tema, analizzando, tra i tanti possibili, alcuni disegni ritenuti significativi e con carattere di esemplarità. Il primo caso-studio selezionato, di mano di Borromini, è un foglio molto noto e studiato, già oggetto di numerose analisi e interpretazioni. Può essere considerato l'esito di una fase avanzata del processo di progettazione, prossima alla conclusione. Tale documento grafico offre una moltitudine di informazioni che è possibile coniugare non solo con altri disegni dell'architetto per il medesimo progetto, ma anche con molteplici altri aspetti del suo *modus operandi*; il secondo è un disegno di cui non conosciamo con certezza l'autore e costituisce una specifica interpretazione di un tema ricorrente nel Rinascimento, da mettere utilmente a con-

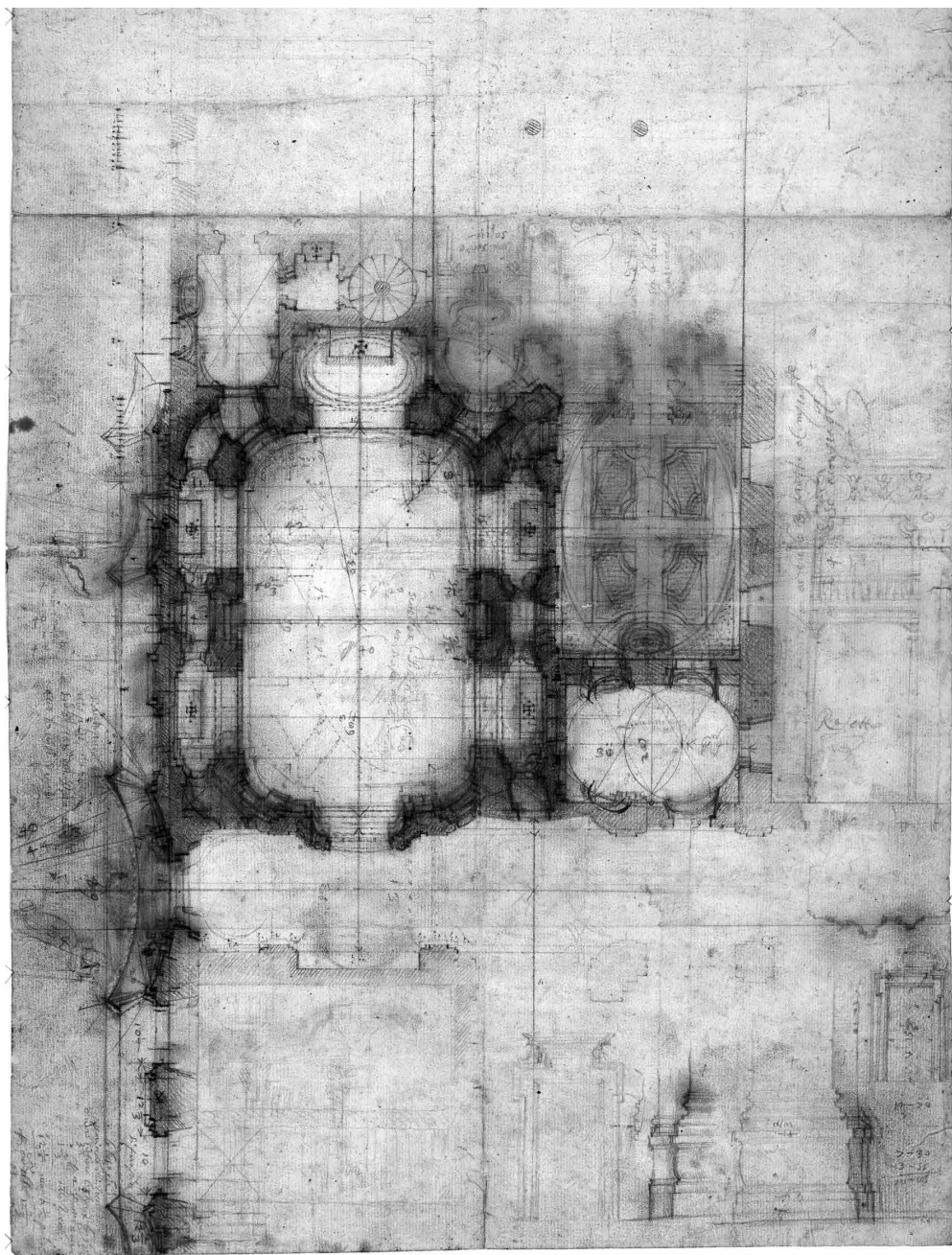


Fig. 3 F. Borromini, *Studio per la pianta della Cappella dei Re Magi in Propaganda Fide*, 1660 ca. (The Albertina Museum, Vienna, AzRom 889; © The ALBERTINA Museum, Vienna).

fronto con altri esempi coevi; il terzo, anch'esso anonimo e del quale non si conoscono, allo stato attuale, analisi storiografiche, non sembra essere un elaborato progettuale, ma piuttosto l'esito di uno studio sul Pantheon, collocandosi perciò nella categoria dei disegni dall'Antico. Vi sono rappresentati un altare e dettagli degli ordini architettonici. Mentre questi primi tre disegni appartengono all'età moderna, l'ultimo, il quarto, riguarda un progetto contemporaneo. È uno schizzo eseguito dall'architetto Rafael Moneo nelle primissime fasi di elaborazione di un progetto, verosimilmente in occasione di un sopralluogo nell'area interessata.

La selezione è stata operata secondo determinati criteri distintivi, in un arco temporale voluta-

mente esteso, cercando di tracciare un quadro capace di restituire almeno in parte alcuni aspetti della complessità e ricchezza del disegno di architettura.

Si prenda dunque in esame il disegno AzRom 889 di Francesco Borromini (fig. 3).

Vi è rappresentato uno studio per la pianta della Cappella dei Re Magi nel Palazzo di Propaganda Fide a Roma, uno degli ultimi capolavori del Maestro ticinese. Realizzato a grafite su carta, misura 49,5 x 66,6 cm. È conservato all'Albertina Museum di Vienna, sede di una delle più importanti e ricche collezioni di disegni di Borromini⁶. Nel foglio, (solo) all'apparenza specchio di una fase di indeterminatezza del processo progettuale, è 'registrata' una stratificazione di idee e di alterna-

⁶ Su questo disegno nello specifico e più in generale sugli studi sui disegni di Francesco Borromini, rimandiamo ai seguenti testi e alle indicazioni bibliografiche riportatevi: J. CONNORS, *Francesco Borromini (1599-1667): Die Revolution des Graphits*, in *Von Bernini bis Piranesi. Römische Architekturzeichnungen des Barock*, Ausstellungskatalog (Stuttgart, Graphische Sammlung Staatsgalerie, 2 ottobre-12 dicembre 1990), herausgegeben von E. Kieven, Stuttgart 1993, pp. 33-38 e cat. 16. Si veda anche Id., *Francesco Borromini. La vita (1599-1667)*, in *Borromini e l'universo barocco*, catalogo della mostra (Roma, Palazzo delle Esposizioni, 16 dicembre 1999-28 febbraio 2000), a cura di R. Bösel, C.L. Frommel, I, Milano 1999, pp. 7-21; Id., *Un teorema sacro. San Carlo alle Quattro Fontane*, in *Il giovane Borromini. Dagli esordi a San Carlo alle Quattro Fontane*, catalogo della mostra (Lugano, Museo Cantonale d'Arte, 5 settembre-14 novembre 1999), a cura di M. Kahn-Rossi, M. Francioli, Milano 1999, pp. 459-474; H. THELEN, *Francesco Borromini. Die Handzeichnungen*, I-II, Graz 1967; Id., *Sui disegni di Borromini*, in *Borromini e l'universo barocco... cit.*, I, pp. 65-73; *Borromini e l'universo barocco... cit.*, II, cat. XVIII.12, e cat. XXI.24; P. PORTOGHESI, *Francesco Borromini. La vita e le opere*, Milano 2019.

tive progettuali per la risoluzione di più problemi, dall'assetto interno dello spazio architettonico al modo in cui questo si voleva rapportare con la facciata dell'edificio; dalla disposizione delle aperture verso la strada al nesso funzionale e visivo dell'aula della cappella con gli spazi contigui. Tale complessità di intenzioni e di ragionamenti che Borromini riversa su questo foglio, tuttavia, non restituisce un documento indecifrabile ma è, al contrario, rivelatore di un processo progettuale, di precise scelte, in cui riconosciamo molto del metodo di lavoro dell'artista. Come è noto, Borromini era maestro del disegno e in questo specifico aspetto della sua attività è stato un innovatore, un pioniere, grazie soprattutto all'uso sempre più esteso della grafite e alle potenzialità espressive e di studio che questo nuovo media offriva. Non a caso, Joseph Connors vi si è riferito come alla "rivoluzione della grafite"⁷.

Il disegno fa parte di una sequenza, la cui cronologia non sempre è chiaramente ed esattamente ricostruibile, che ci guida nello studio del processo di progettazione, aiutandoci ad individuare le fasi cruciali e i temi-chiave. Dunque, Albertina 889 ci rivela, ad esempio, possibili soluzioni per lo sviluppo della tematica della "sliding facade", già sperimentata con successo nel progetto dell'Oratorio dei Filippini⁸. L'insistenza di segni in corrispondenza dell'indicazione delle aperture verso il fronte di via di Propaganda, dove si sviluppa il lungo prospetto del palazzo, ci aiuta a capire l'intuizione che porta Borromini a spingersi oltre la concezione dello slittamento della facciata, per creare una sequenza, ben visibile in pianta, di tre blocchi autonomi tra loro e rispetto alla facciata: cappella-ingresso-corpo scala⁹. In questo disegno, inoltre, Borromini studia il nesso tra l'Oratorio e gli altri spazi che completano – con funzioni diverse e in gran parte già fissate prima del suo intervento¹⁰ – il grande isolato, legandoli tra loro attraverso un sistema di assi visivi.

Ma, appunto, l'intento principale di questo breve scritto non è quello di addentrarsi nell'analisi di tale specifico progetto, né di ritornare sull'uso del disegno in Francesco Borromini, tema già esplorato in molti, approfonditi studi, anche molto recenti. O ancora, di rapportare questo interessantissimo disegno ad altri di mano di Borromini. Per tutti questi aspetti la letteratura è già poderosa. Albertina 889 è stato selezionato, tra l'incommensurabile patrimonio di disegni di architettura sparsi nel mondo, tra archivi, musei, fondazioni, collezioni private, per riflettere ancora sulla moltitudine di messaggi che il disegno può restituire, sulla sua importanza e insostituibilità ancora oggi, nell'era di AutoCAD, del BIM, dell'AI. Uno tra infiniti, vuole costituire solo uno dei possibili esempi, e offrire qualche occasione di riflessione. È un documento importante, che non soltanto ci porta a conoscere una fase particolare di questo specifico progetto, decifrando il sistema di segni – ognuno testimonianza di una diversa soluzione, ma ci conduce verso una moltitudine di altre riflessioni, rendendolo sede di una analisi propriamente interdisciplinare.

Si tratta di uno studio che l'autore compie principalmente per sé stesso, non per la committenza, non per le maestranze. Un soliloquio. Ma da questo colloquio silenzioso che Borromini compie tra sé e sé riusciamo a comprendere molto dell'*iter* progettuale e dunque a giungere a una più profonda comprensione dell'esito di questo processo, e oltre. Il disegno ci riporta nella Roma di metà Seicento, nel cuore della città antica, con un tessuto urbano ancora non del tutto regolarizzato secondo i principi che guidavano il lavoro dei *magistri stratarum*. Il lotto trapezoidale e la lunga facciata su una via larga appena una decina di metri costituivano dei limiti oggettivi rispetto a una visione d'insieme 'classica', frontale e simmetrica¹¹ – che pure aveva informato il progetto di Bernini per la stessa cappella, poi

⁷ CONNORS, *Francesco Borromini. La vita...* cit., p. 9.

⁸ Id., *Borromini and the Roman Oratory: Style and Society*, Cambridge 1980.

⁹ Una concezione che lo stesso Borromini svilupperà ulteriormente nell'assetto e posizionamento del vestibolo di Santa Maria dei Sette Dolori.

¹⁰ CONNORS, *Borromini and the Roman Oratory...* cit. Si veda in particolare il capitolo terzo, pp. 35-61.

¹¹ Su questi aspetti legati al nuovo assetto urbanistico negli spazi pubblici del centro di Roma: Id., *Alleanze e inimicizie. L'urbanistica di Roma barocca*, Roma 2005, pp. 27-33 e *passim*.

demolita – e questo certamente aveva influenzato la scelta dell'architetto di scorporare lo studio dell'esterno da quello dell'interno. Egli aveva definitivamente abbandonato, in questo caso e più ampiamente in altre opere, il principio rinascimentale della corrispondenza tra interno e facciata, confermandone la revisione già avviata da Peruzzi nei due palazzi attigui dei fratelli Massimo. La veduta necessariamente 'di sguincio', obliqua, motivava inoltre l'utilizzo di paraste giganti, la cui posizione, indicata nello studio della pianta, verrà poi precisata in quello per l'alzato. Inoltre, il peculiare carattere del disegno, la 'macchia' (*smudge*) dai perimetri indistinti, nata dal sovrapporsi e intersecarsi di linee e pensieri, ci porta a ragionare sul ruolo svolto dagli strumenti di lavoro dell'architetto nelle diverse fasi progettuali. Jonathan Foote suggerisce una corrispondenza tra questi e i materiali costruttivi:

Abbiamo riflettuto sulle qualità indefinite dei segni di grafite di Borromini, e abbiamo tracciato parallelismi tra i materiali da disegno e i materiali da costruzione. [...] Questi tre materiali, la grafite, le tavolozze e lo stucco romano, pur avendo ciascuno una propria logica materica, sono tutti caratterizzati da un alto grado di duttilità e morbidezza. Presi insieme, sfidano il rigido schema geometrico con cui l'opera di Borromini viene normalmente valutata, sottolineando invece il potenziale generativo nel disegnare materiali e tecniche in una complessa dialettica tra l'immagine e la costruzione. Pur resistendo all'intransigenza della forma, i materiali del disegno e dell'edificio sono legati attraverso una sostanziale intelligibilità, ciascuno con pratiche e associazioni concrete¹².

Tale interessante interpretazione ci riporta a un ulteriore aspetto, ovvero la formazione dell'autore del disegno. Borromini non appartiene alla lunga genia degli architetti pittori, né a quella degli architetti scultori. Il suo avvicinamento alla pratica architettonica avviene attraverso un contatto diretto, fisico, con la materia, e questo non può non avere influenzato anche il suo modo di

rappresentare l'architettura e il suo farsi sul supporto bidimensionale del foglio¹³.

Borromini fa ricorso alla geometria per dimensionare e determinare le forme e 'sotto' alla 'macchia', alla complessa stratigrafia del disegno, leggiamo chiaramente la costruzione geometrica, motore generatore dello spazio architettonico. Questa modalità lo avvicina di nuovo alla pratica medievale, senza ricorrere unicamente all'uso dei principi proporzionali, matematici e assoluti, che avevano caratterizzato l'opera di molti suoi predecessori.

Inoltre, allo stesso modo in cui attinge alla geometria e alla conoscenza delle potenzialità strutturali della pietra, Borromini si lascia ispirare dal mondo delle forme naturali. Ciò appare soprattutto in certi suoi disegni per altri progetti – esemplari in questo senso gli studi per la lanterna di Sant'Ivo alla Sapienza – in cui muove dalla copia di elementi naturali, che poi 'trasforma' in un oggetto architettonico, complice la sua collezione di fossili e conchiglie. L'artista opera un trasferimento dalla forma organica alla forma architettonica, passando per dettagli costruttivi complessi, quasi una anticipazione di sviluppi successivi, una architettura organica *ante-litteram*. Ma questo esplicito riferimento alle forme naturali – tema non certo nuovo nell'architettura di ogni tempo – è stato per molti versi, nel caso di Borromini, il riflesso della cultura del tempo, del 'metodo galileiano' in cui la sua opera si radica¹⁴. Inoltre, la scelta stessa di questo specifico disegno a spirale per la lanterna ha aperto molte altre interpretazioni, talora arbitrarie, legate ad aspetti simbolici, culturali, esoterici¹⁵.

Questo piccolo foglio, questi pochi centimetri quadrati, dove l'architetto ha tracciato insistentemente varie ipotesi progettuali, sviluppate in un tempo che non possiamo definire con precisione, diventa un palinsesto, una piattaforma in cui le linee del pensiero si intrecciano e si fondono in un programma di lavoro che può e deve essere

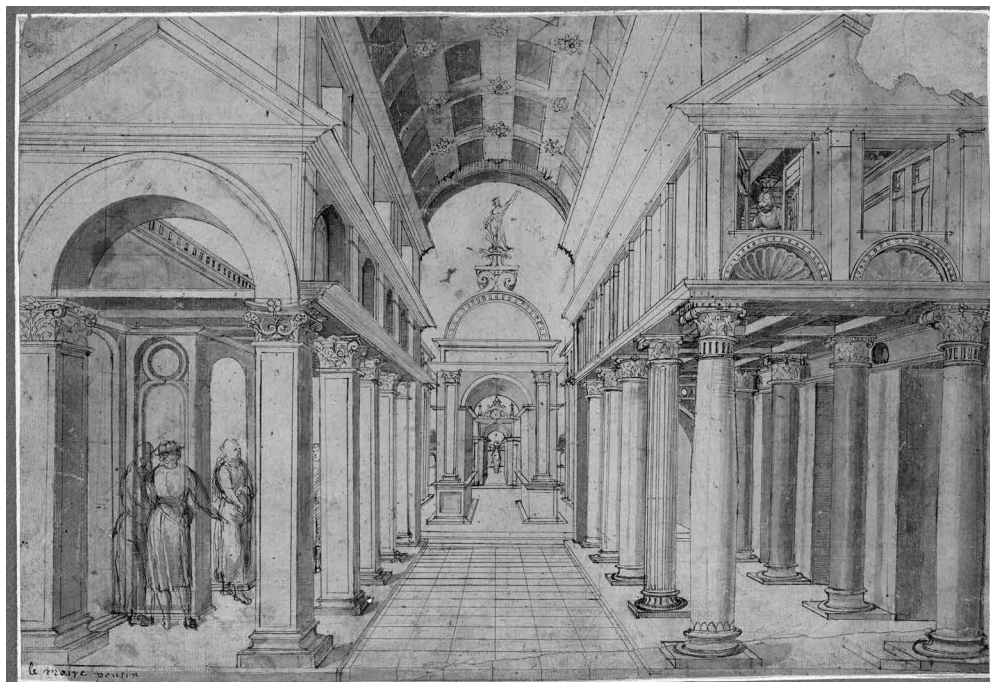
¹² "We have been ruminating on the smudgy qualities of Borromini's graphite marks, drawing parallels between drawing materials and building materials. [...] These three materials, graphite, *tevolozze*, and *stucco romano*, in spite of each having their own material logic, are all characterised by a high degree of pliability and suppleness. Taken together, they defy the rigid, geometric schema by which Borromini's work is normally evaluated, emphasising instead the generative potential of drawing materials and techniques in a complex dialectic between imagining and building. Yet, in resisting the intransigence of form, the materials of the drawing and the building are linked through a substantial intelligibility, each having concrete practices and associations": J. FOOTE, *Borromini's Smudge*, "Drawing Matter Journal", 2022, 2, pp. 1-28: 9, https://drawingmatter.org/wp-content/uploads/2022/11/DMJ_No2_JonathanFoote-1.pdf (consultato il 22 gennaio 2025). In questo saggio Foote esplora il rapporto tra disegno e costruzione, offrendo una chiave di lettura del disegno di Borromini legandolo a strumenti e metodi di lavoro in uso a Roma nel primo Seicento.

¹³ Sull'uso della grafite in età moderna, si veda anche *Il Disegno*, a cura di G.C. Sciolla, 1 (*Forme, tecniche, significati*), a cura di A. Petrioli Tofani, S. Prosperi Valenti Rodinò, G.C. Sciolla, Cinisello Balsamo 1991; P. EMMONS, *Drawing Imagining Building: Embodiment in Architectural Design Practices*, London-New York 2019, pp. 171-178 e *passim*.

¹⁴ Il saggio di J. CONNORS, *Virtuoso Architecture in Cassiano's Rome*, in *Cassiano Dal Pozzo's Paper Museum*, conference proceedings (London, 14-15 December 1989), II, Milan 1992, pp. 23-40, e gli estesi riferimenti bibliografici, contribuiscono ad inquadrare la figura del virtuoso e l'atmosfera culturale del mondo in cui vive e opera Borromini, di cui i suoi stessi disegni sono chiara testimonianza.

¹⁵ Si veda in proposito il saggio di Id., *Borromini's S. Ivo alla Sapienza: The Spiral*, "The Burlington Magazine", 138, 1123, 1996, pp. 668-682.

Fig. 4 Anonimo, Area Lombarda, Studio di uno spazio architettonico in prospettiva, 1510-1550 (The Pierpont Morgan Library and Museum, New York. Drawings and Prints Department, 1962.21; © The Pierpont Morgan Library and Museum, New York).



interpretato in più modi, richiedendo uno sforzo collettivo, più competenze, per essere compreso a fondo.

Il disegno di architettura chiama la necessità di sguardi complementari, che sappiano penetrare la complessità dei dati che vi sono racchiusi: rievocando la vitruviana figura dell'architetto scienziato, poi ripresa dall'Alberti, e oggi coadiuvata dalle macchine, o chiamando al tavolo di lavoro esperti di più discipline.

Nella sconfinata produzione di disegni che nel corso dei secoli hanno costituito la base per le ricerche di generazioni di studiosi, altri esempi possono essere presi in considerazione in questa breve riflessione sulla molteplicità di messaggi insiti nel particolare tipo di documento che è il disegno di architettura.

Consideriamo ad esempio un gruppo di opere grafiche che affrontano il medesimo tema: la nota serie di 'scene prospettiche', realizzate verosimilmente nel primo Cinquecento, al culmine delle ricerche sulla rappresentazione dello spazio architettonico¹⁶. Variamente – e non sempre con piena certezza – attribuiti ai massimi protagonisti del Rinascimento italiano, talvolta assegnati più genericamente a una 'Scuola Italiana' o, ancora, rimasti anonimi, questi disegni raccontano, attraverso attente e dettagliate rappresentazioni di luoghi ideali, delle nuove, infinite potenzialità che il disegno in prospettiva poteva offrire¹⁷. Tra i presunti, o confermati, autori figurano prevalentemente gli appartenenti alla schiera dei pittori architetti – tra cui spiccano

i nomi di Bramante, Raffaello, Peruzzi –, artisti giunti alla pratica dell'architettura dopo una formazione come pittori, a dimostrazione della intensità del dibattito tra le arti del disegno in quella fase storica¹⁸.

Di nuovo, però, non vogliamo addentrarci nello specifico della questione attributiva, né soffermarci sul confronto tra le opere che compongono questa serie, questioni già largamente dibattute. Vorremmo piuttosto provare ad elencare gli ambiti di interesse che in questi fogli si intersecano. Queste rappresentazioni di costruzioni spaziali fantastiche riflettono l'interesse per gli studi sulla prospettiva, uno dei temi più ampiamente esplorati nel Rinascimento, nelle pagine dei trattati come in progetti reali; ma sono anche risposta al dibattito sulle città ideali, intese principalmente come modelli di perfezione piuttosto che progetti da tradurre in pietre, marmi e mattoni. Questi disegni sono testimonianza, d'altra parte, delle trasformazioni in atto tra la fine del Quattrocento e la prima metà del Cinquecento nella storia del teatro, allorquando, con il passaggio alla scena fissa, la possibilità di costruzioni prospettiche su fondali e quinte contribuì significativamente all'evoluzione dello spazio scenico¹⁹. Alla Pierpont Morgan Library di New York è conservato un foglio, datato 1510-1530 circa, che rappresenta un interno in prospettiva, con due porticati simmetrici fiancheggianti uno spazio voltato a botte (fig. 4)²⁰. Il disegno è stato messo in relazione con la *Scena prospettica* attribuita dubitativamente a Donato Bramante e di cui

¹⁶ A questo proposito ricordiamo qui in particolare soltanto la *Scena prospettica con edifici romani* (compasso, tracce di stilo, pietra nera, penna e inchiostro, pennello e inchiostro diluito su carta, 588 x 715 mm), conservata agli Uffizi (GDSU) e tradizionalmente attribuita a Baldassarre Peruzzi; la *Scena tragica* e la *Scena comica*, raffigurate da Sebastiano Serlio nel secondo libro del suo *Trattato*, nel capitolo conclusivo *Trattato sopra le scene*; la *Scena per la Calandria* (?) nel Palazzo Apostolico Vaticano, anch'essa tentativamente e da molti attribuita a Peruzzi.

¹⁷ Della fittissima bibliografia su questo tema rimandiamo ai seguenti testi e ai relativi rimandi bibliografici: A. PETRIOLI TOFANI, *La scena teatrale*, in *Rinascimento da Brunelleschi a Michelangelo. La rappresentazione dell'architettura*, catalogo della mostra (Venezia, Palazzo Grassi, 31 marzo-6 novembre 1994), a cura di H. Millon, V. Magnago Lampugnani, Milano 1994, pp. 529-538; A. BRUSCHI, *Da Bramante a Peruzzi. Spazio e pittura*, in Baldassarre Peruzzi. *Pittura, scena e architettura nel Cinquecento*, a cura di M. Fagiolo, M.L. Madonna, Roma 1987, pp. 311-338; M. FAIETTI, *Il disegno padre delle arti, i disegni degli artisti, il disegno delle 'Vite'. Intersezioni semantiche in Vasari scrittore*, in *Figure, memorie, spazio. La grafica del Quattrocento. Appunti di teoria conoscenza e gusto*, catalogo della mostra (Firenze, Gabinetto dei Disegni e delle Stampe degli Uffizi, 8 marzo-12 giugno 2011), a cura di Ead., A. Griffo, G. Marini, Firenze 2011, pp. 12-37; M.Y. HARA, *Capturing eyes and moving souls: Peruzzi's perspective set for La Calandria and the performative agency of architectural bodies*, "Renaissance Studies", 31, 2017, 4, pp. 586-607.

¹⁸ C.L. FROMMEL, *Sulla nascita del disegno architettonico*, in *Rinascimento da Brunelleschi a Michelangelo...* cit., pp. 100-121.

¹⁹ F. RUFFINI, *Teatri prima del teatro. Visioni dell'edificio e della scena tra Umanesimo e Rinascimento*, Roma 1983; A. NICCOLI, *Lo spazio scenico. Storia dell'arte teatrale*, Roma 1971, p. 88, fig. 76; F. CRUCIANI, *Lo spazio del teatro*, Roma-Bari 2005.

²⁰ "Italian School, 16th century, *Perspectival Interior with Cofered Barrel Vault, Aisle with Pillars on Left and Aisle with Columns on Right*, ca. 1510-1530". Penna e inchiostro marrone, acquerello grigio-marrone, tracce di stilo su carta, dimensione massima 262 x 382 mm, <https://www.themorgan.org/drawings/item/141971> (consultato il 10 gennaio 2025).



Fig. 5 D. Bramante (attr.), *Una strada con vari edifici, colonnati e un arco (scena prospettica)*, (Civica Raccolta delle Stampe Achille Bertarelli, Castello Sforzesco, Milano, Inv. Art. prez. m 275; © Comune di Milano, tutti i diritti riservati - Raccolta delle Stampe "Achille Bertarelli", Castello Sforzesco, Milano).

conosciamo diverse versioni (fig. 5)²¹. Se l'autore è a tutt'oggi anonimo, gli studi di cui rimane traccia in un carteggio, anch'esso conservato alla Morgan, suggeriscono più riferimenti e una datazione più tarda, alla metà del secolo. Come già riferito in altra sede²², la medesima collezione custodisce infatti anche una ricca documentazione legata alla storia degli studi su questo foglio, *in primis* alla questione attributiva, ma non soltanto. Molti altri campi di ricerca possono essere esplorati, come la successione delle attribuzioni e il dibattito che si è svolto intorno a questo aspetto, o la ricostruzione della sequenza di pubblicazioni, mostre, seminari, convegni in cui questo disegno è stato presentato e discusso. Tutto ciò permette di restituire una accurata cronologia e di compilare una bibliografia pressoché completa²³. L'analisi può implicare anche una specifica ricerca volta a ricostruire il viaggio che, nel tempo, un singolo foglio, o una raccolta di fogli, hanno compiuto dal tavolo dell'autore all'attuale collocazione in un museo, in un archivio, in una collezione privata, cui erano giunti molto probabilmente dopo numerose tappe intermedie. Se non sempre è possibile risalire a questo itinerario, anche tracce parziali possono fornire importanti informazioni sul tema del collezionismo.

È evidente che l'assemblaggio di questa documentazione, oggi reso possibile dalle grandi banche dati, quando effettuato sistematicamente potrà offrire la possibilità di analisi sempre più approfondite, grazie alla possibilità di una consul-

tazione simultanea di disegni e scritti, oltre che di una comunicazione e di uno scambio a distanza tra studenti e studiosi²⁴. In questo senso un contributo significativo può arrivare dall'Intelligenza Artificiale, con l'utilizzo degli strumenti cosiddetti di *deep learning* oggi in continua e veloce evoluzione: la possibilità di raccolta e catalogazione di un sempre crescente volume di dati, e la velocità nel processarli, potranno offrire agli studiosi maggiori elementi su cui basare le proprie ricerche e formulare ipotesi²⁵.

Moltiplicandosi i dati e gli attori di questo scambio anche un singolo disegno può diventare oggetto di confronti, verifiche e ricerche aperte a più campi di indagine. Inoltre, l'annullamento della distanza tra lo studioso e l'oggetto di studio favorisce il grado di approfondimento. Quanto fino a qualche decennio fa poteva essere verificato solamente con l'osservazione diretta del foglio, oggi si può analizzare sullo schermo di un computer, a volte con esiti importanti: iscrizioni, misurazioni, filigrane, ingranditi e ampiamente illuminati affiorano a uno a uno restituendoci con esattezza informazioni fondamentali che a loro volta diventano ulteriori oggetti di analisi, ad esempio per l'elaborazione di schemi e diagrammi interpretativi. Si apre in questo modo una catena virtuosa di verifiche, che può coinvolgere più categorie di specialisti. Certo, la visione diretta del disegno rimane ancora la fase più importante e mai completamente sostituibile. Ma è indubbio che le possibilità di indagine sono oggi enormemente estese e aperte a un

²¹ A.M. HIND, *Early Italian Engraving: A Critical Catalogue with complete reproduction of all the prints described*, 2.5 (Known masters other than Florentine monograms and anonymous), London 1948, pp. 104-106, nn. 2-2b. Si veda anche la scheda di A. PETRIOLI TOFANI, in *Rinascimento da Brunelleschi a Michelangelo...* cit., pp. 530-531, con i relativi riferimenti bibliografici.

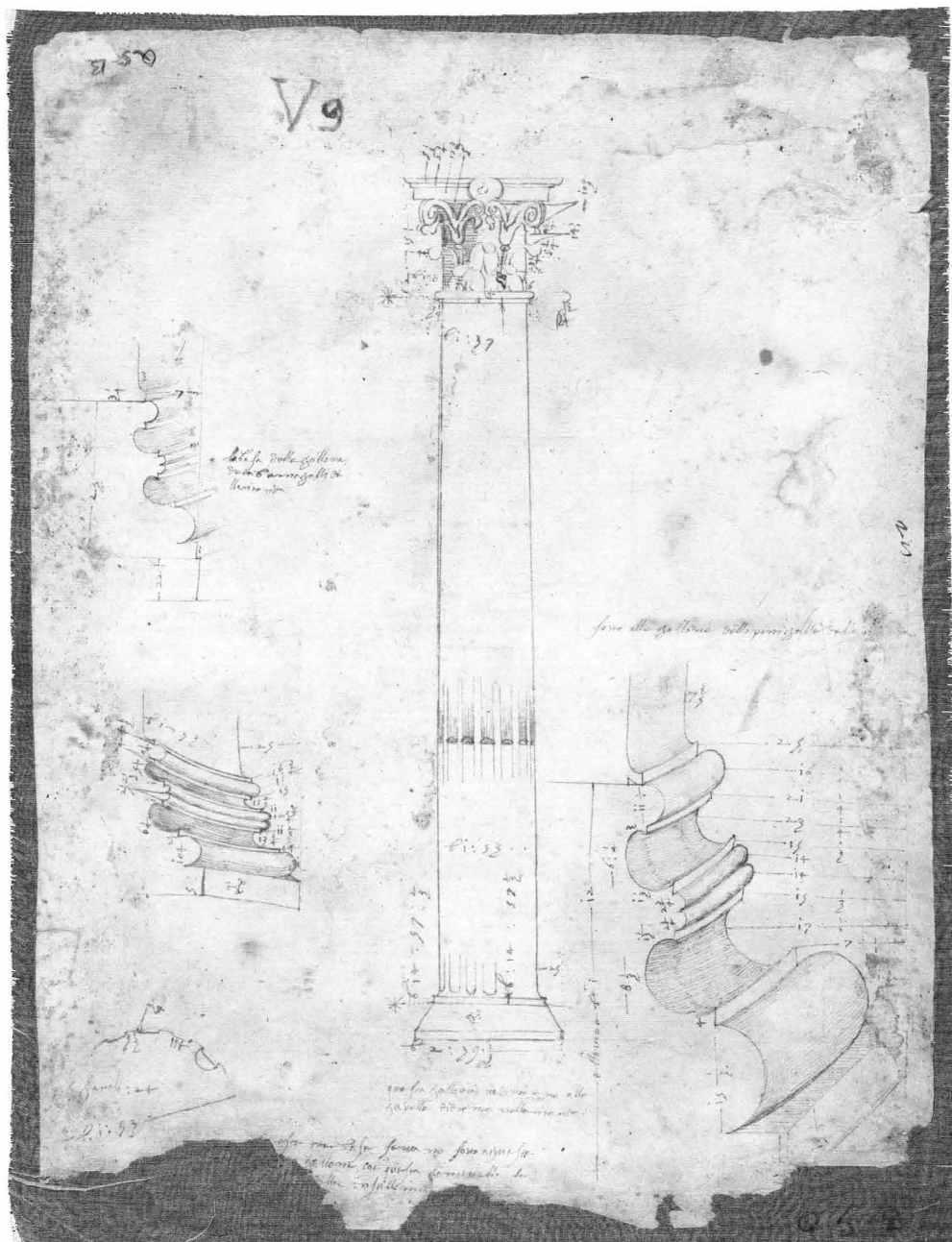
²² M.C. LOI, *Disegni del Rinascimento italiano alla Pierpont Morgan Library di New York. Note su un progetto di ricerca*, "Il Disegno di Architettura. Notizie su Studi, Ricerche, Archivi e Collezioni Pubbliche e Private", 41, 2017, pp. 35-38.

²³ La sequenza di saggi pubblicati su questo e altri disegni della serie, considerata parallelamente e caso per caso, ci aiuta inoltre a comprendere lo stato degli studi e anche il *tipo di studi* che una determinata fase o che una determinata scuola hanno condotto.

²⁴ Inoltre, i sistemi di conservazione e di studio, oggi sempre più raffinati, permettono di preservare i disegni dall'inevitabile degrado e di individuare anche quei segni rimasti non visibili, quei segni nascosti, o non interpretabili, a occhio nudo.

²⁵ A questo proposito, si vedano le osservazioni di Mauro Martino, in M.C. LOI, M. MARTINO, *AI 2024: Quali prospettive per gli studi di storia dell'architettura?*, "SRSA. Studi e Ricerche di Storia dell'Architettura", 16, 2024, 2, pp. 115-120.

Fig. 6 Anonimo, *Elementi degli ordini del Pantheon, con misure e annotazioni*, 1500-1550 ca. (© Victoria and Albert Museum, London. Prints, Drawings & Paintings Collection, Moody Collection).



pubblico sempre più ampio.

Lo studio di un progetto attraverso i disegni è un processo che rimane, potenzialmente, sempre aperto. Tranne specifici casi, che sono comunque una minoranza e solitamente appartengono alla contemporaneità, in tempi anche molto distanti la ricerca può restituire nuovi disegni relativi a un tema già studiato. Tale integrazione a un *corpus* già indagato impone, nella maggioranza dei casi, una revisione complessiva, aprendo nuovi interrogativi su datazione, autografia e, più in generale, offrendo nuovi dati per la ricostruzione della storia di quello specifico progetto. Una breve riflessione può essere fatta rispetto ai disegni dall'Antico, categoria densa di interrogativi e, appunto, di questioni aperte. Possiamo, ad esempio, fare riferimento a uno studio ricondu-

cibile a uno dei monumenti più indagati della storia dell'architettura: il Pantheon²⁶. Il disegno cui ci riferiamo è parte di una collezione, dal carattere del tutto eterogeneo, conservata presso il Victoria and Albert Museum e nota come *Moody Collection*, dal nome dell'artista inglese che la acquisì per il museo londinese alla metà del Diciannovesimo secolo (figg. 1, 6)²⁷. Eseguito su carta e tracciato a penna e inchiostro seppia, misura 21 x 27 cm e presenta su entrambe le facciate studi che possono essere riferiti con relativa certezza al Pantheon, ed in particolare all'edicola in cui è collocata la tomba di Raffaello, con l'altare della Madonna del Sasso (figg. 7-8)²⁸.

Potrebbe trattarsi di una pagina di un taccuino, ipotesi confortata dalle dimensioni stesse del foglio e dalla presenza, sul lato sinistro del recto, di

²⁶ In particolare per questa analisi si fa riferimento ai disegni del Cinquecento, ma ugualmente importanti sono i rilievi francesi ottocenteschi, a partire da quelli eseguiti da Antoine Desgodetz e pubblicati in *Les Édifices Antiques De Rome Mesurés Et Dessinés Tres-Exactement Sur Les Lieux Par Feu M. Desgodetz Architecte Du Roi / Gli Edifizj Antichi Di Roma Misurati E Disegnati Esattissimamente Sui Luoghi Dal Fu M. Desgodetz Architetto Del Re*, traduzione con note e il testo originale a lato, Roma 1822. Sui disegni dei *Pensionnaires* si veda anche, ad esempio, *Il Pantheon*, in *Roma Antiqua, 'Envois' degli architetti francesi (1786-1901)*. Grandi edifici pubblici, Roma 1992, pp. 97-131.

²⁷ Su questa collezione, M.C. Loi, *Mantova a Londra. Ipotesi su alcuni disegni al Victoria and Albert Museum*, in *Le arti del disegno. Architettura, ornato, figura*, a cura di S. L'Occaso, M.C. Loi, Mantova 2017, pp. 26-37. Di prossima pubblicazione, a cura di M.C. Loi e O. Horsfall Turner, è il catalogo completo del Fondo Moody.

²⁸ Un'analisi approfondita del disegno e il confronto con altri studi e rilievi dell'edicola è attualmente in corso da parte di chi scrive. Ringrazio Antonio Russo per le ripetute occasioni di discussione e confronto su questo disegno.



Fig. 7 Pantheon, Roma. Dettaglio con l'edicola d'altare della Madonna del Sasso e la tomba di Raffaello (foto M.C. Loi).



Fig. 8 Pantheon, Roma. Dettaglio della base corinzia dell'edicola d'altare della Madonna del Sasso (foto A. Russo).

alcuni fori. Non se ne conosce l'autore e anche la datazione è incerta. L'autore vi esegue una veduta prospettica frontale dell'edicola, indicando le misure – espresse in palmi romani – di alcuni elementi degli ordini e l'altezza e la larghezza dell'invaso centrale. Nel verso del foglio sono raffigurate una colonna e il dettaglio, ripetuto tre volte, di una base corinzia (come quella effettivamente realizzata, mentre nel recto è rappresentata una base attica). Anche in questo caso ne sono riportate le misure, cui si aggiungono alcune annotazioni, tuttavia difficilmente interpretabili, in quanto il foglio è danneggiato e brani del testo, in una grafia già di difficile comprensione, sono mancanti²⁹.

Tuttavia, alcune supposizioni possono essere avanzate, proprio avvalendoci della possibilità, offerta oggi da strumenti di indagine sempre più accurati, di confronti con un numero molto alto di disegni del Pantheon risalenti al primo Cinquecento³⁰, datazione che sembra verosimile per questo studio. Senza sviluppare in questa sede l'analisi comparativa di disegni e documenti, si vuole sottolineare ancora una volta l'importanza del disegno e la necessità di rinnovare la comprensione ogni qualvolta un nuovo documento grafico va ad aggiungersi a una serie già indaga-

ta³¹.

Nei suoi studi sul tema del disegno, James Ackerman ha delineato la storia della diffusione della sua pratica a partire dal Quattrocento, ricordando innanzitutto quanto l'uso della carta in luogo della pergamena contribuì a un decisivo cambiamento nel modo di pensare e svolgere il progetto di architettura, sottolineando poi che colore, consistenza, dimensione e densità del supporto hanno significativamente influito sul modo stesso di utilizzare il disegno come strumento di lavoro³². Riflettendo sull'evoluzione, nel corso del tempo, del disegno di architettura e sui poderosi sviluppi della tecnologia a supporto delle varie fasi del progetto e del suo studio, lo studioso ha analizzato l'origine e sottolineato il ruolo essenziale del primo, veloce, spontaneo, gesto progettuale: lo schizzo³³. È probabilmente questo il maggiore depositario di informazioni, la traduzione della vera essenza e della molteplicità di implicazioni del progetto, in un semplice tratto, breve e veloce: un saggio di interdisciplinarietà. Il significato di questo particolare tipo di disegno emerge con forza ancora oggi, e rappresenta un momento fondamentale nell'attività di molti architetti. È il caso di Rafael Moneo, al quale è sempre stato caro il tema del disegno³⁴. Analiz-

²⁹ Il foglio è stato restaurato, presumibilmente intorno al 1980, con l'applicazione di una sottile garza di nylon.

³⁰ Per una ricostruzione delle varie fasi di intervento si veda F. CANTATORE, *La tomba di Raffaello al Pantheon e l'altare della Madonna del Sasso*, "Annali di Architettura", 33, 2021, pp. 49-64. In particolare, per lo studio di questo specifico disegno, il primo riferimento e confronto è con i disegni rinascimentali del medesimo soggetto, tra cui, ad esempio, quelli di Francesco di Giorgio, di Giuliano da Sangallo, di Raffaello.

³¹ Nello specifico, dei numerosi e recenti rilievi del Pantheon, si veda ad esempio, R. FLETCHER, *Geometric Proportions in Measured Plans of the Pantheon of Rome*, "Nexus Network Journal", 21, 2019, pp. 329-345.

³² J. ACKERMAN, *L'Origine dello schizzo*, in James Ackerman e Rafael Moneo... cit., pp. 15-18; Id., *The Origins of Sketching*, in Id., *Origin, Invention, Revision: Studying the History of Art and Architecture*, New Haven-London 2016, pp. 1-20. Sull'uso del colore, si veda il recente B. BAUDEZ, *Inessential Colors: Architecture on Paper in Early Modern Europe*, Princeton-Oxford 2021.

³³ ACKERMAN, *The Origins of Sketching*... cit.

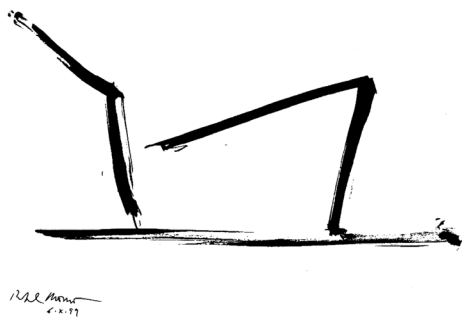


Fig. 9 R. Moneo, *Schizzo per il progetto del Kursaal a San Sebastián*, 1990-1999 (© Studio R. Moneo, Madrid).

Fig. 10 R. Moneo, *Kursaal, Centro culturale e sala concerti a San Sebastián* (foto M.C. Loi).



ziamo, ad esempio, lo schizzo riferito al progetto del Kursaal, la sala congressi e l'auditorium di San Sebastián, nei Paesi Baschi (fig. 9)³⁵. Nelle poche, essenziali linee tracciate di getto durante un sopralluogo nell'area, sembra già essere presente l'idea-forza del progetto: la realizzazione di due corpi separati, con un calcolato rapporto tra le loro volumetrie e l'isolamento dei due prismi nell'aria rarefatta e limpida del fiume e dell'oceano su cui gli edifici si affacciano, nella baia di Donostia. In questi pochi segni è soprattutto evidente l'abilità grafica dell'architetto spagnolo, che rende espressivi dei semplici tratti, riuscendo così a trasferire senza ambiguità nel taccuino l'essenza della sua idea originale, poi tradotta nei prismi traslucidi in cemento, legno, vetro e pietra.

Mettendo a confronto questo piccolo foglio con il progetto realizzato emerge con evidenza che quest'ultimo è frutto della percezione personale dell'architetto e della sua profonda riflessione sul luogo: un omaggio al *genius loci* (figg. 10-11). Lo schizzo e le parole dello stesso Moneo lo chiariscono in modo perentorio:

L'architettura del Kursaal ha origine in un luogo molto specifico – la foce del fiume Urumea – e non è solo una convenzione definire questa caratteristica geografica come la sua ispirazione. La città di San Sebastián è profondamente legata alla sua geografia [...]. A mio avviso era fondamentale mantenere la condizione naturale del sito [...]. Così sono nati due cubi, due volumi astratti in grado di soddisfare il programma³⁶.

Con queste osservazioni, che non hanno certo po-

tuto esaurire un tema così ampio e articolato, si sono voluti proporre alcuni elementi di analisi e riflessione sulla complessità del disegno di architettura, sul suo carattere di *medium*: un laboratorio interdisciplinare, sede di molti saperi in coazione. Volendo tentare una prima, sommaria sintesi, potremmo affermare, con Ackerman, che

il disegno architettonico non è solo un documento contenente i dati richiesti, ma porta inevitabilmente l'impronta dello stile personale dell'autore e di quello del tempo e del luogo, al punto che un osservatore esperto può identificarne l'autore o almeno datarlo approssimativamente [...]. Inoltre, un disegno può costituire una forma grafica di teoria architettonica concepita non solo per illustrare i principi del progettista, ma per persuadere l'osservatore della loro validità. Un disegno architettonico può non essere solo un mezzo per raggiungere un fine, ma un fine in sé [...] (oppure) diventare un oggetto di moda del tutto slegato dalla realizzazione di edifici [...]. La retorica del disegno [...] è centrale per il suo potere e il suo fascino³⁷.

Ma questo elenco dei diversi possibili usi e interpretazioni del disegno potrebbe continuare, ad esempio, in riferimento alla specifica esperienza di un architetto, o al ruolo del committente, che spesso influenza un determinato tipo di rappresentazione, dall'antico 'disegno di presentazione' ai *render* contemporanei e alle varie simulazioni tridimensionali, di certa e immediata comprensione anche per un pubblico di non specialisti. Possiamo anche ricordare che vi sono stati architetti che hanno fatto del disegno un'opera a sé stante, slegata dal progetto effettivo e, ancora, che la riproducibilità stessa delle prove su car-

³⁴ MONEO, *Ideare, rappresentare, costruire...* cit., pp. 19-26; M.C. LOI, R. BESCOS, *Rafael Moneo: il disegno di architettura oggi*, "Il Disegno di Architettura. Notizie su Studi, Ricerche, Archivi e Collezioni Pubbliche e Private", 27, 2003, pp. 70-77; J.A. CORTES, R. MONEO, *Comentarios sobre dibujos de 20 arquitectos actuales*, Barcelona 1976.

³⁵ R. MONEO, *Kursaal Concert Hall and Convention Center, San Sebastián*, in *Rafael Moneo: Remarks on 21 Works*, New York 2010, pp. 375-408. Per una descrizione del progetto si rimanda anche alle schede, accompagnate da commento critico, in *Kursaal, Auditorium and Congress Center in San Sebastián*, Rafael Moneo, "Arquitectura Viva", <https://arquitectura-viva.com/works/kursaal-san-sebastian> (consultato il 13 aprile 2025).

³⁶ "The architecture of the Kursaal originates in a very specific location – the mouth of the Urumea river – and it is not merely a figure of speech to describe this geographical feature as its inspiration. The city of San Sebastián is deeply bound to its geography [...]. In my view it was crucial to maintain the site's natural condition [...] thus two cubes emerged, two abstract volumes capable of fulfilling the program": MONEO, *Kursaal Concert Hall...* cit., p. 379.

³⁷ "The architectural drawing is not just a document containing the required data, but inescapably bears the stamp of the author's personal style and that of the time and place, to the degree that a practiced viewer can identify the draftsman or at least the approximate date [...]. Further, a drawing may be a graphic form of architectural theory conceived not only to illustrate the designer's principle but to persuade the viewer of their rightness. An architectural drawing may not be just a means to an end, but an end in itself [...] (or) become an object of fashion quite disconnected from the making of buildings [...]. The rhetoric of drawing [...] is central to its power and appeal": ACKERMAN, *Introduction: The Conventions and Rhetoric of Architectural Drawing...* cit., pp. 34-35.



ta, contraendo significativamente il tempo di gestazione, realizzazione e perfezionamento della rappresentazione dell'idea, ha moltiplicato le potenzialità di realizzazione e uso del disegno.

Ma, come ricorda Rafael Moneo,

il disegno, paradossalmente, da strumento architettonico è diventato palpitante dell'architettura. Gli architetti – ben consapevoli del fatto che oggi la costruzione di un edificio non parte più dal disegno – sanno che l'architettura non raggiunge tutta la sua pienezza nell'immagine disegnata, come invece credeva Aldo Rossi. Tuttora attratti dal disegno, sembrano avere scoperto che l'architettura – ciò che vorrebbero che un edificio fosse – può essere affidata agli schizzi, in modo impreciso ma immediato e diretto. Come passare dallo schizzo, questo primo gesto quasi automatico, alla realtà del costruito senza l'aiuto strutturale che l'antico disegno di architettura forniva? Questa è, a mio intendere, la domanda che dobbiamo porci oggi, tempo in cui i mezzi sono tanto generosi e sofisticati – ma altrettanto equivoci [...] ³⁸.

Qualunque sia il significato di un disegno di architettura, rimane la certezza, oggi, della sua importanza e insostituibilità. Il suo studio può essere una sfida continua tra l'autore e il fruitore che, armato di strumenti sempre più potenti, veloci, efficaci, può riuscire, in un'alta percentuale di casi, a interpretare ogni singola linea e a intraprendere molteplici indirizzi di ricerca e approfondimento. Tuttavia, a dispetto degli sviluppi della tecnologia, il più importante, e potente, tra i vari tipi di disegno, sembra essere lo schizzo. La 'magia' dello schizzo risiede nell'intenzione di catturare l'istante in cui 'l'idea del progetto'

è già contenuta *in nuce*. Nei pochi segni che lo caratterizzano, spesso tracciati velocemente dal suo autore, possiamo trovare tutta la ricchezza e la complessità del progetto di architettura.

Fig. 11 R. Moneo, Kursaal, Centro culturale e sala concerti a San Sebastián (foto M. Morán/Otto; © Studio R. Moneo, Madrid).

³⁸ MONEO, *Ideare, rappresentare, costruire...* cit., p. 25.

THE ARCHITECTURE OF ATTRITION

Monumental prints of sixteenth-century siege warfare defy easy categorization, as they picture the complex dynamics of mobile military societies. The sprawling encampments that surrounded city walls during extended sieges constituted a novel form of social organization, one that was reflected in the innovative responses of artists. Siege encampment prints connect architectural history to a constellation of related disciplines, including military history, urbanism, technology, and cartography. Monumental prints depicting the late military campaigns of Charles V, which saw the creation of some of the largest encampments ever assembled, provide a case study for considering the pervasive impact of siege warfare on all aspects of life. The goal of attrition was at the heart of all sieges, a strategy that relied on architecture to succeed. Examining encampment prints through the lens of architectural history demonstrates one of the many ways in which the field operates at the intersection of multiple disciplines.

A monumental early modern print of a military siege encampment does not immediately present as a subject for architectural history. Yet sixteenth-century siege warfare produced a particular form of temporary sociability that was, at its core, a response to a specific urban condition. The encampments that massed outside fortified city walls during prolonged sieges constituted a complex new experiment in social living. Large-format depictions of them were, by necessity, an experimental artistic response. These depictions, which flourished in the middle decades of the century, resemble topographical prints but do not conform to the more familiar and common category of city views. In fact, they do not fit neatly into any category, which is why they have fallen through the fissure that divides military history and architectural history, a fissure that is usually bridged only by the study of fortification design. Attrition – which was the goal of all sieges – required architecture.

Views of Charles V's military encampments depict stalemates as a form of settlement. Thus they offer an ideal subject to surface the various disciplines that converge within the current practice of architectural history. While siege warfare was by no means unique to the early modern period, the technological and architectural advancements during that time brought the condition of standoff to a peak. Several features of Charles's military strategy distinguish the enormous encampments of his siege campaigns, especially those of the 1540s, as a singular subject for artists. The emperor was famous for personally engag-

ing in combat rather than retreating to the relative safety of a distant command post. His presence on the battlefield meant that he was readily identified with the encampments of his troops, which is why commemorative portraits of his army in the field became a new type of imperial portraiture.

Moreover, these encampments also became temporary substitutes for capital cities. Born in Ghent, crowned in Bologna in 1530, and with aspirations of universal monarchy, the Holy Roman Emperor Charles V (1500-1558) had no fixed home base. Itinerancy was central to his political and military strategy, allowing him to conduct diplomacy wherever he needed to be – including on the battlefield. Charles's battles against Protestant resistance consumed him in the late 1540s and early 1550s, and an unusual concentration of large-format, multi-sheet woodcut depictions of his encampments survive from this era. Many extraordinary examples are extant, including Hans Mielich's *Siege of Ingolstadt* (1546), the *Siege of Wittenberg* (1547) that will be discussed here, Hans Rentz's *Siege of Magdeburg* (1550/1), and a *Siege of Metz* attributed to Monogrammist CS (1552)¹. Each of these works survives in only one or two known impressions, with the exception of the *Siege of Ingolstadt*, of which three impressions exist. Due to their rarity, these monumental prints have received little scholarly attention. While there is a substantial body of literature on military camp engravings, it primarily focuses on periods from the Thirty Years War onward. Together, these earli-

er prints constitute a significant corpus devoted to a defining feature of this historical period: the pervasive impact of siege warfare on all aspects of life. The prints have not previously been examined through the lens of architectural history – an oversight this paper seeks to address, demonstrating one of the many ways in which the field operates at the intersection of multiple disciplines.

The Field Encampment near Wittenberg of the Most Illustrious, Most Powerful, Invincible Lord Charles V, Roman Emperor, 1547, once attributed to Monogrammist MS, serves as a brief case study in how these mid-sixteenth-century works defy categorization (fig. 2)². It shares formal qualities with the hundreds of topographical maps of cities and their surroundings produced during the period, such as those that Sebastian Münster began publishing in his *Cosmographia* in 1544. Yet, the landscape and habitation it depicts were, by definition, ephemeral. While the print had a commemorative function, formally it has little in common with a famous print that commemorates Charles V's related victory at Mühlberg: Enea Vico's 1551 engraving of the emperor crossing the Elbe (fig. 1). The tone of the *Field Encampment near Wittenberg* is more curious than celebratory, making it easy to miss the fact that it, too, commemorates a victory of sorts. In contrast to Mühlberg, the victory at Wittenberg was political rather than military, ambiguous rather than dominant. The print addresses these circumstances in allusive ways.

Charles's troops had remained encamped at Wittenberg since their win at Mühlberg on 24 April



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Fig. 1 E. Vico, *The Battle of Mühlberg with the Army of Charles V Crossing the Elbe River*, 1551 (Metropolitan Museum of Art, The Elisha Whittelsey Collection, The Elisha Whittelsey Fund, 1949.49.97.349).

Fig. 2 *The Field Encampment near Wittenberg of the Most Illustrious, Most Powerful, Invincible Lord Charles V, Roman Emperor*, 1547 (© Kungliga Biblioteket, Stockholm).

¹ Hans Mielich, *The Field Encampment near Ingolstadt* [1546], 1549, Germanisches Nationalmuseum Nürnberg, HB270; other impressions are in the Historisches Museum Regensburg and the Ingolstadt Stadtmuseum. *The Field Encampment near Wittenberg*, 1547, Kungliga Biblioteket, Stockholm. Hans Rentz, *Siege of Magdeburg* [1550/1], 1552, Kupferstichkabinett, Staatliche Museen zu Berlin, 20-1960. Christoph Stimmer (attr.), *Siege of the City of Metz*, 1552, Herzog Anton Ulrich Museum, Braunschweig, WB 2.1-2.3 and Bibliothèque Nationale de France, Collection Michel Hennin.

² The printed inscription reads: “Des Aller Durchleuchtigsten. Grossmechtigsten. Unüberwindliche Herrn Herrn Karoli des. v. Römischen Kaijers ~ veldleger Beij Wittenberg ~ anno .MD XLVII.”. Near the bottom center of the print, next to a tree stump, a black shield with three fleur-de-lys descending on the diagonal has the initials SVS printed above it.

³ For a useful overview of these events see G. PARKER, *Emperor: A New Life of Charles V*, New Haven-London 2019, pp. 327-328.

⁴ The classic study of early large-format woodcuts, with a particular emphasis on German examples, remains H. APPUHN, C. VON HEUSINGER, *Riesenholschnitte und Papiertapeten der Renaissance*, Unterschneidheim 1976. Relatively recent studies on siege prints by these authors include M.D. POLLAK, *Cities at War in Early Modern Europe*, Cambridge 2010; M. McDONALD, *The Print Collection of Cassiano dal Pozzo, II: Architecture, Topography and Military Maps*, I-III, London 2019; P. MARTENS, *Cities under Siege Portrayed ad vivum in Early Netherlandish Prints (1520-1565)*, in *Ad Vivum?: Visual Materials and the Vocabulary of Life-Likeness in Europe Before 1800*, edited by T. Balfe, J. Woodall, C. Zittel, Leiden 2019, pp. 151-199; and J. MAIER, *Cartography and Breaking News: Mapping the Great Siege of Malta*, “Renaissance Quarterly”, 75, 2022, 2, pp. 459-507.

⁵ I. COLLIJN, *Magnus Gabriel de la Gardie's samling af äldre stadsvyer och historiska planscher i Kungl. Biblioteket*, Stockholm 1915, p. 64, n. 180. The de la Gardie collection in Stockholm has 187 prints, including both city views and siege prints, covering the period 1519-1621. Many of these large-format works exist only in these impressions.

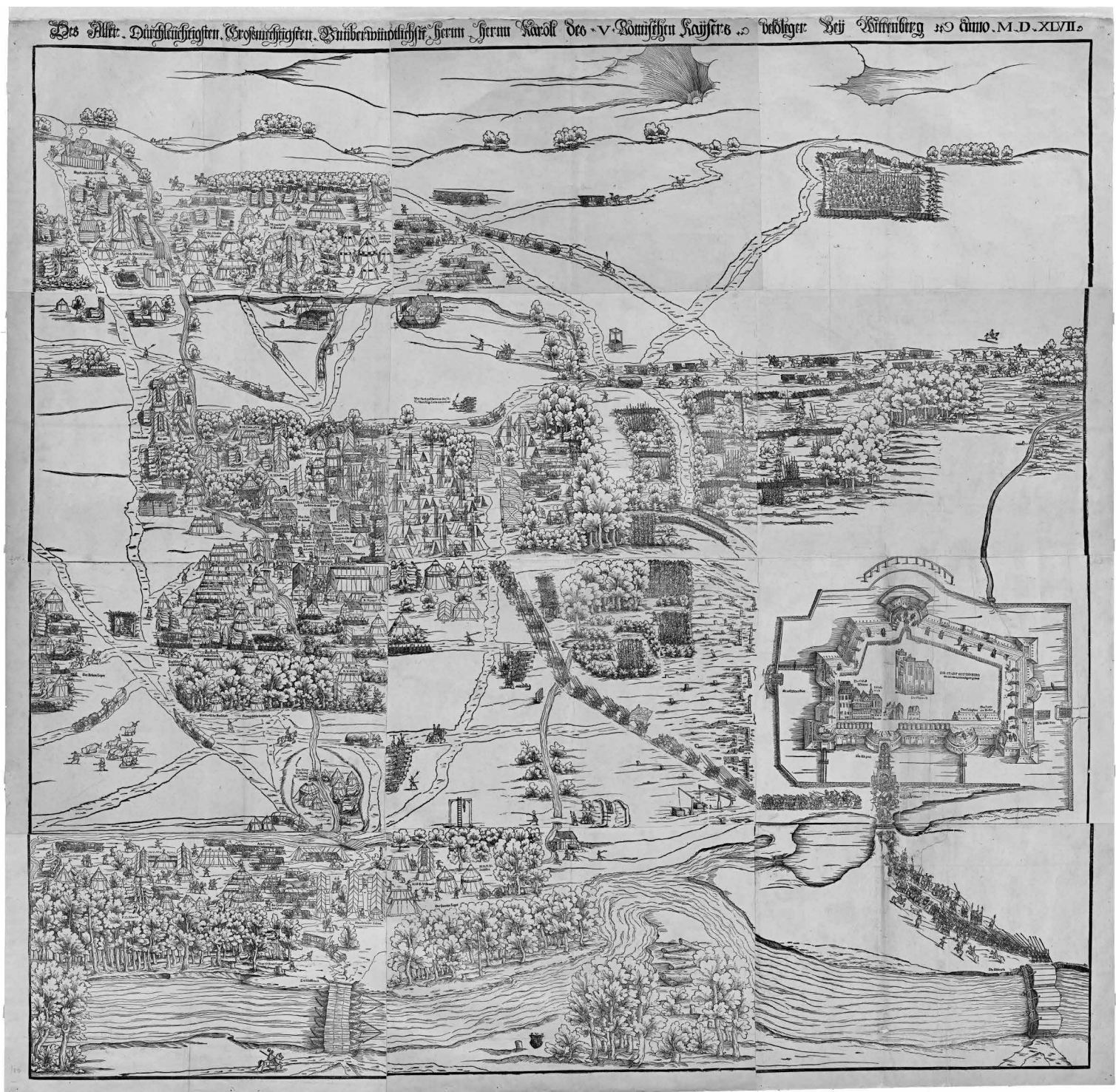
1547, where they had crushed the Protestant forces of the Schmalkaldic League. During that battle, imperial soldiers had captured John Frederick I, Elector of Saxony, prompting immediate debates over what to do with the prisoner. Executing the Elector risked making him a martyr, providing further fuel for the Protestant cause; a lighter sentence meant relinquishing the chance to make an example of him to deter other rebels. Either way, Charles could not afford to prolong the war, as his remaining troops and funds dwindled. He found a halfway position by sentencing John Frederick to death on May 10, then immediately suspending the sentence³. The emperor recognized that he could never take Wittenberg by force, because its fortifications, emphasized in the print, were formidable, and its inhabitants were rumored to have provisions to last for a year (fig. 3). The maneuver worked: Wittenberg capitulated nine days later.

Although the imperial encampment outside Wittenberg was short-lived, the complex organization of forces required to sustain the standstill is evident in the print. *The Field Encampment near Wittenberg* investigates the logistical structure that led to capitulation through stasis rather than action. In recording the moment of the city's surrender, the print aligns with another category of large-scale print common in the sixteenth and seventeenth centuries: the siege print. This heterogeneous genre, in which the events of a long-term military conflict are consolidated into a single map or view, has been the subject of significant recent attention from historians, including Martha Pollak, Pieter Martens, Mark McDonald, and Jessica Maier⁴. As an emerging focus of multiple strands of research – with emphases as various as cartography, news dissemination, and urbanism – siege prints constitute a more legible genre than encampment prints, primarily because they survive in greater numbers. The provenance of the sole surviv-

ing impression of *The Field Encampment near Wittenberg* suggests that at least one early modern collector perceived the work as a siege print. The impression entered the National Library of Sweden as part of the map collection of Count Magnus Gabriel De la Gardie (1622-1686), a Swedish diplomat, royal advisor, and general⁵. De la Gardie included the *Field Encampment* in his albums of military and topographical maps, indicating that, in his intellectual world, the view belonged among these categories.

A view of a military encampment and a siege map are two very different things, however. Siege prints appeal to an idea of war as a story of grand strategy rather than of individual human experience. In contrast, the social world of the encampment, not of the city or of combat itself, is the main subject of *The Field Encampment near Wittenberg*. The proportion of real estate devoted to each area of inhabitation tells us as much⁶. Measuring approximately one-and-a-half meters square (155 x 156 cm), the print is composed of twelve sheets arranged in a 3 x 4 grid. Notably, the city of Wittenberg covers only one of these twelve sheets; the other eleven are reserved for the enemy outside its walls. Although we know nothing about the artist, it is clear that this person worked with deep knowledge of the events⁷. Such knowledge may have come from a written account rather than personal involvement. It is possible that a printed text was intended to accompany the woodcut, though one does not survive. Regardless, the artist designed the view to invite a vicarious lived experience of the encampment, guiding the viewer along pathways into and through it, encountering people and anecdotal interactions along the way.

The print's composition encourages the viewer to begin at the bottom edge, entering the encampment from the south. The Elbe flows across the lower quadrant, filling much of three sheets. To the west (left), a boat bridge erected across



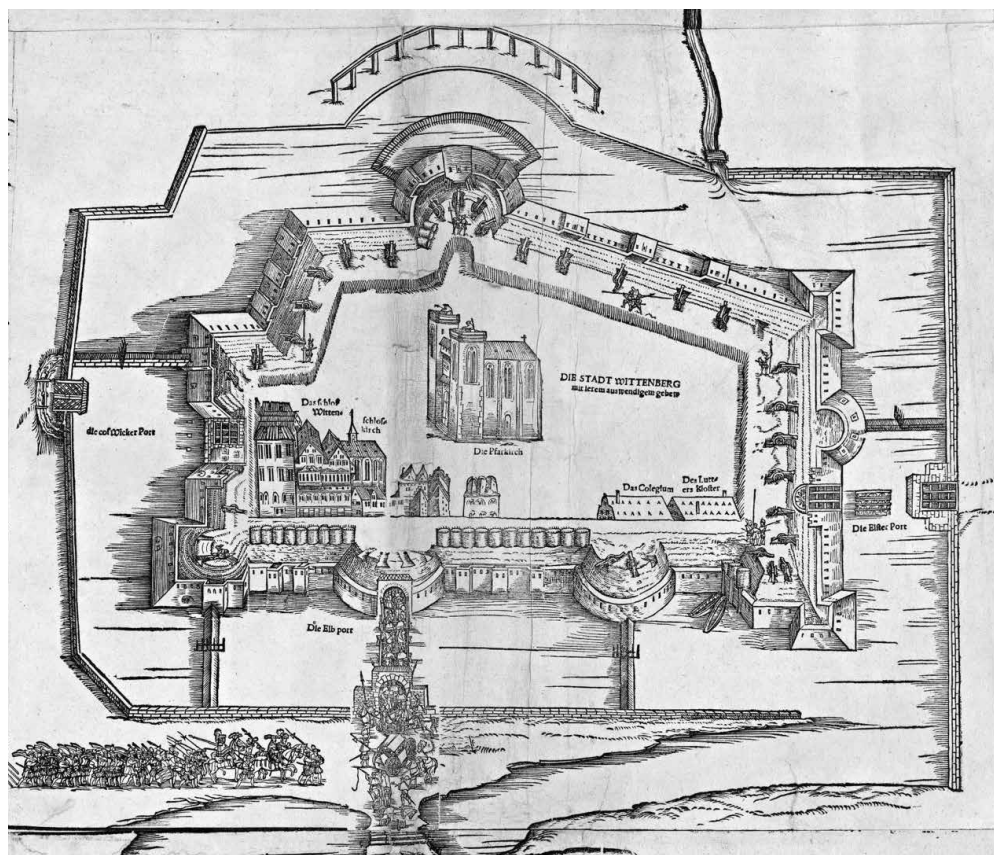
the river indicates the current's westerly direction, because its two moorings are upstream, to the east (right). A soldier rides toward the bridge, preparing to cross and encounter midstream the horse-drawn cart arriving from the opposite direction (fig. 4). Farther upstream, past a bend where a small tributary merges with the Elbe in the marshy terrain near the city, a more permanent, covered bridge with a triple-vaulted ceiling connects the main road to Wittenberg (fig. 5). These two bridges – one temporary, one permanent – mirror the forms of settlement direct-

ly above them. North of the Elbe, roads and streams crisscross the landscape. Details suggest the ways in which armies on the march depend on their local environment for sustenance. Horses and cattle drink from the streams, while soldiers gather around a windmill. Clusters of trees dot the landscape, except where they have been chopped to their stumps. Logs lie on the riverbank, ready to be turned into planks or firewood, while the forest near the city has been cleared to open sightlines for the defensive artillery. Screening walls of stakes woven with vines dot

⁶ POLLAK, *Cities at War*... cit., p. 320, note 32.

⁷ M. GEISBERG, *Der Deutsche Einblatt-Holzchnitt in der ersten Hälfte des XVI. Jahrhunderts*, München 1923-1929, plate xxxviii. Although the print does appear in M. GEISBERG, *The German Single-Leaf Woodcut: 1500-1550*, revised and edited by W.L. Strauss, New York 1974, nrs. 947-952, only the original edition identifies its location in the Kungliga Biblioteket, Stockholm. I am grateful to Armin Kunz for pointing out this essential point. See also M. GEISBERG, *Bilder-Katalog zu Max Geisberg: Der Deutsche Einblatt-Holzchnitt in der ersten Hälfte des XVI. Jahrhunderts; 1600 verkleinerte Wiedergaben*, herausgegeben von H. Schmidt, München 1930, p. 165. This reduced-size version of the prints also includes bibliography.

Fig. 3 *The Field Encampment near Wittenberg...*, 1547. Detail of the city (© Kungliga Biblioteket, Stockholm).



the clearings, interspersed with more substantial
offensive walls constructed of braided willows
filled with mud.

Within the encampment, the transient appears permanent, in a detailed examination of how temporary forms of inhabitation are built, arranged, and occupied. All the elements of urban life are present, including multiple modes of transportation, signs of social hierarchy, and structured access to communal resources. Tents sprawl across the landscape and intermingle among the trees, their shapes and sizes reflecting the ranks of their occupants. Simple A-frames, reserved for the regular foot soldiers, have laundry hanging to dry and animals staked to their poles. Bell tents, some small and round and others large and extruded, carry identifying labels, created from pieces of moveable type ganged together and inserted into the woodblock or stereotyped. The emperor's camp appears at the center, a group of large buildings joined together with tents and barricade walls, collectively identified as "El Palatio Caesareo" (fig. 6). The names of the emperor's close advisors and officers appear on the buildings of the surrounding village, commandeered for this purpose. Around the village, clusters of tents are organized into distinct groups. Satellite camps form a loose ring around the main camp at the center, separated from it

by some distance. To the west, on the left side of the frame, the Bohemians have pitched their tents and stabled their horses near a pair of buildings. To the south, along the Elbe, the Duke of Alba, the emperor's chief general, is camped within a forest, ensconced amid the trees. The Spanish and Neapolitan troops under his command are stationed nearby, near a large fleet of artillery wagons, adjacent to the camp's market. Just north of them, the field marshal's tents are placed within a deep trench, defended by a bank of cannons.

On the opposite side of the main camp, to the north, another cluster of smaller encampments fills the top left corner of the print. Within this grouping, the tents and provision wagons of Maurice, Duke of Saxony, stand out on the far right, decorated with a distinctive checkerboard pattern. Notably, Maurice and Alba are positioned at opposite extremes of the composition, a sign that this depiction of the camp's layout might reflect a degree of historical truth. Tensions between Maurice's German troops and Alba's Italian and Spanish soldiers ran so high that attacks among these ostensible allies were frequent. Charles had ordered that they camp as far apart as possible to keep the fighting to a minimum. The print's far-flung constellations of subsidiary camps reflect the uncomfortable circum-

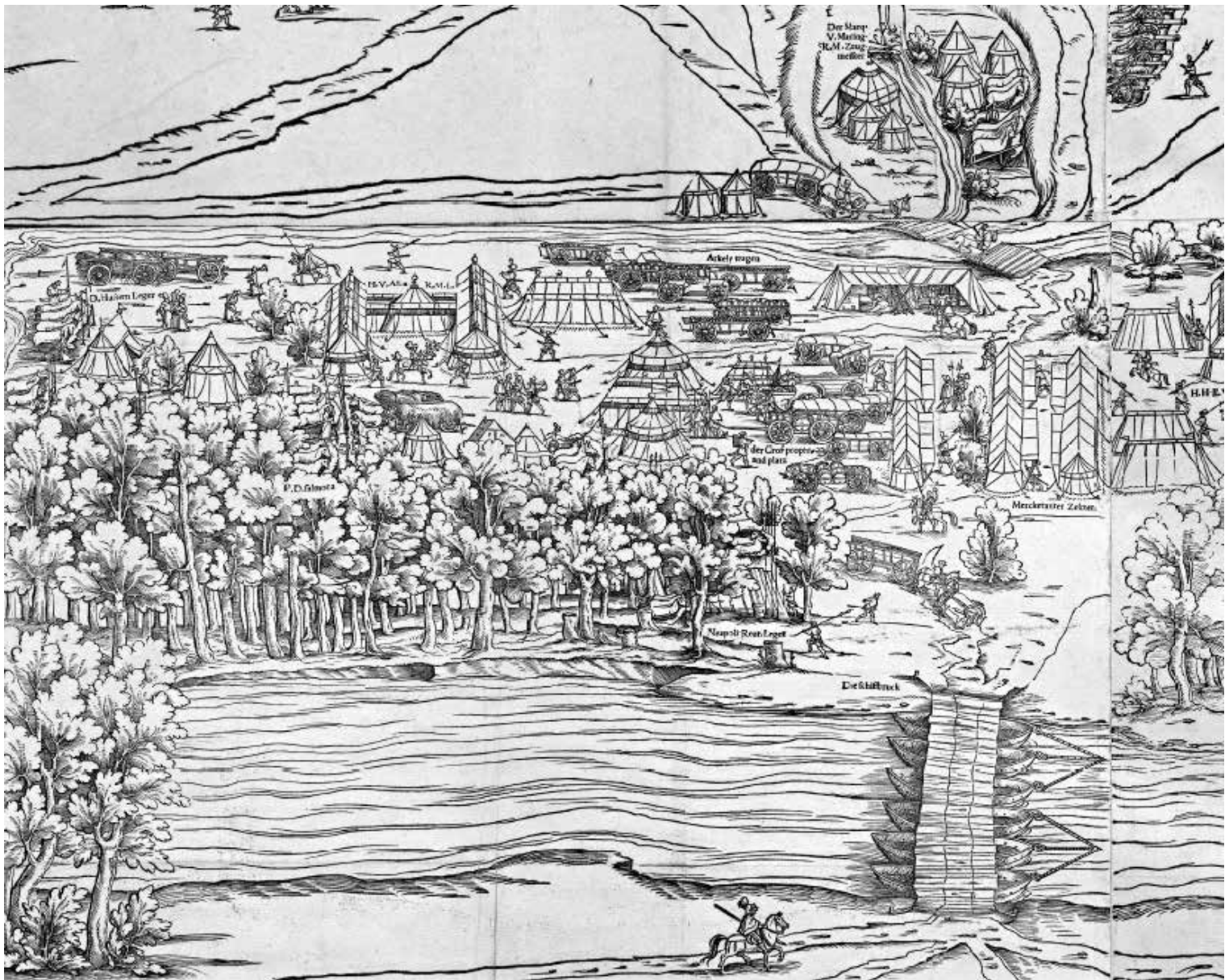


Fig. 4 *The Field Encampment near Wittenberg...*, 1547. Detail of the bridge of boats (© Kungliga Biblioteket, Stockholm).

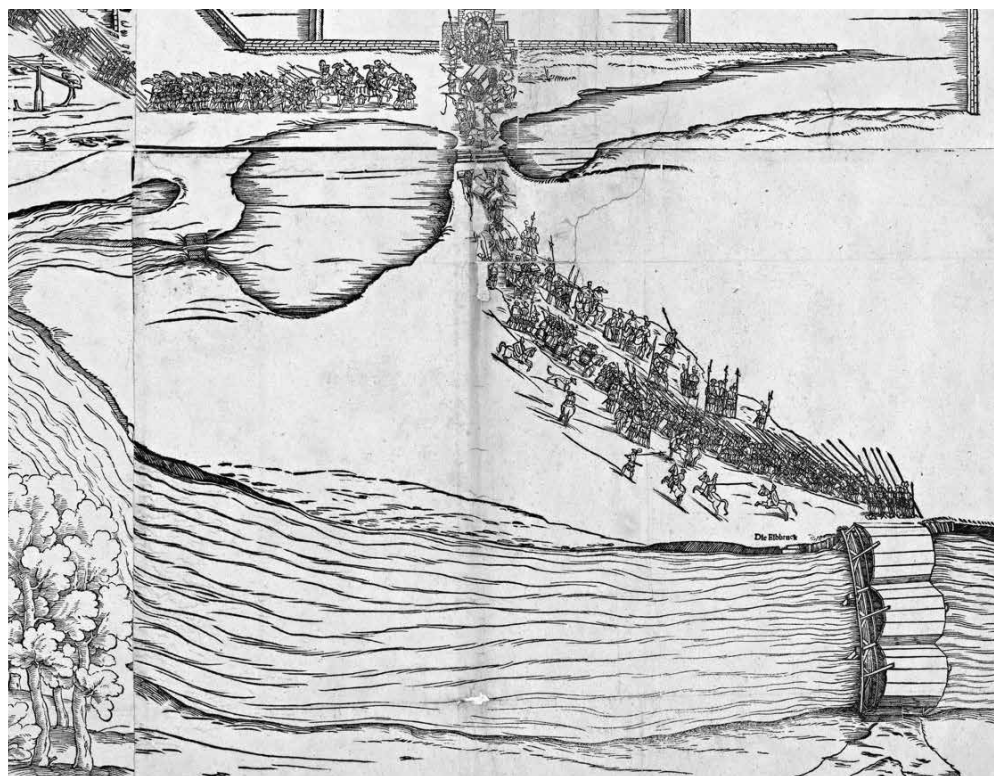
stance that Charles's temporary coalition of unruly troops, recruited from across Europe, could not easily unite under the banner of common purpose.

Fortunately for the emperor, he never had to lay siege to Wittenberg. Instead, his camp served an essentially consular purpose. *Field Camp near Wittenberg* gestures toward that function with a row of tents gathered on the southern side of the main camp, near Charles's quarters. The presence of these tents, labeled as belonging to the English, French, Venetian, and Portuguese ambassadors, indicate how the emperor's victory at Mühlberg had resounded across the continent, drawing representatives ready to press their countries' cases with the victorious emperor. Others, such as the Elector of Brandenburg – stationed next to Maurice – came to plead for John Frederick's life.

It is as if Charles V invaded Richard Scarry's *Busytown*, prompting the question: what do imperial soldiers and diplomats actually do all day? Many of them occupy themselves less with combat than with logistics. A large and complex support structure was necessary to support an army of this size. Furthermore, when nobility traveled with the imperial army, they took large entourages with them, enough to support their families in addition to themselves and their troops⁸. For every figure in *The Field Encampment near Wittenberg* overseeing a cannon, ten more are mind-ing cattle, stirring cauldrons, washing laundry, and loading the wagons. The business of feeding, clothing, and housing the army on the road is shown as a more labor-intensive activity than firing weapons – and from a political and military point of view, it could be more effective. Faced with the threat of a siege, a city might come to

⁸ H. KAMEN, *The Duke of Alba*, New Haven 2004, p. 31.

Fig. 5 *The Field Encampment near Wittenberg...*, 1547. Detail of the bridge and the evacuation of Wittenberg (© Kungliga Biblioteket, Stockholm).



terms quickly rather than try to withstand the horrors of holding out, especially when surrendering without resistance meant a city's inhabitants could exit the walls with dignity, not to mention their belongings.

After Wittenberg – represented by John Frederick's wife and son as well as city government officials – came to peaceful terms with Charles, its citizens were granted this slightly brighter fate. The print carefully illustrates the terms of the Capitulation. Amid all the activity outside the walls, the encampment's *raison d'être* has been relegated to the side, one sheet up from the bottom right corner. Only the city's defense and a few key buildings appear, a synecdoche for the Lutherstadt.

In the aerial view of the city, Wittenberg's defenses dominate the composition, with a wide moat and thick walls ringing its perimeter. Cannons are spaced at intervals, left in place upon the city's surrender to the enemy. The city church, or Pfarrkirche, stands at the center, prominent against a blank background. The wooden pyramids that once topped its two towers have been removed and replaced with artillery platforms, shown in the print as manned by gunners. The surrounding architecture identifies the city as Martin Luther's: the Wittenberg castle and its church – where the reformer had once tacked his 95 *Theses* and where he now lay buried – appears along the city wall, near his cloister and

college. That a print commemorating an imperial victory should brandish an oversized Wittenberg Castle and Pfarrkirche, which symbolically magnify the city's Protestant identity, demonstrates one of its primary rhetorical functions.

At the end of the Schmalkaldic War, Charles sought to convince his defeated enemies that religious confessionalization had not been at the core of the conflict, though clearly it had been. Unable to continue fighting the Protestants on the battlefield, he needed to lay this point aside, at least temporarily. At Wittenberg, Charles allowed Protestant services to continue in the churches and even made a public spectacle of bowing his head to the city's crucifix. Although the Capitulation required the destruction of the fortifications at Gotha, John Frederick's second city, his first city – Luther's city – could remain intact. Its inhabitants were allowed to leave with their arms and their goods, a significant and generous concession. In the print, the evacuation unfolds at the main gate facing the Elbe (fig. 5). The city's residents depart, accompanied by wagons, with soldiers still carrying their lances. The emperor leads the much neater and longer procession of troops entering from the left, marching down the main road from the camp. The print presents a peaceful convergence rather than a collision.

Field Camp near Wittenberg makes visible the enormous human apparatus required to force a



Fig. 6 *The Field Encampment near Wittenberg...*, 1547. Detail of the center of the imperial encampment, including the emperor's quarters (© Kungliga Biblioteket, Stockholm).

political victory without direct combat. In a siege encampment, patterns of inhabitation emerge rapidly and with urgency, clustered around natural resources, organized in social hierarchies, and, most critically, arranged with consideration for sightlines. In these respects, at least, they share typological characteristics with other forms of ephemeral architecture that developed alongside the early modern itinerant monarch, including triumphal entries. Charles employed public ceremonies of the entry, which often required reorganizing city streets and erecting temporary structures, to solidify his control over a disparate and far-flung set of territories. *The Field Encampment near Wittenberg* depicts the city's capitulation for what it was: a ceremonial entry of a different kind. As a permanent record of that epiphenomenal event, the view is similar to the prints of festival architecture common to the period.

Printed representations of triumphal entries and encampments both document ephemeral architecture, arguing by extension for the importance of ephemeral architecture for a contemporary understanding of early modern history. The comparison of the two is apt enough to hone attention on the key point of difference. In a triumphal entry, there is a clear route and the end of the procession is predetermined. That is why prints of triumphal entries are basically prints of *frames*. In contrast, encampment prints show settled and inhabited *places*, even if those settle-

ments were temporary. The uncertainty of the outcome motivates the creation of visual records showing the process, or change.

Debates about the course, structure, and even existence of the military revolution explore how new architectural and technological developments in warfare led to sweeping social change. Prints of encampments speak to these questions in a lively way, revealing how contemporary artists encountered and grappled with that change. The woodcut medium was not elite: more people could make, buy, and see these prints than had ever had access to the older, more traditional media of war commemoration, like tapestries or frescoes. Dramatic, complex events of broad import and long duration could be depicted with infinite detail at an enormous scale, produced quickly, and distributed widely.

The Field Encampment near Wittenberg provides an apposite case study for reflecting on the interdisciplinary nature of early modern architectural history. Monumental prints of siege warfare – and the encampments they produce – represent entire worlds at the very moment that a new and terrible process of world-making came into being through artillery warfare. They picture the architectural forms, both permanent and ephemeral, that produced and resulted from this process. These works of uncertain outcome are the ultimate uncertain works.

SEZIONE II
STORIOGRAFIA

ENERGY AND ENVIRONMENTAL CONTROLS IN THE HISTORIOGRAPHY OF MODERN ARCHITECTURE

Heating, ventilating, cooling, and lighting are often overlooked in the historiography of modernism. However, an emerging initiative in architectural history is now addressing energy use in the built environment. Recent studies have illuminated the significance of environmental technologies in nineteenth- and twentieth-century buildings across the Americas, Europe, Africa, Asia, and Australia.

Numerous historic structures have now been analyzed in terms of their passive and active systems for creating optimal interior environments, as related to changing ideas on comfort, energy consumption, and environmental sustainability. There has also been a growing interest in studying the embodied energy of historic buildings going back to antiquity. This scholarship assesses how the procurement, transportation, and assembly of materials used energy before the advent of mechanically powered construction equipment. Additionally, new research into the ‘constructional ecology’ of architecture is closely examining energy consumption and carbon emissions associated with the fabrication of conventional modernist materials such as steel and various types of glass, as well as the mechanized production of traditional materials like stone. Collectively, these scholarly efforts are broadening the analytical scope of architectural history by bridging it to disciplines that have traditionally been separate from the primarily art historical study of architecture.

Modern architectural history has long focused on the collaboration between architects and structural engineers in creating the iconic works of the nineteenth and twentieth centuries. However, far less attention has been given to collaborations between architects and mechanical engineers in the realm of environmental controls as these developed from the mid-nineteenth century. Heating, ventilating, cooling, and lighting remain underexplored and often overlooked in the historiography of modernism, despite being essential for habitability and integral to the development of modern construction. Recently, a growing body of research in architectural history has begun to examine energy use in the built environment. Studies in this field have effectively illuminated the importance of environmental technologies for a range of nineteenth- and twentieth-century buildings across the Americas, Europe, Africa, Asia, and Australia. This emerging field has produced numerous analyses of individual historic structures, investigating both passive and active systems for creating optimal interior environments. For this subfield to develop it has had to build an interdisciplinary bridge to the history of mechanical engineering, a discipline traditionally separate from art historically rooted studies of architecture. This potential to reframe the past from the perspective of the energy-conscious present speaks to one of the central thematic questions of this issue of *Opus Incertum*, whose editors ask: “Is the growing interest in hyper-contemporaneity a problem or an opportunity for the architectu-

ral historian? Are there chronological limits that should not be crossed to preserve the necessary critical distance or is the study of hyper-contemporaneity a stimulating challenge that could lead to methodological innovations and open new interdisciplinary horizons in the field?” Architectural history now has an opportunity to learn from contemporary design practices, particularly those associated with the concept of ‘integrated design’. This term, frequently used in current literature on green building, indicates a collaborative process in which architects, engineers, fabricators, contractors, and building owners work together to combine both passive material and active mechanical systems in larger buildings that aspire to be green or energy-conserving. A notable example of such an environmentally responsible structure is the California Academy of Sciences, designed by Renzo Piano and completed in 2008, at the time the world’s largest LEED Platinum building with the largest green roof (fig. 2)¹.

Histories of such recent buildings examine multilateral collaborations among utility companies, local and national governments, and foundations and consultants for energy issues. As the critic Sara Hart observed: “In architecture and engineering, coordination and collaboration are essential functions, but the terms are not interchangeable. Coordination is quantifiable and rational. Collaboration, on the other hand, is creative and often daring. Collaborators are allies, committed to a single vision. Successful collaboration can raise a building’s stature to that of an

icon”². The consensus is that integrated design as interdisciplinary collaboration is necessary to design green buildings that combine passive and mechanical systems for energy efficiency.

This transformation of contemporary architecture has recently led historians to reconsider older buildings as products of technical and artistic collaborations that lie outside traditional art historical models of analysis³. In scholarship, this direction has begun to shape historical accounts for contemporary green buildings that could be fruitfully applied to architecture of earlier periods⁴. This model is an example of a direction, derived from current architectural practice focused on energy use and environmental controls, that could potentially enrich the practice of an interdisciplinary architectural history. It might be insightfully brought to different building types, such as museums, residences, office buildings, schools and universities, government buildings, and renovations of historic buildings, with attention to the connections between their programs, budgets, climates, locales, and technologies.

The need to link histories of architecture with histories of energy use and environmental technologies raises important methodological questions related to this new interdisciplinary necessity. Traditionally, art historical studies of architecture have focused on the analytical model whereby a building emerges from a dialogue between its patron or client and its architects and their artistic collaborators. However, recent scholarship examining the collaborative process behind canonical works has begun to explore in-



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Fig. 1 J. Nash, *Interior of the House of Commons During a Debate*, 1858 (© Heritage Collections at UK Parliament, WOA 2934).

Fig. 2 R. Piano with Stantec Architecture (formerly Chong Partners Architecture), California Academy of Sciences, Golden Gate Park, San Francisco, 2000-2008 (© California Academy of Sciences).



teractions between clients, architects, and engineers in ways previously less considered. To understand buildings historically in terms of energy use, scholars need to not only engage with technical expertise as the traditional model of a mechanical engineering firm designing a heating, ventilating, and air-conditioning (HVAC) system either with or alongside architects and structural engineers. Instead, they need to examine the importance of multilateral collaboration involving many actors. This approach would transcend an art historical focus on individual architects that may occlude appreciation of how they worked in teams with engineers, suppliers, contractors, and clients. Art history has long sustained interdisciplinary aspirations. In architectural history, could these extend beyond social, cultural, material, and structural analyses to fully engage the mechanical realm?

Historiography of environmental controls

Most historical studies of modern architecture and energy have focused on operational energy consumed for heating, ventilating, lighting, and air conditioning. Among the first scholars to take this approach was Reyner Banham who, with his 1969 book *The Architecture of the Well-tempered Environment*, integrated study of the evolution of environmental controls into the broader history of modern architecture. As Banham wrote, what is needed is “a bridge between the history of modern architecture as commonly written – the progress of structure and external form – and

a history of modern architecture understood as the progress of creating human environments”⁵. Coinciding with the environmental movement, James Marston Fitch’s 1972 book *American Building: The Environmental Forces That Shape It* proposed a historiography for American architecture that engaged the whole human experience of the built environment, taking into account how buildings are heated and cooled, how they are ventilated and how their air is filtered, their artificial and natural lighting, their acoustics, and the integration of environmental control systems to create interior microclimates⁶.

Several scholars have pursued the agenda that Banham and Fitch envisioned, offering new insights into buildings considered canonical for the histories of modern architecture. One such historian is Henrik Schoenefeldt, who has rigorously reexamined key sites such as Joseph Paxton’s Crystal Palace (1850-1851) in London, which relied largely on passive means of cooling and ventilating, and the New Palace of Westminster (Houses of Parliament), also in London (1836-1868). Designed by Sir Charles Barry and Augustus W. N. Pugin, the latter building had traditionally been understood as central to the history of the Gothic Revival as the major stylistic and ideological movement in English architecture of its time. Schoenefeldt has explored the mechanically innovative heating and ventilating systems developed by David Boswell Reid, especially for the chambers of both the House of Lords and the House of Commons (fig. 1). These systems we-

¹ See, for example, K. MOE, *Integrated Design in Contemporary Architecture*, New York 2008.

² S. HART, *An Icon Is Completed After 80 Years: Part I*, “Architectural Record Innovation”, 193, 2005, 11, pp. 20-23.

³ See, for example, D. HAWKES, W. FORSTER, *Energy Efficient Buildings: Architecture, Engineering, Environment*, New York 2002, which explores architect-engineer collaborations for environmental controls from the eighteenth century to the present.

⁴ *Integrated Design: GSA/Morphosis/Arup; San Francisco Federal Building*, edited by B. Carter, Buffalo 2008; S. WELS, *California Academy of Sciences: Architecture in Harmony with Nature*, San Francisco 2008; M.A. THOMAS, *The Greenest Building: How the Bullitt Center Changes the Urban Landscape*, Portland 2016.

⁵ R. BANHAM, *The Architecture of the Well-tempered Environment*, Chicago 1984² (first ed. London 1969), p. 92. N. WHITELEY, Reyner Banham: *Historian of the Immediate Future*, Cambridge 2002, esp. ch. 4.

⁶ J.M. FITCH, W. BOBENHAUSEN, *American Building: The Environmental Forces That Shape It*, Boston 1972.



Fig. 3 W. Harrison, E. Durell Stone, D. Deskey, Radio City Music Hall, New York City, 1929-1932 (Wurts Bros. X2010.7.1.7534; © Museum of the City of New York).

re groundbreaking in their scale and complexity, and in the integration of technical experimentation with the building's complex programmatic concerns. Schoenefeldt's work reveals such buildings as climatic machines in a way that complements earlier assessments of them in histories of modern architectural styles. Specifically, his studies highlight the importance of interstitial space within a modern building's overall volume for housing equipment, piping, ducts, and ancillary devices⁷.

This body of work exemplifies a rich new direction for studies of nineteenth-century buildings that necessarily bridges between the history of art and the history of mechanical engineering. A comparably fruitful focus for such studies has been large theater buildings of the nineteenth and twentieth centuries for which heating, ventilating, and cooling were critical. These were among the first public buildings wherein energy consumption on a large scale had enabled functionality as habitability, especially since the advent of electrification in the 1880s for powering air systems as well as lighting. Given the need to move large quantities of air to adequately ventilate auditoriums seating 2,000 to over 6,000 people, these spaces became central to both theoretical speculation and practical experimentation in controlling humidity to aid cooling in environments of heat- and fume-producing gaslights, and, after 1890, the heat load created by electric lighting, in addition to the heat generated by the audience (fig. 3). To account for these

developments, architectural history needs to move beyond its conventional narratives of visual style and spatial form to bridge to the histories of technology and medicine⁸.

Another building type central to the history of modern architecture has been the tall office building and eventually the skyscraper as its super-tall (300-meters or higher) variant. Its historiography, theory, and criticism have traditionally focused on formal or aesthetic issues, considering the building's exterior as an artistic object. Paralleling this tradition there has been an ongoing interest in tall buildings from the standpoint of structural engineering, from foundations to wind-bracing. However, distinct from studies of the skyscraper's form and structure, more recent has been the effort to chart its evolution as a mechanically serviced interior system which is ever more energy dependent in its operations. Indeed, there was an evolution of tall office buildings through several stages of energy systems that paralleled the type's stylistic and structural development. Yet, the connections between all these aspects of tall buildings' history have been less explored, largely due to a lack of interdisciplinary awareness. This is now changing, in part because these buildings are enormous consumers of energy; reducing their energy profiles has prompted the development of a new parallel historiography⁹.

The impact of energy consciousness on historical studies of modern architecture is well illustrated by comparing three successive generations of

⁷ H. SCHOENEVELDT, *Rebuilding the Houses of Parliament: David Boswell Reid and Disruptive Environmentalism*, Abingdon 2021; ID., *The Temporary Houses of Parliament and David Boswell Reid's Architecture of Experimentation*, "Architectural History", 57, 2014, pp. 175-215. Schoenefeldt acknowledges R. BRUEGMANN, *Central Heating and Forced Ventilation: Origins and Effects on Architectural Design*, "Journal of the Society of Architectural Historians", 37, 1978, 3, pp. 143-160. See also H. SCHOENEVELDT, *The Crystal Palace Environmental Considered*, "Arq: Architectural Research Quarterly", 12, 2008, 3-4, pp. 283-294; ID., *Adapting Glasshouses for Human Use: Environmental Experimentation in Paxton's Designs for the 1851 Great Exhibition Building and the Crystal Palace*, Sydenham, "Architectural History", 54, 2011, pp. 233-273.

⁸ C. MEAD, *Charles Garnier's Paris Opéra: Architectural Empathy and the Renaissance of French Classicism*, New York-Cambridge 1991; J. SIRY, *The Chicago Auditorium Building: Adler and Sullivan's Architecture and the City*, Chicago 2002; ID., *Air-Conditioning in Modern American Architecture, 1890-1970*, University Park 2021.

⁹ P. OLDFIELD, D. TRABUCCO, A. WOOD, *Five Energy Generations of Tall Buildings: An Historical Analysis of Energy-Consumption in High-Rise Buildings*, "Journal of Architecture", 14, 2009, 5, pp. 591-613.



Fig. 4 H. Labrouste, *Bibliothèque Sainte-Geneviève*, Paris, designed 1838-1839, built 1843-1851 (from E. EDWARDS, *Memoirs of Libraries: Including a Handbook of Library Economy*, London 1859, p. 674; © Library of Congress, Washington, DC, Prints and Photographs Division, LC-DIG-ppmsca-15552).

interpretation of Henri Labrouste's *Bibliothèque Sainte-Geneviève* in Paris, designed from 1838-1839 and built 1843-1851. Traditionally, this building had been celebrated for innovative use of exposed iron columns and arches as the structural framework for its vast 85-meter-long reading room on the second floor (fig. 4). This interior fit beautifully into a narrative of modern architecture as a progressive development of innovative construction in iron, and then in steel and reinforced concrete¹⁰. Such a reading prevailed from the 1940s to the 1970s. But with the rise of post-modernism in European and American architecture in the latter decade, there was new interest in modern architecture's retrospective involvement with earlier historical styles, and the related problem of architecture's capacity to convey publicly comprehensible meaning through the reworking of known stylistic conventions. In this second moment, the historian Neil Levine powerfully revised our understanding of the *Bibliothèque Sainte-Geneviève* as its architect Labrouste's reinterpretation of ancient Greek and medieval Gothic architecture that expressed the French July Monarchy's commitment to public accessibility of its collections, especially for students at the University of Paris, and the monar-

chy's dynastic relationship to the earlier Bourbon kings who had built the adjacent Church of Sainte-Geneviève, later renamed *Le Panthéon* in the French Revolution¹¹. In the 2010s, the library was revisited once again for its innovative system of gas lighting and central heating that enabled it to remain open after nightfall to serve students. According to this third reading, Labrouste had created a building with 'healing' properties that derived neither from its structure nor its symbolism but rather from its energy-consuming mechanical systems. In a time before electrification, these functioned with careful attention to solar control through the room's great windows and with a system of stack ventilation from the basement up above the vaults through the attic¹². As outlined above, the historiography of this building illustrates how each successive era perceived its architecture anew.

The integration of mechanical systems into the architectural design of interiors, which Banham had identified as an historiographic lacuna, has been addressed in several works that study examples from the late eighteenth through the early twenty-first centuries. This scholarship bridges between narratives of technical innovation and architectural style, arguing for a historiography

¹⁰ S. GIEDION, *Space, Time and Architecture*, Cambridge 1967⁵ (first ed. Cambridge 1941), pp. 212-226.

¹¹ N. LEVINE, *The Romantic Idea of Architectural Legibility: Henri Labrouste and the Neo-Grec*, in *The Architecture of the Ecole des Beaux Arts*, exhibition catalogue (New York, Museum of Modern Art, 29 October 1975-4 January 1976), edited by A. Drexler, New York-Cambridge 1977, pp. 325-416; ID., *The Book and the Building*, in *The Beaux-Arts and 19th-Century French Architecture*, edited by R. Middleton, Cambridge 1982, pp. 138-174.

¹² M. BRESSANI, M. GRIGNON, *The Bibliothèque Sainte-Geneviève and 'Healing' Architecture*, in *Henri Labrouste: Structure Brought to Light*, edited by C. Bélier, B. Bergdoll, M. Le Coeur, New York-Paris 2013, pp. 94-123; V. LERUM, *Sustainable Building Design: Learning from Nineteenth-Century Innovations*, London 2016, pp. 46-53.



Fig. 5 Times Square at Night, 30 November 1932 (photo S.H. Gottscho, 88.11.2541; © Museum of the City of New York).

that accounts for the experience of interiors as both aesthetic conceptions and controlled environments. This perspective has been brought to such architects as Charles Rennie Mackintosh, Le Corbusier, Mies van der Rohe, Erik Gunnar Asplund, Arne Jacobsen, Alvar Aalto, Louis I. Kahn, Carlo Scarpa, Sigurd Lewerentz, Luis Barragán, and Peter Zumthor¹³. Related studies explore how architects and environmental engineers creatively approach the design and expression of both active and passive thermal environmental control systems as innovative responses to client, site, and user requirements. These analyses focus on integration of mechanical equipment into overall building structural and spatial form, as well as designed details, and reconstruct the dialogue between architects and engineers to illuminate how their processes advanced technically and aesthetically to achieve a synthesis of their concerns¹⁴.

Beyond histories of specific mechanical innovations, there is now an intellectually rich in-

vestigation of the transformative effects of environmental technologies on human interactions with, and perceptions of, buildings and cities. Central to contemporary concerns about energy use is electric lighting. Sandy Isenstadt's studies discuss the ways this modern technology has affected the built environment and our interactions with it, focusing on the period from the late nineteenth century through the 1940s. Isenstadt's is not a straightforward history of electric lighting or its effects on architecture, but rather an investigation of how it fundamentally altered domestic experience, revolutionized perceptions of both the natural and built landscape through innovations like the electric automobile headlight, transformed manufacturing workspaces, and illuminated outdoor commercial environments, as epitomized by New York's Broadway (fig. 5). He shows that, like other environmental technologies, electric lighting depended on a new national infrastructure of power production, and underscores that lighting created

¹³ D. HAWKES, *The Environmental Imagination: Technics and Poetics of the Architectural Environment*, Abingdon 2020².

¹⁴ G. BAIRD, *The Architectural Expression of Environmental Control Systems*, London 2001.

Fig. 6 L.A. Reinhard and H. Hofmeister; Corbett, Harrison, and MacMurray; and Hood, Godley, and Fouilhoux (architects); O.B. Hanson (chief engineer, NBC); A.W. Canney (air-conditioning engineer), RCA Building West, Rockefeller Center, NBC Broadcasting Studio 8H, New York City, 1933 (Wurts Bros. X2010.7.2.5847; © Museum of the City of New York).



professional and advocacy groups like the American Illuminating Engineering Society, whose views differed from those of architects¹⁵. Methodologically, studies such as Isenstadt's evoke the work of the sociologist of science Bruno Latour, who argued that technical innovations are best understood as part of a collective system that includes the motivations of their users, makers, and those who maintain them¹⁶. Equally rich as innovative historiography have been recent studies of buildings as acoustic environments. As Sabine von Fischer and Olga Touloumi have written:

Despite its ubiquity, sound is largely missing from histories of architecture and the built environment. Historians and scholars often rely on their critical gaze to unlock the interpretative potential of objects, buildings and sites. These ocularcentric architectural histories, following the tools and mannerisms of Western art-historical methods, look at the built environment through various scales (from object to territory) and media (from bricks to master plans). They do so with an asymmetrical focus on visibility, both as the method and resource of writing about space, ultimately, displacing the multi-sensorial spatial experience outside the purview of architectural analysis¹⁷.

Architectural historians have engaged with the acoustic histories of building types such as churches and concert halls¹⁸. But an awareness of the history of energy use has recently broadened this

sub-field to include interiors whose acoustic functionality depends on the integration of electronic amplification, air-conditioning, insulation, and lighting (fig. 6). These include broadcast and film production studios, as well as auditoriums designed as settings not only for live in-person meetings but as rooms whose proceedings would project to a world audience. One canonical example is the United Nations General Assembly in New York City. For architectural history to account for mechanically powered acoustic environments, there needs to be interdisciplinary expertise from the physics of sound to the political role of broadcast media¹⁹.

Historiography of sustainability in historic buildings

Since the 1990s, sustainability's centrality as an agenda for contemporary architecture has inspired another approach to architectural history of the modern period that focuses not on mechanical innovations for controlling interior environments, but on historic buildings as repositories of ideas for passive strategies for heating, cooling, and ventilating, in alignment with the current goal of reducing energy consumption as a key component of sustainability. Various studies have traced this term's evolving uses and meanings, from its historical roots to its recent ascendancy and ever-widening scope. The concept of 'sustain-

¹⁵ S. ISENSTADT, *Electric Light: An Architectural History*, Cambridge 2018. A comparably wide-ranging cultural exploration of a technology's impact is W. SCHIVELBUSCH, *Geschichte der Eisenbahnreise: Zur Industrialisierung von Raum und Zeit im 19. Jahrhundert*, München 1977, English trans. *The Railway Journey: Trains and Travel in the Nineteenth Century*, New York 1979.

¹⁶ B. LATOUR, *Reassembling the Social: An Introduction to Actor-Network Theory*, Oxford 2005.

¹⁷ S. VON FISCHER, O. TOULOUMI, *Sound Modernities: Histories of Media and Modern Architecture*, "Journal of Architecture", 23, 2018, 6, pp. 837-880: 873.

¹⁸ D. HOWARD, *Sound and Space in Renaissance Venice: Architecture, Music, Acoustics*, New Haven-London 2009; B.V. PENTCHEVA, *Hagia Sophia: Sound, Space, and Spirit in Byzantium*, University Park 2017.

¹⁹ O. TOULOUMI, *Assembly by Design: The United Nations and Its Global Interior*, Minneapolis 2024.

nability' emerged with planned yield forestry in seventeenth- and eighteenth-century England, North America, and Germany. It resurfaced during the Industrial Revolution in the nineteenth century, and later with the environmental movement in the 1960s, before becoming widely used today to convey a utopian vision of a stable, prosperous, and ecologically minded society²⁰. There are also efforts to trace the history of ecological consciousness in the modernist movement in architecture through the twentieth century, particularly since the oil crisis of the 1970s. The result is that the once-fixed canon, such as that of the Bauhaus, is now seen through a new lens that highlights modernism's tradition of environmental awareness²¹.

The ecological ideal for today's built environment has inspired historical studies that comparatively analyze major public buildings of the nineteenth and twenty-first centuries, arguing that the best-performing contemporary architecture, while innovative in materials and monitoring systems, reflects an awareness of scientific principles present in great eighteenth- and nineteenth-century buildings. These principles include the energy efficiency of buoyancy-driven ventilation and the importance of thermal mass in moderating interior temperature and humidity changes, among other consideration. Such analysis emphasizes how both historic and contemporary buildings sought to create comfortable interior environments while maintaining a sustainable relationship with the natural world. From this perspective, valuable lessons can be drawn from sites such as the eighteenth-century Winter Palace in St. Petersburg, Russia, which, after a devastating fire in 1837, was equipped with a warm air heating and ventilation system. Also noteworthy in this regard are Sir John Soane's Museum, the British Museum Reading Room, and the Natural History Museum in London²². Since the advent of the environmental move-

ment in the 1960s, a tradition of studies has developed to understand architecture's relationship to climate. Fundamental to this discourse is the work of the Olgyay brothers, which has been widely cited²³. While this conversation has largely unfolded within the design community, it has also inspired a recent tradition of historical scholarship that revisits art historically canonical architecture from the perspective of how designers addressed the response of their buildings to local climate. This historiography focuses not so much on climate-modifying equipment, but rather on how architects integrated concerns for daylighting, ventilation, heating, and cooling into the forms of their buildings and the character of their interiors. Exemplary of this approach is the work of Dean Hawkes, who has applied it to the study of English architecture from the sixteenth through the twentieth centuries. Hawkes examines how the rise of meteorology and its quantitative assessment of the English climate interacted with literary and painterly representations, shaping the scientific and cultural context in which climatically responsive architecture emerged. This insightful analysis has provided new perspectives on Robert Smythson's Elizabethan country houses of the sixteenth century, Sir Christopher Wren's church and collegiate buildings of the seventeenth century, English Palladian architecture of the eighteenth century, Sir John Soane's early nineteenth-century buildings in London's urban climate, Arts and Crafts houses of the early twentieth century, and English modernist houses of the mid-twentieth century²⁴.

Since the 1990s, the growing emphasis on sustainability in architecture has prompted a broad reconsideration of the modernist movement, shifting the focus from stylistic concerns to environmental ones. One of the liveliest new fields of investigation in this area has been to revisit canonical and less canonical form-givers to understand how these architects thought through their build-

²⁰ J.L. CARADONNA, *Sustainability: A History*, New York 2014.

²¹ P. ANKER, *From Bauhaus to Ecohouse: A History of Ecological Design*, Baton Rouge 2010; *Sorry, Out of Gas: Architecture's Response to the 1973 Oil Crisis*, edited by G. Borsari, M. Zardini, Montreal 2007.

²² LERUM, *Sustainable Building Design*... cit.

²³ V. OLGAY, *Design with Climate: Bioclimatic Approach to Architectural Regionalism*, Princeton 1963; B. GIVONI, *Man, Climate, and Architecture*, Amsterdam-London-New York 1969; *Climate and Architecture*, edited by T. Dahl, London 2010.

²⁴ D. HAWKES, *Architecture and Climate: An Environmental History of British Architecture 1600-2000*, London 2012.

Fig. 7 U.S. Capitol, House of Representatives, Washington, D.C. Attic viewed along its center line, showing air conditioning ducts (installed in 1928) between iron trusses (installed in 1857), with diffusers along the base of the ducts at the edges of glass ceiling panels (from “Heating, Piping, and Air Conditioning”, 1, 1929, 8, p. 66; © Carrier Corporation Archives, Iron Mountain).



dings as modulating climate, seeing the modernist tradition through the lens of sustainability as an integral component of its avant-garde character – an aspect previously overlooked. The revisionary approach has shed new light on such figures as Le Corbusier, Oscar Niemeyer, Johannes Duiker, Alvar Aalto, Frank Lloyd Wright, Jean Prouvé, Arne Jacobsen, Marcel Breuer, Lina Bo Bardi, Iannis Xenakis, and others. Reassessing how these architects considered factors like the solar path in relation to the orientation of houses and designed their building envelopes as climate-modifying systems has expanded our understanding of modernism’s vision of functionality to include buildings’ biological habitability²⁵.

Along these lines, one fruitful focus for recent historical studies has been the solar house, especially as it evolved from the 1930s through the 1970s. Throughout this period, a succession of architects and researchers explored how ‘natural conditioning’ – heating and cooling with passive solar techniques – could offer a viable alternative to fossil fuels. Studies of this movement emphasize the myriad ways in which architects collaborated not only with clients, engineers, and builders on individual projects, but also within networks that included research scientists in universities and national and international organizations that sought to develop collective expertise. During the Cold War of the 1950s and 1960s,

and later during the Arab oil embargo of 1973, when energy security became a pressing global concern, the passive solar house emerged as a politically charged architectural type²⁶.

Historiography of interior comfort

Among many issues of energy consumption in modern buildings, air-conditioning holds a central place in twentieth-century architecture since the advent of mechanical cooling and dehumidification just after 1900. Historically, more energy was used for heating, but air-conditioning demands greater energy intensity to both dehumidify and cool interiors. By 2000, the intensity of energy use for comfort cooling and refrigeration accounted for 48 percent of the total energy consumed by buildings in the United States, making it the largest single component²⁷. Since fossil fuels and natural gas are typically burned to generate the electricity that powers air-conditioning – releasing carbon dioxide and other greenhouse gases into the atmosphere – air-conditioning plays a central role in accelerating global warming and climate change. The profound impact of air-conditioning on energy consumption in buildings has, in part, inspired a new historiography that examines its role in the development of modern architecture. These studies bridge the traditionally separate disciplines of art history – focused on such issues as style, form, patrona-

²⁵ *Lessons from Modernism: Environmental Design Strategies in Architecture, 1925-1970*, edited by K. Bone, S. Hillyer, S. Joh, New York 2014.

²⁶ A. DENZER, *The Solar House: Pioneering Sustainable Design*, New York 2013; D.A. BARBER, *A House in the Sun: Modern Architecture and Solar Energy in the Cold War*, Oxford 2016.

²⁷ S. HAYTER *et al.*, *Designing for Sustainability*, ASHRAE conference paper (Dublin, 20-22 September 2000), NREL/CP-550-27797, pp. 1-2.



ge, and functionality – and the history of mechanical engineering within the broader history of technology. By integrating these fields, they demonstrate how the latter became integral to the discourse on architecture as a new element of its functionality (fig. 7)²⁸.

Related but distinct is an emerging field of study that focuses on the history of ideas about comfort in the built environment and the social history of climatic control of interiors. Rooted in literature on light and warmth in domestic spaces from the seventeenth through the nineteenth centuries, particularly in English and American traditions of country houses and cottages, histories of comfort address the material culture of heating and illumination before physical comfort became an explicit concern. By the eighteenth century, comfort had become a central value in material culture as a legitimated form of po-

pular consumption²⁹. Also related are studies of the interior environments shaped by modern technologies, which extend historiographical discussions to offices and workplaces as well as domestic interiors. Engaging with the sociology of consumption and technology, these studies trace how, over the past few generations, expectations of comfort, cleanliness, and convenience have altered radically. They investigate the evolution of these changes associated with energy-consuming technologies – including showers, heating, air-conditioning, and clothes washing – as well as their social meaning as prevalent practices and daily rituals linked with homes, offices, domestic appliances, and clothing. Formative scholars like Elizabeth Shove highlight how conceptions of normality and cultural and economic forces control routine consumption, with a tendency toward escalating and standardizing patterns

Fig. 8 Skidmore, Owings, and Merrill (architects); G. Bunshaft (chief designer); Jaros, Baum, and Bolles (mechanical engineers); R. Loewy (interior designer), Lever House, New York City, 1950-1952. Office interior, showing central air diffusers in the acoustic ceiling (© Ezra Stoller/Esto).

²⁸ SIRY, *Air-Conditioning in Modern American Architecture...* cit. See also G. COOPER, *Air-Conditioning America: Engineers and the Controlled Environment, 1900-1960*, Baltimore 1998.

²⁹ J.E. CROWLEY, *The Invention of Comfort: Sensibilities and Design in Early Modern Britain and Early America*, Baltimore 2001; F.M. BUTERA, *Dalla caverna alla casa ecologica. Storia del comfort e dell'energia*, Milano 2004; *Addressing the Climate in Modern Age's Construction History: Between Architecture and Building Services Engineering*, edited by C. Manfredi, Cham 2019.

of energy use (fig. 8)³⁰. Recently, historians have started thinking about how to define comfort in a future society that prioritizes lower energy consumption and reduced carbon emissions to mitigate climate change³¹.

The artificially cooled and mechanically ventilated environment of the mid-twentieth century also created new opportunities for indoor public spaces that integrated passive material envelopes with energy-consuming active systems. These interiors became environmental refuges, designed to counter the deterioration of postwar, postindustrial cities³². Important work by Michelle Murphy examines the history and science of what became known as ‘sick building syndrome’, meaning contaminated environments associated with sealed, mechanically ventilated and cooled interiors. Her research, along with other studies, explores how this issue was perceived by a range of actors, including feminist activists, protesting workers, ventilation engineers, toxicologists, epidemiologists, corporate scientists, and ecologists. ‘Sick building syndrome’ represents an environmental politics of the indoors, where habitability is enabled by buildings’ high operational energy use³³.

Partly prompted by contemporary concerns for sustainability, the past decade has seen the emergence of a historiography of modern architecture in the nineteenth and twentieth centuries that traces a long line of alternative experiments in cooling without air-conditioning. The global search for less energy-intensive, and hence less costly, means of moderating climate to enable habitability, especially in equatorial or tropical regions, has inspired a kind of alternative history of modernism outside the prevailing art historical canon. A key center for such studies has been Singapore, where Jiat-Hwee Chang has traced the origins of the concept of tropical architecture to nineteenth-century British colonial architectural knowledge and practices in the tropi-

cs, as these were linked to military technologies, medical theories, and sanitary practices, and were manifested in colonial building types such as military barracks, hospitals, and housing. This scholarship also explores the ways in which colonial knowledge and practices shaped postwar and postcolonial technoscientific research in climatic design and tropical architecture through the early 1970s³⁴.

Other recent scholarship along these lines has taken a more global, comparative approach, exploring how leading architects of the twentieth century brought regional approaches to climate adaptability into the design process. Focusing on the period surrounding World War II – before fossil-fuel-powered air-conditioning became internationally prevalent – Daniel Barber has investigated architectural discussions of design, materials, and shading systems, including variations on *brise-soleil*, as a means of interior climate control (fig. 9). While emphasis has partly been on the work of major architects such as Richard Neutra, Le Corbusier, Lúcio Costa, and Skidmore, Owings, and Merrill, as well as climate designers like Victor and Aladar Olgyay, also important for historical study of energy and architecture has been the collective contribution of large professional and scientific organizations such as the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, which traditionally lie outside an art historical frame of reference³⁵.

Historiography of embodied energy and the built environment’s role in climate change

Over the past decade, growing concerns about climate change and carbon emissions have led architects to consider the substantial levels of energy consumption and their attendant environmental consequences associated with the manufacture and transport of building materials. This relatively recent focus on embodied ener-

³⁰ E. SHOVE, *Comfort, Cleanliness, and Convenience: The Social Organization of Normality*, Oxford 2004.

³¹ *Comfort in a Lower Carbon Society*, edited by E. Shove, H. Chappelles, L. Lutzenhiser, London 2013.

³² D. GISSEN, *Manhattan Atmospheres: Architecture, the Interior Environment, and Urban Crisis*, Minneapolis 2014.

³³ M. MURPHY, *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers*, Durham 2006.

³⁴ J.H. CHANG, *A Genealogy of Tropical Architecture: Colonial Networks, Nature and Technoscience*, New York 2016.

³⁵ D.A. BARBER, *Modern Architecture and Climate: Design Before Air Conditioning*, Princeton 2020.

³⁶ B. CALDER, *Architecture from Prehistory to Climate Emergency*, London 2021; Id., G.A. BREMNER, *Buildings and Energy: Architectural History in the Climate Emergency*, “Journal of Architecture”, 26, 2021, 2, pp. 79–115.

³⁷ K. MOE, *Unless: The Seagram Building Construction Ecology*, New York 2021.

³⁸ See essays on “Accumulation”, a project by e-flux Architecture and Daniel A. Barber, produced in cooperation with the Princeton Environmental Institute at Princeton University, the Ph.D. Program in Architecture at the University of Pennsylvania Weitzman School of Design, and other university entities: <https://www.e-flux.com/architecture/accumulation/> (last accessed 10 November 2024).

³⁹ See the “Toxicities” series by Aggregate Architecture: <https://we-aggregate.org/piece/toxics> (last accessed 10 November 2024).



gy in new buildings has, in turn, inspired scholars like Barnabas Calder to investigate the embodied energy of historic structures going back to antiquity³⁶. This scholarship assesses how the procurement, transportation, and assembly of materials used energy in the era before mechanically powered construction equipment. Currently, a variant of this historiography has emerged that focuses on what has been called the ‘constructional ecology’ of architecture. Scholars such as Kiel Moe analyze the energy consumption and carbon emissions tied to the fabrication of such conventional modernist materials as steel and other metals, and different types of glass, as well as the mechanized production of traditional materials like stone (fig. 10). Studies of operational and embodied energy link the historiography of architecture to the field of environmental history³⁷. Contemporary concerns about the role of the built environment in climate change are also driving a range of interdisciplinary initiatives

in architectural history. These include investigations into material accumulation – from plastics in the oceans to carbon in the atmosphere – and their connections to people, buildings, and cities³⁸. Related studies explore the history of toxic substances and toxicity in the built environment from the nineteenth century to the present³⁹. Collectively, these efforts broaden the analytical scope of architectural history by connecting it to other disciplines such as environmental studies, material science, and public health.

Fig. 9 Le Corbusier, *L'Unité d'Habitation*, south of Marseilles, 1947-1952. West façade featuring *brise-soleil* (photo Archivision, 1A1-LC-UHM-1-D1; © F.L.C./ADAGP, Paris/Artists Rights Society [ARS], New York 2024).

Fig. 10 L. Mies Van der Rohe, P. Johnson, *Seagram Building*, New York City, 1954-1958 (photo A. Jemolo / Scala /Art Resource, NY. ART432445; © 2024 Artists Rights Society [ARS], New York/VG Bild-Kunst, Bonn).

STORIA DELL'ARCHITETTURA E STORIA DEL PAESAGGIO: PROSPETTIVE CONVERGENTI

This paper explores the intersecting perspectives of architectural and landscape history, emphasizing their interdisciplinary potential. Recent methodological diversity in architectural history has opened new research avenues, particularly at the crossroads of ecological, agrarian, and forestry sciences. Although landscape history emerged only in the nineteenth century, it shares strong connections with architectural studies in terms of analyzing the dynamic interactions between humans and their environment. Tracing its historiographical development, this study explores key contributions, from Jacob Burckhardt's cultural approach to Emilio Sereni's research on Italian agrarian landscapes. It differentiates landscape history from environmental history, noting that the former focuses on cultural perceptions and spatial organization, while the latter examines broader ecological transformations. Despite these distinctions, both disciplines deepen our knowledge of architecture within its territorial and environmental contexts. A case study of the Clitunno Springs in Umbria illustrates this interdisciplinary approach. The site, which includes a medieval temple-church, embodies layered historical interpretations, from its origins as a Roman sacred site to its Christianization and later Romantic rediscovery. Using regressive analysis, the paper reconstructs the site's transformations over time to reveal a continuous interplay between architecture and landscape. It argues that integrating architectural and landscape history sharpens our understanding of built heritage and demonstrates the enduring cultural significance of places shaped by both human intervention and natural processes.

Storiografie a confronto

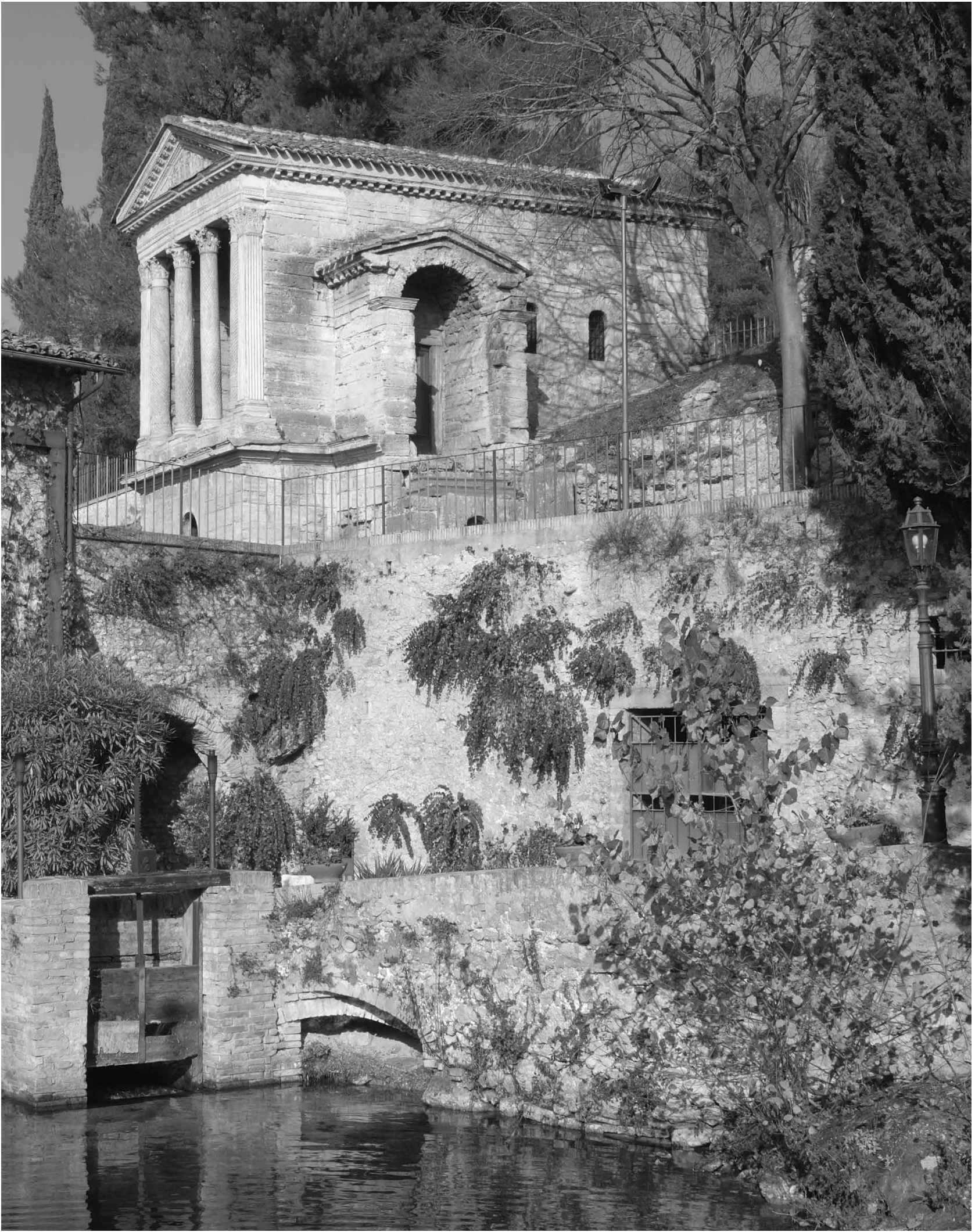
La moltiplicazione degli approcci e dei percorsi di ricerca che ha caratterizzato negli ultimi anni la storia dell'architettura è un segno di vitalità della nostra disciplina. Un sorprendente eclettismo metodologico ha aperto campi svariati di sperimentazione, che interrogano la dimensione storica dell'architettura da prospettive diverse e s'intersecano con i saperi di altre discipline. L'attenzione sarà qui rivolta a un indirizzo di ricerca in forte sviluppo, che condivide molti aspetti delle scienze ecologiche, agrarie e forestali: la storia del paesaggio.

Nella ricerca consolidata e nei progressi più recenti, le indagini sul paesaggio storico offrono diversi punti di contatto con le scienze dell'architettura¹. È utile allora tentare una riflessione metodologica sulle potenzialità che una corretta storia del paesaggio può offrire per la comprensione degli edifici, nella loro dimensione territoriale e ambientale. Occorre quindi in primo luogo precisare quali siano le basi scientifiche di questo approccio e i rapporti intrecciati con altre forme analoghe di storia, come la storia ambientale. Nella seconda parte del saggio si tenterà poi di mostrare, con un esempio concreto di ricerca sul campo, gli strumenti e i metodi d'indagine in una prospettiva di convergenza interdisciplinare. La storia del paesaggio è una storia giovane, che di fatto si è configurata soltanto dopo la metà dell'Ottocento². Se vogliamo individuare una fase cruciale per la sua nascita, possiamo identificarla nell'ambiente della *Kulturgeschichte* te-

desca, e in particolare nell'opera di Jacob Burckhardt³. Il suo volume del 1860 *Die Kultur der Renaissance in Italien* contiene un intero capitolo dedicato alla scoperta del paesaggio nella sua dimensione storica, interpretata attraverso la lettura di autori del calibro di Boccaccio, Petrarca ed Enea Silvio Piccolomini. Siamo negli anni in cui la grande eredità scientifica di Alexander von Humboldt veniva accolta in ampi settori delle scienze umane, ben oltre l'iniziale ambito naturalistico in cui si era configurata. Nella seconda metà dell'Ottocento la storia del paesaggio guadagna importanti contributi soprattutto dalla geografia, grazie ai lavori di Paul Vidal de La Blache⁴. L'attenzione si sposta dalla storia della letteratura e delle arti ai caratteri dei luoghi, alle indagini regionali, agli aspetti legati all'incontro tra le società e le risorse offerte dall'ambiente. Si gettavano così le basi per gli sviluppi successivi della geografia culturale, che intreccia un dialogo serrato con la storia. Tra gli autori più significativi, soprattutto per i rapporti con l'architettura, figura il contributo di Denis Cosgrove⁵, che indaga il paesaggio come fenomeno culturale, prodotto da una comunità insediata su un territorio, nella rete complessa di relazioni politiche, economiche e sociali.

Senza percorrere, nell'ambito ristretto del nostro saggio, le tappe dello sviluppo storiografico in questo settore, un impulso decisivo è segnato dalla rivoluzione storiografica delle *Annales* e soprattutto dal lavoro di Marc Bloch del 1931 dedicato ai caratteri originari della tradizione rurale

francese⁶. Nello stesso periodo tra le due guerre, dai ricercatori inglesi giungevano poi importanti contributi nel campo archeologico, che configuravano i metodi della nascente *landscape archaeology*. Il nuovo approccio si basava sull'estensione territoriale delle indagini, sulle tracce nascoste nelle sistemazioni agrarie, sulle analisi di laboratorio dei resti paleoambientali e sui primi risultati della fotografia aerea⁷. La storia del paesaggio si arricchiva così di strumenti innovativi e di un incontro interdisciplinare ad ampio raggio. Il metodo di ricerca e le innovazioni introdotte da Bloch saranno la base di quello che rimane il testo fondativo per la cultura italiana in questo settore: la *Storia del paesaggio agrario italiano*, pubblicata da Emilio Sereni nel 1961⁸. La grande eredità dell'opera di Sereni continua, ancora oggi, a guidare le nostre ricerche e ad aprire nuovi percorsi d'indagine⁹. Le basi metodologiche della storia del paesaggio appaiono così consolidate: si tratta di una forma di storia che indaga l'assetto dell'ambiente percepito dall'uomo in un contesto culturale, nella sua organizzazione spaziale e nell'assetto delle forze produttive che modificano il territorio in base alle esigenze collettive. Come ogni forma di storia anche quella del paesaggio può basarsi soltanto sulle fonti, che possono essere distinte in fonti documentarie e fonti figurate, indagate con metodi che si adattano, di volta in volta, ai caratteri, alle finalità e alle modalità di formazione culturale del contesto storico in esame¹⁰. Nella storiografia recente, per limitarci ai lavori di più ampio respiro,



¹ Nella prospettiva di aggiornamento metodologico del presente saggio, verranno privilegiate le pubblicazioni più recenti, nella vastissima bibliografia dedicata al paesaggio e alla sua storia. Tra i contributi degli ultimi anni in Italia si distinguono: *Paesaggi. Una storia contemporanea*, a cura di E. Giammattei, Roma 2019; P. D'ANGELO, *Il paesaggio. Teorie, storie, luoghi*, Roma-Bari 2021; A.L. SIANI, *Introduzione al paesaggio*, Bologna 2024.

² Per gli sviluppi della storiografia del paesaggio, si veda C. TOSCO, *Il paesaggio come storia*, Bologna 2007.

³ K. LÖWTH, *Jacob Burckhardt. L'uomo nel mezzo della storia*, Roma-Bari 2004 (prima ed. Lezern 1936).

⁴ A.L. SANGUIN, *Vidal de La Blache. Un génie de la géographie*, Paris-Berlin 1993. Per gli sviluppi della geografia del paesaggio confronta il quadro recente di B. CASTIGLIONI, *Paesaggio e società. Una prospettiva geografica*, Roma 2022.

⁵ D.E. COSGROVE, *Social Formation and Symbolic Landscape*, London 1984, trad. it. *Realtà sociali e paesaggio simbolico*, a cura di C. Copeta, Milano 1990. Per i rapporti con l'architettura si distingue la sua interpretazione del paesaggio palladiano, si veda *Id.*, *The Palladian Landscape: Geographical Change and Its Cultural Representations in Sixteenth-Century Italy*, University Park 1993, trad. it. *Il paesaggio palladiano. La trasformazione geografica e le sue rappresentazioni culturali nell'Italia del XVI secolo*, a cura di F. Vallerani, Caselle di Sommacampagna 2009.

⁶ M. BLOCH, *Les caractères originaux de l'histoire rurale française*, Paris 1988 (prima ed. Oslo 1931). Per il contributo delle *Annales*: P. BURKE, *Una rivoluzione storiografica. La scuola delle "Annales"*, 1929-1989, Roma-Bari 1992.

⁷ *Archaeologies of Landscape: Contemporary Perspectives*, edited by W. Ashmore, A.B. Knapp, Malden-Oxford 1999; *Detecting and Understanding Historic Landscapes*, edited by A. Chavarría Arnau, A. Reynolds, Mantova 2015. In Italia si distinguono i lavori di F. CAMBI, *Archeologia dei paesaggi: fonti e diagnostica*, Roma 2003²; e *Manuale di archeologia dei paesaggi: metodologie, fonti, contesti*, a cura di F. Cambi, Roma 2011. Gli strumenti della *landscape archaeology* si integrano con il progetto di conservazione dei siti archeologici; sul tema vedi T. MATTEINI, A. UGOLINI, *Il bisbiglio dei ricordi indefiniti. Progetto paesaggistico e conservazione attiva dei luoghi archeologici*, Padova 2023.

⁸ E. SERENI, *Storia del paesaggio agrario italiano*, Bari 1961.

⁹ Per l'eredità storiografica di Sereni: A. GIARDINA, *Emilio Sereni e le aporie della storia d'Italia*, "Studi storici", XXXVII, 1996, 3, pp. 693-719; D. MORENO, O. RAGGIO, *Dalla storia del paesaggio agrario alla storia rurale. L'irrinunciabile eredità scientifica di Emilio Sereni*, "Quaderni storici", n.s., XXXIV, 100, 1999, 1, pp. 89-104; *Paesaggi agrari. L'irrinunciabile eredità scientifica di Emilio Sereni*, a cura di M. Quaini, Cinisello Balsamo 2011; *Paesaggi in trasformazione. Teorie e pratiche della ricerca a cinquant'anni dalla Storia del paesaggio agrario italiano di Emilio Sereni*, a cura di G. Bonini, C. Visentin, Bologna 2014; *Il paesaggio agrario italiano. Sessant'anni di trasformazioni da Emilio Sereni a oggi (1961-2021)*, a cura di C. Tosco, G. Bonini, Roma 2023; *Paesaggi e prospettive. Contributi per i 60 anni dalla pubblicazione della Storia del paesaggio agrario di Emilio Sereni*, atti del convegno (Gattatico, Istituto A. Cervi-Biblioteca Archivio E. Sereni, 11-13 novembre 2021), a cura di G. Bonini, A. Panico, A. Sereni, Gattatico 2023.

¹⁰ Per un quadro metodologico, si veda C. TOSCO, *Il paesaggio storico. Fonti e metodi di ricerca tra Medioevo ed età moderna*, Roma-Bari 2009.

¹¹ R. RAO, *I paesaggi dell'Italia medievale*, Roma 2015; E. IRACE, M. VAQUERO PIÑEIRO, *I paesaggi dell'Italia moderna. Da Petrarca a Napoleone*, Roma 2023.

¹² G. BARBERA, *Il giardino del Mediterraneo. Storie e paesaggi da Omero all'Antropocene*, Milano 2021, p. 41.

disponiamo di due significative opere di sintesi, frutto delle ricerche di Riccardo Rao e di Ermينيا Irace con Manuel Vaquero Piñeiro, dedicate rispettivamente alla storia del paesaggio italiano nel Medioevo e nell'età moderna¹¹. Entrambi i volumi condividono in modo esplicito la lezione di Sereni.

La storia del paesaggio si presenta, in definitiva, come una 'storia culturale'. Come avverte Giuseppe Barbera in un libro recente, dedicato al giardino mediterraneo: "Tutti i paesaggi sono culturali"¹². È una storia che si distingue per la lettura dei rapporti instaurati con l'ambiente nel corso del tempo dalle popolazioni insediate sui territori. Un ambiente però che non è mai un fenomeno 'naturale', ma è sempre il risultato di un'azione precedente dell'uomo, che ha elaborato i suoi caratteri originari e aperto la strada per nuove trasformazioni e modificazioni. In Italia come nell'intera Europa, almeno a partire dal neolitico, il paesaggio è sempre un deposito ereditario, un *cultural heritage*, segnato dalla storia e dall'intervento più o meno incisivo dell'azione antropica. Come dimostrano le ricerche più recenti, anche i fiumi e i boschi, in genere considerati ingenuamente come paesaggi 'naturali', sono in realtà espressioni di paesaggi culturali, consolidati dalla cura delle popolazioni¹³.

Alla storia del paesaggio si collega, per diversi aspetti, la 'storia ambientale'. Come si è detto, presenta molti elementi in comune con la storia del paesaggio, ma si distingue da questa sua parente prossima in quanto si concentra sui fenomeni che hanno condizionato lo sviluppo degli ecosistemi a partire dall'Antropocene. Condivide i suoi metodi con le scienze naturali e, soprattutto, con le scienze ecologiche. Mentre l'origine della storia del paesaggio si colloca in ambito tedesco, la storia ambientale nasce piuttosto nel mondo anglosassone, e in particolare nella cultura americana¹⁴. La storia dell'ambiente ha conosciuto una crescente fortuna negli ultimi anni nel contesto internazionale, a partire dal nu-

mero monografico delle *Annales* del 1974, dedicato ai rapporti tra "histoire et environnement"¹⁵. L'interesse è dimostrato dalla moltiplicazione delle ricerche a tutti i livelli e dalla riedizione di testi classici, come *Something new under the sun* di John McNeill¹⁶. Nel quadro internazionale disponiamo oggi di efficaci lavori di sintesi di storia ambientale, come il volume di Lukas Thommen dedicato al mondo antico¹⁷ e quello di Richard Hoffmann che indaga l'età medievale¹⁸. In Italia si distingue il contributo più recente di Emilio Padoa-Schioppa che ricostruisce le linee essenziali della storia ecologica dell'Europa e il ruolo assunto dall'impatto antropico, in una lettura sintetica dove "ogni singolo evento locale aggiunge un tassello fondamentale di conoscenza sul comportamento complessivo dei sistemi ecologici"¹⁹.

L'elemento decisivo per distinguere i due approcci è proprio quello culturale: mentre la storia dell'ambiente si presenta come un'analisi scientifica delle modificazioni dell'ecosistema nel corso del tempo, la storia del paesaggio pone al centro la cultura delle popolazioni in rapporto alle forme dei territori, modificati dal lavoro dell'uomo. La cultura è qui intesa in senso antropologico, in tutte le sue manifestazioni, dai manufatti della vita materiale alle forme più elaborate di rappresentazione artistica, estetica e letteraria²⁰. La storia ambientale invece si limita a ricostruire i processi che nel passato hanno condizionato gli ecosistemi, considerando l'impatto antropico come uno dei fattori di trasformazione. Naturalmente ogni ricercatore e ogni autore applicano questi metodi con orientamenti diversi e le due forme di storia possono restare nettamente distinte, oppure ibridarsi in una prospettiva interdisciplinare.

A questo punto, dopo aver chiarito in una sintesi necessariamente condensata le analogie e le differenze tra i due approcci storiografici, non ci resta che considerare il rapporto con la storia dell'architettura. Il campo che si apre è mol-

to vasto e registra, soprattutto negli ultimi anni, un interesse crescente. Nei limiti di questo saggio non possiamo esplorare le diverse diramazioni dei percorsi di ricerca, e ci limiteremo a considerare alcuni apporti recenti in ambito internazionale. In generale non è difficile riconoscere che ogni architettura si pone sempre in rapporto al paesaggio dove sorge il patrimonio edificato. In Italia il paesaggio ha attratto l'interesse dei ricercatori che lavorano sulla critica del progetto e sulle esperienze dell'architettura contemporanea²¹. La situazione cambia se rivolgiamo la nostra attenzione alla storia precedente alla rivoluzione industriale.

Nei lavori di sintesi più impegnativi, pubblicati di recente, si distinguono soprattutto gli studiosi che lavorano sull'eredità del mondo antico, nel contesto delle scienze archeologiche. Nel 2023, promosso dal Paul Getty Museum di Los Angeles, è stato pubblicato il volume di Mantha Zarmakoupi, *Shaping Roman Landscape*, che si presenta come un tentativo di condensare i diversi aspetti culturali del paesaggio italiano nei primi secoli dell'Impero²². I risultati sono significativi perché riprendono criticamente una lunga tradizione di studi, esaminando i rapporti tra l'ambiente antropizzato, le forme del potere, le sistemazioni agrarie, le ville, i giardini, i progetti di colonizzazione, in un quadro comparato che unisce i resti archeologici, le strutture architettoniche e le testimonianze delle arti figurative. Al centro si colloca, in modo innovativo, l'*ecocritical approach*, che applica i principi delle scienze ecologiche alla lettura dei fenomeni storici, con risultati che aprono nuove prospettive.

Anche la storia ambientale sembra attrarre un crescente interesse da parte degli storici dell'architettura. Le urgenze epocali imposte dal cambiamento climatico e dalla transizione energetica, hanno richiamato la riflessione sull'impatto dell'edilizia sull'ambiente, sul ciclo di vita degli edifici, sulle fonti di energia assorbite nei processi di fabbricazione, sulla climatizzazione de-

gli ambienti costruiti. In una dimensione storica, si è tentata una lettura di lungo periodo dei rapporti tra architettura e modificazioni ambientali, con risultati che non sempre però, in questo ambito di ricerche, dimostrano un rigore di metodo e una conoscenza specifica dei contesti storici in cui si colloca il patrimonio edilizio. Nel tentativo di valutare alcuni apporti recenti, vorremmo mettere in luce un aspetto critico che ha segnato i limiti, e le ingenuità, di una lettura dei nessi causali tra storia dell'architettura e storia dell'ambiente. Il problema che emerge consiste nell'ipotetico riconoscimento di connessioni immediate tra le modificazioni dell'ecosistema e l'arte del costruire, che portano a letture 'epocali' troppo semplificate.

Per chiarire meglio i limiti di queste sperimentazioni possiamo considerare due apporti recenti. In Francia Philippe Rahm ha da poco pubblicato un'ambiziosa *Histoire naturelle de l'architecture*, che indaga l'arte del costruire attraverso i secoli come una storia ambientale ed ecologica²³. Al centro si collocano gli aspetti fisici, chimici, biologici, energetici e climatici che condizionano l'architettura, considerata come una risposta dell'uomo alle esigenze elementari di sopravvivenza e di regolazione omeotermica del nostro corpo. Si sviluppano così indagini ardite in periodi e settori tematici molto diversi, che vanno dai Sumeri alle moderne società post-industriali. I risultati appaiono talvolta convincenti, ma in molti casi destano forti perplessità, come quando l'autore sostiene che la diffusione delle chiese costruite a partire dal Dodicesimo secolo nel mondo mediterraneo sarebbe dovuta dall'intenzione di offrire ambienti freschi per ripararsi dal calore esterno²⁴. Non è necessario commentare queste affermazioni per riflettere sulle incertezze che gravano sui progetti di una storia ambientale troppo semplificata.

Un altro esempio di discussione è offerto da un libro di notevole successo di Barnabas Calder, *Architecture: From Prehistory to Climate Change*,

¹³ Per i paesaggi fluviali un contributo attuale è offerto da S. FENOGLIO, *Uomini e fiumi. Storia di un'amicizia finita male*, Milano 2023. Per la storia dei boschi come storia culturale si distinguono M. AGNOLETTI, *Storia del bosco. Il paesaggio forestale italiano*, Roma-Bari 2018; Id., *Atlante dei boschi italiani*, Roma-Bari 2022; vedi anche *Il bosco. Biodiversità, diritti, culture, dal Medioevo al nostro tempo*, a cura di A. Dattero, Roma 2022.

¹⁴ L'origine della storia ambientale è fatta risalire allo studioso e diplomatico statunitense George Perkins Marsh, con il volume Id., *Man and Nature: Or, Physical Geography as Modified by Human Action*, New York 1864; è interessante ricordare che la prima versione del volume venne scritta in Italia nel 1862-1863, mentre Marsh era stato nominato da Lincoln ambasciatore degli Stati Uniti a Torino. Per un quadro di riferimento nella cultura nordamericana: E. RUTKOW, *American Canopy: Trees, Forests, and the Making of a Nation*, New York 2012.

¹⁵ "Annales-Économie Sociétés Civilisation", XXIX, 1974, 3. La storia ambientale è anche definita 'ecostoria', per rendere più evidente il legame con le scienze ecologiche; in Italia il termine è stato introdotto da P. PIEROTTI, *Imparare l'ecostoria*, Pisa 1997. Sul rapporto tra i concetti di paesaggio, ambiente e territorio si distingue il saggio di R. ASSUNTO, *Paesaggio, ambiente, territorio: un tentativo di precisazione concettuale*, "Bollettino del Centro Internazionale di Studi di Architettura Andrea Palladio", XVIII, 1976, pp. 45-48, che ha aperto in Italia il dibattito sul tema. Per una discussione critica: C. TOSCO, *Territorio e paesaggio: esplorazioni semantiche*, "U+D Urbanform and Design", XX, 2023, pp. 54-59. Per i metodi di ricerca della storia ambientale: A. CARACCIOLLO, *L'ambiente come storia: sondaggi e proposte di storiografia dell'ambiente*, Bologna 1988; F. WALTER, *L'historien et l'environnement: vers un nouveau paradigme*, "Natures, sciences, sociétés", II, 1994, 1, pp. 31-39; R. DELORT, F. WALTER, *Histoire de l'environnement européen*, Paris 2001; F. PRATESI, *Storia della natura d'Italia*, Roma 2001; M. ARMIERO, S. BARCA, *Storia dell'ambiente. Una introduzione*, Roma 2004; *Storia e ambiente*, a cura di A. Varni, Bologna 2007; G. CORONA, *Breve storia dell'ambiente in Italia*, Bologna 2015.

¹⁶ J.R. MCNEILL, *Qualcosa di nuovo sotto il sole. Storia dell'ambiente nel XX secolo*, ripubblicato di recente da Einaudi, Torino 2020, con una nuova introduzione dell'autore.

¹⁷ L. THOMMEN, *Umweltgeschichte der Antike*, München 2009, trad. it. *L'ambiente nel mondo antico*, Bologna 2014.

¹⁸ R.C. HOFFMANN, *An Environmental History of Medieval Europe*, Cambridge 2015. In Italia il contributo più recente si deve a M. CAMPOPIANO, *Storia dell'ambiente nel Medioevo. Natura, società, cultura*, Roma 2025.

¹⁹ E. PADOA-SCHIOPPA, *Storia ecologica dell'Europa. Un continente nell'Antropocene*, Bologna 2023, p. 29.

²⁰ P. BURKE, *La storia culturale*, Bologna 2019; C. TOSCO, *I beni culturali. Storia, tutela e valorizzazione*, Bologna 2014.

²¹ Per ricordare alcuni contributi significativi in ambito italiano: G. DURBIANO, M. ROBIGLIO, *Paesaggio e architettura nell'Italia contemporanea*, Roma 2003; M. VITTA, *Il paesaggio. Una storia fra natura e architettura*, Torino 2005; P. BALDESCHI, *Paesaggio e territorio*, Firenze 2011; L. ZAMPIERI, *Per un progetto nel paesaggio*, Macerata 2012; M. TRISCUOGGIO, *L'architetto nel paesaggio. Archeologia di un'idea*, Firenze 2018.

²² M. ZARMAKOUPI, *Shaping Roman Landscape: Ecocritical Approaches to Architecture and Wall Painting in Early Imperial Italy*, Los Angeles 2023.

²³ PH. RAHM, *Histoire naturelle de l'architecture. Comment le climat, les épidémies et l'énergie ont façonné la ville et les bâtiments*, Paris 2020.

²⁴ Ivi, p. 74.

Fig. 2 Veduta odierna delle fonti del Clitunno, Campello sul Clitunno (© Ecomuseo di Campello sul Clitunno).



pubblicato nel 2021 e subito tradotto in italiano²⁵. È un lavoro che si presenta come una lettura di lungo periodo dei rapporti tra architettura e ambiente, centrato in particolare sullo sfruttamento delle fonti energetiche e sulle tecnologie impiegate nelle costruzioni. Molte considerazioni espresse dall'autore appaiono interessanti, ma non convincono in diversi casi le connessioni storiche proposte e le interpretazioni degli edifici nel contesto ambientale.

Suscita profonde perplessità per un medievista, ad esempio, la lettura della torre campanaria anglosassone di Earls Barton, nel Northamptonshire, attribuita alla fine del Decimo secolo, che presenta un'elaborata decorazione lapidea a elementi lineari, curvilinei e cuspidati. La torre non viene confrontata con gli edifici coevi, ma con i manoscritti miniati e con l'oreficeria (senza proporre opere precise), concludendo che "la quantità di edifici monumentali di questo periodo non sembra essere stata in grado di produrre un corpo di artigiani specializzati nella lavorazione della pietra di livello paragonabile"²⁶. Il confronto tra l'architettura e le arti suntuarie del periodo non è pertinente, perché paragona ambiti di produzione figurativa del tutto diversi per modalità formative, materiali impiegati, tecniche, tradizioni specifiche e cultura materiale. È un accostamento inadeguato, che non aiuta a capire gli autonomi sviluppi dei due ambiti artistici e, soprattutto, non ha nulla a che vedere con una corretta impostazione di storia ambientale. Si legga ancora un'altra curiosa affermazione, riferita alla cappella palatina di Aquisgrana, il più importante monumento di architettura carolingia pervenuto fino a noi: in questo caso il paragone proposto da Calder è addirittura con San-

ta Sofia di Costantinopoli, costruita "all'incirca in metà tempo" e "molto più grande"²⁷. Anche in questo caso la comparazione con un edificio realizzato in tutt'altro contesto storico e ambientale, non ha senso. Costantinopoli era una capitale lontana, estranea agli orizzonti culturali del mondo franco, che nessun architetto dell'età carolingia aveva mai visitato. Il confronto andrebbe piuttosto instaurato con un altro monumento della cultura architettonica giustiniana, il San Vitale di Ravenna, che invece i costruttori della cappella di Aquisgrana conoscevano bene e che lo stesso Carlo Magno aveva visitato con la sua corte nel 784, dopo la conquista del regno longobardo. Si comprenderebbe allora che è San Vitale il modello architettonico rielaborato ad Aquisgrana, scelto per ragioni evidenti: era la chiesa che più di ogni altra esprimeva in Occidente l'autorità sacrale dell'impero cristiano.

Le indagini comparative sono una linea portante della storia dell'architettura, ma andrebbero condotte secondo adeguati criteri metodologici, culturali e soprattutto ambientali. I confronti non si enumerano sfogliando le pagine di un libro di storia, ma esaminando i canali di comunicazione e di circolazione della cultura architettonica di un'epoca. L'esempio dei recenti lavori di Rahm e di Calder aiuta a comprendere le difficoltà che gravano oggi sul corretto approccio ad una storia ambientale dell'architettura.

Una lettura più attenta deve partire dai caratteri dei luoghi dove sorgevano gli edifici, da un esame rigoroso delle strutture conservate, dall'ambiente storico, dalla percezione del paesaggio nei suoi aspetti culturali. Per tentare delle proposte alternative, proviamo ad applicare i principi teorici che abbiamo delineato ad un caso stu-

²⁵ B. CALDER, *Architecture: From Prehistory to Climate Emergency*, London 2021, trad. it., *Architettura ed energia. Dalla preistoria all'emergenza climatica*, Torino 2022.

²⁶ Ivi, p. 133.

²⁷ Ivi, p. 139.



Fig. 3 Tempio del Clitunno (© Ecomuseo di Campello sul Clitunno).

dio, che si colloca al passaggio tra il mondo antico e l'Alto Medioevo. La nostra prospettiva sarà 'interdisciplinare', in una convergenza di metodi e strumenti tra storia dell'architettura, storia ambientale e storia del paesaggio.

Le fonti del Clitunno: architettura, ambiente e paesaggio storico

L'esempio proposto riguarda le fonti del Clitunno, un sito nelle campagne dell'Umbria, nel comune di Campello, non lontano da Spoleto, noto fin dall'antichità per la salubrità delle sue acque (fig. 1). Nell'area si è conservata una straordinaria condensazione di elementi architettonici e paesaggistici, che la rendono uno spazio privilegiato per la nostra indagine. Nel percorso di ricerca adotteremo il *metodo regressivo*, alla base delle indagini sul paesaggio storico: partendo dalle condizioni attuali seguiremo le trasformazioni dell'età moderna, fino a tentare di ricostruire le forme del paesaggio antico e medievale. Sarà necessariamente un percorso di sintesi, ma che cercherà di mettere in luce le tappe fondamentali di un lungo processo storico.

Il quadro ambientale è caratterizzato dalle sorgenti di faglia del fiume Clitunno, che formano polle d'acqua fredda e limpida, con verdi isolotti e rive erbose (fig. 2). Le piante si specchiano nello scenario suggestivo delle fonti cristalline. L'ecosistema è caratteristico delle acque di sorgiva, che favoriscono la biodiversità e lo sviluppo di una vegetazione igrofila. Tra le specie arboree si distinguono cipressi (*Cupressus sempervirens*, L.), frassini (*Fraxinus excelsior*, L.) e piop-

pi (*Populus alba*, L.), già testimoniati in età antica, insieme a specie introdotte nella seconda metà dell'Ottocento, come il salice piangente (*Salix babylonica*, L.) e il cipresso calvo delle paludi (*Taxodium distichum*, L.)²⁸. L'interazione tra acque lentiche, comunità ittiche e sinecologia vegetale rendono le fonti del Clitunno un importante *hot-spot* di biodiversità, inserito nella rete ecologica 'Natura 2000'²⁹. In tale suggestivo scenario naturale, si erge un'architettura di forte impatto: il tempio del Clitunno, una chiesa che riproduce il modello di un tempio classico (fig. 3). È un monumento molto noto e, come vedremo, molto controverso, che figura in tutti i manuali di storia dell'architettura medievale, di recente entrato nella lista del patrimonio mondiale UNESCO, nel sito seriale "I Longobardi in Italia: i luoghi del potere"³⁰. Tutti questi elementi ambientali, architettonici e paesaggistici, si presentano al visitatore di oggi nel fascino di un sito che nasconde, in realtà, profonde stratificazioni.

Cerchiamo a questo punto di ripercorrere, a grandi linee, la riscoperta del sito archeologico del Clitunno nell'età moderna. L'edificio sacro del tempio era ben noto agli architetti e ai letterati del Rinascimento, e aveva attratto, come vedremo, anche l'interesse di Palladio. I viaggiatori del Grand Tour, che percorrono il tracciato dell'antica via Flaminia per raggiungere Roma, talvolta si recano a visitare le sorgenti del Clitunno³¹. Oggetto di ammirazione è sempre l'enigmatico sacello, che alcuni attribuiscono all'età tardo antica e altri all'Alto Medioevo,

²⁸ E. ORSOMANDO, F. MAGGI, M. CACCHIONI, *Aspetti floristici e qualità delle acque delle fonti e del fiume Clitunno: bacino idrografico del fiume Topino, Umbria*, Campello sul Clitunno 2001.

²⁹ "Natura 2000 è il principale strumento della politica dell'Unione Europea per la conservazione della biodiversità": <https://www.mase.gov.it/portale/rete-natura-2000> (consultato il 12 agosto 2025).

³⁰ Il Tempio del Clitunno è uno dei sette luoghi del sito seriale UNESCO "I Longobardi in Italia. I luoghi del potere (568-774 d.C.)": <https://longobardinitalia.it/scopri/campello-sul-clitunno/> (consultato il 12 agosto 2025).

³¹ A. SORBINI, *Le fonti del Clitunno e il fascino dell'antico nei viaggiatori del Grand Tour*, "Studi Umbri", XII, 2020, 1, <http://www.studiumbri.it/storia/clitunno-incanto-dei-grand-tour-di-ieri-e-di-oggi/> (consultato il 12 febbraio 2025).

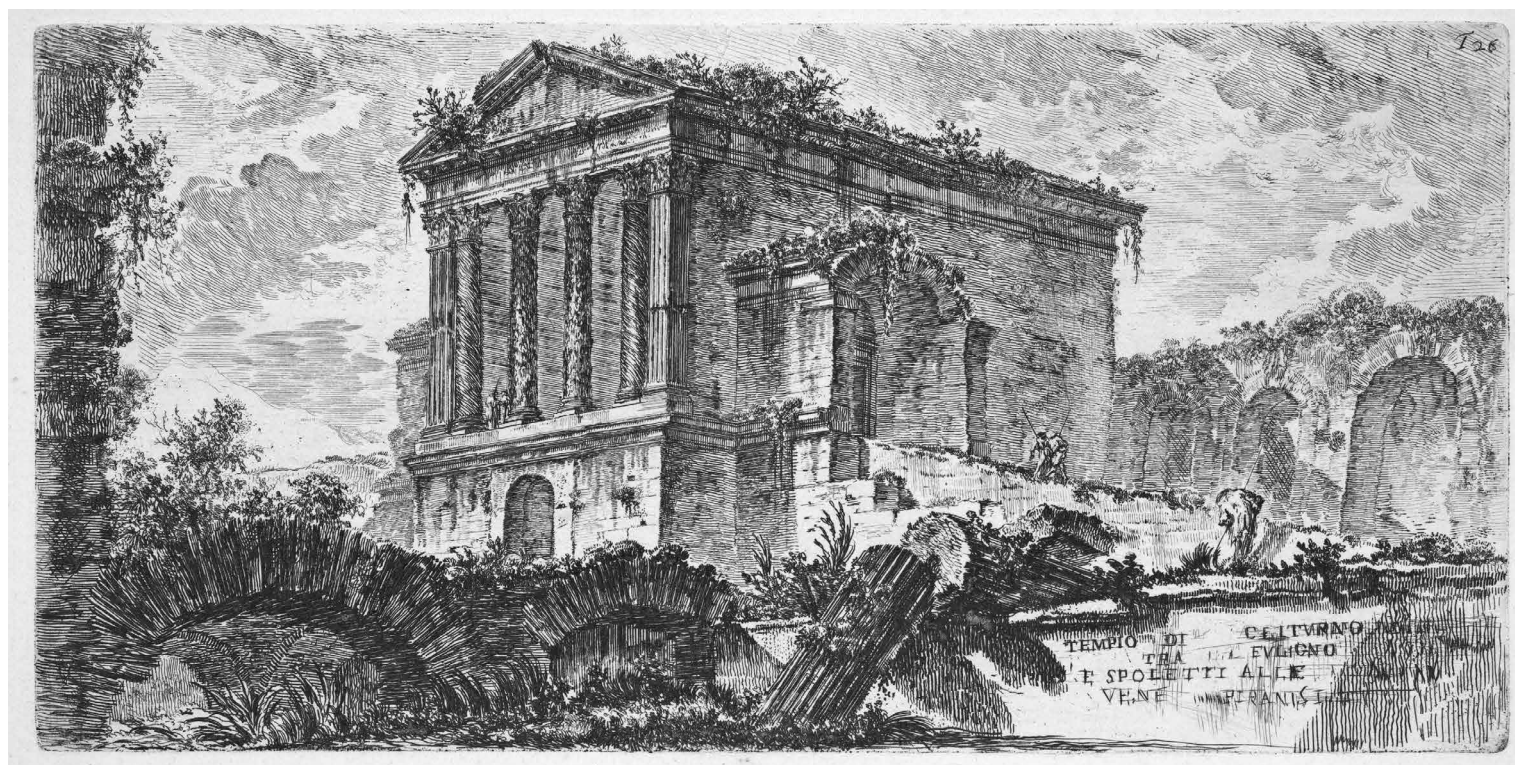


Fig. 4 G.B. Piranesi, *Tempio di Clitunno tra Fuligno e Spoletti* (da *Alcune vedute di archi trionfali, ed altri monumenti inalzati da Romani...*, Roma 1748, tav. 26; Metropolitan Museum of Art, Harris Brisbane Dick Fund, 1937).

Fig. 5 *Le fonti del Clitunno in una fotografia del 1920 ca.*, cartolina postale, editore Graziani (© collezione privata, Torino).



con un dibattito che resta vivo fino ai giorni nostri. François Maximilien Misson, autore di un libro di viaggio molto noto per il pubblico francese, giunge al Clitunno nel 1688 e dichiara senza perplessità che il tempio è una chiesa cristiana, costruita con materiali antichi di spoglio³². È curioso ricordare che tra i visitatori stranieri figurano anche il marchese de Sade, in fuga dalla Francia per scampare a un processo per corruzione. Il marchese è attratto dai simboli cristiani del piccolo edificio, che considera aggiunti in un secondo tempo³³. La notorietà del tempio presso un pubblico vasto venne quindi accresciuta

da un'incisione di Giovanni Battista Piranesi, pubblicata nel 1748 (fig. 4)³⁴. Come di consueto nelle vedute piranesiane, le dimensioni del monumento sono esaltate rispetto a quelle reali dalla presenza di figure umane rimpicciolite. Le fonti del Clitunno non compaiono nell'immagine, la natura circostante appare in stato di abbandono e la vegetazione cresce spontanea tra le rovine antiche.

L'interesse esclusivo per il prezioso edificio dei viaggiatori del Settecento era anche dovuto alle condizioni ambientali del sito. In una regione ad alto rischio sismico come l'Umbria, i terremoti

³² F.M. MISSION, *Viaggio in Italia*, a cura di G.E. Viola, Palermo 2007, p. 155.

³³ D.A.F. DE SADE, *Viaggio in Italia, ovvero Dissertazioni critiche, storiche e filosofiche sulle città di Firenze, Roma, Napoli e Loreto, e sulle strade adiacenti a queste quattro città...*, a cura di M. Lever, Torino 1996, p. 389.

³⁴ G.B. PIRANESI, *Alcune vedute di archi trionfali, ed altri monumenti inalzati da romani parte de quali si veggono in Roma, e parte per l'Italia disegnati ed incisi dal cavalier Gio. Battista Piranesi*, Roma 1748, tav. 26.

ti documentati tra Sei e Settecento, soprattutto quello più catastrofico del 1703³⁵, avevano provocato nell'area di faglia del Clitunno una parziale occlusione della vena di risorgiva. Il flusso delle acque era diminuito e il piccolo lago subiva un processo d'interramento. Il luogo appariva in uno stato di semi-abbandono, frequentato dalla popolazione locale soltanto per la presenza delle fonti. In piena età napoleonica Johan Gottfried Seume intraprende un lungo viaggio archeologico a piedi da Lipsia all'Italia, e giunge nel 1802 alle fonti del Clitunno. L'erudito tedesco osserva con disappunto il degrado del luogo, affollato da carrettieri, asinai e lavandaie. È la fonte d'acqua però ad attrarre tutta la sua attenzione: "Certamente qui più non esistono i boschetti sacri e i molti templi, ma la contrada è dolcissima e io, assetato, scesi devotamente alla fonte e bevvi a grandi sorsate l'acqua della sorgente maggiore, quasi fosse stata la fonte di Ippocrate"³⁶.

La stagione romantica era imminente, e non poteva restare insensibile al fascino delle sorgenti del Clitunno. La consacrazione letteraria avvenne con la poesia di Byron, che evoca le sacre fonti nel IV canto (stanze LXVI-LXVII) del *Childe Harold's Pilgrimage*, dedicato all'Italia³⁷. L'interesse dei viaggiatori ora cambia direzione e inizia a focalizzarsi dal tempio alle forme suggestive del paesaggio, carico di memorie classiche. Le pagine del *Childe Harold* divengono la guida sentimentale per i turisti inglesi che giungono in Italia, e le fonti del Clitunno s'impongono come una tappa obbligata nel viaggio attraverso le bellezze della penisola. Nel mondo anglosassone l'ammirazione per il sito avrà un ruolo importante nella scelta dei modelli del giardino paesaggistico, come veduta pittoresca del tempio classico di marmi bianchi che si specchia nel verde del paesaggio lacustre.

Anche Jacob Burckhardt include il Clitunno nell'itinerario del suo *Cicerone* (1855), affascinato dalla bellezza del bosco e dalle acque limpide. È interessante la riflessione dello studioso te-

desco riguardo l'architettura dell'edificio sacro: "Un architetto difficilmente potrà porsi una questione più istruttiva di questa: come mai questi edifici, piccoli, tutt'altro che modelli nel loro genere, riescono ad ottenere un effetto così grande, assai superiore alla loro mole?"³⁸. Appare chiaro che l'effetto del tempio, nonostante le sue modeste dimensioni, sia legato al fascino del paesaggio che lo accoglie.

Con l'Unità d'Italia il sito archeologico è sottratto alla giurisdizione dello Stato Pontificio e diviene parte del patrimonio nazionale. Iniziano i lavori di restauro del tempio, che porteranno alla scoperta degli affreschi all'interno della cella e al recupero delle decorazioni scultoree³⁹. Il degrado che aveva subito l'area verde venne arginato con un primo intervento promosso dal conte Paolo Campello della Spina alla metà dell'Ottocento. Come descrive nei suoi *Ricordi*, le rive vennero scavate, rimossa la terra di deposito e riattivato il flusso delle risorgive⁴⁰. Il laghetto era divenuto così navigabile e il conte aveva fatto venire da Pediluco una barchetta per gite romantiche, destando lo stupore dei contadini del luogo che, a suo dire, "non avevano mai veduto una barca". Lo scenario naturale iniziava ad assumere un aspetto più gradevole, adeguato al gusto dei giardini paesaggistici.

La valorizzazione del sito ebbe un notevole impulso dall'ode barbara di Carducci *Alle fonti del Clitunno*, composta nel 1877 e destinata a grande notorietà⁴¹. Il poeta-vate della giovane nazione evocava il fascino di un luogo segnato dalle memorie antiche, i miti italici, l'atmosfera sacra, "i boschi e l'acque de l'Umbria verde". L'ode è una poesia di paesaggio, che esalta il sito come emblema del nostro patrimonio, dove si fondono arte, storia e natura.

Il recupero delle fonti del Clitunno assumeva così un ruolo importante nel quadro della nascente politica nazionale di tutela del paesaggio⁴². La poesia di Carducci, attenta alle forme della vegetazione, era divenuta il viatico per la

³⁵ A. TERTULLIANI, L. GRAZIANI, M. LOCATI, *Nuovo studio della sequenza sismica del 1703 in Italia centrale*, "Quaderni di Geofisica", CLXXVIII, 2022, 576, pp. 1-578.

³⁶ J.G. SEUME, *L'Italia a piedi, 1802*, a cura di A. Romagnoli, Milano 1973, p. 147. Tra i viaggiatori tedeschi anche Goethe, mentre attraversa l'Umbria, dedica poche righe ad una "curiosa chiesetta" che chiama San Crocifisso, forse riferendosi al nostro tempio o forse al San Salvatore di Spoleto: J.W. GOETHE, *Viaggio in Italia*, con il commento di H. von Einem, Milano 1993, p. 133, e nota 3.

³⁷ P. QUENNEL, *Byron in Italia*, Bologna 1999.

³⁸ J. BURCKHARDT, *Il Cicerone. Guida al godimento delle opere d'arte in Italia*, I, Milano 1994, p. 66.

³⁹ Sull'architettura e la conservazione del tempio si veda più avanti la nota 51; per le scelte di restauro cfr. anche A. MELUCCO VACCARO, *Archeologia e restauro. Storia e metodologia del problema*, Roma 2000, pp. 83-85. Di recente (2021) il Ministero della Cultura ha promosso la manutenzione degli affreschi del sacello, con la revisione degli impianti di sicurezza e d'illuminazione.

⁴⁰ P. CAMPELLO DELLA SPINA, *Ricordi di 50 anni. Dal 1840 al 1890*, Spoleto 1910, p. 38.

⁴¹ M. VEGLIA, *Paesaggi carducciani*, in *Carducci e i miti della bellezza*, catalogo della mostra (Bologna, Biblioteca dell'Archiginnasio, 1 dicembre 2007-1 marzo 2008), a cura di M.A. Bazzocchi, S. Santucci, Bologna 2007, pp. 120-127, e *Giosue Carducci e l'identità italiana*, catalogo della mostra (Milano, 29 novembre 2007-28 febbraio 2008), a cura di A. Andreoli, Roma 2007.

Fig. 6 Tempio del Clitunno, decorazione del timpano absidale (foto C. Tosco).



lettura dei caratteri ambientali. All'inizio del Novecento l'agronomo umbro Francesco Francolini curava il restauro dell'oasi verde e l'allestimento della vegetazione (fig. 5), seguendo le impressioni della poesia carducciana ed esaltando i caratteri romantici e pittoreschi. Il poeta aveva mostrato il suo fastidio per la "molle pianta" dei salici piangenti che crescevano lungo le rive, e Francolini ne limitò lo sviluppo, evitando impianti di rinnovamento⁴³. Il nuovo volto delle fonti venne coronato nel 1910, in occasione del primo cinquantenario dell'Unità, dal monumento a Carducci realizzato dallo scultore Leonardo Bistolfi, con un'epigrafe composta da Ugo Ojetti⁴⁴. L'aspetto odierno del parco del Clitunno è quindi in gran parte dovuto a tali opere di sistemazione, in linea con le prime affermazioni dei valori del paesaggio nella tutela del patrimonio italiano.

Seguendo il metodo regressivo, proseguiamo a questo punto la nostra indagine sul paesaggio storico: dalle condizioni odierne del sito, attraverso la sua riscoperta romantica e l'esaltazione nazionalistica tra Otto e Novecento, scendiamo più in profondità per esaminare le fonti antiche e medievali. Le sorgenti del Clitunno erano molto note nel mondo romano. La dolcezza delle acque, che scorrevano placide in un ambiente pastorale, attraeva la sensibilità dei poeti bucolici. L'abbondanza delle risorgive, la regimazione dei flussi e l'estensione di prati irrigui aveva-

no favorito lo sviluppo dell'allevamento bovino e di una florida economia rurale. L'ambiente assumeva così nella cultura religiosa pagana una dimensione sacra, con la presenza di sacelli e di are votive. Virgilio nelle *Georgiche* celebra il Clitunno come "flumine sacro" e ricorda i tori bianchi, allevati sulle sponde, che venivano portati a Roma per i sacrifici più solenni⁴⁵. Il tema è ripreso in un'elegia di Propertio dove il bosco sacro (*lucus*) accoglie le candide mandrie: "Qua formosa suo Clitumnus flumina luco/integit, et niveos abluit unda boves" ("Dove il bel fiume Clitunno fa ombra col suo bosco e l'onda bagna i buoi candidi come la neve")⁴⁶.

Le fonti del Clitunno rappresentavano così un vero emblema della sacralità del paesaggio per la poesia pastorale del mondo romano. Se dalla poesia latina passiamo alla prosa, la descrizione più suggestiva del sito è offerta da una lettera di Plinio il Giovane, che nel 107-108 d.C. aveva visitato di persona le sorgenti:

Un colle di modesta altezza si eleva boscoso e ombreggiato da antichi cipressi. Ai piedi di questo nasce una sorgente che sgorga per varie vene [...]. Le rive sono tutte ricoperte di frassini e pioppi, che il limpido fiume consente di ammirare nelle loro verdi immagini, quasi fossero sommerse. La freschezza dell'acqua rivaleggerebbe con quella della neve. Lì vicino è un tempio venerato: vi si vede, in piedi, lo stesso Clitunno, rivestito e decorato di toga pretesta, mentre attorno sono sparsi numerosi sacelli di altre divinità⁴⁷.

⁴³ E. GIAMMATTEI, *La forza dei luoghi. Nomi del paesaggio come pensiero e come azione*, in *Paesaggio 1922-2022. Cent'anni della legge Croce*, a cura di F. Mangone, N. Ruggiero, Napoli 2022, pp. 31-47: 40.

⁴⁴ Per le suggestioni carducciane e la scelta delle piante nell'"incantevole quadro": F. FRANCOLINI, *I salici del Clitunno*, Spoleto 1942. Secondo una tradizione locale, i salici piangenti del Clitunno derivavano dalle talee importate dalle piante che sorgevano presso la tomba di Napolenone a Sant'Elena, seguendo una prassi diffusa nei giardini francesi della seconda metà dell'Ottocento.

⁴⁵ L. GENTILI, *Spoleto 1910: Ojetti, Bistolfi e la stele di Carducci alle Fonti del Clitunno*, "Spoletium", XXXIX, 1998, pp. 101-106.

⁴⁶ VIRGILIO, *Le Georgiche*, II, 146-148.

⁴⁷ PROPERTIO, *Le Elegie*, II, 19, 25-26.

⁴⁸ PLINIO IL GIOVANE, *Lettere ai familiari*, trad. it. L. Rusca, Milano 2000³, VIII, 8, p. 635.

Nella viva descrizione di Plinio emerge un processo di 'acculturazione', che si riflette nelle forme del paesaggio. Il nume italico del luogo, il dio fluviale Clitunno, viene romanizzato e rivestito con la toga pretesta, l'emblema delle più alte cariche dello Stato. Riconosciamo così un altro passaggio decisivo per la nostra storia: la civiltà romana, con i suoi modelli culturali e i suoi simboli condivisi, si è ormai imposta alle fonti del Clitunno e ne ha modificato il paesaggio, organizzato per l'allevamento dei tori bianchi sacrificali e per l'esercizio pubblico di un culto inserito nella religione dell'Impero. Lo scenario naturale attrae l'attenzione dei poeti e di un letterato dell'alta aristocrazia, come lo stesso Plinio. L'indagine comparata delle fonti antiche consente quindi di mettere in luce i caratteri culturali assunti dal paesaggio del Clitunno in età imperiale, nella forma in cui veniva percepito dalle popolazioni dell'epoca e rielaborato negli ambienti letterari. Nell'età tardo antica, con l'avvento del cristianesimo e l'assunzione della nuova fede a religione di Stato, la percezione culturale del sito era destinata a cambiare. Non mancano anche per questo periodo notizie in relazione al nostro ambiente. È significativo che il poeta di corte Claudiano descriva un viaggio nel 404 del giovane imperatore Onorio nell'Italia centrale⁴⁸, fino a raggiungere le fonti del Clitunno, che mantenevano intatto il loro fascino anche per un principe cristiano.

La disgregazione dell'Impero d'Occidente nel corso del Quinto secolo ebbe come conseguenza l'abbandono delle architetture sacrali pagane che ornavano le sponde del fiume, nel quadro generale della crisi insediativa, dello spopolamento delle campagne e del degrado delle sistemazioni agrarie. Nei primi secoli del Medioevo le fonti del Clitunno subirono un processo di trasformazione ambientale. L'interruzione dei sistemi di controllo delle acque provocò una rinaturalizzazione del sito, che tendeva ad assumere

un aspetto lacustre. Nella prima metà del Settimo secolo Isidoro di Siviglia ricorda nelle *Etymologiae* il "lacus Clitorius"⁴⁹. La menzione isidoriana è importante, perché le *Etymologiae* diventeranno la più diffusa enciclopedia della cultura scolastica medievale. La medesima designazione ambientale è poi ripresa da Paolo Diacono nella sezione geografica dell'*Historia Langobardorum*⁵⁰. Il fatto che Paolo indichi proprio il "lacus Clitorius" come luogo rilevante dell'Umbria, insieme alle città di Perugia e di Spoleto, conferma che le fonti del Clitunno mantenevano anche in età longobarda un notevole valore geografico, nel quadro ambientale della regione. La cristianizzazione del sito avvenne dunque dopo l'abbandono delle strutture cultuali pagane e il tempietto rappresenta l'intervento architettonico che segna il passaggio alla nuova religione. È importante però osservare che le acque e i caratteri del paesaggio lacustre mantennero un'importanza centrale in questo processo.

La collocazione scelta per il tempietto mette in risalto la scenografia del sito. L'edificio sorge su un rialzo che domina le fonti e il pronao è rivolto verso lo specchio delle acque. Per la costruzione vennero impiegati materiali di spoglio provenienti dai sacelli pagani abbandonati e gli apparati decorativi lapidei presentano una curata commistione tra i frammenti antichi, adattati alla struttura architettonica, e i rilievi medievali che esibiscono simboli cristiani (fig. 6).

L'epoca di costruzione del tempietto rimane un problema molto dibattuto nella storiografia, ma le ricerche più recenti tendono a confermare una cronologia compresa nella prima età longobarda, nel quadro politico e culturale del ducato di Spoleto⁵¹. Le incertezze nascono dal fatto che il sacello rimane un esempio veramente unico nel patrimonio dell'architettura altomedievale a noi noto, del tutto privo di confronti con altri edifici dell'epoca. La sua struttura riproduce il modello di un tempio classico *in antis*, con pro-

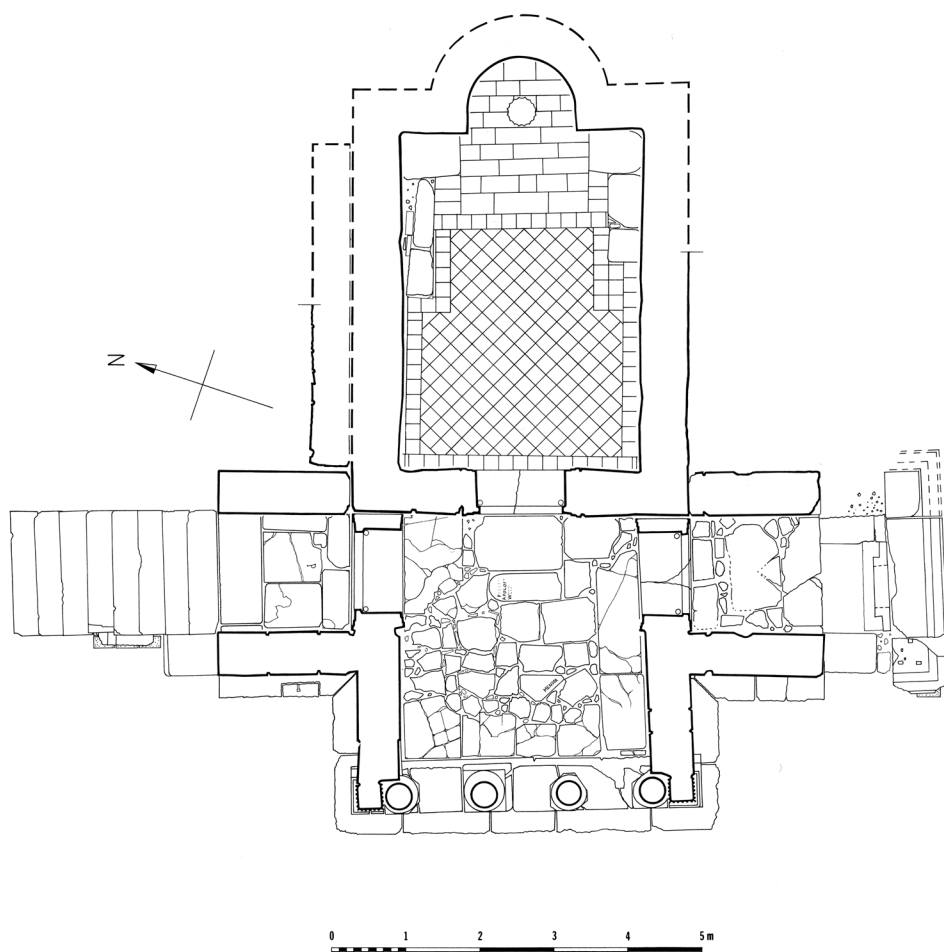
⁴⁸ Claudian, *Panegyricus de sexto consulatu Honorii Augusti*, edited by M. Dewar, Oxford 1996.

⁴⁹ ISIDORO DI SIVIGLIA, *Le Etymologiae*, XIII, 13, 2.

⁵⁰ PAOLO DIACONO, *L'Historia Langobardorum*, II, 16.

⁵¹ Il tempietto presenta una complessa stratificazione e almeno due fasi costruttive, integrate dai restauri, che in questa sede non possiamo approfondire. La monografia più valida di riferimento rimane J.J. EMERICK, *The Tempietto del Clitunno near Spoleto*, University Park 1998; l'autore è tornato sul tema in ID., *The Tempietto del Clitunno and San Salvatore near Spoleto: Ancient Roman Imperial Columnar Display in Medieval Contexts*, in *Tributes to Pierre du Prey: Architecture and the Classical Tradition, from Pliny to Posterity*, edited by M.M. Reeve, London-Turnhout 2014, pp. 41-77, confermando una cronologia alla prima età longobarda. Il dibattito sulla datazione delle fasi costruttive è ancora aperto, e si veda il quadro critico offerto da G. BINAZZI, *Considerazioni sulla cronologia del Tempietto sul Clitunno*, "LANX", VII, 18, 2014, pp. 1-47, che propone un'attribuzione alta, al V secolo avanzato; tra gli autori più recenti C.B. MCCLENDON, *The Origins of Medieval Architecture. Building in Europe, A.D. 600-900*, New Haven-London 2005, p. 56, rimane favorevole a una datazione intorno al 700. In un quadro comparativo, per gli aspetti decorativi e l'uso del reimpiego, i confronti più stringenti si riconoscono con il San Salvatore di Spoleto, su cui disponiamo di un'ampia monografia: *La Basilica di San Salvatore di Spoleto*, a cura di M. Bassetti, L. Pani Ermini, E. Menestò, Spoleto 2012. A parere di chi scrive la datazione più probabile del sacello del Clitunno rimane il VII secolo, considerando i risultati delle analisi di laboratorio al C¹⁴ dei resti di carboni inclusi nella malta, estratti dalle pareti della navata: C. Tosco, *L'architettura medievale in Italia (600-1200)*, Bologna 2016, pp. 29-30.

Fig. 7 Tempio del Clitunno, pianta al livello della cella
(da EMERICK, *The Tempio del Clitunno... cit.*, plate II).



⁵² A. PALLADIO, *I quattro libri dell'Architettura*, Venezia 1570, lib. IV, cap. XXV, pp. 98-102, con quattro tavole di disegni. Un disegno preparatorio del tempio, a inchiostro bruno su carta, è presente nella collezione palladiana di Palazzo Chiericati a Vicenza (Vicenza, Museo Civico di Palazzo Chiericati, Gabinetto disegni e stampe, coll. D22). Prima di Palladio, anche Francesco di Giorgio aveva dimostrato il suo interesse per il tempio, riprodotto in un disegno conservato agli Uffizi (Firenze, Gallerie degli Uffizi, Gabinetto dei disegni e delle stampe, 321A).

⁵³ PALLADIO, *I quattro libri...* cit., p. 98.

⁵⁴ L'intonaco dipinto si sovrappone al fregio marmoreo dell'edicola, svincolando la cronologia degli affreschi da quella della decorazione architettonica, come stabilito con le analisi condotte in occasione dei restauri del 1983-1985: *I dipinti murali e l'edicola marmorea del Tempio sul Clitunno*, a cura di G. Benazzi, Todi 1985; per le pitture vedi anche V. PACE, *Immanenza dell'antico, congiunzioni romane e traiettorie europee: aspetti dell'arte longobarda in Umbria e in Campania*, in *I longobardi nei ducati di Spoleto e di Benevento*, atti del congresso (Spoleto, 20-23 ottobre 2002, Benevento, 24-27 ottobre 2002), II, Spoleto 2003, pp. 1125-1148.

⁵⁵ Iscrizione: "S(an)c(tus) Deus angelorum qui fecit resurrectionem". L'epigrafe frontale si collegava a due altre iscrizioni perdute, poste sui lati, che inneggiavano al Dio dei profeti e degli apostoli: *Inscriptiones Christianae Italiae septimo saeculo antiquiores*, in *Regio VI Umbria*, a cura di G. Binazzi, VI, Bari 1989, n. 81.

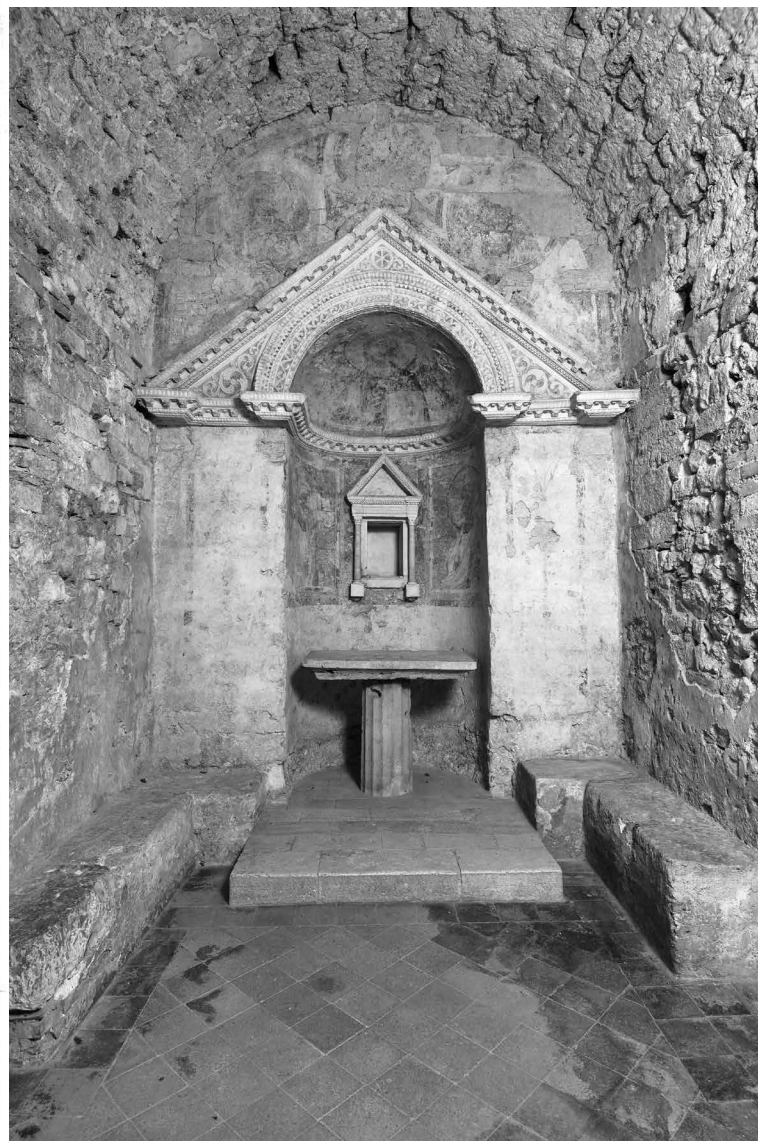
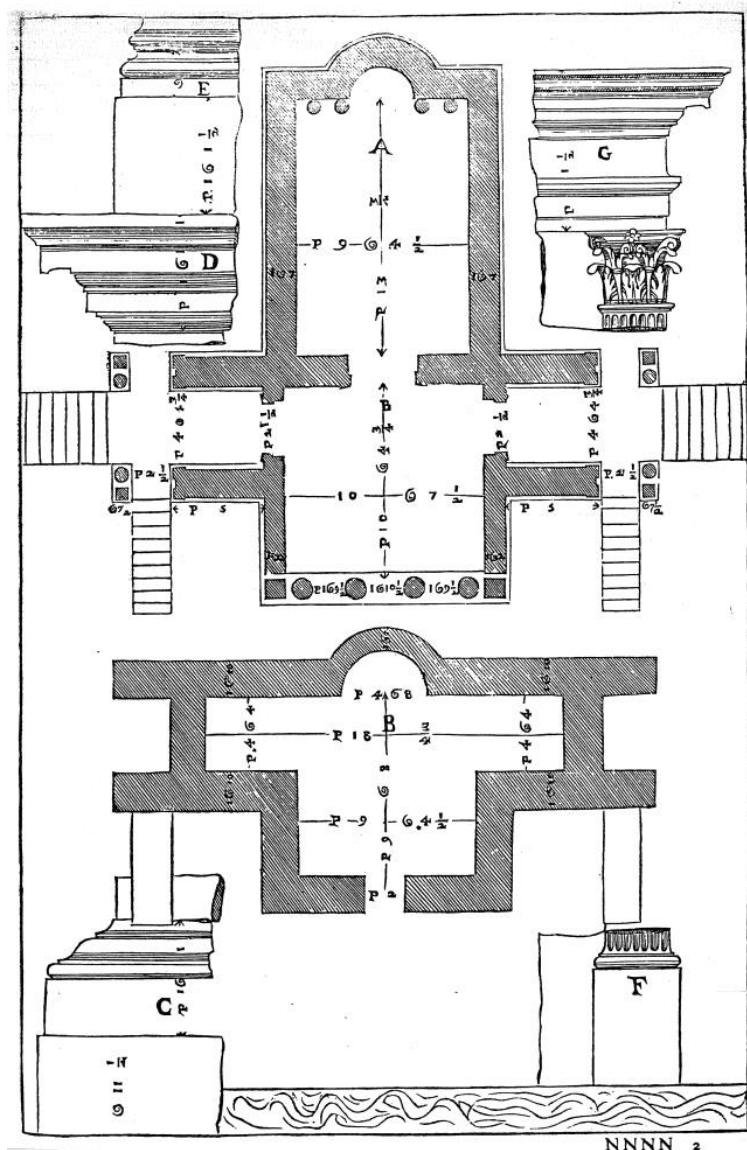
⁵⁶ G. OTRANTO, *Note sulla tipologia degli insediamenti micelici nell'Europa medievale*, "Vetera Christianorum", XLIII, 2006, pp. 175-200.

⁵⁷ P.G. SPANU, *Fons vivus. Culti delle acque e santuari cristiani tra tarda antichità e alto medioevo*, in *Settimane di studio del CISAM*, atti del convegno (Spoleto, 12-17 aprile 2007), Spoleto 2008, pp. 1029-1077.

nao tetrastilo (fig. 7). L'alto basamento esalta la costruzione nel paesaggio circostante. È interessante osservare che anche Andrea Palladio sia rimasto affascinato dal tempio e lo abbia studiato con attenzione nei *Quattro libri dell'Architettura*, nel libro IV dedicato agli edifici sacri (fig. 8)⁵². L'architetto non poteva rendersi conto che non si trattava di un sacello antico, ma di un'autentica chiesa medievale.

La struttura spaziale del tempio pagano venne adattata alle esigenze del rito cristiano. L'interno della cella voltato a botte, che nell'uso antico non era riservato al culto ma alla conservazione del tesoro e della statua della divinità, venne adibito per ospitare l'aula liturgica (fig. 9). Una piccola abside, fuoriuscente dal perimetro della parete di fondo orientale, rimane l'unica concessione architettonica alle esigenze culturali cristiane. All'interno si conservano un ciclo di affreschi e un'elaborata decorazione della parete absidale, che Palladio aveva giudicato "di bellissimi ornamenti"⁵³. L'edicola marmorea assume l'aspetto di un frontone 'siriano', con un arco compreso tra due architravi e coronato da un timpano, che forse riprende a scala minore il 'fastigium'

che decorava l'altare della basilica di San Giovanni in Laterano⁵⁴. Tutti questi elementi dimostrano che il tempio è una costruzione molto elaborata, concepita da maestranze che avevano consapevolmente ripreso i modelli architettonici e gli apparati ornamentali della tradizione classica, adattandoli alle esigenze del culto cristiano. L'aspetto che più interessa le nostre ricerche è però il valore paesaggistico del sito nelle sue stratificazioni storiche. La sacralità pagana delle acque del Clitunno, descritta dalle fonti antiche, viene trasposta nel processo di cristianizzazione. L'iscrizione posta sull'architrave del timpano frontale, inneggia alla maestà degli angeli⁵⁵ e richiama il culto degli esseri celesti che si era diffuso in Italia a partire dal dominio bizantino, con la fondazione del santuario di San Michele Arcangelo sul promontorio del Gargano⁵⁶. È nota la connessione tra la devozione all'Arcangelo e la presenza di fonti sacre, legate ai riti battesimali⁵⁷. Le fonti del Clitunno assumono così un nuovo valore cristiano grazie alla fondazione della chiesa che imita un tempio antico, con il pronao scenograficamente rivolto verso le sorgenti. Un altro elemento architettonico rafforza que-



sta lettura: il basamento su cui poggia il tempio all'interno è cavo, con un ambiente rivestito da lastre lapidee di recupero, aperto da un arco frontale. Mancava quindi una scalinata di accesso in corrispondenza della facciata, mentre la salita all'edificio sacro avveniva tramite due scale poste ai lati⁵⁸. Le ricerche più recenti hanno stabilito che il vano basamentale funzionava come un ambiente di raccolta delle acque, che sgorgavano dal substrato roccioso e defluivano verso l'esterno attraverso l'arco di facciata, come una fonte sacra di fronte al tempio⁵⁹. Lo stretto legame tra la presenza delle acque del Clitunno e la struttura architettonica assumeva un forte significato, anche nella funzione religiosa del culto cristiano. Assistiamo così ad una forma di 'migratio' culturale, dove al centro si collocano i caratteri originari dell'ambiente lacustre del Clitunno. La matrice romana continua ad esercitare la sua eredità, e l'architettura del tempio cri-

stiano è l'emblema più chiaro di un 'passato che non passa', della forza di un modello culturale radicato nel sito.

La lunga storia che abbiamo cercato di ricostruire è una storia di re-interpretazioni del paesaggio. L'originario valore sacrale del Clitunno nella religione italica, la sua inclusione nel culto imperiale del mondo romano, la cristianizzazione delle fonti e la costruzione del tempio nella prima età medievale, la riscoperta e lo studio del sacello a partire dal Rinascimento, il fascino pittoresco dell'ambiente lacustre nella stagione romantica, l'affermazione del sito come emblema del patrimonio nazionale dopo l'Unità, sono tutti fenomeni che si accumulano nel corso del tempo, reinterprestando con prospettive diverse i valori culturali del paesaggio. Per comprendere in profondità questi processi semantici, storia del paesaggio e storia dell'architettura si saldano in una prospettiva convergente di ricerca.

Fig. 8 A. Palladio, *Pianta del tempio del Clitunno a due livelli e particolari architettonici* (da PALLADIO, *I quattro libri... cit.*, lib. IV, cap. XXV, p. 99).

Fig. 9 *Tempio del Clitunno, Campello sul Clitunno. Interno della cella* (foto C. Tosco).

⁵⁸ Per la ricostruzione degli accessi originari: EMERICK, *The Tempio del Clitunno...* cit., p. 64, fig. 3.

⁵⁹ La presenza di una fonte all'interno del basamento è testimoniata dai corografi locali e dalle incrostazioni calcaree ancora conservate nelle pareti del vano di raccolta: BINAZZI, *Considerazioni sulla cronologia...* cit., pp. 9-10.

ARCHITETTURA E AMBIENTE IN VALLE DI SUSA: METODI D'INDAGINE E PROSPETTIVE DI RICERCA

This article reflects on the interdisciplinary dialogue between environmental and architectural history, focusing on the climatic conditions of the Susa Valley in Piedmont from the Middle Ages to the modern era. Grounded in recent studies on climate change in the Alpine region, it examines the correlation between environmental phenomena, geomorphological features, and architectural stratifications. The torrential nature of the Dora Riparia River, with its erosion and accumulation zones, has led to the formation of alluvial fans along the valley slopes, where the main mountain communities have developed. The study of these sedimentary areas provides insight into the impact of floods and hydrogeological instability, while archival sources shed light on social responses to these phenomena, such as relocating religious centers to safer areas. Architectural history provides a means of exploring these processes through a focus on technical and constructional aspects. While some architectural heritage sites successfully adapted to flood events in the Middle Ages, they failed to withstand those of the modern period. This research aims to establish a method for investigating the relationship between environmental history and architectural heritage, paving the way for future inquiry.

La conoscenza di un territorio si basa sull'analisi del suo paesaggio. Con questo termine si identificano le interrelazioni che si generano tra l'uomo e l'ambiente in cui vive. La loro comprensione consente di aprire un'indagine multidisciplinare, coinvolgendo anche i temi dell'ecologia, dell'ecostoria e del cambiamento climatico. Lo studio della materia paesaggistica, grazie alla sua prospettiva multidisciplinare, riconosce una pluralità di approcci. Se rivolgiamo la nostra attenzione all'ambito storico, uno strumento di ricerca significativo è rappresentato dall'analisi regressiva. Il metodo considera le condizioni attuali del paesaggio e tenta di ricostruire le fasi precedenti, dalla più recente alla più antica¹. La storia del paesaggio è considerata come una catena di cui noi disponiamo dell'ultimo anello, che tuttavia si collega a un lungo processo: il paesaggio di oggi altro non è che l'eredità stratificata dei paesaggi del passato.

Un osservatorio privilegiato per studiare tali fenomeni è rappresentato dalla catena alpina. I mutamenti climatici, le forme del popolamento, l'instabilità dei versanti, la canalizzazione delle vie di comunicazione lungo le valli principali, la vegetazione e le attività agricole distribuite secondo i livelli di quota, sono elementi che caratterizzano le dinamiche paesaggistiche nel corso dei secoli. La storia del paesaggio si misura da tempo con la storia delle Alpi e gli aspetti ambientali hanno da sempre rappresentato un elemento importante delle ricerche².

In tale quadro la Valle di Susa diviene un inte-

ressante modello di lettura multidisciplinare. L'area alpina è di origine glaciale, le sue caratteristiche geomorfologiche e la favorevole posizione di collegamento tra la Francia e la pianura Padana hanno determinato un notevole sviluppo antropico nel corso dei secoli. Il costante dialogo tra l'azione umana e quella naturale ha generato una sovrapposizione di paesaggi storici, che concorrono alla percezione dell'assetto territoriale odierno. In apertura, è bene stabilire la terminologia che verrà adottata: si applicherà la definizione di 'paesaggio' offerta dalla *Convenzione Europea del Paesaggio*, firmata a Firenze nel 2000, che ha il vantaggio di essere un testo normativo giuridico riconosciuto a livello internazionale e uno strumento importante per le attività di ricerca³. La *Convenzione* propone la seguente definizione: ««Paesaggio» designa una determinata parte di territorio, così come è percepita dalle popolazioni, il cui carattere deriva dall'azione di fattori naturali e/o umani e dalle loro interrelazioni»⁴.

La conoscenza della storia e dell'architettura locale si rivelano significative per determinare i processi di sviluppo insediativo del territorio. Al tempo stesso, anche le caratteristiche geomorfologiche risultano essere fondamentali per la comprensione degli aspetti ambientali che caratterizzano un luogo. Oltre alle conoscenze della storia e della cultura materiale, fondamentale importanza è rivestita infatti dalla storia dell'ambiente e dei processi ecologici⁵. Lo studio di tali componenti ambientali può essere ap-

profondito in termini di ecofatti, ovvero di tracce dei processi naturali sedimentate nell'assetto geomorfologico del territorio che influenzano il sistema insediativo della Valle di Susa. L'interazione tra le differenti sfere disciplinari consente di aprire prospettive di ricerca al momento ancora poco indagate, che permettono di approfondire lo stretto dialogo tra la storia ambientale e quella urbana. Inoltre, le fonti tradizionalmente legate alla storia dell'architettura e del paesaggio possono contribuire a individuare la storia del rapporto tra territorio e cambiamento climatico, per una più completa conoscenza e valorizzazione di questa valle delle Alpi occidentali.

Il sito si presenta ricco di testimonianze storiche e architettoniche, che tuttavia sono esposte al rischio idrogeologico generato dai regimi di piena del sistema fluviale, andando così incontro a fenomeni di degrado e di dissesto strutturale⁶. La valle presenta un orientamento quasi perfetto sull'asse ovest-est, che favorisce la distribuzione degli insediamenti e della vegetazione sui versanti. Le caratteristiche geomorfologiche hanno facilitato lo sviluppo antropico dell'area. In particolare, nel periodo compreso tra Medioevo ed età moderna si inizia a registrare l'espansione dei centri urbani lungo l'asta fluviale della Dora Riparia, il principale corso d'acqua del territorio che ha generato il solco vallivo⁷. Il regime torrentizio del fiume si presenta discontinuo con tratti di erosione, di trasporto e di accumulo alternati tra di loro fino all'affluenza alla sinistra del Po nella pianura torinese. L'ampio sistema fluvia-



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Fig. 1 Carta topografica in misura della Valle di Susa e di quelle di Cesane e Bardonecche, divisa in nove parti, 1764-1772. Dettaglio (AST, Carte topografiche e disegni, Carte topografiche per A e B, Susa 3, mazzo 3, fol. 5).

Fig. 2 Dettaglio del percorso del torrente Cenischia nella Carta topografica in misura della Valle di Susa e di quelle di Cesane e Bardonecche..., 1764-1772 (AST, Carte topografiche e disegni, Carte topografiche per A e B, Susa 3, mazzo 3, fol. 5; elaborazione A. Panico).



Area di erosione e trasporto

Area di sedimentazione

sle vallivo genera inoltre processi di erosione dei versanti anche lungo gli assi torrentizi perpendicolari allo sviluppo della valle (sud-nord e nord-sud), favorendo il confluire dei detriti in conoidi di deiezione. I principali insediamenti della Valle di Susa sorgono su tali aree di accumulo.

Nel quadro ambientale così rapidamente delineato nelle sue linee essenziali, la storia del paesaggio indaga le dinamiche del popolamento nel corso del tempo. Uno strumento di primaria importanza sono le fonti di archivio, figurative e documentarie. In particolare, la cartografia storica consente di comprendere la portata degli eventi erosivi e ricostruire in maniera regressiva l'ecostoria del percorso dell'alveo fluviale, comparandolo al differente assetto attuale.

L'importanza della Valle di Susa è legata all'abbondanza delle testimonianze iconografiche dovute alla necessità della sua difesa militare. Nello Stato sabauda rappresentava infatti la principale valle di penetrazione degli eserciti nemici. Una cartografia preziosa per il livello di dettaglio e l'esattezza del rilevamento si riconosce nella *Carta topografica in misura della Valle di Susa e di quelle di Cesane e Bardonecche, divisa in nove parti*, redatta tra il 1764 e il 1772 per motivi di difesa militare⁸. La mappa fornisce preziose testimo-

nianze dei processi morfologici di accumulo e di erosione che interessano il sistema idrico (figg. 1-2)⁹. Considerando ad esempio l'area circostante la città di Susa – il principale insediamento urbano eponimo situato all'incirca al centro del territorio – è possibile analizzare il corso del torrente Cenischia. Osservando la *Carta topografica*, si nota come il corso d'acqua generi aree di accumulo nel fondovalle e di erosione delle pareti rocciose in quota. L'abbassarsi dell'altitudine, e dunque la diminuzione della pendenza del versante, favorisce un rallentamento della corrente del torrente. Questo determina l'accumulo di materiale abraso trasportato, che si sedimenta nel fondovalle in prossimità della confluenza con la Dora Riparia, favorendo nel tempo lo spostamento dell'alveo. Interessante osservare le colture lungo il corso del Cenischia, che mutano a seconda della differenza di materiale litogenetico che compone il suolo. Il terreno di origine sedimentaria si rivela essere adatto alla viticoltura.

L'analisi delle dinamiche fluviali e la comparazione con l'assetto odierno consentono di comprendere la relazione tra la geomorfologia e lo sviluppo urbano dell'area, applicando uno studio regressivo e ponendo in relazione le fonti ar-

¹ C. Tosco, *Il paesaggio storico. Fonti e metodi di ricerca tra Medioevo ed età moderna*, Roma-Bari 2009.

² L. LORENZETTI, *Le Alpi di Clio. Scritti per i venti anni del Laboratorio di Storia delle Alpi (2000-2020)*, Locarno 2020; *Histoire naturelle et montagnes. Regards croisés des Andes à l'Himalaya*, sous la direction de S. Boscani Leoni, A.L. Head-König, L. Lorenzetti, Zürich 2021.

³ Sulla Convenzione Europea del Paesaggio è recente il bilancio: *La Convenzione Europea del Paesaggio vent'anni dopo (2000-2020). Ricezione, criticità, prospettive*, a cura di M. Frank, M. Pilutti Namer, Venezia 2021. Per una lettura storica dei concetti di territorio e paesaggio, si veda C. Tosco, *Territorio e paesaggio: esplorazioni semantiche*, "U+D Urban-form and Design", XX, 2023, pp. 54-59.

⁴ Firenze, 20 Ottobre 2000, *Convenzione Europea del Paesaggio*, art. 1.a: <https://www.premiopaesaggio.beniculturali.it/convenzione-europea-del-paesaggio/> (consultato il 12 marzo 2024).

⁵ Per l'approccio geomorfologico: M. PANIZZA, S. PIACENTE, *Geomorfologia culturale*, Bologna 2003; per l'approccio storico e ambientale: A. CAROCCIOLO, *L'ambiente come storia. Sondaggi e proposte di storiografia dell'ambiente*, Bologna 1988; J.R. McNEILL, *Qualcosa di nuovo sotto il sole. Storia dell'ambiente nel XX secolo*, Torino 2002; P. BEVILACQUA, *La terra è finita. Breve storia dell'ambiente*, Roma-Bari 2006; *Storia e ambiente*, a cura di A. Varni, Bologna 2007; C. Tosco, *Il paesaggio come storia*, Bologna 2007, pp. 105-114; G. CORONA, *Breve storia dell'ambiente in Italia*, Bologna 2015; M. DI TULLIO, M.L. FAGNANI, *Una storia ambientale dell'età moderna. Società, saperi, economie*, Roma 2024; M. CAMPOPIANO, *Storia dell'ambiente nel Medioevo. Natura, società, cultura*, Roma 2025; per l'approccio archeologico: *Manuale di archeologia dei paesaggi. Metodologie, fonti, contesti*, a cura di F. Cambi, Roma 2011, pp. 31-52; P. FORLIN, *Introducing the archaeological assessment of a medieval disaster: Friuli and the 1348 Eastern Alps earthquake*, in "Scienze dure", storia e archeologia del Medioevo: verso nuovi paradigmi?, a cura di A. Molinari, C. Wickham, "Archeologia Medievale: Cultura Materiale, Insediamenti, Territorio", I, 2023, pp. 185-204.

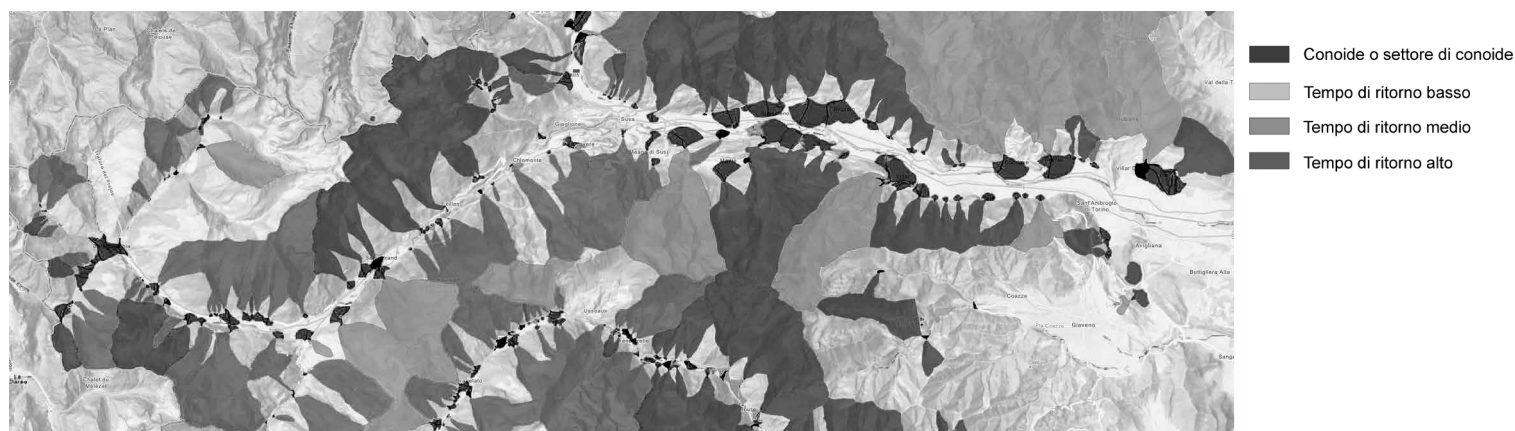


Fig. 3 Carta geologica della Valle di Susa, 2024. Dettaglio (Geoportale Arpa Piemonte; elaborazione A. Panico).

chivistiche e gli strumenti di indagine contemporanea. Analizzando la carta geologica odierna¹⁰ diviene possibile individuare i conoidi di deiezione formati dall'accumulo di sedimenti lungo i bacini idrici (fig. 3). In particolare, la mappa permette di individuare lo stato di attività morfologica e il tempo di ritorno delle piene. Tali dati consentono di osservare l'incidenza e la portata delle inondazioni e dei dissesti idrogeologici, sottolineando la collocazione dei principali centri urbani sui conoidi.

I recenti studi riguardanti la storia del cambiamento climatico in quest'area alpina permettono di ampliare il quadro relativo alla storia dell'architettura degli edifici presenti sul territorio rispetto agli eventi alluvionali¹¹. Diviene infatti possibile osservare come le oscillazioni del clima si ripercuotano sulle componenti idrogeomorfologiche, determinando la fondazione o la scomparsa di alcuni beni patrimoniali. Se infatti dal Medioevo all'età moderna si riscontra un numero sempre maggiore di insediamenti sul territorio, a partire dal Duecento si registrano d'altra parte fenomeni sempre più ravvicinati di precipitazioni e dissesti idrogeologici causati da un generale raffreddamento delle temperature. Tale periodo rientra all'interno del concetto storiografico di Piccola Età Glaciale¹². In particolare, si riscontrano due picchi significativi relativi all'incidenza dei fenomeni alluvionali nella Valle di Susa: il primo compreso tra il 1300 e il 1450 e il secondo, di maggiore portata, tra il 1600 e il 1750. Tuttavia, alte incidenze di esondazioni sono segnalate anche a partire dallo scorso secolo e si protraggono fino a oggi.

Prendendo in analisi l'area intorno a Susa, le fonti archivistiche ci permettono di comprendere la relazione tra storia dell'architettura e cambiamento climatico. In un documento datato al 1379 viene riportata la testimonianza di Pie-

tro de Grysiaco, rettore dell'ospedale della Madonna del Ponte a Susa, dipendente dall'abbazia di San Giusto, in cui chiede al conte di Savoia, Amedeo VI, di assegnare alla comunità un nuovo edificio poiché quello vecchio era stato danneggiato "de anno MCCCLXV vel circa inundatio aque Durie aruynaverit"¹³.

La chiesa della Madonna del Ponte, che oggi ospita il Museo Diocesano di Arte Sacra, venne fondata nel Tredicesimo secolo e fu completamente modificata nella seconda metà del Diciannovesimo secolo. I disegni del Diciassettesimo secolo consentono di osservare alcuni elementi dell'aspetto della chiesa nel periodo compreso tra il 1629 e il 1697 e le trasformazioni urbane avvenute. Nella veduta del 1629 (fig. 4) l'edificio sacro viene rappresentato in maniera approssimativa all'interno dell'area periferica di Susa e pare assomigliare maggiormente a una cappella o un'edicola situata al centro del ponte, da cui il toponimo Madonna del Ponte. Nella rappresentazione del 1697 (fig. 5) molto più accurata, si osserva invece la corretta posizione della chiesa sul lato sinistro della Dora e si identifica più chiaramente l'architettura: la struttura si presenta a capanna, con un campanile annesso alla facciata caratterizzata dall'assenza di una porta di ingresso, mentre si riscontrano al tempo stesso un piccolo rosone e una monofora. Interessante analizzare anche l'espansione del centro urbano lungo il lato destro orografico. L'insediamento appare circondato da una cinta muraria con torri semicircolari, mentre si distingue il progressivo smantellamento dell'area sommitale del castello nel periodo compreso tra le due testimonianze iconografiche. La fortificazione si erige sopra un'altura, la cui parete rappresenta il sito di erosione dell'alveo fluviale e la rispettiva zona di accumulo sedimentario lungo l'altra sponda della Dora, su cui si estende l'area urbana di Susa.

⁶ G. GISOTTI, M. BENEDINI, *Il dissesto idrogeologico. Previsione, prevenzione e mitigazione del rischio*, Roma 2000; W. PALMERI, *Dissesto e disastri idrogeologici nell'Italia unita*, in *Economia e ambiente in Italia dall'Unità a oggi*, a cura di G. Corona, P. Malanima, Milano 2012, pp. 125-145; *Nouvelle ligne Lyon Turin - Nuova linea Torino-Lione. Revision de l'avant-projet de reference-Revisione del progetto definitivo. Plaine de Susa-Piana di Susa. Rapport géologique, hydrogéologique, géomorphologique et géotechnique-Relazione geologica, idrogeologica, geomorfologica e geotecnica*, concepito da D. Grandis, I. Stringa, Torino 2013, pp. 32-37: http://via.regione.piemonte.it/torinolione/6-%20C3.B%20GEOLOGIA/C3B_50-PIANA%20DI%20SUSA/C3B_50-01-GENERALIT%C0%20OPERE%20ALL%27APERTO/PD2_C3B_0032_50-01-01_10-01_Relazione%20geologica%20Piana%20di%20Susa_A_F.pdf (consultato il 12 agosto 2024).

⁷ *Le radici medievali dell'insediamento alpino in Piemonte*, a cura di D. Lanzardo, F. Panero, Torino 2006.

⁸ AST, *Carte topografiche e disegni, Carte topografiche per A e B, Susa 3, marzo 3, fol. 5*.

⁹ P. PIEROTTI, *Imparare l'ecostoria*, Pisa 1997; C. TOSCO, *Ecstoria dei paesaggi fluviali*, in *Alvei, meandri, isole e altre forme urbane. Tecniche di rappresentazione e progetto nei territori fluviali*, a cura di G. Motta, C. Ravagnati, Milano 2008, pp. 164-176.

¹⁰ Geoportale Arpa Piemonte, aggiornato al 2024: *Carta Geologica Interattiva del Piemonte (Progetto GeoPiemonteMap)*.

¹¹ *Cambiamenti climatici sulla montagna piemontese*, a cura di Luca Mercalli, Bussoleno 2008; S. MONTUSCHI, G. ALLAIS, *I risultati: dalle cronache storiche, scarse evidenze di un Medioevo caldo*, "Nimbus", 65-66, 2012, 2, pp. 25-48; L. MERCALLI, D. CAT BERRO, *Due mila anni di clima in Val di Susa. Da Annibale al riscaldamento globale*, Moncalieri 2018.

¹² C. PFISTER, *I cambiamenti climatici nella storia dell'Europa. Sviluppi e potenzialità della climatologia storica, in Che tempo faceva? Variazioni del clima e conseguenze sul popolamento umano. Fonti, metodologie e prospettive*, a cura di L. Bonardi, Milano 2003, pp. 19-59; W. BEHRINGER, *Storia culturale del clima. Dall'Era glaciale al Riscaldamento globale*, Torino 2013; B. CALDER, *Architettura ed energia. Dalla preistoria all'emergenza climatica*, Torino 2022, pp. 139-157. Per un approccio globale alla storia dell'ambiente, si veda E. PADOA SCHIOPPA, *Storia ecologica dell'Europa. Un continente nell'Antropocene*, Bologna 2023.

¹³ AST, *Corte, Opere pie per comuni e borgate*, marzo 213, 30 marzo 1379.

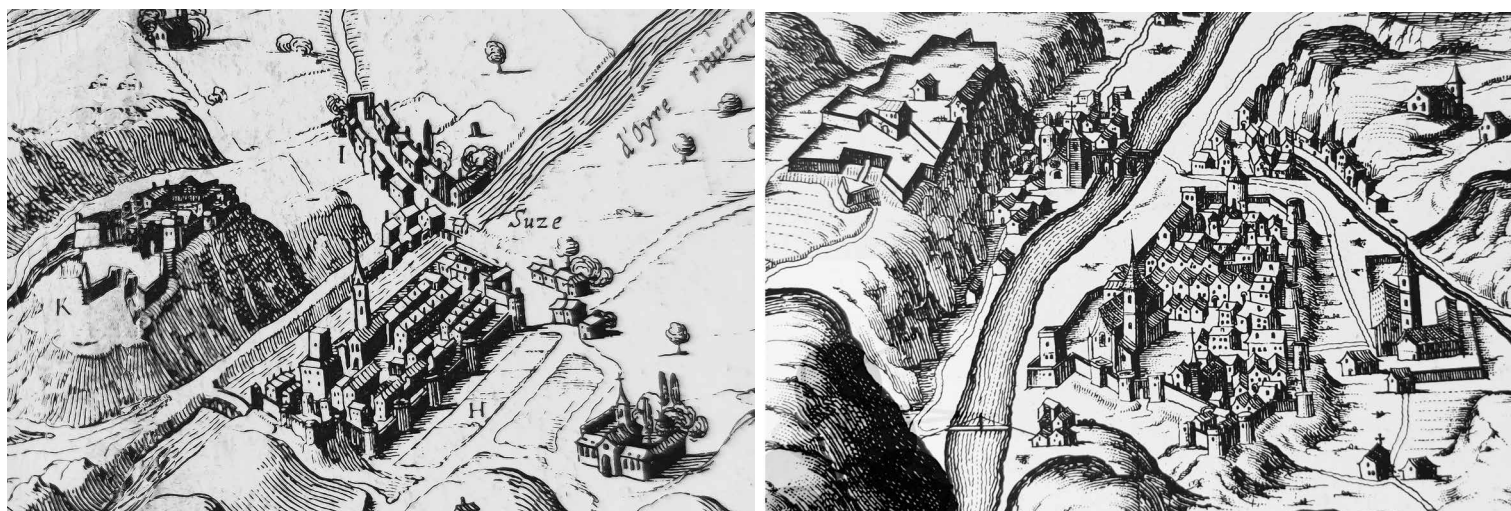


Fig. 4 A. Bosse, J. De Beins, *Plan au vray tant de la prise de la ville de Suze...*, 1629. Dettaglio dell'abitato con la cappella della Madonna del Ponte (da A. PEYROT, *Le Valli di Susa e del Sangone. Vedute e piante, feste e cerimonie dal XIII al XIX secolo*, I, Torino 1986, p. 33).

Fig. 5 N. Tassin, *Plans et profils*, in V. CORONELLI, *Teatro delle Città*, I, Venezia 1697, t. 79. Dettaglio dell'abitato con la chiesa della Madonna del Ponte (da PEYROT, *Le Valli di Susa e del Sangone...* cit., p. 48).

I ponti rappresentati nelle due raffigurazioni risultano essere differenti tra di loro: se all'inizio del Diciassettesimo secolo di distinguono due infrastrutture di modeste dimensioni, dall'impianto semplice e sorrette da piloni, alla fine del Seicento la loro configurazione appare del tutto diversa. Si riconosce una sorta di passerella subito fuori dall'insediamento, sostenuta da una struttura centrale connessa a terra tramite una sorta di strallo. Il ponte di collegamento lungo il principale asse stradale risulta invece massiccio e di ampie dimensioni, verosimilmente per consentire il passaggio di carri. La struttura sembra essere rappresentata in muratura, sostenuta da due archi e da un rostro triangolare collocato sul pilone centrale, per rafforzare il sostegno durante i periodi di piena.

L'esigenza di rinforzare le infrastrutture rispetto alle impetuose esondazioni della Dora, si riscontrano negli stessi anni anche in altre aree della Valle di Susa. In particolare, si segnala la piena del torrente Gravio nei pressi di Villar Focchiardo del 1685, in cui la forza delle acque aveva provocato "la rottura del muraglione che si ritrova a fianco del torrente"¹⁴. All'incirca al medesimo periodo potrebbe risalire il crollo dei ponti di Susa presenti ancora nei disegni di inizio Seicento.

Un esempio analogo lo si può ritrovare a Bussoleno, a pochi chilometri da Susa. Nei disegni di Clemente Rovere del 1842 si riconosce la presenza del ponte sopra la Dora, verosimilmente ricostruito nel Diciassettesimo secolo in maniera simile all'originale ponte medievale distrutto in precedenza. L'infrastruttura, che collegava il centro urbano circondato da mura e il nuovo nucleo di espansione nelle campagne al di là del fiume, si caratterizza per uno stile costruttivo molto simile al ponte segusino del disegno del 1697.

La presenza di un pilone centrale e di due arcate laterali consentiva verosimilmente di fronteggiare in maniera più efficace le piene del corso d'acqua. In seguito ai danneggiamenti riportati dovuti al regime di piena della Dora, il ponte venne abbattuto e ricostruito alla fine del Diciannovesimo secolo in muratura e in pietra, con tiranti in ghisa e sostenuto da archi a sesto ribassato (fig. 6)¹⁵.

Un osservatorio significativo del rapporto tra la storia dell'architettura e quella ambientale è la prevostura di San Lorenzo a Oulx. La canonica, fondata nella prima metà dell'Undicesimo secolo, fu costruita su un'area pianeggiante e particolarmente fertile, formata dall'accumulo sedimentario generato dal rallentamento delle correnti nel punto di confluenza tra la Dora Riparia e la Dora di Bardonecchia. I documenti risalenti al 1434 riportano di importanti esondazioni avvenute circa venticinque anni prima, nel 1409, soffermandosi su "Oulx dove fino al secolo precedente la piana non era che prati e vegetazione, oggi è ridotta a pietrosa e rovine portate dalle acque"¹⁶. Le fonti archivistiche attestano la ripresa del complesso da tali eventi calamitosi. Tuttavia la situazione ambientale avversa favorì il lento declino delle sue pertinenze terriere a partire dal Quindicesimo secolo.

Nel 1728 si registra il più grande fenomeno alluvionale dell'area, che investì l'intera Valle di Susa causando gravissimi danni¹⁷. Numerose cronache riportarono dell'inondazione e dei danneggiamenti provocati nel territorio, tra cui la più dettagliata è attribuita al canonico di San Lorenzo, Carlo Telmon¹⁸. La prevostura di Oulx, che era riuscita a rispondere fino a quel momento agli eventi alluvionali che l'avevano colpita, non seppe far fronte alla violenza dei fenomeni

¹⁴ AST, *Camera Piemonte*, marzo 6, art. 471, 16 luglio 1728.

¹⁵ L. PALMUCCI QUAGLINO, M.G. VINARDI PIPITONE, *Il sistema delle fortificazioni nella bassa Valle di Susa: torri, castelli, case-forti, cinte, fortificazioni*, in *Atti del corso di cultura castellana*, Torino 1982, pp. 49-67; P.L. PATRIA, *Bussoleno com'era: il borgo medievale*, Borgone Susa 2000; A. PANICCO, *Architetture fortificate scomparse: la cinta muraria di Bussoleno in Valle di Susa*, in *Città e guerra. Difese, distruzioni, permanenze delle memorie e dell'immagine urbana*, II (Tracce e patrimoni), a cura di R. Amore, M.I. Pascariello, A. Veropalumbo, Napoli 2023, pp. 493-499.

¹⁶ R. BLANCHARD, *Les Alpes Occidentales*, VI (Le versant Piémontais), I-II, Grenoble 1954, pp. 553-554.

¹⁷ G. RODDI, *L'inondazione del 1728 in Valsusa e la Prevostura d'Oulx, "Segusium"*, 18, 1989, pp. 65-79.

¹⁸ A. BOGGE, *L'alluvione del 1728 in Val di Susa (da un documento inedito del canonico Carlo Telmon)*, "Studi Piemontesi", IV, 1975, 2, pp. 379-397.



Fig. 6 Ponte di Bussoleno sulla Dora Riparia edificato alla fine del XIX secolo, in una cartolina del 1950 ca. (foto A. Panicco).

del Diciottesimo secolo, causati dal cambiamento climatico, che ne distrussero buona parte dei fabbricati e dei territori. La *Carta tipografica della Prevostura d'Oulx et beni a essa adiacenti con l'annotazione de danni ricevuti dall'inondazione seguita li 20 maggio 1728* datata al 1735 circa¹⁹, rappresenta il complesso in seguito ai danni riportati. Nel documento si evidenziano per iscritto le perizie relative ai deterioramenti degli spazi e i precedenti interventi riguardanti l'edificazione di canali, dighe e muraglioni nel vano tentativo di arginare la sponda fluviale (fig. 7). I costi preventivati per la ricostruzione del complesso furono talmente elevati che a partire dal 1749 la canonica ulcense venne abbandonata²⁰. In seguito alla soppressione della diocesi di Susa per volere napoleonico nel 1804 e la rinnovata istituzione nel 1817, la collegiata entrò a far parte del patrimonio segusino²¹. La chiesa intitolata a San Pietro venne ricostruita a partire dal 1886 e consacrata nel 1904 con il nome di Sacro Cuore di Gesù e gestita dai salesiani (fig. 8). Oggi l'edificio è riconosciuto dalla comunità ulcense per la sua valenza religiosa e per la condivisione degli spazi con l'attiguo centro di accoglienza "Rifugio Fraternità Massi", destinato ai migranti di passaggio in Alta Valle di Susa. Dell'antica prevostura non rimangono tracce del periodo di fondazione, tuttavia la testimonianza della memoria medievale del luogo si conserva nell'arco di accesso allo spazio della chiesa (fig. 9).

La relazione tra i centri urbani e le caratteristiche naturali della valle alpina offre l'opportunità di sviluppare una riflessione sulla *longue durée*, sottolineando come lo studio della storia am-

bientale necessiti di un'analisi sul lungo periodo per comprendere le interazioni profonde tra territorio e cambiamenti climatici. Nel Ventesimo secolo ritroviamo altri significativi eventi calamitosi, tra cui l'esondazione che colpì l'intera Valle di Susa nel giugno del 1957. I documenti e le fotografie permettono di osservare che i territori più colpiti furono gli insediamenti collocati sui conoidi alluvionali. Proprio su queste aree le testimonianze archivistiche registrano la maggiore incidenza dei fenomeni alluvionali nei secoli. Tra le località maggiormente interessate si riscontra Oulx, la cui piana fu interamente sconvolta dalle esondazioni della Dora di Cesana e dalla Dora di Bardonecchia al punto che fu chiamato l'esercito per provvedere al taglio della massicciata ferroviaria per tentare di far confluire le acque esondate nei fiumi. Il torrente Cenischia rischiò di travolgere l'abitato di Novalesa e più a valle, alla confluenza con il rio Crosiglione, generò un nuovo alveo. A Bussoleno venne allagata la sede ferroviaria e buona parte degli edifici collocati lungo la sinistra orografica della Dora (fig. 10)²². Poco distante, a Chianocco, il rio Prebec rovesciò sul conoide e sull'abitato parte del materiale alluvionale per una stima di circa 50.000 m³:

16 giugno 1957 il Rio Prebec si ingrossa trascinando massi e piante e straripa [...]. Come scoppio di bomba il Rio esce dal letto [...]. Il Rio si è aperto un nuovo letto e irrompe tra i boschi e le vigne e si scarica collegandosi con il Rio di Bruzolo, dicono che il Rio abbia così ripreso il vecchio letto. [...] Con tutto questo disastro i danni alle opere pubbliche e alle campagne salgono a 800 milioni [...]”²³.

¹⁹ AST, *Sezioni Riunite*, Carte topografiche e disegni, Camerale Piemonte, Prevostura di Oulx, mazzo 1, art. 735.

²⁰ P.L. PATRIA, *La canonica regolare di S. Lorenzo d'Oulx e i Delfini: poteri locali e regionali a confronto (sec. XI-XIII)*, in *Esperienze monastiche in Val di Susa*, a cura di Id., P. Tamburino, Susa 1989, pp. 81-114; C. Tosco, *Architetture del Medioevo in Piemonte*, Savigliano 2003; C. Tosco, *Architettura e paesaggio alpino nell'età romanica*, in *Valle di Susa. Tesori d'arte*, a cura di C. Bertolotto, Torino 2005, pp. 90-92; A. PANICCO, *La resilienza della prevostura di Oulx tra medioevo ed età moderna*, in *Città che si adattano?*, a cura di R. Tamborino, II (Adattabilità in circostanze ordinarie), a cura di C. Devoti, P. Bolca, Torino 2024, pp. 225-237.

²¹ N. BARTOLOMASI, S. SAVI, F. VILLA, *Storia, arte, attualità della Chiesa in Val Susa*, Cuneo 1972, p. 76; C. MAURICE, *Vie sociale politique et religieuse du Briançonnais. Les écartons d'Oulx et du Pragelas au XVIIIème siècle. Névache et ses seigneurs au XVème siècle*, "Segusium", 11-12, 1976, pp. 93-97.

²² Si vedano le fotografie nella rivista settimanale "Epoca", XXVII, fasc. 351, 23 giugno 1957.

²³ Archivio Storico di Susa, Fondo Parrocchia di Chianocco. Per ulteriori approfondimenti sui regimi di piena del Prebec: G. MORTARA, *Osservazioni preliminari nel bacino del Torrente Prebec (Valle di Susa)*, Torino 1975; M. BIROGLIO, G. BOTTINO, M. ROSSO, *Valutazione della pericolosità connessa con gli eventi di piena nel bacino del torrente Prebec (Val di Susa)*, "Geam. Geoingegneria Ambientale e Mineraria", XXX-VII, 102, 2001, 1, pp. 9-19; *Cambiamenti climatici sulla montagna piemontese...* cit.



Fig. 7 Carta tipografica della Prevostrura d'Oulx et beni a essa adiacenti con l'annotazione de danni ricevuti dall'inondazione seguita li 20 maggio 1728, 1735 (AST, Sezioni Riunite, Carte topografiche e disegni, Camerale Piemonte, Prevostrura di Oulx, mazzo 1, art. 735).

Fig. 8 Chiesa del Sacro Cuore di Gesù a Oulx (costruita 1886-1895, consacrata nel 1904) (foto A. Panico).



La conoscenza della storia ambientale diventa pertanto determinante per comprendere i fenomeni idrogeologici che insistono su un determinato territorio, permettendo di individuare la ricorrenza degli eventi. Tali elementi rapportati allo studio dello sviluppo del sistema insediativo e delle caratteristiche architettoniche locali, forniscono interessanti dati riguardanti la rispo-

sta sociale agli eventi calamitosi e sottolineano i possibili effetti dei fenomeni alluvionali. In tale quadro diventa sempre più urgente porsi il quesito: se lo studio della storia ambientale aiuta a individuare alcune dinamiche alluvionali ricorrenti, si possono prevedere i possibili effetti futuri di un eventuale evento calamitoso e, di conseguenza, prevenire il danneggiamento dei beni patrimoniali?



Fig. 9 Arco di accesso alla prevostura di Oulx (foto A. Panicco).

Fig. 10 Area della stazione ferroviaria di Bussoleno allagata per l'esondazione della Dora e del rio Moletta (da "Epoca", XXVII, 351, 23 giugno 1957).



Attualmente attraversiamo una fase di grandi cambiamenti climatici, che generano sempre più frequenti impatti sul territorio e sulle architetture, comportando gravi rischi di perdita del valore culturale di un luogo. Diviene pertanto fondamentale interrogarsi su quali potrebbero essere le strategie da mettere in atto per salvaguardare l'eredità culturale prevenendo il rischio idrogeologico. Gli studi scientifici non dovrebbero essere orientati esclusivamente sulle attuali condizioni ambientali, ma aprirsi alla storia del paesaggio, applicando i metodi dell'indagine regressiva. Soltanto l'analisi della risposta delle architetture agli effetti delle sollecitazioni clima-

tiche consente di promuovere efficaci politiche di monitoraggio e di valorizzazione. Lo studio storico del paesaggio odierno necessita del continuo dialogo tra più discipline per concordare azioni coordinate, consapevoli e integrate per la tutela del patrimonio culturale.

ÉCOLOGIES, PERFORMANCES, POUVOIRS : QUESTIONNER L'IMAGE D'ARCHITECTURE AU PRISME DES ÉTUDES VISUELLES

As a vehicle for societal and ecological projection, the architectural image – understood as encompassing both representations of architectural and urban projects and the broader category of images produced within, for, and by architectural communication – constitutes a uniquely operative corpus within the framework of globalized visual culture. How, then, can its underrepresentation within the diverse materials considered by the interdisciplinary field of visual studies be explained? Drawing on examples from Francophone, Germanophone, and Anglophone scholarly traditions, this article traces the missed encounter between two largely incompatible conceptions of the architectural image – differing in terms of object, methodology, and epistemological stakes – characteristic of visual studies on the one hand and architectural and urban research on the other. It then outlines the conditions under which such an encounter might become possible, mobilizing the concepts of ‘ecology’, ‘performativity’, and ‘power’ of images as critical tools for reexamining representations of/for architecture. Crucially, integrating the architectural image into the agenda of visual studies necessitates a cross-pollination between image theory and architectural history.

Dans *Image Science*, le théoricien des études visuelles W.J.T. Mitchell fait état de son humilité au regard de l'architecture, un objet d'étude qu'il perçoit comme nécessitant une initiation¹. Il écrit :

Comme je parle en tant que non-expert et étranger aux préoccupations professionnelles de la communauté architecturale, j'offre ces commentaires avec beaucoup d'hésitation et sous réserve de correction. Mon expertise se situe dans les domaines de la théorie de l'image, des médias et de la culture visuelle. Ma stratégie consistera donc à réfléchir à certaines caractéristiques notables de l'architecture spectaculaire, qui attire l'attention à notre époque, en particulier lorsqu'elle dialogue avec deux médias étroitement liés, les arts graphiques et la sculpture. Ces deux médias semblent nécessairement liés au problème de l'architecture, ne serait-ce que parce que, d'une part, une grande partie de l'architecture contemporaine semble aspirer à la condition de sculpture et que, d'autre part, l'architecture 'proprement dite' est avant tout une activité graphique, une activité imageante, et non l'activité réelle d'ériger des bâtiments².

Domaine qui lui est étranger, 'l'activité imageante' des architectes échapperait ainsi, de son propre aveu, à son expertise "de la théorie de l'image, des médias, et de la culture visuelle"³. Plus encore, la frontière entre ce qui relève de "l'architecture 'proprement dite'" et ce qui relève des études visuelles serait régie par les "préoccupations professionnelles de la communauté architecturale", définissant des 'insiders' et des 'outsiders'. Outsider revendiqué, Mitchell renonce aux approches qu'il développe alors depuis trois décennies pour appréhender les

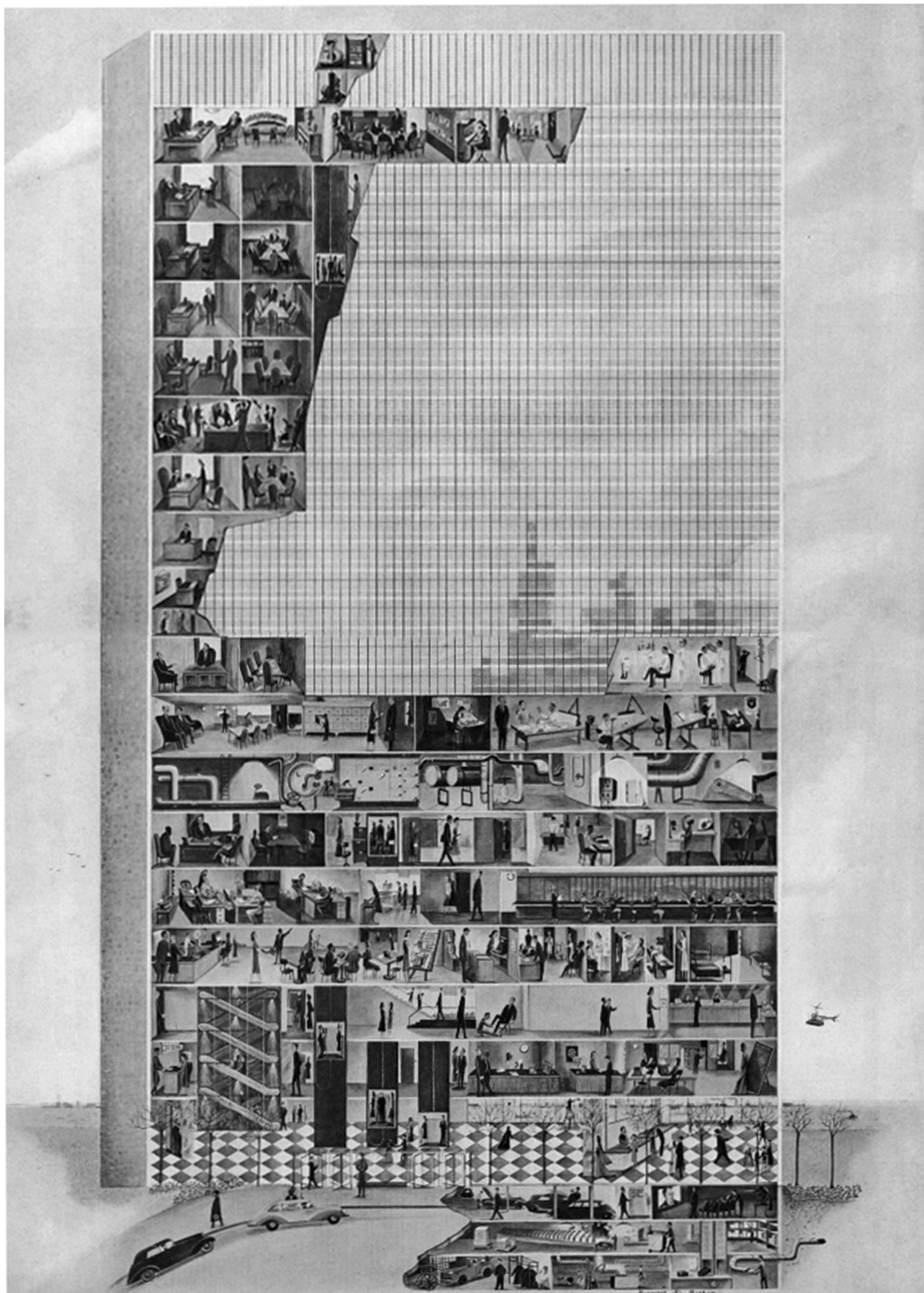
images issues des domaines les plus variés – régimes de plausibilité, rapport au texte, désir des images ou encore performativité – afin de réfléchir aux "caractéristiques notables de l'architecture spectaculaire, qui attire l'attention à notre époque"⁴. Ce faisant, il situe la dimension 'iconique' de l'architecture au niveau des objets tridimensionnels issus de cette activité, qu'il rapproche de la sculpture⁵.

Questionnant cette frontière entre l'architecture et les études visuelles, notre essai explore l'hypothèse d'un croisement entre les deux champs ; plus précisément, il aborde un type d'image quasi-inexploité par les spécialistes des études visuelles, soit l'image d'architecture, entendue comme une figuration réaliste qui "[s']efface" au bénéfice de l'objet représenté, selon une convention de lecture transparente [...] mettant en jeu une dimension utopique projetée vers le futur"⁶. Cette catégorie inclut les perspectives de projets, les photographies de réalisations récentes, et plus généralement, les représentations ayant pour fonction de porter le projet d'architecture vers le public non-initié de la culture de masse : reportages illustrés, annonces de promoteurs immobiliers, prospectus édités par les municipalités, ou encore visions prospectives d'un futur plus lointain – villes flottantes, Smart Cities, villes sur Mars – diffusées dans le cadre de sujets de vulgarisation scientifique (fig. 2-4)⁷.

Dans cet essai, le terme 'image d'architecture' sera ainsi à comprendre au sens d'*architecture-picture*, suivant une distinction entre *picture* et *image* également posée par Mitchell :

Vous pouvez accrocher [au mur] une *picture*, mais vous ne pouvez pas accrocher une *image*. La *picture* est un objet matériel, une chose que vous pouvez brûler ou abîmer. L'*image* est ce qui apparaît dans une *picture* et qui survit à sa destruction – dans la mémoire, dans le récit, dans des copies et des traces au sein d'autres médias. [...] L'image n'apparaît jamais sans média, mais elle est aussi ce qui transcende les médias, ce qui peut être transféré d'un média à un autre⁸.

Nous allons montrer que l'image d'architecture est le lieu d'un 'double-point aveugle' épistémologique, à la fois dans le champ des études visuelles, comme nous venons de le voir, et dans le champ de la recherche architecturale et urbaine, où elle est toujours l'image *de* quelque chose avant d'être une image tout court. Pour étayer notre argument, nous retracerons, dans un premier temps, les termes d'une rencontre manquée entre deux conceptions de l'image d'architecture qui s'ignorent, avant d'envisager, dans un deuxième temps, les conditions de possibilité d'une telle rencontre, à la croisée de la recherche architecturale et urbaine et des études visuelles ; en guise d'armature conceptuelle, nous mobiliserons les notions d'écologie des images', de 'performance des images', et de 'pouvoir de la représentation' qui en sont issues. Enfin, dans une étude de cas, nous questionnerons une image d'architecture, non pour ce qu'elle 'montre', ni pour son rôle dans un processus de projet, mais à partir des enjeux critiques qu'elle soulève – autrement dit, pour ce qu'elle 'fait' dans la société⁹. Au-delà de promouvoir une approche critique des représenta-



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Fig. 1 M.B. Graham, *Le bâtiment du secrétariat des Nations Unies à New York. Coupe transversale de l'intérieur* ("Vogue", 1 novembre 1952 ; collection privée).

Fig. 2 Abiboo Studio, *Images de synthèse de Nüwa sur la planète Mars*, 2021 (© ABIBOO Studio).

¹ Voir Maxime Boidy, *Les études visuelles*, Saint-Denis 2017. Concernant les différentes acceptions, orientations et appellations du champ, des *Visual Studies* à la *Visual Culture*, en passant par les *Visual Culture Studies*, voir W.J.T. MITCHELL, *Image Science: Iconology, Visual Culture, and Media Aesthetics*, Chicago 2015, pp. 5-40. Voir aussi F. BRUNET, *Théorie et politique des images* : W.J.T. Mitchell et les études de visual culture, "Études Anglaises", 58, 2005, 1, pp. 82-93.

² W.J.T. MITCHELL, *Back to the Drawing Board: Architecture, Sculpture and the Digital Image*, dans Id., *Image Science...* cit., pp. 137-152 : 138, trad. fr. par M.M. OZDOBA (sauf indication contraire, les citations en langue anglaise et allemande sont traduites par l'auteure). Mitchell précise : "L'architecture a pris la place occupée jadis par la sculpture, s'imposant comme un art de l'image et des monuments iconiques dominant les espaces qui les entourent, attirant l'attention du monde" : *ivi*, p. 143.

³ *Ivi*, p. 138.

⁴ Les corpus traités par Mitchell s'étendent de l'art contemporain à l'imagerie scientifique, et de la couverture de la première guerre du Golfe par CNN aux dinosaures de *Jurassic Park*. Voir BRUNET, *Théorie et politique des images...* cit., pp. 85-88 ; M. BOIDY, S. ROTH, *Avant-propos : Indiscipline de l'image*, dans *Iconologie. Image, texte, idéologie*, sous la direction de W.J.T. Mitchell, trad. fr. par M. Boidy, N. Cilins, S. Roth, Paris 2009 (première éd. Chicago 1986) ; M. BOIDY, S. ROTH, *Avant-propos*, dans *Que veulent les images ? : Une critique de la culture visuelle*, sous la direction de W.J.T. Mitchell, trad. fr. par M. Boidy, S. Roth, Dijon 2014, pp. 7-13.

⁵ MITCHELL, *Back to...* cit., p. 138.

⁶ Cette définition de l'image d'architecture est le fruit d'un séminaire de recherche que j'ai coorganisé avec Raphaële Bertho au Centre d'histoire et de théorie des arts (EHES) ; voir R. BERTHO, M.M. OZDOBA, *L'image dans ses usages projectifs, réflexions de synthèse*, dans *Picturing Architecture*, 3 septembre 2013, <https://picturingarchitecture.wordpress.com/2013/09/03/limage-dans-ses-usages-projectifs-reflexions-de-synthese/> (consulté le 4 mars 2025). Elle cible les usages transparents de l'image d'architecture, à l'attention d'un public non-initié. Les représentations techniques (plans, coupes, maquettes d'étude, etc.) circulant entre les acteurs du projet (architectes, ingénieurs, maîtres d'ouvrage, maîtres d'œuvre, etc.) ne sont pas abordées dans le cadre de cet article.

⁷ Les images de synthèse de Nüwa, capitale de la première colonie humaine sur la planète Mars (projet de l'agence Abiboo Studio, endossé sur Twitter par Elon Musk), ont été diffusées sur une série de blogs et de sites internet en 2021. Voir, par exemple, D. DOUÏEB, *Mars : voici à quoi ressemblera la première ville sur la planète rouge*, dans *papergeek*, 24 mars 2021, <https://www.papergeek.fr/mars-voici-a-quoi-pourrait-ressembler-la-ville-quelon-musk-veut-y-construire-2436539> (consulté le 4 mars 2025).

⁸ W.J.T. MITCHELL, *Les quatre concepts fondamentaux de la science de l'image*, dans Id., *Image Science...* cit., pp. 17-27 : 21-22. Sur la question de l'intermédialité en lien avec l'architecture dans les jardins, voir D. RIBOULLAULT, *L'architecture au jardin : de la représentation à la transfiguration*, "Le Visiteur", 25, 2020, 1, pp. 83-98, <https://shs.cairn.info/revue-le-visiteur-2020-1?lang=fr> (consulté le 4 mars 2025).

⁹ M. DE CERTEAU, *L'invention du quotidien*, I (*Arts de faire*), Paris 1980.

¹⁰ J. EMERLING, R. GARDNER, *Introduction: Architecture! (To Be Said Excitedly but with Real Frustration)*, "Journal of Visual Culture", 15, 2016, 3, pp. 295-200 : 295.

¹¹ Outre un relevé des 'readers' en études visuelles parus depuis la fin des années 1990 (notamment *The Visual Culture Reader*, edited by N. Mirzoeff, London 1998 ; *The Feminism and Visual Culture Reader*, edited by A. Jones, London 2003 ; *The Nineteenth-Century Visual Culture Reader*, edited by V.R. Schwartz, J.M. Przyblyski, New York 2004) et des livraisons du "Journal of Visual Culture" fondé en 2003, qui offrent une vision panoramique des corpus mobilisés dans ce champ de recherche interdisciplinaire, je fonde ce constat sur mon expérience de la recherche en études visuelles au Royaume Uni et en France, comme étudiante en Master au Depart-

tions sd'architecture à l'échelle des sciences humaines et sociales, il s'agit également, à travers cette réflexion, d'affirmer le potentiel inhérent à l'ancrage des études visuelles dans les enjeux et les pratiques historiquement situés du projet architectural et urbain.

Les études visuelles à la rencontre de l'architecture : une épistémologie de l'espace

Une recherche sur le mot-clé 'architecture' dans la principale revue du champ interdisciplinaire des études visuelles – le *Journal of Visual Culture*, fondé en 2002 – permet de se convaincre de la faible représentation du sujet, à l'exception du numéro spécial *Architecture!* de 2016, dans lequel les éditeurs Jae Emerling et Ronna Gardner constatent "l'incapacité de l'architecture contemporaine à aborder l'ensemble des enjeux complexes soulevés par les études visuelles"¹⁰. En effet, tandis que lesdits enjeux sont abordés à travers des corpus aussi divers que l'art contemporain, les icônes religieuses, la peinture de genre, ou encore les images de propagande, l'image d'architecture en demeure singulièrement absente¹¹. Pour pallier à ce déficit, les contributeurs du numéro spécial entreprennent – à l'instar de Mitchell dans *Image Science*, cité dans l'introduction – d'emmener la pratique architecturale sur le terrain de l'image. Conservateur pour l'architecture au MoMA de New York, Martino Stierli soutient, dans cet esprit, que "les architectes n'ont pas attendu le 'tournant iconique' pour concevoir leurs bâtiments de manière à ce qu'ils soient photographiables et s'impriment dans la mémoire"¹².

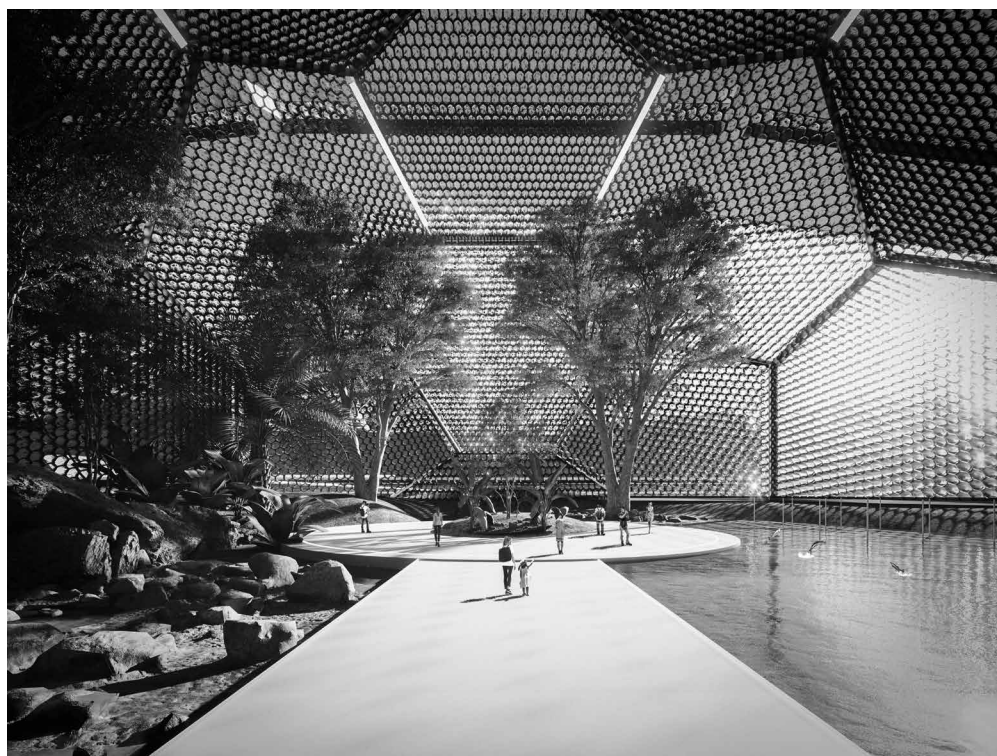
Selon un biais hérité de l'histoire de l'art, les contributeurs du volume appréhendent l'architecture comme un art qui se manifeste dans des œuvres – qu'il s'agisse des édifices réalisés ou, par extension, de la production graphique des architectes dans le cadre du projet (plans, coupes, perspectives, collages, maquettes numériques, etc.). Ainsi, un prisme essentiellement 'spatial' domine les études visuelles dans leur approche de l'architecture, qui privilégie une attention à

la dimension immersive conférée par l'architecture au problème de l'image. C'est aussi le cas du colloque organisé en 2007 par le centre *Eikonos* pour la théorie et l'histoire de l'image à l'université de Bâle, où les tenants de la *Bildwissenschaft*, branche germanophone des études visuelles, entreprennent de se saisir du thème architectural¹³. Cosignant l'introduction de l'ouvrage issu de cette rencontre, intitulée "Sur l'apparition de l'architecture comme image" (*Zum Erscheinen von Architektur als Bild*), Matteo Burioni, Johannes Grave et Andreas Beyer entendent tirer profit de la perspective inédite offerte par l'architecture pour 'dépasser' une compréhension de l'image jugée restrictive ("verengte Bildbegriffe aufbrechen") à l'aune d'une dimension spatialisée qui tienne compte de "la relation fondamentale entre l'espace constitué par l'architecture et la corporalité de l'être humain". D'autant plus, écrivent-ils,

que les approches d'une théorie de l'image ou d'une science historique de l'image ont été développées presque exclusivement à partir de l'exemple de la peinture, de la photographie, du film et des nouveaux médias. Si l'on prend l'architecture au sérieux dans ce contexte, en tant qu'objet pleinement légitime, elle peut s'offrir comme un surprenant défi pour l'élaboration d'une théorie [de l'image]¹⁴.

Tandis que la *Bildwissenschaft* – authentique 'science des images' – déploie un arsenal puissant pour problématiser les *pictures*, leur argumentaire relie l'imagéité (*Bildlichkeit*) de l'architecture à sa seule condition 'd'art de l'espace'.

L'imagéité se révèle alors être une propriété de l'architecture qui s'actualise en fonction de situations et qui n'est pas nécessairement prescrite par la configuration du bâtiment [...]. C'est une expérience spatiale plutôt intuitive et quotidienne, une manière d'habiter ou d'utiliser, qui peut se muer – même brièvement – en un regard conscient qui répond à une impression particulière. Ce regard sur la construction ne se porte pas forcément sur le contexte structurel, ni sur l'architectonique à proprement parler, il peut se détacher de l'intégration fonctionnelle des matériaux pour en privilégier les qualités sensorielles¹⁵.



Dans un chapitre consacré aux architectes Venturi et Scott Brown, Martino Stierli conceptualise ainsi la ville automobile à partir du regard par le pare-brise, telle une suite cinématographique de vues. Convoquant Walter Benjamin, il entend “comprendre et [...] construire la ville américaine dans son ‘éparpillement’, plutôt que de concevoir des alternatives nostalgiques ou modernistes”¹⁶.

De fait, la primauté accordée à l’expérience immersive dans les espaces architecturaux et urbains peut se retracer dans les travaux précurseurs du champ des études visuelles, consacrés au déploiement de la modernité¹⁷. A commencer par Walter Benjamin, qui met l’accent sur une rencontre ‘spatialisée’ entre les constructions architecturales et un public, relevant selon ses termes d’une “impression fortuite” :

Les constructions architecturales sont l’objet d’un double mode de réception : l’usage et la perception, ou mieux encore : le toucher et la vue. On ne saurait juger exactement la réception de l’architecture en songeant au recueillement des voyageurs devant les édifices célèbres. Car il n’existe rien dans la perception tactile qui corresponde à ce qu’est la perception dans la réception optique. La réception tactile s’effectue moins par la voie de l’attention que par celle de l’habitude. En ce qui concerne l’architecture, l’habitude détermine dans une large mesure même la réception optique. Elle aussi, de par son essence, se produit bien moins dans une attention soutenue que dans une impression fortuite¹⁸.

Héritiers de cette approche, Phil Ethington et Vanessa Schwartz – respectivement professeur en histoire urbaine et directrice du Visual Studies Research Institute à l’USC (University of Southern California) – ont consacré un projet de recherche aux icônes urbaines (*Urban Icons Project*), visant à contextualiser l’architecture remarquable des métropoles contemporaines à l’aune d’un processus de ‘spectacularisation’, en s’appuyant sur une série d’édifices ‘faisant image’ ou ‘consommés pour leur imagéité’. Transformant le chaos de l’expérience urbaine en signification, le concept d’icône urbaine permet, selon eux, “d’établir des liens entre la spatialité concrète de la ville et la spatialité métaphorique des ‘paysages imaginaires’, entre le matériel et l’idéal, entre les formes sur le terrain et les formes dans l’esprit” : s’ils se penchent sur les représentations d’architecture, depuis le Colisée jusqu’à la tour Eiffel, c’est ‘dans leur relation’ à l’expérience de ces architectures dans l’espace urbain¹⁹. Conformément à cette orientation spatiale, les résultats du *Urban Icons Project* furent publiés dans la revue *Urban Studies* plutôt que dans une revue d’études visuelles. Comme l’illustrent ces exemples, l’appréhension de l’architecture comme ‘image spatialisée’ dans le champ de recherche interdisciplinaire des études visuelles semble se faire au détriment d’une prise en compte de l’image d’architecture au sens de *picture*.

ment of Visual Cultures de Goldsmiths College (University of London), puis comme doctorante au Laboratoire d’histoire visuelle contemporaine, au sein du Centre d’histoire et de théorie des arts de l’EHESS à Paris.

¹² M. STIERLI, *Architecture and Visual Culture: Some Remarks on an Ongoing Debate*, “Journal of Visual Culture”, 15, 2016, 3, pp. 311-316 : 313. Pour avancer cet argument, Stierli s’appuie sur les ouvrages de B. COLOMINA, *Privacy and Publicity. Modern Architecture as Mass Media*, Cambridge 1996, et de C. ZIMMERMAN, *Photographic Architecture in the Twentieth Century*, Minneapolis 2014.

¹³ M. BURIONI, J. GRAVE, A. BEYER, *Einleitung. Zum Erscheinen von Architektur als Bild*, in *Das Auge der Architektur. Zur Frage der Bildlichkeit in der Baukunst*, herausgegeben von Id., Paderborn 2011, pp. 11-37 : 12-13.

¹⁴ Le texte critique la tendance de la théorie de l’architecture depuis le dix-huitième siècle, à “situer l’aspect pictural de l’architecture soit dans sa fonction de signe, soit dans le travail des surfaces planes ou le cadrage de points de vue particuliers sur les édifices”, qui s’orientent vers l’idéal du tableau moderne mais ne rendent pas justice à “certaines dispositions fondamentales de l’architecture conçue comme un art de l’espace”. Ivi, pp. 11, 15. Sur le même sujet voir *Das Diaphane: Architektur und ihre Bildlichkeit*, herausgegeben von U. Kuch, Bielefeld 2020.

¹⁵ BURIONI, GRAVE, BEYER, *Einleitung...* cit., p. 19.

¹⁶ M. STIERLI, *Die ‘Er-Fahrung’ der Stadt. Las Vegas, Film und der Blick aus dem Auto*, in *Das Auge der Architektur...* cit., pp. 423-465.

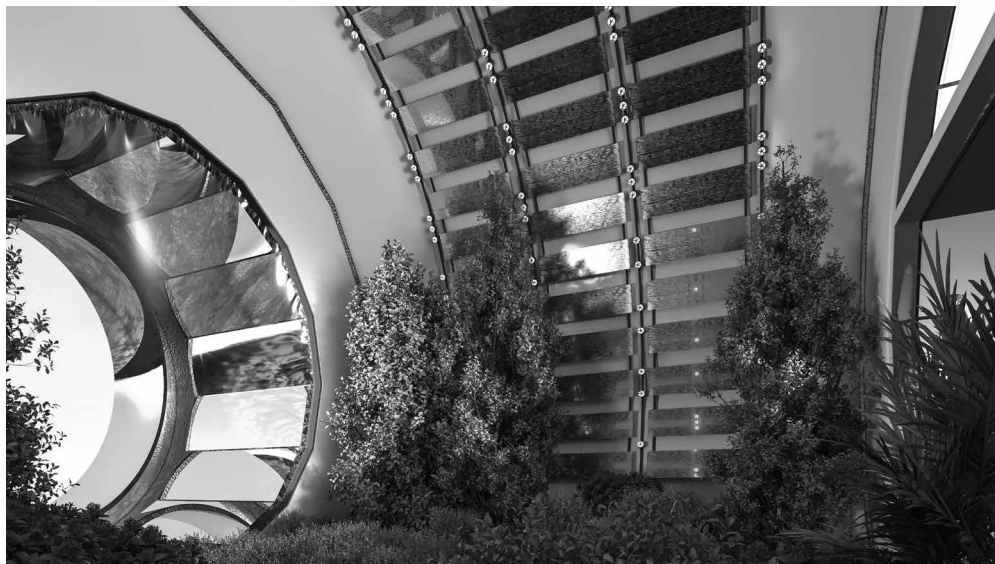
¹⁷ Sur la modernité comme principale clé de lecture des changements de la culture visuelle au dix-neuvième siècle, voir *The Nineteenth-Century Visual Culture Reader...* cit.

¹⁸ W. BENJAMIN, *L’œuvre d’art à l’époque de sa reproduction mécanisée*, “Zeitschrift für Sozialforschung”, V, 1936, 1, pp. 40-68 : 64. Ce passage est également convoqué par MITCHELL, *Image Science...* cit., p. 128.

¹⁹ P. ETHINGTON, V. SCHWARTZ, *Introduction: An Atlas of the Urban Icons Project*, “Urban History”, 33, 2006, 1, pp. 5-19 : 9-10, 13. Dans *Jet Age Aesthetic*, Schwartz analyse l’architecture des aéroports au regard d’une “culture du mouvement” qui s’est épanouie dans l’après-guerre, privilégiant là aussi le prisme spatial. V.R. SCHWARTZ, *Jet Age Aesthetic: The Glamour of Media in Motion*, New Haven 2020.

Fig. 3 Abiboo Studio, Images de synthèse de Nüwa sur la planète Mars, 2021 (© ABIBOO Studio).

Fig. 4 Abiboo Studio, Images de synthèse de Nüwa sur la planète Mars, 2021 (© ABIBOO Studio).



L'image dans la recherche architecturale et urbaine : une épistémologie du projet

Les études sur les représentations constituent un sous-champ riche et diversifié de la recherche architecturale et urbaine. Une ‘épistémologie du visuel’ s’y constitue dans une forme d’autonomie par rapport au champ des études visuelles, bien qu’elle en partage le constat d’un “déferlement d’images [auquel nous sommes] soumis aujourd’hui, tant dans notre vie privée que professionnelle”, exigeant une nouvelle “aptitude à les interpréter [...] aussi importante que de savoir lire ou compter”²⁰. Or, les questionnements sur l’image développés dans ce contexte sont largement dominés par des préoccupations relatives à la conduite du projet. Appelant de ses vœux le développement d’approches interdisciplinaires

en dialogue avec les sciences humaines et sociales, l’historienne de l’architecture Dianne Harris regrettait ainsi, dans un article paru en 2011, que

pour les historiens de l’architecture employés dans des écoles formant des professionnels du projet [architectes et urbanistes], les impératifs de la pratique professionnelle et les exigences du cursus se traduisent par des limitations et des restrictions de plus en plus rigides. Dans ces lieux, la pression pour produire des histoires de l’architecture qui soient immédiatement utiles à l’enseignement dispensé dans les ateliers de projet, ou qui mettent en avant les architectes et leur activité professionnelle, demeure aussi intense que mal avisée²¹.

Enseignant en écoles d’architecture, le sociologue Christophe Camus y décrit une sociologie des médias envisagée “en termes de métier,

²⁰ O. Söderström, *Des images pour agir : le visuel en urbanisme*, Lausanne 2001.

²¹ D. HARRIS, *That’s Not Architectural History! Or What’s a Discipline For?*, “Journal of the Society of Architectural Historians”, 70, 2011, 2, pp. 149-152 : 150. Historienne de l’architecture et chercheuse interdisciplinaire, Harris a développé une approche éminemment politique des images de l’habitat unifamilial circulant dans les médias populaires aux États-Unis après la Seconde Guerre mondiale dans D. HARRIS, *Little White Houses: How the Postwar Home Constructed Race in America*, Minneapolis 2013.

²² C. CAMUS, *Repenser sociologiquement l’architecture à partir de ses médiations*, dans *Penser l’architecture en sociologie*, Dossier préparé par O. Chadoin, L. Brown, “SociologieS”, 2021, <http://journals.openedition.org/sociologies/17153> (consulté le 4 mars 2025).

de compétence, de collaboration interprofessionnelle, d'économie, d'acceptabilité ou d'utilité sociale et [...] se limitant la plupart du temps [aux enjeux de] la production d'édifices et d'espaces à laquelle participent les professionnels de ce secteur"²². L'image d'architecture désigne alors "ce qui participe de près ou de loin à son mode de production et de consommation"²³. Pensée à partir de la pratique professionnelle, ses enjeux s'inscrivent, schématiquement, dans deux paradigmes : d'une part, le 'paradigme de l'auteur', structuré par l'œuvre des architectes, qu'elle soit réalisée ou qu'elle demeure une 'architecture de papier'²⁴ ; et d'autre part, le 'paradigme instrumental', qui questionne l'image d'architecture dans sa qualité d'outil au service des processus et des savoirs du projet.

Le paradigme de l'auteur

L'histoire de l'architecture est une science illustrée. Or, en dépit de cette affinité avec les images, la matrice historiographique demeure celle des projets d'architecture et de leurs auteurs, les architectes : perspectives de projets, photographies de maquettes, illustrations de presse et photographies d'architecture nourrissent une appréhension visuelle des édifices. Comme le soulignait Jean-Louis Cohen, l'image est généralement considérée de manière circonspecte en termes de 'réverbération médiatique', objet 'secondaire' dérivé du projet ou de la réalisation architecturale, dont elle risque d'occulter la complexité :

Chaque forme de réverbération médiatique de l'architecture est affectée de biais spécifiques [...]. La télévision ne diffuse pas l'architecture, ainsi que l'on peut parler d'une diffusion des films, ou même de la peinture, mais l'image animée des édifices. Les films ne parviennent que fort difficilement à reproduire l'expérience spatiale concrète et introduisent donc des déformations appréciables, en particulier dans la restitution des usages, des modes d'habiter. Un effet médiatique particulier est [...] la condensation, à savoir la réduction à une image simplifiée et aplatée d'une configuration spatiale

complexe dont la découverte n'est possible que par une lente déambulation²⁵.

En effet, dès lors qu'il s'agit de produire des connaissances sur le projet, il n'est pas rare que l'image soit grevée d'un a priori négatif, assimilée à l'artifice, voire au mensonge²⁶.

Corollaire de la place centrale de l'artiste en histoire de l'art, celle de l'architecte domine les questionnements relatifs aux images élaborés dans le champ de l'histoire de l'architecture, où de nombreux chercheurs explorent les pratiques d'architectes-dessinateurs, d'architectes-photographes ou encore d'architectes-communicants²⁷. 'L'histoire médiatique de l'architecture', qui a pris de l'ampleur à partir du début des années 2000 dans le sillage de Beatriz Colomina, envisage ainsi l'image pour ce qu'elle fait à l'architecture, et – réciproquement – l'architecture pour ce qu'elle fait à l'image²⁸. Or, si cette approche a révélé de manière importante la 'fonction médiatique' de l'architecture à une époque 'cernée par les images', c'est pour mieux éluder la masse des images d'architecture échappant à l'auctorialité des architectes²⁹.

Car en situant la 'fonction médiatique' à l'endroit du projet – même entendu au sens le plus large –, elle occulte une multitude 'd'agents des images' (illustrateurs, services de communication, directeurs artistiques, etc.) parfois très éloignés du champ architectural : l'image d'architecture est alors prise en compte *dans la mesure* où elle s'inscrit dans une épistémologie proprement architecturale³⁰. Attribuées à une série de figures tutélaires, de Le Corbusier à Adolf Loos et de Charles et Ray Eames à Franck Gehry, les innovations dans l'ordre du visuel intéressent les chercheurs dans la mesure où elles renouvellent les régimes de conception, de production et de médiatisation du projet³¹. Si la sensibilité aux enjeux médiatiques relève indéniablement d'une ouverture de l'histoire de l'architecture vers les études visuelles, ces travaux restent peu accessibles aux chercheurs en sciences humaines et

²³ J.P. JUNGSMANN, *L'image en architecture. De la représentation et de son empreinte utopique*, Paris 2001.

²⁴ À titre d'exemple, voir les expositions *Images et imaginaires d'architecture : Dessin, peinture, photographie, arts graphiques, théâtre, cinéma en Europe aux XIXe et XXe siècles*, conçue par Jean Dethier (Paris, Centre Pompidou, 8 mars-28 mai 1984) ; *Architectures de papier. Dessins de Piranèse à Mallet-Stevens*, conçue par Basile Baudiez (Paris, Musée Nissim de Camondo, 26 mars-21 juin 2015) ; ou plus récemment, les initiatives de la fondation britannique Drawing Matter, <https://drawingmatter.org/> (consulté le 4 mars 2025).

²⁵ J.L. COHEN, *L'architecture saisie par les médias*, "Les Cahiers de Médiologie", 11, 2001, 1, pp. 310-317 : 313. Le chercheur britannique Iain Borden défend la même idée dans son essai *Imaging Architecture: Dialectical Imagery and Temporality in Architectural History*, "Journal of Architecture", 12, 2007, 1, pp. 57-77.

²⁶ Voir mon compte rendu de la table ronde *Images ! Sans mensonges, l'architecture est-elle possible ?* organisée par l'ordre des architectes en Ile de France le 4 octobre 2012 ; M.M. OZDOBA, *Couvrez cette image que je ne saurais voir*, dans *Picturing Architecture*, 6 octobre 2012, <https://picturingarchitecture.wordpress.com/2012/10/06/couvrez-cette-image-que-je-ne-saurais-voir-2/> (consulté le 4 mars 2025).

²⁷ Voir par exemple N. HERSCHDORFER, L. UMSTÄTTER, *Construire l'image : Le Corbusier et la photographie*, catalogue de l'exposition (Musée des Beaux-Arts de La Chaux-de-Fonds, 30 septembre 2012-13 janvier 2013 ; Centre international pour la ville, l'architecture et le paysage Bruxelles, 26 avril-6 octobre 2013), Paris 2012 ; W. OECHSLIN, G. HARBUSCH, *Sigfried Giedion und die Fotografie: Bildinszenierungen der Moderne*, Zürich 2010. Ou encore le récent appel à contributions de la revue "Profrils" éditée par l'Association d'histoire de l'architecture (AHA), qui entend "questionner et mettre en lumière les différentes facettes de l'interaction entre architectes et photographes en tant que coproducteur-ice.s de la représentation visuelle de l'architecture en s'intéressant aux usages, aux regards et aux pratiques qui ont marqué cette relation au fil du temps", <http://www.histoire-architecture.org/archives/4792> (consulté le 4 mars 2025).

²⁸ *Architecture and Its Image: Four Centuries of Architectural Representation. Works From the Collection of the Canadian Centre for Architecture*, exhibition catalogue (Montreal, Canadian Centre for architecture, 7 May-7 August 1989), edited by E. Blau, E. Kaufman, Cambridge 1989 ; B. COLOMINA, J. OCKMAN, *Architectureproduction*, New York 1988 ; COLOMINA, *Privacy and Publicity*... cit.

²⁹ EAD., *Cernés par les images. L'architecture de l'après-Sputnik*, trad. fr. par H. Sirven, Paris 2013 (première éd., sous la forme d'un article, *Enclosed by Images: The Eameses' Multimedia Architecture*, "Grey Room", 2, 2001, pp. 6-29).

³⁰ Jean-Louis Cohen attribue également la "fonction médiatique" aux architectes, lorsqu'il écrit que cette dernière "a été extraordinairement bien illustrée depuis 1998 par ce que l'on peut désormais dénommer l'effet Bilbao", c'est-à-dire la rencontre d'un site urbain en plein renouveau, d'une volonté politique, d'une stratégie d'entreprise culturelle et, surtout, *d'une architecture provocante*". COHEN, *L'architecture saisie*... cit., p. 313 (mes italiques). A propos de l'approche historiographique par les 'agents des images', voir A. VÖWINCKEL, *Agenten der Bilder: Fotografisches Handeln im 20. Jahrhundert*, Göttingen 2016.

³¹ COLOMINA, *Privacy and Publicity*... cit. ; EAD., *The Media House*, in *Tulane Papers: The Politics of Contemporary Architectural Discourse*, "Assemblage: a Critical Journal of Architecture and Design Culture", 27, 2012, pp. 55-66 ; K. RATTENBURY, *This Is Not Architecture: Media Constructions*, London 2002 ; ZIMMERMANN, *Photographic Architecture*... cit. ; A.T. FRIEDMAN, *American Glamour and the Evolution of Modern Architecture*, New Haven 2010.

sociales étrangers à la culture architecturale³². Ainsi, le croisement entre 'l'histoire médiatique' de l'architecture et le champ interdisciplinaire des études visuelles, où elle trouve un accueil limité, relève plutôt du trompe-l'œil³³.

Le paradigme instrumental

Tout comme l'histoire de l'architecture, la recherche urbaine interroge les images à l'aune de leur mise en œuvre par les acteurs du projet : ce prisme instrumental nourrit une 'épistémologie du visuel' qui mobilise, selon les cas, les points de vue de l'histoire de la photographie ou encore des sciences de l'information et de la communication³⁴. Les représentations visuelles (cartes, vues aériennes, photographies de chantier, etc.) sont alors analysées dans leurs rapports aux dynamiques du développement urbain, aux processus de projet, ou encore à la constitution des savoirs relatifs à ces dynamiques et processus³⁵. Le récent ouvrage *Photographier le Grand Paris*, par exemple, ambitionne de "comprendre l'histoire du Grand Paris – sociale, architecturale, urbaine, paysagère, politique – et son aménagement, [à travers] les images que cette histoire a produites, et les finalités diverses selon lesquelles [ces images] ont été créées, interprétées, médiatisées, conservées". Mais aussi de "questionner la figurabilité d'une métropole en perpétuelle évolution"³⁶.

C'est également l'approche qu'emprunte Nathalie Roseau, professeure d'urbanisme à l'école nationale des Ponts et Chaussées, dont les travaux interrogent "les dynamiques de transformation métropolitaine et la place qu'y occupent les infrastructures, leurs temporalités et leurs représentations"³⁷. Ses recherches sur les imaginaires métropolitains offrent une perspective inédite pour appréhender ces dynamiques, ciblant des acteurs du visuel souvent négligés par l'histoire urbaine. Le cas de l'architecte et illustrateur Hugh Ferriss, célèbre pour ses vues spectacu-

lares de la ville de New York en projet (fig. 5), éclaire alors la 'mutation métropolitaine' de la ville au prisme de ses figurations, l'érigeant en véritable penseur de la ville par l'image :

Visuelle et textuelle, l'œuvre de Ferriss est foisonnante. Elle préfigure le tournant métropolitain dont fait l'objet la cité new-yorkaise, de la mutation de Manhattan au déploiement de la suburbia à l'échelle des deux États qui composent l'aire métropolitaine, en passant par les réalisations massives des infrastructures – ouvrages d'art, parkways, aéroports – qui feront la fierté de la Port of New York Authority. En représentant la métropole en devenir, dans ses productions libres comme dans les projets auxquels il apporte son concours, Ferriss cristallise et extrapole, projette et transforme. Témoin et acteur, il contribue à l'édification du paysage à la fois imaginaire et réel de la ville³⁸.

Centrée sur les processus de projet – impliquant architectes, municipalités, comités consultatifs, grandes entreprises, fondations, etc. – cette approche ne s'intéresse pas, en premier lieu, aux enjeux politiques de la *publicité* du projet urbain. Autrement dit, si elle met en relief le rôle crucial de l'activité imageante dans le développement urbain, elle se détourne de ce que "font les images dans l'espace public"³⁹.

Un apport fondamental du champ des études urbaines est de faire apparaître – c'est à dire, de rendre disponibles pour l'attention critique – des représentations de projets habituellement perçues de manière transparente. Néanmoins, l'analyse des images y intègre, comme préalable, les conditions de possibilité politiques, économiques et organisationnelles du projet. Comme le rappelait Jean-Louis Cohen avec lucidité, "contrairement aux autres arts, cinéma compris, [l'architecture] a les plus grandes difficultés à être subversive, dès lors qu'elle nécessite la mobilisation de moyens considérables pour exister aux yeux de tous, moyens qui supposent l'adhésion des pouvoirs à ses stratégies de

³² Dénonçant ce renfermement disciplinaire dans le texte cité plus haut (voir note 21), Dianne Harris conjure les historiens de l'architecture à s'adresser à un public plus large, car "ce qui compte, pour ceux d'entre nous qui étudient l'environnement bâti, c'est de savoir si quelqu'un s'en soucie encore ou non" ("What will matter, to those of us who study the built environment, is whether or not anyone still cares"), HARRIS, *That's Not Architectural History...* cit., p. 152.

³³ S. SUMA, *Une histoire médiatique de l'architecture ?*, "Transversale : Histoire Architecture Paysage Urbain", 4, 2020, pp. 55-63.

³⁴ Voir les articles consacrés au thème de la représentation dans les "Cahiers de la Recherche en Architecture, Urbanisme et Paysage" (CRAUP) et dans la revue "Urbanisme". Voir aussi *L'architecture et ses images*, sous la direction de E. Cohen, G. Monnier, "Sociétés & Représentations", 30, 2010, 2. Sur les modes de communication de 'l'imagerie aménageuse', voir A. GAGNEBIEN, H. BAILLEUL, *La ville durable imaginée : formes et modalités de la communication d'un projet de société*, "Études de Communication", 37, 2011, 2, pp. 115-130 ; J. GOBERT et al., *Mise en scène et en récit de la nature dans la ville : de nouvelles frontières*, "Développement Durable et Territoires", 14, 2023, 3, <https://doi.org/10.4000/developpementdurable.23586> (consulté le 8 septembre 2025) ; S. NIVET, *L'image au pied de la lettre. L'imagerie aménageuse au prisme de la (climate) fiction*, "Les Cahiers de la Recherche Architecturale Urbaine et Paysagère", Actualités de la recherche, 2023, <http://journals.openedition.org/craup/12561> (consulté le 4 mars 2025).

³⁵ Voir les travaux menés dans le sillage de Frédéric Pousin, dont *Figures de la ville et construction des savoirs : architecture, urbanisme, géographie*, sous la direction de F. Pousin, Paris 2005, et plus récemment dans le cadre du programme de recherche ANR Photopaysage, voir *PhotoPaysage. Débattre du projet de paysage par la photographie*, sous la direction de F. Pousin, Paris 2018, ainsi que le site internet <http://photopaysage.huma-num.fr/> (consulté le 4 mars 2025).

³⁶ R. BERTHO et al., *Photographier le Grand Paris. Une histoire visuelle du changement métropolitain*, Paris 2024.

³⁷ Selon les termes de sa notice biographique, <https://ecole-desponts.fr/nathalie-roseau> (consulté le 4 mars 2025).

³⁸ N. ROSEAU, *L'imaginaire métropolitain de Hugh Ferriss : New York, 1916-1962*, "Marnes. Documents d'Architecture", 4, 2016, pp. 190-237 : 193.

³⁹ Voir le colloque international *Que font les images dans l'espace public ?* organisé par le département de géographie et environnement et l'institut de la gouvernance de l'environnement et du développement territorial de la faculté des Sciences de la Société de l'Université de Genève les 18-20 janvier 2017, compte rendu de Max Bonhomme, <https://arip.hypotheses.org/1902> (consulté le 4 mars 2025). Voir aussi les études réunies par M. HATTUM, A. HULTZSCH, *The Printed and the Built: Architecture, Print Culture and Public Debate in the Nineteenth Century*, New York 2018, dont certaines s'attellent à cette question.



Fig. 5 H. Ferriss, *Vue prospective de la ville de New York* ("New York Tribune", 18 septembre 1921, p. 5 ; © Library of Congress, Washington, DC).

projet"⁴⁰. Pour être constructible, le projet (architectural ou urbain) doit renoncer à la subversion : dans la mesure où elles adoptent le point de vue de la production de la ville, épousant le périmètre d'action des professionnels du projet, les approches de l'image développées dans le champ de la recherche urbaine sont vouées à manquer les enjeux critiques qui fondent "l'attitude intellectuelle" des études visuelles⁴¹. Celle-ci exige de se pencher sur la réception des images et leurs effets au sens large : pour le dire avec l'historienne Elsa Vonau, "pour mesurer la portée réelle [des représentations architecturales et urbaines], on aimerait savoir [non seulement] comment elles agissent sur les formes urbaines, [mais aussi] quels sont les cadres institutionnels, les politiques qui leur donnent corps, les pratiques qui les animent"⁴².

Mobiliser les prismes critiques des études visuelles pour penser l'image d'architecture Pour penser la rencontre entre les sciences du projet et les études visuelles, quittons désormais "un monde où l'image représente et signifie d'emblée quelque chose [et entrons] dans un univers intellectuel où les images apparaissent, agissent avant de prendre sens, avant d'être les images de quelque chose"⁴³. Adoptons une attitude 'suspendue' face aux images, contre-intuitive dans le champ de la recherche architecturale et urbaine, où l'image est fondamentalement l'image de quelque chose. Avec Louis Marin, dont les travaux ont nourri les *Visual Studies* anglosaxonnes dans les années 1970-80, souvenons-nous que l'effacement de l'image au bénéfice de l'objet représenté – le projet architectural ou urbain – ne va pas de soi : ainsi,

⁴⁰ COHEN, *L'Architecture saisie...* cit., pp. 312-313.
⁴¹ J'emprunte la notion "d'attitude intellectuelle" à Marquard Smith dans *Visual Culture Studies: Interviews with Key Thinkers*, sous la direction de M. Smith, London 2008, pp. X-XI, lui-même cité dans BOUDY, *Les études visuelles...* cit., p. 28.
⁴² Recension d'Elsa Vonau d'un ouvrage dirigé par l'historien de l'architecture Vittorio Magnano Lampugnani paru en 2011, E. VONAU, *Magnano Lampugnani, Vittorio, Frey, Katia, Perotti, Eliana, Stadt und Text. Zur Ideengeschichte des Städtebaus im Spiegel theoretischer Schriften seit dem 18. Jahrhundert*, "La Revue de l'Institut Français d'Histoire en Allemagne", 2011, <http://journals.openedition.org/ifha/6589> (consulté le 4 mars 2025).
⁴³ G. BARTHOLEYS, T. GOLSENNE, *Une théorie des actes d'images*, dans *La performance des images*, sous la direction de A. Dierckens, G. Bartholeys, T. Golsenne, Bruxelles 2010, pp. 15-25 : 20.

la transparence de la représentation, loin d'être naturelle,

dépend d'une technique, d'une idéologie, d'un parti pris, d'un point de vue, etc. toutes choses relatives [et que] tous éléments métatextuels, réflexifs, qui font que 'la représentation se présente représentant quelque chose' participent de l'opacification. Il y a opacification quand la représentation ne désigne plus simplement l'objet au travers de ses signes (transitivité) mais revient sur elle-même, exhibe ses signes en tant que signes, questionne son propre fonctionnement (réflexivité)⁴⁴.

Dans *Penser l'image*, anthologie dirigée par Emmanuel Alloa qui réunit philosophes, théoriciens et historiens de l'art autour de la question "Qu'est-ce qu'une image ?", plusieurs représentants des *Visual Studies* et de la *Bildwissenschaft* érigent, précisément, la transparence en pivot épistémologique, point de départ de toute réflexion sur l'image :

dire que les images sont des 'fenêtres ouvertes' sur une signification, c'est les traiter comme des simples 'faire-part', transitivités dont la fonction de renvoi fonctionne d'autant mieux qu'elles se font oublier dans leur matérialité. [...] Pour les tenants de la transparence, toute image est toujours image de quelque chose [...]. Pour les tenants de l'opacité au contraire, l'être-image coïncide avec l'imagéité⁴⁵.

Comme le formule Georges Didi-Huberman dans le même volume, une appréhension de l'image dans son opacité exige de prendre du recul, de suspendre son usage 'd'image de', et de prendre le temps de s'interroger à son propos :

Il n'est jamais inutile de se redemander de quoi exactement une image est-elle l'image, quels que soient les aspects qui s'y rendent visibles, les évidences qui y sont apparues, les représentations qui s'y imposent d'abord. Cette question a, de plus, l'avantage d'éveiller l'intérêt pour le comment des images, autre question cruciale. Et puis, il y a la question toute bête et toute méchante, en réalité, je veux dire la question politique – de savoir à qui sont les images⁴⁶.

Penser l'image, nous dit Gottfried Böhm, c'est demander : "que donne à voir une image, que montre-t-elle et surtout : comment montre-t-elle ?", et ainsi "réfléchir à l'entrelacement entre les images et ce qu'elles montrent"⁴⁷. Dans cette perspective, les notions d'écologie des images', de 'performance des images', et de 'pouvoir de la représentation', empruntées au champ interdisciplinaire des études visuelles, offrent un horizon épistémologique fécond pour penser l'image d'architecture, comme nous allons le montrer dans la seconde partie de ce texte.

La notion d'écologie des images', premièrement, est propice à élargir les acteurs, les usages et les contextes pris en compte dans l'analyse des images d'architecture. Dans son recueil du même nom, l'historien de l'art Ernst Gombrich approche les styles, les motifs et les genres picturaux en termes de 'niches écologiques', autrement dit, de 'milieux' où les images se développent, prospèrent, se transforment, ou périssent :

Ce mot d'écologie [...] vient des racines grecques oikos, la maison ou l'habitat, et logos, parole, discours ou, comme ici, étude. Ainsi le Petit Larousse définit-il l'écologie comme la 'partie de la biologie qui étudie les rapports des êtres vivants avec leur milieu naturel'. C'est la complexité de ce 'rapport' qui rend cette étude si intéressante. Le sol et le climat influencent évidemment le type de végétation d'une zone donnée, mais la végétation, à son tour, influence le climat et, à long terme, la nature du sol. [...] On pourrait affirmer qu'il y a une parfaite analogie entre l'écologie des êtres vivants et le milieu social des images⁴⁸.

Si les analyses de Gombrich traitent d'une variété d'images qualifiée par lui-même de déroutante, l'image d'architecture n'a cependant pas sa place dans ce corpus. Or, avec Gombrich, nous pouvons nous demander quand et où, à l'échelle d'une culture ou à l'échelle transculturelle, l'image d'architecture tend-elle à prospérer ou à se raréfier ? À quelles institutions renvoient ses conventions stylistiques : la science-fiction, l'art, l'ingénierie ou encore la communi-

⁴⁴ N. WANLIN, *Le moment critique d'une théorie de la représentation*, "Acta Fabula", 3, 2002, 1, <https://www.fabula.org/acta/document11045.php> (consulté le 4 mars 2025), note de lecture sur l'ouvrage de L. MARIN, *De la représentation*, Paris 1994.

⁴⁵ E. ALLOA, *Entre transparence et opacité : ce que l'image donne à penser*, dans *Penser l'image*, sous la direction de E. Alloa, Paris 2010, pp. 7-21 : 14. À l'instar d'Ola Söderström dans le champ des études urbaines, cité plus haut, la quatrième de couverture de *Penser l'image* constate une "multiplication proliférante des images [qui] semble bien – et c'est là son paradoxe – inversement proportionnelle à notre faculté de dire ce qu'est réellement une image".

⁴⁶ G. DIDI-HUBERMAN, *Rendre une image*, dans *Penser l'image*... cit., pp. 267-292 : 267.

⁴⁷ G. BOEHM, *Ce qui se montre. De la différence iconique*, dans *Penser l'image*... cit., pp. 27-47 : 27, 30.

⁴⁸ E. GOMBRICH, *Préface*, dans *L'écologie des images*, Paris 1983, pp. 5-8 : 5-6 ; Id., *La théorie artistique de la Renaissance et l'essor du paysage* [1953], dans *L'écologie des images*... cit., pp. 15-43.

cation politique ? Comment ces institutions évoluent-elles au cours du temps ? Dans quels usages est-elle mobilisée ? De quels détournements fait-elle l'objet ? Mais aussi, comment s'adapte-t-elle aux évolutions du milieu⁴⁹ ?

La notion de 'performance des images', ensuite, nous permet de penser les effets des images d'architecture – autrement dit, la manière dont elles sont à même d'émouvoir et de mobiliser le regardeur. En effet, comme le rappellent Gil Bartholeyns et Thomas Golsenne en introduction de l'ouvrage du même nom,

l'histoire de l'art comme 'science' [a exclu] de son domaine l'observation des réactions violentes ou intenses face aux images, l'analyse de leur puissance. Elle restreignait son champ à une seule catégorie d'images – les œuvres d'art – en même temps que se constituaient les grandes collections muséales. [...] Si l'on parle de la puissance d'une œuvre d'art, dans cette optique, c'est en fait comme expression de la puissance créatrice de l'artiste⁵⁰.

En convoquant les notions d'efficace (Marin), de désir (Mitchell), ou encore d'agentivité (Gell), ils montrent que les images "ne se contentent pas de représenter passivement des faits, des idées, des personnes. Elles circulent, jouent, trompent, choquent, plaisent ou convainquent : en un mot, elles 'performent'"⁵¹. Transposée à l'image d'architecture, cette approche nous incite à prendre en compte les réactions, les émotions ou encore les croyances qu'elle suscite. Lorsqu'elle fait l'objet d'une diffusion significative dans un contexte historique et culturel donné, l'image d'architecture peut s'envisager comme un 'agent social performatif' qui a des effets dans la société⁵². En outre, dans la mesure où elle visualise un espace réel – passé, présent ou à venir – contrairement à la fiction, la performance d'une image dépend nécessairement de l'expérience que l'on peut faire de cet espace (lorsqu'il est accessible), de l'anticipation de cette expérience (lorsqu'il s'agit d'un projet), ou encore de son impossibilité (dans le cas d'un bâtiment disparu).

Enfin, la notion de 'pouvoir de la représentation' forgée par Louis Marin fournit un cadre des plus stimulants pour aborder les représentations de projets comme des visions faisant autorité, qui s'imposent au regardeur de manière unilatérale. En effet, "le premier sens du verbe représenter signifie présenter à nouveau, à la place de, à la place d'un absent, comme l'écrit Alberti à propos de l'art de la peinture. Mais représenter signifie aussi se présenter, redoubler une présence, s'attribuer autorité et légitimité qui s'imposent à autrui"⁵³. Ainsi, par-delà son rôle au service de la représentation du projet, l'image d'architecture suscite la croyance du public dans la force dont disposent ses commanditaires, participant à asseoir leur autorité. Pour le dire avec Marin,

la représentation est [...] l'opération qui met la force 'en réserve' dans les signes, en transformant la force en pouvoir. Le résultat de cette opération substitutive est un effet de croyance : celui qui voit le portrait équestre du roi croira que le souverain dispose d'une force sans limites⁵⁴.

Dès lors, nous prenons conscience que l'image d'architecture est essentiellement liée à l'exercice d'un pouvoir, ne serait-ce qu'en vertu des moyens nécessaires pour la produire et la diffuser : produire et diffuser les images d'un projet, c'est affirmer qu'on a le pouvoir de le réaliser – à l'instar des perspectives de projets urbains sur la planète Mars convoquées dans l'introduction de ce texte, qui corroborent le scénario de colonie spatiale porté par Elon Musk (fig. 2-4). Dès lors, si les images d'architecture se prêtent à un questionnement du point de vue des études visuelles, ce n'est pas en tant qu'outils du projet, mais parce qu'elles sont investies par des 'pratiques du regard'⁵⁵. En suivant cette approche, nous interrogeons non seulement "ce que [les images d'architecture] signifient", mais aussi "ce qu'elles 'font' dans un réseau de relations sociales", afin de mieux saisir la manière dont elles "fonctionnent dans notre culture" et de les

⁴⁹ Sur ces questions, voir le pôle de recherche sur les *Écologies visuelles* (*Visual Ecologies Studies*) coordonné par Sophie Suma et Benjamin Thomas à l'université de Strasbourg, <https://www.culturesvisuelles.org/champs-de-recherche/ecologies-visuelles> (consulté le 4 mars 2025). Voir également mes propres travaux sur le sujet, M.M. OZDOBA, *La mise en paysage du Front de Seine : de la ville du futur à la ville durable* (1960-2010), "Articulo. Journal of Urban Research", 4, 2013, <https://doi.org/10.4000/articulo.2283> (consulté le 4 mars 2025) ; EAD., *Du photoréalisme au post-photographique, les paysages imaginés du Bureau Bas Smets*, dans *PhotoPaysage...* cit., pp. 118-135.

⁵⁰ BARTHOLEYNS, GOLSENNE, *Une théorie des actes d'image...* cit., p. 17.

⁵¹ Ivi, p. 18. Sur la notion d'efficace des images, voir L. MARIN, *Des pouvoirs de l'image : Gloses*, Paris 1993, pp. 10-21 ; sur le désir des images, voir *Que veulent les images...* cit. ; sur l'agentivité (*agency*) des images, voir A. GELL, *L'Art et ses agents. Une théorie anthropologique*, trad. fr. par S. Renaut, O. Renaut, Dijon 2009 (première éd. Oxford 1998), pp. 20-23 ; sur les actes d'image, voir H. BREDEKAMP, *Théorie de l'acte d'image*, trad. fr. par F. Joly, Y. Sintomer, Paris 2015 (première éd. Frankfurt 2010).

⁵² G. BARTHOLEYNS, *Un bien étrange cousin, les visual studies*, dans *Politiques Visuelles*, sous la direction de Id., Dijon 2016, pp. 5-28.

⁵³ Louis Marin : *pouvoir de la représentation et représentation du pouvoir*, catalogue de l'exposition (Paris, INHA, Galerie Colbert, 29 mai-26 juillet 2008), sous la direction de G. Carelli, Paris 2008, pp. 4-10 : 9.

⁵⁴ Ivi, p. 5 ; voir aussi Id., *Le portrait du roi*, Paris 1981 ; ainsi que l'ouvrage collectif dirigé par W.J.T. MITCHELL, *Landscape and Power*, Chicago 1994.

⁵⁵ M. BAL, *Visual Essentialism and the Object of Visual Culture*, "Journal of Visual Culture", 2, 2003, 1, pp. 5-32 : 11.

comprendre comme des “mécanismes de relais dans les échanges de pouvoir, de valeur et de publicité”⁵⁶.

Questionner l'imagerie du siège de l'ONU à New York au prisme des études visuelles (étude de cas)

Comme l'a souligné Dianne Harris, qui milite pour une approche critique des images dans le champ architectural, “parce qu'elles sont omniprésentes et apparemment ordinaires au point de ne pas être observées de manière critique, ces formes visuelles et matérielles constituent de puissants dispositifs idéologiques”⁵⁷. Or, force est de constater que l'image d'architecture n'a pas pris toute sa place, à ce jour, parmi les corpus traités dans le champ interdisciplinaire des études visuelles. Plutôt qu'il ne résulte d'une circonstance fortuite, nous avons vu plus haut que ce désintérêt découle d'un inconfort à appréhender des images enchevêtrées dans des processus de projet peu intelligibles en dehors du champ architectural : ainsi, les chercheurs attelés à cet exercice se doivent de décrire non seulement “les formes sociales et politiques [que] visualise” l'image d'architecture, mais aussi les “formes sociales et politiques qu'elle contribue à produire, et que l'on peut saisir à travers elle”⁵⁸ ; autrement dit, ils ont pour tâche de croiser les savoirs de l'image et les savoirs du projet.

L'abondante imagerie médiatique diffusée au moment de l'édification du siège de l'Organisation des Nations Unies sur les bords de l'East River à New York, entre 1947 et 1953 (fig. 6), nous servira comme cas d'étude pour illustrer notre propos⁵⁹. En associant l'histoire du projet d'architecture et l'appareil interprétatif des études visuelles, nous mettrons en relief le rôle de laboratoire, puis de modèle, joué par les images de ce bâtiment emblématique de l'architecture moderne d'après-guerre, à l'échelle de la société étasunienne. À l'aune de la réception du projet par

le public, Hugh Ferriss – évoqué plus haut – apparaît comme l'un des nombreux illustrateurs ayant contribué à la campagne de communication menée par l'ONU, qui présentait le bâtiment équipé de murs rideaux et de l'air climatisé comme un “futur déjà arrivé dans le présent”⁶⁰.

Tandis que les perspectives de Ferriss apparaissent au format de vignettes dans les colonnes étroites de la presse quotidienne (fig. 7), le relevé des principaux titres de l'époque révèle qu'elles furent le plus souvent écartées dans la presse magazine, à la faveur d'images réalisées par des illustrateurs étrangers au champ architectural⁶¹. Missionnés par les éditeurs – ou par les services de communication des grandes entreprises, dans le cas des contenus publicitaires –, ces illustrateurs ont participé à ‘activer’ le siège de l'ONU par le biais de représentations qui débordent le registre de la communication du projet d'architecture pour s'adresser pleinement aux préoccupations des lecteurs⁶². Bravant les codes visuels de la culture architecturale, ces représentations d'une rare inventivité graphique exploitent les thèmes contemporains de la culture populaire, comme par exemple la coupe transversale sur la tour du secrétariat de l'ONU parue dans le magazine féminin *Vogue* en 1952, peu après l'inauguration du bâtiment (fig. 1).

Rendue à l'aquarelle par l'illustratrice de livres pour enfants Margaret Bloy Graham, à la manière d'une maison de poupées, la coupe ne respecte pas les proportions du bâtiment, dont elle supprime de nombreux étages afin d'obtenir un effet grossissant. En mobilisant les codes de la littérature enfantine, l'illustration de *Vogue* naturalise la répartition stéréotypée des rôles entre les hommes et les femmes au sein de la nouvelle institution internationale qui “mélange des nationalités comme les fruits dans un cake aux fruits”⁶³. L'article illustré nous apprend qu'à l'ONU, les femmes s'activent à la cafétéria tandis que les hommes s'occupent des affaires sérieuses

⁵⁶ W.J.T. MITCHELL, *Picture Theory: Essays on Verbal and Visual Representation*, Chicago 1994, pp. 184, 327, 420-423. Ces passages sont cités dans HARRIS, *Little White Houses...* cit., pp. 16-17.

⁵⁷ HARRIS, *Little White Houses...* cit., p. 15. La démarche de Harris fait écho à celle de Roland Barthes dans *Mythologies*, qui se proposait de “ressaisir dans l'exposition décorative de ce-qui-va-de-soi, l'abus idéologique qui [...] s'y trouve caché”, voir R. BARTHES, *Mythologies*, Paris 1957, p. 9.

⁵⁸ BOIDY, *Les Études Visuelles...* cit., p. 7.

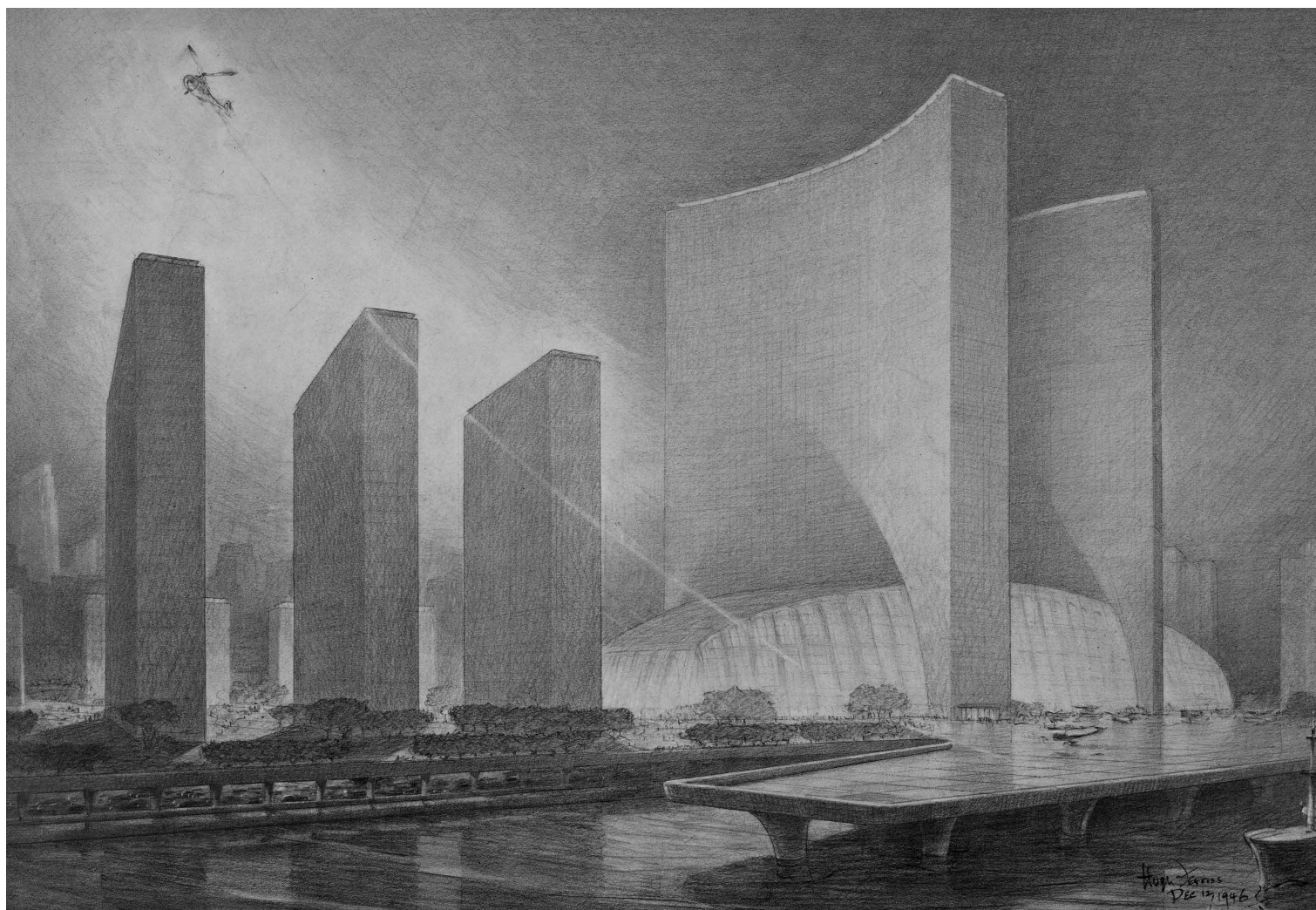
⁵⁹ Je développe cette étude de cas dans ma thèse : M.M. OZDOBA, *Tomorrow's Life Today'. Le mythe de l'architecture ultra-moderne dans la presse américaine (1947-1964)*, thèse de doctorat, École des Hautes Études en Sciences Sociales, Paris 2019.

⁶⁰ *Ibidem*.

⁶¹ Une perspective du projet réalisée par Hugh Ferriss fut notamment publiée par le *New York Times* et le *New York Herald Tribune* le 22 mai 1947, créditée “United Nations official photo”. Outre la presse quotidienne, notre relevé des publications du projet du siège de l'ONU inclut une dizaine de périodiques, dont *Vogue*, *Life*, *Collier's* et *Popular Mechanics*.

⁶² À propos de la contribution de Ferriss au projet du siège de l'ONU, voir G. DUDLEY, *A Workshop for Peace: Designing the United Nations Headquarters*, Cambridge 1994.

⁶³ *The UN secretariat building. Vogue presents for the first time a cross-section of the interior of this modern monument*, “Vogue”, 1^{er} novembre 1952, illustration de Margaret Bloy Graham. Au sujet des médiations architecturales dans la culture populaire, voir Archi.Pop: *Mediating Architecture in Popular Culture*, sous la direction de M. Lasansky, London 2014.



dans de luxueux bureaux équipés du confort moderne : libre interprétation graphique, déconnectée du processus de conception et de communication proprement architectural, l'illustration de Bloy Graham adresse des enjeux qui n'étaient pas du ressort des architectes, loin s'en faut. À ce titre, elle est susceptible de nourrir une histoire culturelle des États-Unis à l'échelle d'un imaginaire du progrès qui s'appuyait singulièrement sur des représentations d'architectures modernes.

Or, si les représentations du siège de l'ONU avaient le pouvoir d'agir sur leur public, c'était en vertu d'un contexte historique et médiatique qu'il est nécessaire de prendre en compte dans l'analyse. La signification du projet architectural, loin d'être univoque, se précisait en effet au fur et à mesure de son déploiement dans un grand nombre d'environnements éditoriaux – de la presse généraliste à la publicité automobile, en passant par les magazines de vulgarisation scientifique et la presse féminine –, que ce soit par le biais du style graphique, comme dans

l'exemple de *Vogue*, et/ou par le biais d'énoncés associés aux images, selon un processus caractéristique des imageries narratives décrit par André Gunthert :

Stéréotype plastique dont on peut décoder le sens sans difficulté, [l'imagerie narrative est] cette production des industries culturelles, où l'image ne peut plus être considérée comme une forme isolée, mais comme un nœud de réseau. [...] La dynamique visuelle constitue, dans la durée, un ensemble toujours plus dense de signes dont la cohérence est assurée par l'identification de leur appartenance thématique⁶⁴.

Dès lors, la signification d'un projet architectural ou urbain à l'échelle du public contemporain ne peut s'appréhender à travers l'œuvre d'un seul dessinateur, même le plus virtuose, elle doit l'être à l'échelle d'une 'écologie' complexe : considérées sous cet angle, les extraordinaires perspectives du projet réalisées par Ferriss nous en disent moins sur les échanges de pouvoir, de valeur et de publicité impliquant le siège de l'ONU que les images souvent anonymes pu-

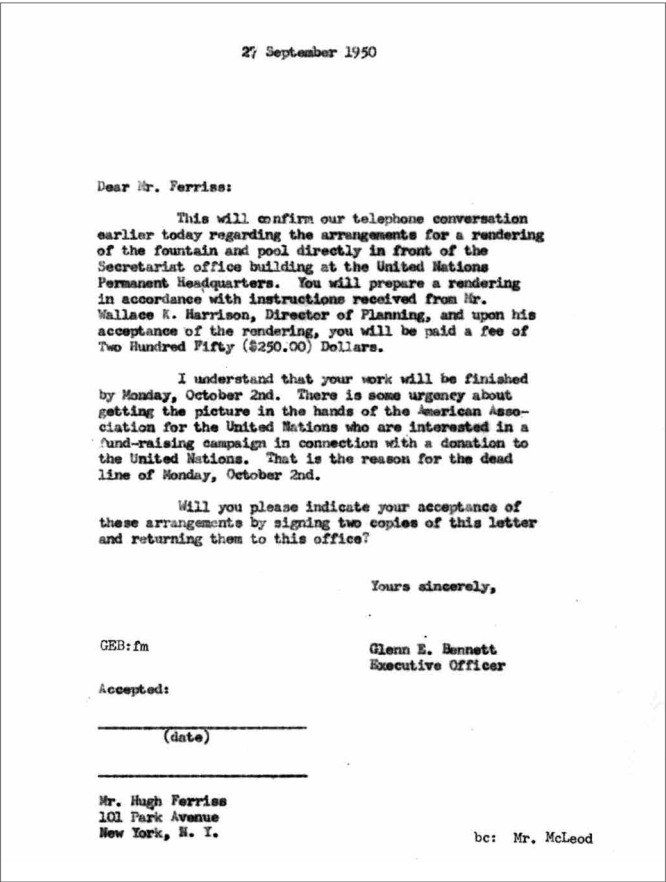
Fig. 6 H. Ferriss, *Projet alternatif pour le bâtiment de United Nations à New York*, 12 décembre 1946 (Columbia University, Avery Architectural & Fine Arts Library, Department of Drawings & Archives, Hugh Ferriss architectural drawings and papers, 1906-1980, Series I, Item NYDA.1000.001.00275).

⁶⁴ A. GUNTHER, *Comment lisons-nous les images ? Les imageries narratives*, dans *Politiques visuelles...* cit., pp. 219-234.



Fig. 7 Article de F. Yerxa avec une illustration de H. Ferriss ("New York Herald Tribune", 22 mai 1947 ; © New York Public Library, Digital Collections).

Fig. 8 Lettre de G.E. Bennett à H. Ferriss, 27 septembre 1950 (© United Nations).



⁶⁵ Voir l'exposition conçue par Maria Stavrinaki et Julia Garimorth au Musée d'art moderne de la ville de Paris en 2024-2025. *L'Âge atomique. Les artistes à l'épreuve de l'histoire*, catalogue de l'exposition (Paris, Musée d'Art Moderne, 11 octobre 2024-9 février 2025), sous la direction de M. Stavrinaki, J. Garimorth, Paris 2024.

⁶⁶ Voir note 60.

⁶⁷ Edgar Morin a décrit la culture comme "un corps complexe de normes, symboles, mythes et images qui pénètrent l'individu dans son intimité, structurent ses instincts, orientent les émotions [...] selon des commerces mentaux de projection et d'identification". Voir E. MORIN, *L'Esprit du temps*, Paris 1962, p. 16. Sur l'image d'architecture comme support projectif dans le contexte du 'home-front' étatsunien pendant la Seconde Guerre mondiale, voir A. SHANKEN, *194X: Architecture, Planning, and Consumer Culture on the American Home Front*, Minneapolis 2009.

⁶⁸ Lettre de G.E. Bennett, Executive Officer de l'Organisation des Nations Unies, à H. Ferriss, 27 septembre 1950 : "I understand that your work will be finished by Monday, October 2nd. There is some urgency about getting the picture in the hands of the American Association for the United Nations who are interested in a fund-raising campaign". (Source: United Nations Archives, New York).

⁶⁹ J'ai développé cette approche dans M.M. OZDOBA, *Dreamscape Century City: Architectural Rendering, Mass Media and the Temporal Imaginary of the Postwar Capitalist Enterprise*, "Getty Research Journal", 15, 2022, 2, pp. 153-174.

bliées dans la presse illustrée, en grande partie tombées dans l'oubli. Ces dernières dévoilent le projet du siège de l'ONU comme un espace de projection pour le public étatsunien au tournant des années 1950, traumatisé par la Seconde Guerre mondiale et les horreurs du nazisme, hanté par la bombe atomique et l'escalade militaire avec l'URSS, et pétri des espoirs suscités par des innovations technologiques sans précédent, dans le contexte d'un capitalisme paternaliste, ségrégationniste et conquérant⁶⁵.

Le récit du siège de l'ONU comme "futur déjà arrivé dans le présent"⁶⁶ possédait une dimension performative, facteur de son succès, qui nourrissait un imaginaire de la concrétisation débordant le registre architectural : d'avantage que la visualisation d'une tour de bureaux, même la plus moderne, les images du siège de l'ONU déployaient, implicitement, des promesses d'une tout autre ampleur. Agent social performatif, elles interpellaient les horizons d'attente contemporains, s'offrant au public comme support de projection et d'identification⁶⁷.

La documentation secondaire de l'imagerie médiatique du projet (contrats, documents de travail, versions écartées ou amendées, factures, communiqués de presse etc.) permet, enfin, de faire apparaître 'à qui sont les images' (fig. 8)⁶⁸.

Témoignant de processus éditoriaux et de jeux d'acteurs qui n'apparaissent plus dans leur forme publiée, elle expose la médiatisation du projet du siège de l'ONU, véritable déluge d'images financé par une série d'acteurs économiques acquis au système, comme ayant participé à promouvoir les 'rêves du futur' portés par les puissants – au détriment des autres –, et à affirmer l'hégémonie des États-Unis dans les affaires du monde (fig. 9)⁶⁹. À l'aune de son imagerie médiatique, l'architecture ultra-moderne du siège de l'ONU apparaît alors comme un catalyseur de croyances et d'aspirations qui tenaient du mythe, autant que du projet technologique et rationnel revendiqué par les architectes. En tissant l'histoire de l'architecture, l'analyse du récit médiatique et le problème du rapport au temps, on se confronte à la dimension politique d'illustrations a priori anodines qui, loin d'être de simples faire-part du projet, ont contribué à naturaliser le système capitaliste qui s'imposait alors sans partage dans cette partie du monde.

Conclusion

Dans son texte publié en 2011 dans le *Journal of the Society of Architectural Historians*, Dianne Harris mettait en garde contre une tentation autarcique de la discipline, invitant ses collè-



Fig. 9 E. Stoller, Photographie du siège des Nations Unies à New York (*The American Breakthrough*, "Fortune", février 1955, pp. 120-121 ; collection privée).

gues historiennes et historiens de l'architecture à s'engager dans des pratiques de recherche inter-, multi-, ou transdisciplinaires, au lieu de se complaire dans un point aveugle à l'échelle des sciences humaines :

Beaucoup de chercheurs en sciences humaines [...] ignorent l'existence de notre discipline, et quand ils ne l'ignorent pas, ils ont une connaissance très limitée de notre travail. [...] L'historien de l'architecture moyen possède des dizaines de livres de chercheurs en sciences humaines de tous horizons, mais nos publications – *qui ont tant à offrir aux historiens, aux sociologues, aux spécialistes d'études culturelles, aux géographes, ou encore aux spécialistes de la littérature et des cultures comparées (pour n'en citer que quelques-uns)* – ne figurent pas sur leurs étagères et sont rarement incluses dans leurs notes de bas de page. En affirmant nos frontières disciplinaires, nous exacerbons encore cette situation car nous finissons par écrire, en grande partie, pour d'autres historiens de l'architecture⁷⁰.

Dans la première partie de cet essai, j'ai montré que le rendez-vous manqué entre la recherche architecturale et urbaine et les études visuelles tient à des prismes disciplinaires mutuellement exclusifs en termes d'objets, de méthodes et d'enjeux. Expliciter ces prismes, passage obligé pour les déplacer ou les réorienter, telle est la tâche à laquelle entend contribuer cet état des lieux, en traçant des axes de réflexion à partir de mon expérience située de la recherche en études visuelles. Car même – et surtout – parce que le public les reçoit avec une certaine distraction, voire de l'indifférence, les images d'architecture constituent un corpus singulièrement agis-

sant à l'échelle de la culture visuelle globalisée, à l'heure où se manifestent dans toute leur ampleur les ravages d'un ordre néolibéral qui se traduit périodiquement dans la dimension du projet architectural et urbain⁷¹.

Dans la seconde partie du texte, j'ai esquissé quelques pistes pour sonder les enjeux critiques des images d'architecture à partir des notions d'écologie des images', de 'performance des images', et de 'pouvoir de la représentation', empruntées à l'arsenal théorique et méthodologique des études visuelles. À travers une étude de cas qui s'émancipe des paradigmes disciplinaires, j'ai montré que la prise en compte de l'image d'architecture dans le programme de travail des études visuelles exige, nécessairement, de questionner leur réception par le public, outre la prise en compte des enjeux, des acteurs et des pratiques du projet : en lui imposant de travailler 'à la croisée' des savoirs du projet, l'image d'architecture s'avère susceptible de bousculer un champ des études visuelles souvent critiqué pour négliger l'histoire au profit de la théorie⁷².

⁷⁰ HARRIS, *That's not architecture...* cit., p. 151 (mes italiques).

⁷¹ Que l'on pense au projet d'architecture pour une colonie sur Mars, aux villes nouvelles commanditées par des autocrates dans les déserts d'Égypte et d'Arabie Saoudite, ou plus récemment, à la vision de Donald Trump pour une rivière sur la bande de Gaza.

⁷² BRUNET, *Théorie et politique des images...* cit., p. 91.

THE STATE SOCIALIST WORKING GROUP OF THE 1950S AND 1960S AND ITS INTERDISCIPLINARY ASPECTS

This paper explores the trajectories of architectural and urban planning historiography within the state socialist countries of Central and Eastern Europe, focusing on the role of academic exchanges in shaping interdisciplinary methodologies. In the aftermath of the Second World War, the Soviet model influenced architectural practices and monument preservation across the USSR, the GDR, and other state socialist countries in Europe, embedding ideologically ‘correct’ rhetoric and Marxist materialist visions into historical narratives. A pivotal shift occurred in late 1954, when changes in Soviet architectural policy led to intensified criticism of architects and scholars, prompting widespread professional debates. In response, the international working group ‘History of Town Planning and Construction in Historical Cities’ (also known as the ‘Working Group’) was founded in 1955, facilitating discussions that sought to bridge the growing divide between architectural theory and practice. Through an analysis of contributions presented at the Erfurt, Warsaw, and Budapest conferences, this study examines how state socialist academics engaged with themes of urban development, preservation, and historical interpretation. Their debates not only revisited the role of aesthetics and Marxist materialism in architectural history but also created enduring and inherently interdisciplinary historiographical frameworks. By tracing the Working Group’s intellectual legacy, this study highlights its impact on both state socialist discourse and approaches to the history of architecture and urban planning.

Following the Second World War, the adoption of the Soviet model led to the establishment of Communist regimes and state socialist systems across the so-called ‘Eastern Bloc’, fundamentally transforming architectural practices and academic research. In this context, a distinct emphasis on institutional monument preservation emerged in the USSR (Union of Soviet Socialist Republics), the GDR (German Democratic Republic/East Germany), and other state socialist countries¹. A major turning point came in late 1954 when a shift in Soviet architectural policy triggered widespread criticism of its architects and academics, subsequently affecting professional circles across Central and Eastern Europe. In response to these changes, the international working group ‘History of Town Planning and Construction in Historical Cities’ (later referred to simply as the ‘Working Group’) was formed in 1955, at a time when the field of history of architecture and urban planning was challenged by a growing disconnect between theory and practice².

This paper examines the contributions of state socialist scholars presented at the Erfurt, Warsaw, and Budapest conferences of the Working Group, arguing that the interdisciplinary debates at these venues – driven by politicized views of aesthetics and Marxist materialist interpretations of architectural and urban planning history³ – contributed to more nuanced narratives that integrated the inherently interdisciplinary nature of state socialist discourse. These contributions

remain crucial for tracing the group’s methodological propositions, understanding emerging professional discourse, and interpreting individual scholars’ perspectives on the past. This study further explores how leading state socialist academics incorporated ideas from disciplines beyond art and architectural history into their presentations, discussions, and publications during this period and beyond. These perspectives offer a deeper understanding of the evolution and reinterpretation of narratives regarding urban planning and architecture developed by Soviet and other state socialist scholars and practitioners both before and after the collapse of Communism.

As recent research reminds us,

European urbanism historiography also applied the “blending out” of the conditions of dictatorial development to the representation of twentieth-century urbanism to a great extent. This anachronism must be eliminated. [...] The internationalization of professional debates during the last decades brings researchers closer to the countries and histories that seemed so distant to their predecessors. Today we can conduct research on dictatorships in a different, more solid and free manner. The influence of the Cold War as a dichotomous, symmetrical paradigm of global interpretation is declining. [...] Historical studies provide promising impulses to better study and interpret urbanism⁴.

These reflections highlight the need to move beyond outdated perspectives and reexamine the historiography of twentieth-century urban planning in all its complexities. This includes consid-

ering the impact of state socialist regimes, as well as previously overlooked debates, public speeches, publications, and other relevant primary and secondary sources. The diminishing primacy of Cold War-era interpretations, often lacking nuance, makes such a reassessment more pertinent than ever.

Soviet influence on post-war architecture in Central and Eastern Europe between ideology and politics

With the directive “On the Restructuring of Literary and Artistic Organizations”, issued by the Central Committee of the Communist Party of the Soviet Union (CPSU)⁵ on 23 April 1932, Soviet cultural policy sought to consolidate all creative forces in the country. This coincided with the dissolution of existing literary and artistic groups and the formation of unified creative unions. The same year, the competition for the Palace of the Soviets, a convention hall and administrative center that was to rise on the site of the demolished Cathedral of Christ the Saviour in Moscow, further reinforced these ideological changes, profoundly impacting architectural and urbanistic methods and discourse. The emergence of Socialist Realism in the arts accompanied the restructuring and reorientation of all architectural and urban planning practices, aligning them with new state policies and objectives, including a renewed emphasis on cultural heritage. Given the early interwar dominance of Modernist paradigms, most Soviet and

DĚJINY STAVBY MĚST A VÝSTAVBA

V HISTORICKÝCH MĚSTECH

KATALOG EXKURSE



ČESKOSLOVENSKO 1957.

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Fig. 1 A special catalogue of historical plans of cities in Czechoslovakia prepared for the 1957 conference in Dobříš (© Haute École du paysage, d'ingénierie et d'architecture de Genève).

¹ F. KLEMPSTEIN, *Denkmalpflege zwischen System und Gesellschaft: Vielfalt denkmalpflegerischer Prozesse in der DDR (1952-1975)*, Bielefeld 2021, p. 15.

² *Städtebau: Geschichte und Gegenwart. Materialien der Konferenz Erfurt 1956 [der Arbeitsgruppe "Geschichte des Städtebaues und Aufbau in historischen Städten"]*, I, Berlin 1959, pp. 74-79.

³ Within the framework of Marxist-Leninist theory, 'materialism' refers to both 'dialectical materialism' and 'historical materialism'. The concept is often attributed to Karl Marx (1818-1883), whose theoretical writings laid its foundation and was later further developed under Leninism. Together with Friedrich Engels (1820-1885), Marx articulated a materialist conception of history ('historical materialism'), which posits that the material world constitutes an objective reality, where material conditions – specifically socio-economic formations and modes of production – shape society and social life. This perspective stands in contrast to 'Hegelian idealism', which sees ideas, culture, or human consciousness as the primary drivers of historical change. 'Historical materialism' was seen as a key analytical tool for studying the history of society in the Soviet Union and other state socialist countries of Europe. See K. MARX, *Zur Kritik der Politischen Ökonomie*, Berlin 1859, pp. III-VIII; J.V. STALIN, *Über dialektischen und historischen Materialismus*, Berlin 1955; R.O. GROPP, *Zu Fragen der Geschichte der Philosophie und des dialektischen Materialismus*, Berlin 1958; and *Диалектический и исторический материализм (Для системы партийной учебы)*, под редакцией С.М. Ковалева, Москва 1967.

⁴ Introduction, in *Urbanism and Dictatorship: A European Perspective*, edited by H. Bodenschatz, P. Sassi, M. Welch Guerra, Basel 2015, pp. 7-14: 7-8.

⁵ Российский государственный архив социально-политической истории (РГАСПИ). Ф. 17. Оп. 3. Д. 881. Л. 22.

⁶ Д.С. Хмельницкий, *Архитектура Сталина. Психология и стиль*, Москва 2006, pp. 92-93.

⁷ J. CONNELLY, *Captive University: The Sovietization of East German, Czech, and Polish Higher Education, 1945-1956*, Chapel Hill 2000, pp. 19-70.

⁸ A. ÅMAN, *Architecture and Ideology in Eastern Europe during the Stalin Era: An Aspect of Cold War History*, New York 1992, p. 60.

⁹ M. DJILAS, *Conversations with Stalin*, Harmondsworth 1967, p. 90.

¹⁰ The concept of the 'ensemble city' emerged in the 1930s as an idealized urban planning model that aimed for a cohesive, artistic vision of the city as a work of art. However, this idea remained theoretical and was never fully translated into practice. It was soon supplanted by ideological directives and simplified methods that prioritized the design of selected urban areas, typically principal streets and city squares. See Ю. Л. Косенкова, *Советский город 1940-х - первой половины 1950-х годов: автореферат диссертации доктора архитектурных наук*, Москва 2000, https://www.niit.ru/pub/pub_cat/kosenkova_yu_l_sovetskiy_gorod_.html (last accessed 12 September 2024).

¹¹ Ю. Л. Косенкова, *Советский город 1940-х - первой половины 1950-х годов. От творческих поисков к практике строительства*, Москва 2008.

¹² Universitätsarchiv, Bauhaus-Universität Weimar, Konferenzen. Enthält v. a.: Unionskonferenz in Moskau Dezember 1954. Baukonferenz in Berlin vom 03.-05.04.1955. / Sign.: I/01/247. 1954-1955.

foreign architects and artists did not expect such a dramatic shift⁶. Soviet hegemony in Central and Eastern Europe extended into historical research, architectural practice, and urban planning. The 'Sovietization' of education and universities in those countries began shortly after the war and continued until the mid-1950s. As John Connelly has discussed, while the adoption of the Soviet model was widespread, it was not uniform, with nuanced variations among different academic elites. The process involved local communists and scholars who assumed roles as state functionaries⁷.

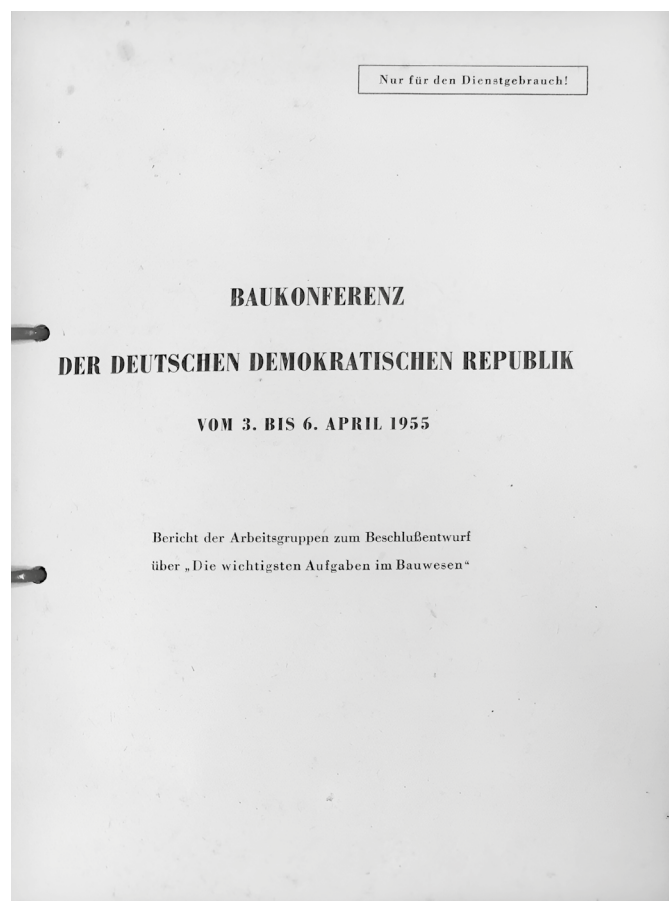
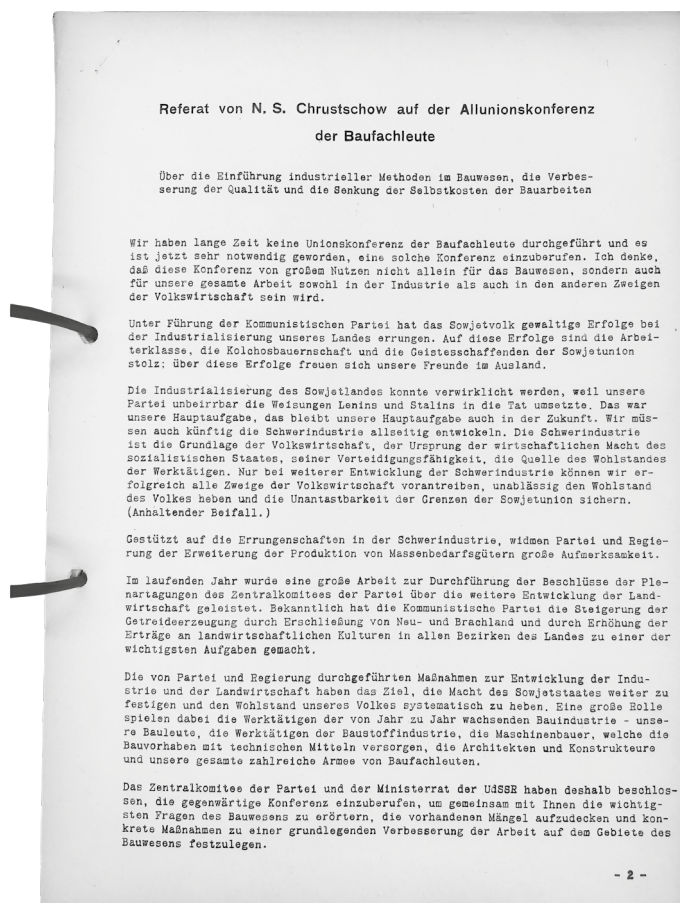
The Soviet model of academic research increasingly diverged from European standards of scientific rigor as it became progressively subordinated to communist ideology and shifting political orientations. In the late 1940s, architects and academics in state socialist countries across Europe came into direct contact with Soviet specialists: as Communist authorities came to power, they initiated close cooperation with the CPSU in Moscow. As Andres Åman has observed, "knowledge of 'the example from the Soviet Union' had to be disseminated quickly and put into practice. The result was a highly unusual campaign in the history of architecture. No country had ever changed direction so quickly, still less six countries at once"⁸. From the late 1940s through the early 1950s, political directives increasingly unified architectural and urban planning practices across the state socialist countries in Europe, reinforcing their growing connections with Moscow. Stalin's remarks to the Yugoslav communist politician and writer Milovan Djilas (1911-1995) encapsulated this process: "Whoever occupies a territory also imposes on it his own social system. Everyone imposes his own system as far as his army has power to do so. It cannot be otherwise"⁹. In line with the Soviet ideological framework, these transformations extended deep into the 'people's democracies' in Europe. Shaped by both systemic and individual factors, these

changes shared many similarities across the affiliated countries, particularly in the intensification of district-level architectural preservation practices. At the same time, Soviet and state socialist European architects often regarded urban planning as a subdivision of the arts. The unrealized idea of the 'city-ensemble'¹⁰ remained more of an aspiration than a tangible project, reflecting a broader trend of emphasizing the artistic component within the discipline of urban planning¹¹.

The death of Joseph Stalin (1878-1953) brought Nikita Khrushchev (1894-1971) to power in 1953, ushering a radical shift in Soviet architectural policy. During a closed session at the 20th Congress of the CPSU, Khrushchev denounced Stalin's cult of personality, marking a sharp ideological break from his predecessor. Even earlier, in December 1954, he delivered a critical speech at the National Conference of Builders, Architects, and Construction Industry Workers, condemning various types of architectural "excesses" (fig. 2). This speech eventually led to Decree 1871, "On the Liquidation of Architectural Excesses", which resulted in harsh criticism of Soviet architects and academics and significantly altered architectural policies. An analogous conference in Berlin (3-6 April 1955) led to a resolution by the Central Committee of the Socialist Unity Party of Germany, further aligning East German architectural policy with Soviet directives (fig. 3)¹². Subsequent publications in East German newspapers clearly signaled this reorientation (fig. 4). By 1955-1956, official policies emphasized rapid industrialization in architectural construction and building practices more generally.

The formation and the objectives of the Working Group

After the Stalinist era, political reorientations in architectural practice, the prevailing uncertainties within Soviet and other state socialist archi-



tectural and academic circles, and the challenges of urban renewal, reconstruction, and monument preservation – along with the necessity of interpreting both the distant and recent past – led to the formation of the ‘History of the Town Planning and Construction in Historical Cities’ working group. In late 1955, this initiative was proposed to the Deutsche Bauakademie (German Building Academy) in the GDR by the academies from Poland and Czechoslovakia with the support of two distinguished professors: Waclaw Ostrowski (1907-1990) from Poland and Emanuel Hruška (1906-1989) from Czechoslovakia. In the spring of 1956, the German Building Academy in East Berlin, the Polish Academy of Sciences in Warsaw, and the Czech and Slovak Academies of Sciences in Prague and Bratislava respectively, launched this international effort. Ostrowski’s and Hruška’s involvement in this initiative was shaped by their postwar experiences: the former participated in the reconstruction of Warsaw and co-founded the Warsaw Institute of Town Planning and Architecture in 1949¹³, while the latter participated in the Congrès Internationaux d’Architecture Moderne (CIAM) in 1947, where he was a referent for questions of regional planning at the

General Secretariat of the Economic Council and an external head of the Spatial Planning Department at the State Planning Office in Prague. A year later, in 1948, Hruška also founded and led the Institute of Urban Planning of the Faculty of Architecture and Civil Engineering in Bratislava¹⁴.

As political landscapes rapidly shifted, the relationship between architecture, urban planning, monument preservation, and politics became increasingly critical within the emerging and ongoing academic discourse of the mid-1950s. One of the primary tasks of the Working Group was to establish a solid theoretical foundation for approaching the reconstruction of war-damaged urban areas¹⁵. The group brought together both collective professional debates and individual contributions from art and architectural historians, architects, and experts in cultural heritage and monument preservation from across the ‘Eastern Bloc’. The formation of the Working Group was preceded by earlier international efforts to protect cultural heritage, notably the Roerich Pact (Treaty on the Protection of Artistic and Scientific Institutions and Historic Monuments, also known as the Washington Pact) of 1935, as well as the development of the Hague

Fig. 2 The German translation of N. Khrushchev’s speech presented at the National Conference of Builders, Architects, and Construction Industry Workers in December 1954 (© Universitätsarchiv, Bauhaus-Universität Weimar).

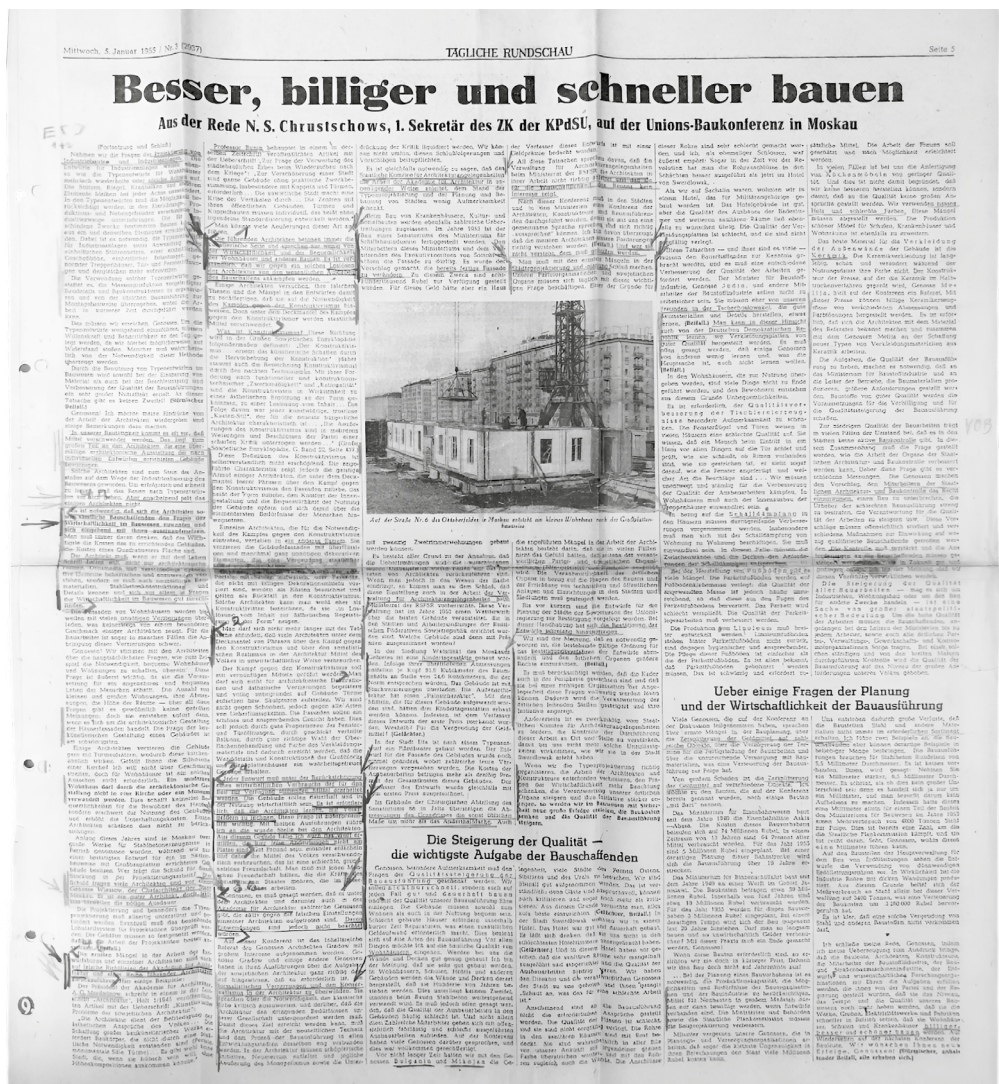
Fig. 3 Report on the draft resolution concerning “the most important tasks in the building sector”, East German Building Conference, Berlin, 3-6 April 1955 (© Universitätsarchiv, Bauhaus-Universität Weimar).

¹³ Archiwum Akt Nowych, Warsaw, Dr. inż. arch. Ostrowski Waclaw, ur. 21 VIII 1907 r. Instytut Urbanistyki i Architektury w Warszawie. Profesor nadzwyczajny. 2/317/0/26.5/6891, 1949, 1954-1955, Życiorys, Warszawa, Luty, 1954, p. 2, and Zaświadczenie by J. Grzybowski from 4 July 1949.

¹⁴ J. DOSTALÍK, Z. ULČÁK, *Biologický universalismus Emanuela Hruška*, “Architektúra & Urbanizmus”, 47, 1986, 1-2, pp. 52-71: 55.

¹⁵ *Städtebau...* cit., I, pp. 74-79.

Fig. 4 A newspaper article titled with Khrushchev's slogan "Besser, billiger und schneller bauen" ["Build better, cheaper, and faster", A.N.] (from "Tägliche Rundschau", 5 January 1955, p. 5; © Universitätsarchiv, Bauhaus-Universität Weimar).



Convention for the Protection of Cultural Property in the Event of Armed Conflict, signed in May 1954. The Hague Convention aimed to address the shortcomings of previous international initiatives and was built upon the principles of the Roerich Pact¹⁶, ensuring the continued relevance of these efforts on an international scale in the years that followed.

At the first Erfurt conference in 1956, East German art historian Gerhard Strauss (1908-1984) outlined the Working Group's agenda, which focused on the methodology and challenges of urban planning history and on contemporary projects in historical city centers¹⁷. The conference opened with welcoming remarks from Kurt Liebknecht (1905-1994), president of the German Building Academy, who explained the origins of the Working Group in his country. He highlighted the ongoing development of existing cities and the shared challenges of rebuilding war-damaged ones, emphasizing both commonalities and regional differences. The importance

of historical studies was presented as a foundational knowledge base for urban planning, offering guidance for contemporary practices without merely replicating old forms. Reflections on the distant and recent past and practices were perceived as a valuable contribution to general history, essential for correcting "mistakes, unscientific attitudes, and nationalist misrepresentations". Liebknecht also expressed hope that this platform would establish a permanent collective, an entity previously lacking at the level of European socialist states¹⁸. The formation of the Working Group thus reflected a broader academic effort to define an up-to-date methodology through which to approach the history of urban planning, in line with the need to integrate contemporary projects into historical city centers (figs. 5-6).

The agenda of the Working Group remained largely consistent over time. International discussions among experts involved concerns regarding how to maintain integrity, determine

what should be preserved, and develop restoration and protection methods. The speeches and studies by Soviet and state socialist European art and architectural historians had to navigate a complex balance between professional autonomy, political influences, and ideological conformity. Unfortunately, surviving documents offer limited insight into how academics integrated collective discourse while also expressing personal or subjective viewpoints within the constraints of Soviet and local state socialist regimes. This raises the question: how did these tensions between the collective and the individual play out? These developments must be understood within the shifting ideological landscape of Khrushchev's 'Thaw' – a period of relative relaxation from the mid-1950s to the mid-1960s – that introduced new dynamics, including partial deviations from previous ideological norms. Such deviations added layers of complexity to professional presentations, debates, and written accounts. At the same time, ideological demands of the state socialist regimes placed significant pressure on architectural policies, particularly in terms of addressing acute housing shortages and reconstructions of historical urban centers. These challenges demonstrate that state directives, intertwined with collective academic contributions, profoundly influenced the intellectual and cultural production of the era.

State socialist discourse and methodological contributions of the Polish delegation

Monument preservation efforts in the GDR were closely tied to state construction initiatives and ideological frameworks. In the 1950s, a distinction emerged between 'construction' (*Aufbau*) and 'reconstruction' (*Wiederaufbau*)¹⁹. A nuanced differentiation between these concepts is evident within the discourse of the Working Group. From the Erfurt conference in 1956 to the Budapest meeting in 1962, international

conference programs underscore the tensions between developing a historical narrative, preserving architectural monuments, and adapting historical sites to the needs of modern cities. The 1956 Erfurt conference and other international events organized by the Working Group were instrumental in shaping methodological discussions on the history of architecture and urban planning. Marking a broader shift in how academic institutions engaged with past and emerging architectural and urbanistic discourse, the final report from the Erfurt conference highlighted some of the key methodological questions (fig. 7). These issues were critically reevaluated and further developed by the Working Group.

The Erfurt conference program, structured into thematic sections with two or three presentations followed by discussion, provided a forum for reassessing established paradigms in architectural and urban planning. One of the first thematic sections, at which Polish and Hungarian experts presented their considerations, focused on methodologies for studying the history of urban development. Their contributions extended beyond documenting the current state of the field; rather, they reflected deeper methodological challenges. The published, multilingual conference proceedings provide important insights into the perspectives of the different participants, including Waław Ostrowski (1907-1990), Tadeusz Przemysław Szafer (1920-2017), Wojciech Trzebiński (1916-1993), Frigyes Pogány (1908-1976), Pál Granasztói (1908-1985), and Hanns Hopp (1890-1971). One of the most distinguished participants in this section was Andrey Vladimirovich Bunin (1905-1977), who represented, in an official capacity, the Institute of Architecture of the USSR Ministry of Higher Education and made significant contributions to the discussion.

The Polish contributions by Ostrowski, Trzebiński, and Szafer focused on their ap-

¹⁶ Convention for the Protection of Cultural Property in the Event of Armed Conflict with Regulations for the Execution of the Convention, UNESCO, www.unesco.org/en/legal-affairs/convention-protection-cultural-property-event-armed-conflict-regulations-execution-convention (last accessed 12 September 2024).

¹⁷ *Städtebau*... cit., I, p. 1.

¹⁸ *Ivi*, p. 2.

¹⁹ KLEMSTEIN, *Denkmalpflege zwischen System und Gesellschaft*... cit., p. 15.

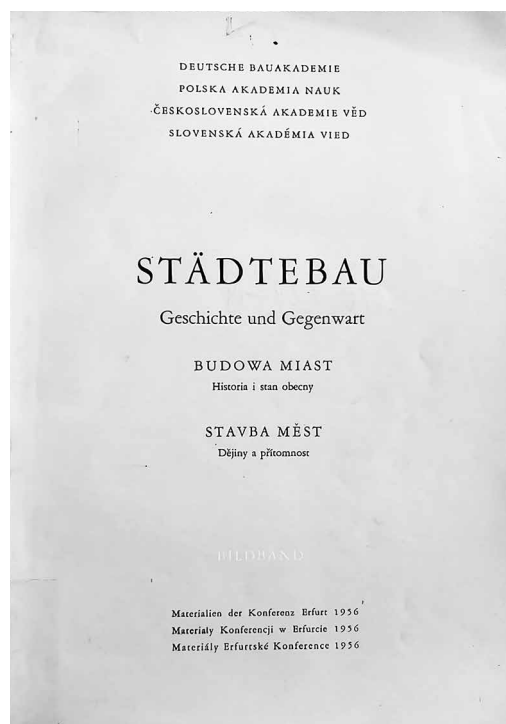
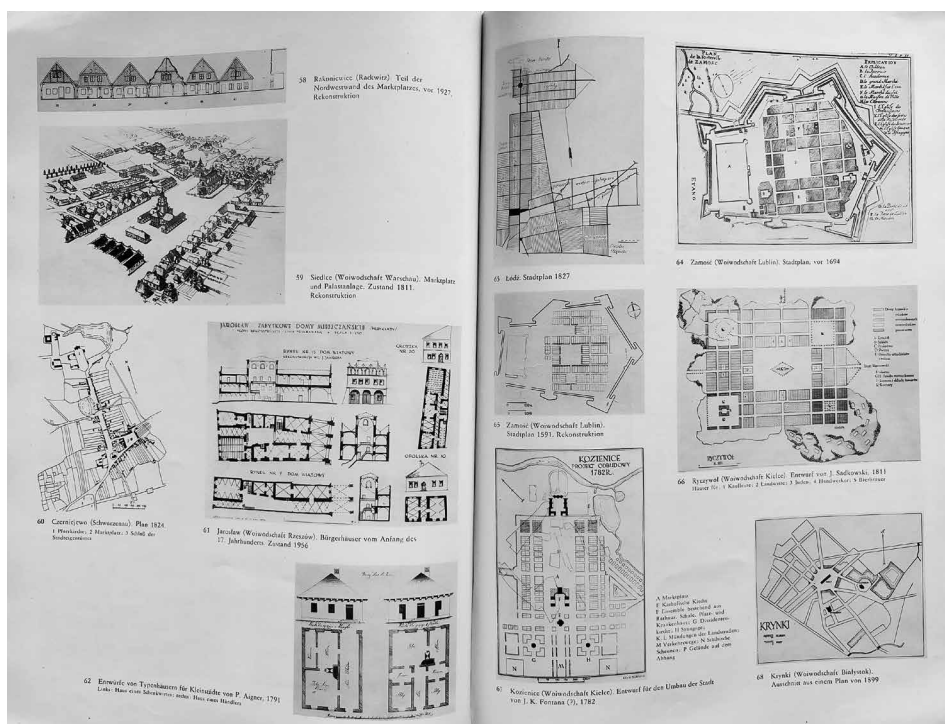


Fig. 5 Cover of the image tome of *Städtebau... cit.*, with materials from the 1956 Erfurt conference (© Bauhaus University Library, Bauhaus-Universität Weimar).

Fig. 6 Images related to buildings and cities in Poland (from *Städtebau... cit.*, figs. 58-68; © Bauhaus University Library, Bauhaus-Universität Weimar).



proaches to the history of urban development in Poland. Their joint presentation, titled *Research Methods for the History of City Planning/Building*, was structured in two parts: the first, prepared by Ostrowski and Trzebiński, and the second, written by Szafer. Both segments emphasized methodological questions and the use of sources. They recognized the complex, uninterrupted processes of urban evolution and considered the history of urban planning as an interdisciplinary field drawing from multiple disciplines²⁰. By framing urban development within a scientific framework, they challenged the prevailing views on the role of aesthetics in architectural history. In the USSR, GDR, and within certain professional circles in the European state socialist countries, urban planning – like architecture – was still largely regarded as a type of artistic practice. The discussions at the Erfurt conference signaled a partial paradigm shift in the study of architectural and urban history in the Soviet and other state socialist contexts. Despite the Polish delegates' criticism of the longstanding view that architecture and urban planning were primarily aesthetic endeavors – a perspective inherited from the late 19th and early 20th centuries – this approach was increasingly seen as insufficient and in need of a reevaluation²¹. Building on the contributions of his Polish colleagues, Hungarian scholar Frigyes Pogány reminded the audience that historical monuments

had traditionally been analyzed and appreciated mainly for their aesthetic qualities. The categories used by art and architectural historians centered on historical and aesthetic values, which remained fundamental to professional discourse. They continued to hold a prominent place in Soviet and other state socialist criticism of architecture and urban planning, reflecting broader intellectual and methodological tensions within the field²².

The analysis of the Polish delegation's contribution and the ensuing discussion makes it clear that earlier Soviet and European state socialist approaches to urban planning history were increasingly seen as inadequate, in particular the one adopted by the Austrian architect, city planner, and urban theorist Camillo Sitte (1843-1903). The history of urban planning was instead framed as needing to be concerned with “the social content that brought cities into being”²³. Sitte's interpretation of urban planning as an art form (the ‘art of cityscapes’) was deemed unsatisfactory and criticized as a “superficial ‘Formalist’ view”²⁴. The critique against Sitte was directed not only at Western traditions but also at the earlier Soviet and state socialist professional practices and interpretations that regarded architecture and urban planning as predominantly aesthetic in nature. The term ‘Formalist’, often used pejoratively, had gained traction in Soviet and European state socialist professional cir-

²⁰ Ivi, p. 60.

²¹ Ivi, pp. 60-67.

²² Ivi, pp. 74-78.

²³ Ivi, p. 62.

²⁴ Ibidem.

cles, particularly after two waves of Stalinist campaigns against Formalism in the early 1930s and late 1940s. Although never clearly defined, this negative view was reinforced by the mechanisms of the Soviet Union's highly centralized administrative command system. Even if only briefly mentioned, critiques of Formalism at Erfurt revealed traces of Stalinist-era discourse embedded within the ideologically sanctioned rhetoric about both contemporary and historical arts and architecture in the USSR and state socialist Europe. While broader political shifts had begun to reshape professional perspectives, the Polish rhetoric at Erfurt still reflected elements of these earlier paradigms. Despite an increasing number of experts distancing themselves from such rigid frameworks after the mid-1950s, the persistence of ideological legacies underscored the continued influence of politics on architectural and urbanistic discourse within the state socialist countries in Europe.

A close examination of the Polish contributions reveals the following key principles these scholars deemed essential for writing the history of urban development and planning²⁵:

- trace the impacts of social-economic transformations, productive forces, and technologies on urban forms;
- emphasize the necessity for a comprehensive approach to historical analysis that acknowledges the continuously evolving and complex nature of urban development;
- analyze both planned and spontaneous urban interventions chronologically, geographically, and factually, while integrating technical and humanistic perspectives;
- investigate the interplay of shapes, silhouettes, and layouts, considering the aesthetic, social, political, and philosophical contexts, rather than reducing urban forms to mere design ideas;
- recognize the role of surviving physical structures as a part of a material understanding of the past; and

- incorporate cartographic and visual materials as essential tools for historical analysis.

State socialist debates highlighted efforts to promote a broader, more socio-politically informed understanding of urban planning history, reflecting the complex intersections between multiple disciplines evident in their rhetoric. The surviving documentation of the Working Group reveals challenges in aligning planning history with socio-economic processes, stressing the need to incorporate social, economic, and technological transformations as key drivers of urban form. The shift in their debates was part of a larger paradigm change in which architecture and city planning were increasingly viewed through the lens of historical materialism and political utility rather than through artistic merit alone. The discussions not only reassessed but also critically debated the state socialist approaches to doing history, which had previously privileged Marxist materialist interpretations alongside aesthetic considerations.

The Polish and Hungarian presentations by Ostrowski and Pogány in Erfurt were followed by a discussion in which their East German colleague, Georg Münter (1900-1965), offered a critical response, targeting in particular Ostrowski's emphasis on aesthetics. Münter argued that urban development needed to be understood within its broader context, shaped by "certain fundamental social relations, which were not directly related to art, architecture and urban planning but 'translated' on the highest level"²⁶. Building on this discussion, Andrey Bunin outlined five key principles for studying the history of urban development and planning:

1. Productive forces form the foundation for the emergence and development of urban forms and must be considered in historical analysis;
2. Cities should be understood as socio-economic entities that exist within a continuous process of development;
3. Construction technology, including building

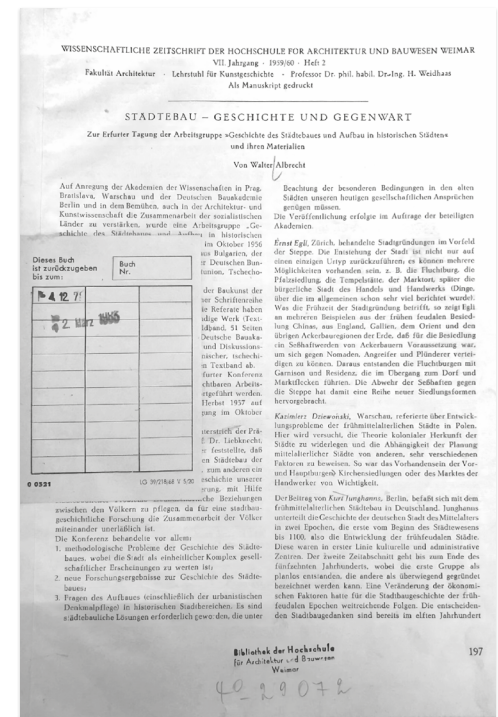


Fig. 7 First page of W. Albrecht's report on the Erfurt conference (from "Wissenschaftliche Zeitschrift der Hochschule für Architektur und Bauwesen Weimar", 7, 1959-1960, 2, p. 197; © Bauhaus University Library, Bauhaus-Universität Weimar).

²⁵ Ivi, pp. 88-90.

²⁶ Ivi, 87.

materials and structural systems, significantly influences the historical evolution of cities;

4. The analysis of urban form should incorporate aesthetic considerations alongside other factors; and

5. The history of urban development should not be examined in isolation or restricted to the context of a single country.

Bunin's five principles were not merely a reaction to the views of Ostrowski and Trzebiński but were also influenced by earlier professional discourse and research in Moscow and Leningrad. They represented the culmination of long-standing intellectual and methodological deliberations, reflecting Bunin's previous experiences and scholarly contributions. Although he articulated these principles explicitly for the first time during the Erfurt discussion, elements of them had already been present in his earlier studies and also continued to shape his later work²⁷.

The discussions, critiques, and contributions surrounding the writing of urban history and its methodology revealed a lack of unified perspectives and methods, with no significant methodological shift yet evident. However, traces of earlier approaches remained evident in the discourse. The Polish shift in perspective was not isolated from parallel debates in Moscow. In 1954, the main Soviet architectural journal, *Архитектура СССР* (*Architecture of the USSR*), had launched a politicized critique targeting scholars such as Andrey Bunin and his colleagues for their aesthetics-centered approaches. A year after the Erfurt conference, in 1957, Ostrowski's review of Bunin's 1953 publication *История градостроительного искусства* (*The History of the Art of Urban Planning*) further underscored the inadequacy of aesthetics-driven analyses in the 1950s²⁸.

The Erfurt debates revealed the complex interplay of professional, political, architectural, and technical factors that shaped approaches to ur-

ban structures under state socialism. The Working Group's discourse represented the culmination of efforts to establish a methodological foundation for the history of urban planning while engaging architects, art historians, and monument conservation specialists in discussions on preservation, restoration, and urban integrity. These debates highlighted the fluid, interdisciplinary nature of the scholars' approach. The Erfurt conference and other international meetings marked a transition from viewing the history of urban planning through a predominantly aesthetic lens to adopting a more complex, multifaceted framework. The critique of aesthetics-centered methodologies deepened, prompting a reassessment of the role of aesthetics in historical narratives – an issue that had long been debated by previous generations of scholars.

The methodological concepts discussed in Erfurt impacted the trajectory of urban planning historiography. Presentations and debates, particularly around Bunin's principles, sought to establish a cohesive methodological framework for studying and writing the history of urban planning. These discussions, alongside contributions from previous conferences, provide a platform for evaluating the relationship between individual and collective strategies. However, this process was fraught with contradictions, as both theoretical and practical developments were shaped by state directives, legislative constraints, and the need to reconcile personal inquiries with broader ideological imperatives.

From Erfurt to Budapest, and the contribution of Károly Ferenczy

Following high-level political criticism of architectural practices, the Working Group came to play a key role in reestablishing methodological foundations for urban planning history and reassessing interpretations of the recent past. The professional debates reminded research-

²⁷ А.В. Шуба, *Пять принципов А.В. Бунина на конференции 1956 года в Эрфурте*, in *Наука, образование и экспериментальное проектирование: тезисы докладов международной научно-практической конференции, 6-10 апреля 2020 г.*, I, Москва 2020, pp. 118-119.

²⁸ W. OSTROWSKI, *Istoria gradostroitel'nowo iskusstwa, tom I: Rabowladieczeskij Stroj, Feudalizm - Kapitalizm, Moskva, 1953 [recenzja]*, "Kwartalnik Architektury i Urbanistyki: Teoria i Historia", II, 1957, 3-4, pp. 309-314. The original title of the review includes Ostrowski's misspelling and mistransliteration of the Russian original in Cyrillic (the correct transliteration of "История градостроительного искусства" is "Istoriya gradostroitel'nogo iskusstva").

ers of the inherent frictions between academic discourse, practical applications, and policy, as scholars and practitioners continuously adapted to shifting professional contexts. In 1956 and 1957, the international meetings in Erfurt and Dobříš (near Prague) facilitated an exchange of ideas and perspectives, fostering shared criticism and generating new debates (figs. 1, 8). After these first and second conferences, state socialist scholars continued to grapple with how to address the recent post-war past and the shifting political landscapes. These challenges were addressed at the Warsaw conference in 1959, where experts sought to interpret both the contemporary 'Western capitalist' developments and their own recent history. The Warsaw conference's main theme focused on twentieth-century urban planning, with particular attention to its progress and transformation in the post-war decades²⁹. The discussion within the Working Group reflected ongoing efforts to refine and formalize a collective state socialist methodology for interpreting the history of urban planning. Meanwhile, in the GDR, the construction of the Berlin Wall in 1961 became a stark reminder of the ideological incompatibilities between Soviet-aligned state socialism and capitalist democracies. The division extended beyond East-West German relations, influencing academic discourse and restricting intellectual exchanges ahead of the Working Group's next meeting. In 1962, the Budapest conference became a critical platform for official debates, addressing the challenges of preserving historical city centers while evaluating architectural history as well. These discussions triggered the development of collective state socialist approaches to writing the history of architecture and urban planning, as well as guiding monument preservation practices. Károly Ferenczy's paper presented at Budapest, in which the Hungarian scholar advocated for a reevaluation of the field of architectural histo-

ry, stood out for its theoretical reflection. His argument, aligned with the perspective of his Polish colleagues at Erfurt, challenged the 'bourgeois' approach to architectural history, which prioritized stylistic uniformity and aesthetics. Ferenczy called for a new theoretical framework that would integrate historical material into a modern socialist perspective, arguing that the existing approach was outdated and ill-suited to contemporary developments³⁰. His critique linked the shortcomings of earlier state socialist interpretations of history to their bourgeois origins and tendencies and advocated for the need to connect architectural history with the ideology of the working class. This perspective reflected broader intellectual trends in which the label of 'Formalism' was not an inherent feature or flaw, but rather a cliché imposed through ideological critique. 'Formalist' traits were deliberately identified in certain works or approaches to reinforce accusations of superficiality and ideological deficiency. Ferenczy's text thus illustrates a broader effort within Soviet and state socialist professional circles to distance themselves from what they regarded as bourgeois art historical traditions.

Ferenczy structured his paper as both a critique of prevailing theory of architectural history and a proposal for its transformation. He argued that a scientific approach was needed to bridge the gap between historical research and professional practice. In his view, architectural history at the time remained disconnected from architectural practice, largely due to methodological shortcomings within the field. The discipline had not yet evolved into a true history of technology, even as the boundaries between the history of construction and the history of architecture were beginning to blur. Simultaneously, the modern architectural field was becoming increasingly internationalized, marked by a growing emphasis on engineering, technical expertise, and

²⁹ L. GERŐ, *Einleitung*, "Építés- És Közlekedéstudományi Közlemények", VIII, 1964, 1-2, pp. 15-16.

³⁰ F. KÁROLY, *Az Építészettörténet-Elmélet Korszerűségéről*, "Építés- És Közlekedéstudományi Közlemények", VIII, 1964, 1-2, pp. 374-375.

integration with the natural and social sciences. Ferenczy also highlighted the role of universities in cultivating the field of architectural history, both as an academic discipline and as a necessity for monument preservation³¹. By linking architectural history to contemporary discourse and professional practices, his contribution at Budapest sought to reshape the discipline into a productive force that could better serve the state socialist professional circles³².

The interdisciplinary nature of the Working Group's contributions

The methodological discussions within the Working Group indicate that the state socialist attitude toward the history of urban planning was not concerned solely with a historical evolution of forms. A closer examination of the professional exchanges at the Erfurt and other international conferences reveals the interdisciplinary nature of the approaches developed by scholars like Ostrowski, Szafer, and Trzebiński. Alongside Münter and Bunin, these scholars helped shape a state socialist framework for interpreting history – one that distanced itself from an explicitly aesthetic analysis.

Conference contributions and debates underscored the integration of architectural and art historical methods with political ideology and Marxist theory. Though not always directly cited, Marxist theory was crucial for the understanding of history, emphasizing socio-economic transformations, the role of productive forces, and the impact of technology on urban development. This Marxist-infused perspective linked the writing of architectural and urban planning history to broader questions of social organization and economic and political critiques of capitalist systems. At the same time, the focus on technology was interpreted as stemming from a techno-positive worldview and observations of technological advancements rather than as a purely Marxist-Leninist ideological construct.

Traditionally, the history of urban planning was rooted in European traditions of art and architectural history. By contrast, the state socialist approach increasingly moved toward more complex interpretations that incorporated interdisciplinary perspectives. During the Erfurt discussions, scholars acknowledged that understanding urban planning history required the integration of multiple disciplines, including political theory and sociology. Technical fields such as civil engineering, along with the expertise of architects, civil engineers, art historians, and monument conservators, were also seen as essential. Moreover, a growing awareness emerged within professional debates regarding the necessity for anthropological, philosophical, and sociological perspectives to study human values. This is evident in references to non-material remains – such as human consciousness, naming conventions, and customs – which were recognized for their role in shaping urban development. Anthropology and cultural studies, through the interpretation of non-urban contexts, visual depictions, and written texts, provided alternative insights into the architectural and urban past. However, sociology, particularly as it developed in the West, was largely dismissed in state socialist contexts during the 1950s. Regarded as a “bourgeois science”³³, it was deemed unnecessary for Soviet and state socialist academics, architects, and urban planners. Consequently, twentieth-century sociological approaches are not explicitly evident in the professional debates of the Working Group.

Within the framework of the planned economy (which was based on state ownership, collective farming, and industrial productions managed by a centralized administrative command system), academic circles often broadened their scope to incorporate political, economic, and social contexts into their research. Scholars emphasized that the history of urban planning needed to extend beyond traditional aesthetic con-

³¹ *Ibidem*.

³² *Ivi*, p. 378.

³³ L.E. KHORUTS, *A Critique of the Theoretical Foundations of Bourgeois “Sociology of Knowledge”*, “Soviet Studies in Philosophy”, 3, 1964, 3, pp. 9-19.

siderations to address social, economic, and geographical factors. The Working Group expanded their focus to include cartographic and visual analysis while also addressing the technical and social dimensions of urban planning. Environmental and geographical factors, such as terrain and land use, were recognized as crucial in shaping urban forms. The Polish contributions at Erfurt further underscored the importance of integrating archaeological insights, particularly for understanding the urban forms of early epochs. These developments highlighted the interdisciplinary nature of the Working Group's discourse and the dynamic interplay of ideas among its scholars.

Bridging national and international frameworks: heritage preservation laws and the Venice Charter

Despite the political divisions that characterized the era of the so-called 'Iron Curtain', the conferences of the Working Group benefited from a rich international exchange, with collaboration in heritage preservation persisting across ideological boundaries. These conferences facilitated discussions that intersected legislative concerns with preservation efforts, contributing to a growing awareness of legal developments at both local and international levels. Situating the Working Group's activities within a broader historical context highlights its alignment with international efforts in heritage preservation and conservation.

The heritage protection laws in Czechoslovakia, the GDR, USSR, and Poland are key to understanding this alignment. Although institutions worked to safeguard cultural monuments through preservation and reconstruction – often supported by specific acts and resolutions – there was no harmonized legal framework for the protection of cultural assets at the national level. The absence of a unified approach to cultural heritage protection led to reliance on cadastral

regulations and ad hoc decrees. National laws remained inconsistent and continued to evolve throughout the 1950s. In Czechoslovakia, this prompted the establishment of dedicated heritage protection agencies, culminating in the regulation of 1958. Meanwhile, in the USSR, regulatory inconsistencies were often in contradiction with various existing provisions. By the mid-1950s, the GDR's 1952 ordinance on preservation and protection of historical monuments was deemed inadequate as well, prompting the introduction of a revised version in September 1961. Poland followed suit with a similar formalization of its legal framework, whereby the absence of a singular, comprehensive law was overcome through the enactment of a dedicated law for the protection of cultural assets (Dz. U. 1962 Nr 10 poz. 48) in 1962³⁴.

A few years later, ICOMOS (International Council on Monuments and Sites) sought to establish overarching guidelines for heritage conservation, culminating in the 1964 Venice Charter. This document aimed to codify a non-ideological, universally applicable approach to heritage preservation. National and international documentation reinforced the interdisciplinary dialogue on how academics and architects addressed historical monuments beyond their own national borders.

The Venice Charter itself emerged as a product of international collaboration, bringing together experts from diverse national and ideological backgrounds. The involvement of Polish and Italian scholars, Jan Zachwatowicz (1900-1983) and Roberto Pane (1897-1987), in both the Working Group's conferences and the development of the Charter underscores the awareness of state socialist discourses and policies within broader international frameworks for cultural heritage protection, conservation, and restoration. Their participation also reflected the cross-national character of academic collaboration. Zachwatowicz had been involved since

³⁴ E. KOCOWSKA-SIEKIERKA, *Kwalifikacja zabytków i ich ochrona w Czechosłowacji w latach 1945-1958*, "Prawo", CCCXVI, 2014, 2, pp. 229-251: 230; В.В. Стравинская, *Советское законодательство по охране историко-культурного наследия*, dissertation presented at the НОУ ВПО "Нижегородская правовая академия", 2008, <https://www.dissercat.com/content/sovetskoe-zakonodatelstvo-po-okhrane-istoriko-kulturnogo-naslediya-0/> read (last accessed 23 April 2024); KLEMSTEIN, *Denkmalpflege zwischen System und Gesellschaft...* cit.; Dz.U. 1962 Nr 10, poz. 48, USTAWA, z dnia 15 lutego 1962 r., o ochronie dóbr kultury, Kancelaria Sejmu, s.1/18, <https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU19620100048/U/D19620048Lj.pdf> (last accessed 27 September 2024).

the first conference in Erfurt, and both he and Pane took part in the third conference in Warsaw in 1959. Their contributions helped bridge state socialist and Western perspectives, reinforcing the importance of establishing a universal framework for historical monuments preservation – one capable of being applied and adapted across differing political and cultural contexts³⁵. Indeed, the crafting of the Venice Charter required a synthesis of many different perspectives from across the ideological spectrum.

Impacts and legacies of the Working Group's conferences

The conferences of the Working Group were partially documented in local journals and conference proceedings published by the various academic institutes. Despite their significance, the full impact of these gatherings remains insufficiently explored. However, traces of their influence can be identified in subsequent scholarly works and in the continued exchange of ideas, as documented in personal correspondences and other primary sources.

Intellectual dialogue continued after the conferences, as evidenced by the correspondence between Swiss scholar Ernst Egli (1893-1974) and Czechoslovak scholar Emanuel Hruška (1906-1989). In 1956, Hruška shared his paper *O Metodě a Cílech Raionového Plánování* (*Regarding the Method and Goals of District Unit Planning*) with Egli, which presented his ideas on regional development in Czechoslovakia³⁶. The paper he delivered at the Erfurt conference in 1956, *Die typische kleine Stadt in der Slowakei* (*The typical small town in Slovakia*), was later preserved in the professional archives of GDR scholars Hermann Räder (1915-1984) and Hermann Weidhaas (1903-1978)³⁷. Notably, Egli's interpretations of the history and theory of urban planning were not confined exclusively to Switzerland; his volumes on urban history were also available in the GDR and the USSR. Following

the 1957 conference, he sent a copy of his work to East German architect and architectural historian Kurt Junghanns, who informed Egli that he used it for his work on an art dictionary. In a letter dated 22 December 1959, Junghanns expressed regret that Egli's third volume had not been available to him before the completion of his publication³⁸.

Meanwhile, after the Warsaw conference in 1959, the German translations of Bunin's work on the development of urban planning in the USSR (*Die Hauptetappen der Entwicklung des Städtebaus in der UdSSR*) and of Schwidkowski's study of Soviet urbanism between 1941 and 1959 (*Die wichtigsten schöpferischen Probleme der Planung von Städten in der sowjetischen Stadtbaukunst der jüngsten Zeit [1941-1959]*) were presented at the German Building Academy in Berlin³⁹. At the same time in Warsaw, Ostrowski read Egli's *Geschichte des Städtebaus*, describing it as "a beautiful book" that "differs significantly from other histories of urban planning"⁴⁰. Moreover, Ostrowski's interests in his colleagues' research extended beyond the conferences. After the Erfurt meeting, he published academic reviews of Bunin's work on the history of urban planning and of Münster's study of ideal cities in the Polish journal "Kwartalnik Architektury i Urbanistyki: teoria i historia"⁴¹.

Examining Ostrowski's and his colleagues' interpretations of contemporary practices raises the question of how the critical discussions from 1956 and 1959 were reflected – or omitted – in their later writings. For instance, the principles guiding the history of urban planning outlined by Bunin in 1956 appeared in the first and second volumes of his *История градостроительного искусства* (1953 and 1971 respectively)⁴², which were published before and after his visit to the GDR in 1956. This professional dialogue and scholarly exchanges are evident in the later works of scholars

³⁵ International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter), 2nd International Congress of Architects and Technicians of Historic Monuments, ICOMOS, Venice 1964, <https://icahm.icomos.org/wp-content/uploads/2017/01/1964-Venice-Charter.pdf> (last accessed 3 September 2024).

³⁶ Hochschularchiv ETH, Zürich, Hs 786:88. Letter with an article from Emanuel Hruška to Ernst Egli.

³⁷ Bauhaus-Universität Weimar, Archiv der Moderne (MdA), Weimar, N/55/61.5, "Bericht von Prof. E. Hruska von Juli 1956: Die typische kleine Stadt in der Slowakei, ihr historischer Kern, Erweiterung und Umland".

³⁸ Hochschularchiv ETH, Zürich, Hs 786:88 and 81. Letters between Kurt Junghanns and Ernst Egli, and the article by Emanuel Hruška that includes a letter from him to Egli (dated 5 May 1957).

³⁹ Leibniz-Institut für Raumbezogene Sozialforschung (IRS), Erkner, Wissenschaftliche Sammlungen, A1 (director ISA), ITG/1/06 and 07/R3/A.

⁴⁰ Hochschularchiv ETH, Zürich, Hs 786:117a. Letter from Waclaw Ostrowski to Ernst Egli (dated 22 December 1959).

⁴¹ OSTROWSKI, *Istoria gradostroitel'nogo iskusstva...* cit.; Id., Münther, Georg: *Idealstädte: Ihre Geschichte vom 15.-17. Jahrhundert*, Berlin 1957 [recenzja], "Kwartalnik Architektury i Urbanistyki: Teoria i Historia", III, 1958, 3-4, pp. 373-377.

⁴² A. SHUBA, *Between 'Art' and 'Culture' of Urban Planning: The Soviet Narrative of Urban Planning History* by A.V. Bunin, in *Totalitarian Architecture and Urban Planning: History and Legacy*, edited by C. Lamberti, J. Zdunek-Wielgolaska, "Esempi di Architettura. International Journal of Architecture and Engineering", 2022, pp. 68-83.

such as Tatyana Fedorovna Savarenskaya (1923-2003), Edmund Goldzamt (1921-1990), Oleg Alexandrovich Schwidkowski (1925-1990), as well as those of Andrey Bunin, Emanuel Hruška, and Ernst Egli⁴³. Many of these scholars actively participated in the efforts of the Working Group or maintained correspondence with their colleagues. Their publications reflect a richly interwoven intellectual landscape, marked by intricate cross-national exchanges and shared professional interests (fig. 8). The evolving discourse, shaped by these interactions, continued to influence later scholarly debates and approaches to writing the histories of architecture and urban planning.

Conclusion

The surviving materials, though fragmentary, document the creation of the Working Group, the evolution of its discourse, and its approaches to studying the history of urban planning and developing architectural projects in historical urban centers. Its conferences acted as catalysts for professional encounters, reflecting the progression of ongoing debates and the emergence of new perspectives. By facilitating the exchange of ideas and creation of new professional networks, these gatherings contributed to a deeper understanding of urban planning history within the state socialist circles in Europe.

As discussed above, the Polish delegation's contribution at the Erfurt conference signaled a critical shift away from a primarily aesthetic focus toward other facets of urban development. The interdisciplinary character of state socialist academic discourse emerged clearly in the debates of the Working Group and the research of individual scholars such as Waław Ostrowski, Tadeusz Szafer, Wojciech Trzebiński, Emanuel Hruška, and Andrey Bunin. Their work was shaped by both political and professional contexts, as well as by later publications by their respective national academics. The Working

Group's contributions reflected the politically and intellectually acceptable views – as well as tensions – present in state socialist professional and academic contexts.

The Erfurt conference and other events emphasized the need to expand historical analysis beyond aesthetics, advocating for an approach that connected architectural and urban history with other disciplines. This helped shape the evolving multidisciplinary orientation of state socialist attitudes toward the history of architecture and urban planning. The emergence of a distinct collective discourse was not only a strategic response to political realities but also an intellectual imperative.

The scholars discussed in this paper linked urban development and professional practices to broader socio-economic and political processes. Their emphasis on technical transformations aligned their work with both contemporary practical concerns and evolving theoretical discourse. Although legal aspects and heritage protection were not explicitly addressed, the historical contextualization of architecture and planning implicitly acknowledged their embeddedness in legal frameworks.

Reflecting on the Working Group's activities has allowed us to trace the evolution of ideas around the history of architecture and urban planning under state socialism. Nonetheless, further research is needed to determine the full extent of its influence on state socialist and Soviet narratives, preservation practices, and theories of urbanism. Continued scholarly engagement with the Working Group's intellectual legacy demonstrates its lasting impact. Indeed, the methodological and interpretative approaches developed by the Working Group in the 1950s and 1960s have extended well beyond the conferences, shaping subsequent academic and professional discourses.

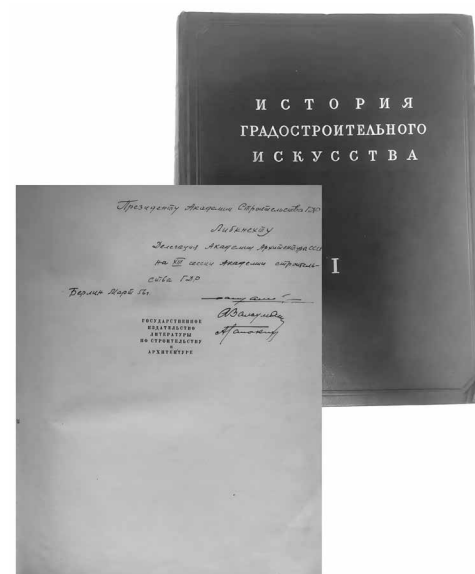


Fig. 8 A.V. BUNIN, *История градостроительного искусства*, Москва 1953, Cover of the first volume and title page with a dedication to K. Liebknicht from the Soviet delegation in Berlin, March 1956 (© Bauhaus University Library, Bauhaus-Universität Weimar).

⁴³ *Ibidem*. Also see E. EGLI, *Geschichte des Städtebaus*, I-III, Erlenbach-Zürich-Stuttgart 1959-1967; E. HRUŠKA, *Stavba miest: Jej história, prítomnosť a budúcnosť*, Bratislava 1970; W. OSTROWSKI, *Contemporary Town Planning*, I-II, Den Haag 1970-1973.

L'IMPORTANZA DI CHIAMARSI KENCHIKU. L'ECCEZIONE GIAPPONESE NELLA STORIA DELL'ARCHITETTURA

*This essay explores the role of interdisciplinarity in the history of Japanese architecture, beginning with a broader reflection on its impact throughout the twentieth century. Unlike the West, Meiji-era Japan faced the unprecedented challenge of having to bridge a technological gap of several centuries while simultaneously assimilating cultural paradigms foreign to its architectural tradition. Notably, due to different cultural conditions and the absence of theoretical and didactic manuals, Japan originally lacked a concept directly comparable to that of 'Architecture' in the Western sense. This condition was further exacerbated by the prejudiced perspectives of some Europeans who came to teach at Japan's newly established universities. Their biased interpretations created a sense of inferiority with respect to European architecture, a perception only gradually dismantled through the work of pioneering figures such as Itō Chūta and Bruno Taut. Furthermore, the historiography of Japanese architecture was largely shaped by architects, urban planners, and art historians, rather than by architectural historians, as exemplified by Walter Gropius and Kenzo Tange's richly illustrated 1960 book, *Katsura: Tradition and Creation in Japanese Architecture*, which remains a milestone for the discipline.*

Il ruolo dell'architettura e la sua narrazione in chiave storiografica rappresentano un campo d'indagine particolarmente fertile per analizzare il più vasto fenomeno della costruzione dell'identità nazionale giapponese; tali aspetti definiscono infatti uno spettro d'esplorazione interculturale di eccezionale interesse, tanto più in quanto espletato in un arco temporale essenzialmente ridotto. La questione architettonica, diversamente da altri paesi non occidentali, ha avuto nel Sol Levante uno sviluppo eccentrico dovuto sostanzialmente a tre ragioni: 1) la mancanza di una idea di architettura equivalente a quella occidentale; 2) la conseguente assenza di una narrazione storiografica diacronica e sequenziale¹; 3) la presenza di fattori involontariamente 'destabilizzanti' e 'distorcenti' come gli *oyatoi gaikokujin*², i tecnici stranieri chiamati nel paese a insegnare l'architettura occidentale.

La corsa alla modernità fu patrocinata, come in pochi altri casi, dalle autorità statali e dai loro promotori culturali i quali, nel definire (e successivamente proiettare) la propria visione del mondo, aprirono, in una fase più tarda, una via alternativa a quella europea e statunitense. Rispetto al mondo occidentale, il Sol Levante si trovò alla fine dell'era dello Shogunato Tokugawa (1603-1868) in una condizione di forte arretratezza tecnologica, che la forzata apertura al commercio da parte degli Stati Uniti indusse a colmare; il Trattato di amicizia e pace tra USA e Giappone (altrimenti conosciuto come Convenzione di Kanagawa) che fece seguito al celebre viaggio del Commodoro Matthew Perry³, fu

infatti una costrizione che obbligò il Sol Levante a porre fine alla sua lunga politica isolazionista e ad aprirsi al mondo. Lo shock indotto dalla constatazione della superiorità tecnologica dell'avversario — che adottò una scaltra politica di minacce alternate a lusinghe, mostrando non solo cannoni ma anche locomotive, pistole e telegrafi⁴ — spinse paradossalmente il Giappone a dare il via ad uno dei più impressionanti *upgrade* tecnologico-culturali della storia, un processo destinato ad imprimere una svolta duratura su tutta la società nipponica — architettura compresa.

L'eccezione giapponese alla 'questione architettonica'

Benché gli sviluppi culturali non vadano necessariamente di pari passo con quelli politici, l'ascesa al trono dell'imperatore Meiji, nel 1868, costituisce un buon punto di partenza per una riflessione sull'identità nazionale: fu infatti durante il suo regno che un moderno concetto di nazione (*kokka*)⁵ prese piede in Giappone. L'emergere di una nuova e coesa entità politica non significa tuttavia che fino a quel momento fossero mancate forme di consapevolezza o di espressione identitaria. Gli scritti giapponesi del IX secolo, ad esempio, mostravano una certa attenzione al tema che si palesava nella dicotomia⁶ *yamatoe* (immagini del Giappone) – *karae* (immagini della Cina). Tale sensibilità, opportunamente sostenuta dagli autori autoctoni, si sarebbe proiettata fino all'epoca moderna animando il dibattito artistico e intellettuale (fig. 2).

Mentre per la maggior parte delle discipline (in

particolare quelle ingegneristiche) il processo si tradusse in una importazione di tecniche così diverse da individuare branche autonome, (basti pensare alla cantieristica navale o all'elettricità), nel caso dell'architettura il fenomeno fu assai più complesso in quanto la modernizzazione interessò un'area che non era soltanto già codificata, ma che possedeva sfumature di senso molto diverse da quelle euroatlantiche. La prima sostanziale differenza risiedeva nella doppia assenza di un concetto e di un termine descrittivo equiparabile alla nozione europea di 'architettura'⁷. Prima del Rinnovamento Meiji, non era infatti esistito un vero e proprio concetto analogo quanto, più che altro, una distinzione tra 'costruzione' e 'stile'⁸: la prima (cioè l'aspetto ingegneristico), godeva di un certo grado di autonomia applicativa, sebbene vi fossero peculiarità legate al modo di sovrintendere i processi da parte dei capomastri (*tōryō*)⁹. Lo stile — connesso all'espressione formale intesa come codificazione estetica di elementi costruttivi e tipologie edilizie — era stato per secoli il nucleo generativo della disciplina, ma era comunque legato al rango della persona o del gruppo destinatario dell'edificio. Era dunque un elemento che esprimeva il ceto e non la sensibilità individuale, mantenendosi inscindibile dalla classe sociale del committente. Lo stesso interesse teorico degli storici *tout court* giapponesi — che pure non era mancato prima dell'era Meiji — si era rivolto essenzialmente (sia nei *kokugaku* che negli *yūsoku kojitsu*)¹⁰ alle residenze signorili. In Giappone, pertanto, il concetto di 'architettura' non raggiunse il suo signi-



Fig. 1 Panorama di Tokyo dal belvedere del Palazzo del governo metropolitano di Tokyo (foto M. Falsetti).

⁹In questo saggio si devono a Marco Falsetti il primo paragrafo e a Giusi Ciotoli il secondo.

¹ Il problema della sequenzialità è comunque legato alle differenti interpretazioni, spesso non disinteressate, di determinati periodi della storia giapponese, ragion per cui i vari *storytelling* sono, di volta in volta, ancorati a punti di partenza diversi. È un aspetto particolarmente evidente soprattutto nel Novecento: basti pensare alle riletture (spesso strumentali e politiche) riguardanti l'origine dell'architettura giapponese nel periodo a cavallo tra le due guerre. Si veda J.S. CLUZEL, *L'architecture éternelle du Japon. De l'histoire aux mythes*, Paris 2008.

² N. UMETANI, *The Role of Foreign Employees in the Meiji Era in Japan*, Tokyo 1971; S. DE MAIO, *Gli oyatoi gaikokujin e l'introduzione dell'ingegneria civile in Giappone. Richard Henry Brunton: ingegnere 'figlio del suo tempo', parte I*, "Il Giappone", 31, 1991, pp. 209-229; S. DE MAIO, *Gli oyatoi gaikokujin e l'introduzione dell'ingegneria civile in Giappone. Richard Henry Brunton: ingegnere 'figlio del suo tempo', parte II*, "Il Giappone", 32, 1992, pp. 63-81; G.J.N. GOODAY, M.F. Low, *Technology Transfer and Cultural Exchange: Western Scientists and Engineers Encounter Late Tokugawa and Meiji Japan*, "Osiris", 13, 1998, pp. 99-128.

³ Si veda W.G. BEASLEY, *The Meiji Restoration*, Stanford 1972; W.G. BEASLEY, *Japan Encounters the Barbarian: Japanese Travellers in America and Europe*, New Haven 1995; A. ALABISO, *Architettura giapponese e architetti occidentali*, Aprilia 2014, pp. 20-26.

⁴ Si rimanda alla "lista dei doni" pubblicata dalla Naval History and Heritage Command <https://www.history.navy.mil/research/library/manuscripts/p-r/list-of-gifts-perry-expedition-opening-of-japan.html> (consultato il 15 novembre 2024).

⁵ C.M.E. GUTH, *Japan 1868-1945: Art, Architecture, and National Identity*, "Art Journal", 55, 1996, 3, pp. 16-20: 17.

⁶ *Ibidem*.

⁷ Un problema di traduzione analogo al dibattito che ha investito la corretta individuazione del termine *kenchiku*/architettura, interessò anche il binomio *bigaku*/estetica. Infatti, l'equivalente nipponico di estetica (*bigaku*) venne introdotto nel 1893, e soltanto dopo aver individuato una dicitura adatta fu inaugurato il primo corso di Estetica presso l'Università di Tokyo. Si rimanda a D. RICHIE, *A Tractate on Japanese Aesthetics*, Berkley 2007, trad. it. *Sull'estetica giapponese*, Torino 2009, pp. 18-19.

⁸ Cfr. G. CIOTOLI, M. FALSETTI, *Kenzo Tange. Gli anni della rivoluzione formale 1940/1970*, Milano 2021, p. 55.

⁹ <https://www.adan.or.jp/en/critics-list/architecture-against-tradition> (consultato il 15 novembre 2024).

¹⁰ CLUZEL, *L'architecture éternelle du Japon...* cit., p. 180.

¹¹ J.M. REYNOLDS, *Teaching Architectural History in Japan: Building a Context for Contemporary Practice*, "Journal of the Society of Architectural Historians", 61, 2002, 4, pp. 530-536: 530.

¹² A.J. TSENG, *Josiah Conder and Early English-Language Historiography of Japanese Architecture*, "Kenchiku Shikō", 2009, pp. 371-378.

¹³ L'Imperial College di Tokyo era stato fondato soltanto nel 1873. Si rimanda a D.B. STEWART, *The Making of a Modern Japanese Architecture: 1868 to the Present*, New York-Tokyo 1987.

¹⁴ REYNOLDS, *Teaching Architectural History in Japan...* cit., p. 531.

¹⁵ Si veda J. FERGUSSON, *The Illustrated Handbook of Architecture: Being a Concise and Popular Account of the Different Styles of Architecture Prevailing in All Ages and Countries*, London 1855; J. FERGUSSON, *A History of Architecture in All Countries from the Earliest Times to the Present Day*, London 1865.

¹⁶ J. FERGUSSON, *History of Indian and Eastern Architecture*, London 1876, p. 487.

ficato moderno attraverso un'evoluzione lineare, bensì mediante un continuo dibattito tra attori diversi e differenti segmenti del mondo culturale (fig. 3). A questa complessità si deve peraltro la relativa assenza di riconoscimento per la figura dell'architetto (stabilizzatasi solo intorno alla metà degli anni Trenta) alla quale si può ascrivere, tra le altre cose, il minor peso dato all'architettura di Stato nel corso degli anni Quaranta, diversamente da altre nazioni.

I cambiamenti dell'Era Meiji (1868-1912) determinarono trasformazioni sostanziali anche nel campo della costruzione, un aspetto a proposito del quale Jonathan M. Reynolds ha notato come "lo stretto rapporto tra storia dell'architettura e pratica architettonica risale ai primi giorni dello sviluppo della professione architettonica stessa"¹¹, quindi ai primi anni di contatto con il mondo occidentale. La necessità di modernizzare il paese spinse il governo nipponico ad affidarsi, come per molte altre discipline, a professionisti esteri, fornendo ad architetti e ingegneri l'opportunità di recarsi in Giappone e collaborare con le neocostituite istituzioni accademiche e con gli enti professionali.

In questa prima fase, lo sviluppo degli stili e della tecnica andò di pari passo con quello dei metodi di produzione. La modernizzazione e la trasformazione dell'economia avevano attratto infatti industrie edilizie che necessitavano di nuovi professionisti e materiali i quali, a loro volta, richiedevano nuove tecniche di lavorazione. Tale condizione generò un rapporto di interdipendenza tra causa ed effetto che si protrasse fino agli anni Novanta dell'Ottocento.

Come accennato poc'anzi, fin dall'inizio il processo di modernizzazione dipese fortemente dalle influenze straniere, i cosiddetti *oyatoi gaikokujin*. Sebbene esperti occidentali, come Thomas James Waters (1842-1898)—l'ingegnere costruttore della Zecca imperiale di Osaka e della ricostruzione del distretto di Ginza—fos-

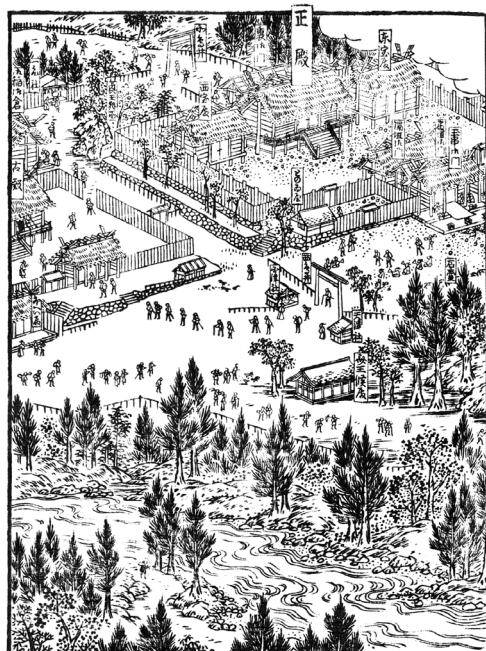
sero già attivi negli anni Sessanta dell'Ottocento, la politica esterofila del governo Meiji innescò un processo di assimilazione più complesso, proprio per via del numero di professionisti impiegati e del breve arco temporale entro il quale venne attuato.

Tra il 1874 e il 1880 da Regno Unito, Francia, Prussia e Italia furono chiamati diversi esperti di architettura, tra cui il britannico Josiah Conder (1852-1920), che insegnò Architettura Occidentale¹² all'Imperial College of Engineering di Tokyo¹³ fino al 1888. L'insegnamento di Conder prevedeva una conoscenza prettamente stilistica dell'architettura occidentale, ottenuta mediante la comparazione di casi studio ordinati secondo un criterio cronologico, privo tuttavia di nessi tipologico-processuali. Conder, inoltre, "esortò i suoi studenti a guardare alla storia come guida per la progettazione futura"¹⁴; tale metodo di insegnamento ebbe—anche a lungo termine—implicazioni fondamentali nel legare, in maniera quasi indissolubile, la storia dell'architettura—il suo studio e la sua narrazione—con la pratica architettonica *tout court*. Nel corso della sua lunga permanenza all'Imperial College (1877-1888), Conder istituì l'insegnamento della Storia dell'Architettura, adottando la visione di James Fergusson, i cui libri dedicavano al Giappone uno spazio estremamente marginale all'interno di una più generale trattazione dell'Asia orientale. Le *History of Architecture*¹⁵ di Fergusson dedicate all'Asia erano fondamentalmente incentrate sull'India, sia per un suo personale giudizio di valore, che per l'assenza di una esperienza diretta del Giappone. Non è un caso che nelle ultime edizioni di *History of Indian and Eastern Architecture*, Fergusson citi più volte proprio gli studi di Conder come "resoconti accurati di templi e palazzi"¹⁶ a dimostrazione del fatto che l'insegnamento passasse interamente dal filtro europeo. Superata l'iniziale—acritica—accettazione della narrazione occidentale



Fig. 2 Residenza del daimyo Matsudaira Tadamasa in Edo zu (*Veduta di Edo*), coppia di paraventi pieghevoli a sei pannelli, XVII secolo (Wikipedia public domain).

Fig. 3 Due viste interne del Santuario di Ise tratte da *Ise sangū meisho zue* (*Guida illustrata al pellegrinaggio di Ise*), vol. 4, 1797 (Open access Waseda University).

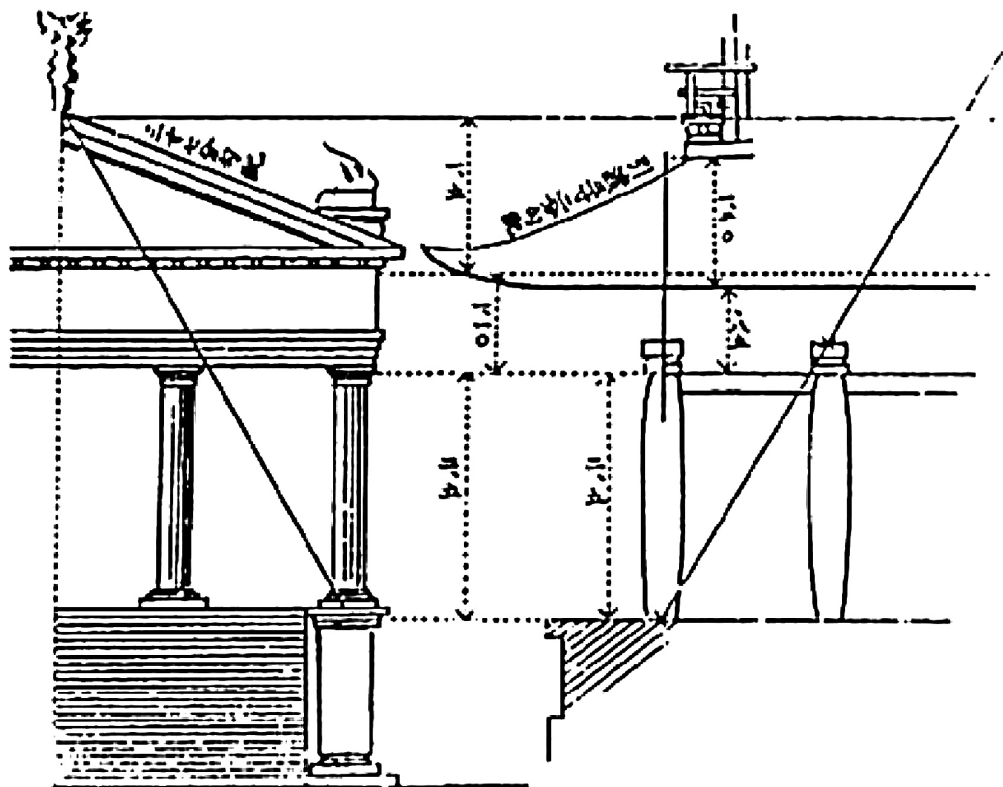


del problema, gli architetti giapponesi formati in tali istituzioni cominciarono a ragionare sulla oggettività di una valutazione così assertiva, e sui modi attraverso i quali integrarla e, possibilmente, rivederla.

Diversamente dagli artisti *tout court*, relativamente interessati da trasformazioni radicali (anche perché il gusto giapponese continuava ad essere molto apprezzato in Europa), gli architetti si trovarono inoltre esposti al fuoco incrociato delle critiche di ambedue le parti: per i loro connazionali le loro realizzazioni non erano abbastanza giapponesi, per gli esperti stranieri non abba-

stanza occidentali. L'incoerente e non univoca definizione del concetto di architettura (ancora concettualmente scisso tra tecnica, funzione e stile) fu, secondo Itō Chūta (fig. 4), un fattore negativo nel riconoscimento degli architetti come categoria, come dimostra il fatto che per indicare l'architettura continuassero ad usarsi entrambe le forme *zōka* (letteralmente, costruzione di una casa) e *kenchiku* (struttura edilizia)¹⁷. Ambedue i termini erano stati creati alla fine del XIX secolo: *zōka* era apparso per la prima volta nel dizionario franco-giapponese *French Language Lexicon* (*Futsugo meiyō*) del 1864, mentre *kenchiku*

Fig. 4 Confronto di Itō Chūta tra un ideale tempio greco e l'horyuji, 1893 (pubblicata nel testo di Itō Hōryūji kenchikuron in "Kenchiku zasshi", 7, novembre 1893).



nel *Pocket Dictionary* inglese-giapponese (*Eiwa taiyaku shūchin jisho*) del 1862. In parallelo al dibattito interno, la questione veniva discussa anche dagli Europei, seppur in uno spettro più vasto; tra i numerosi contributi sull'argomento, singolare è quello di Victor Champier, che nel testo *L'Architecture Japonaise* ripercorse l'etimologia del lemma accomunando — per la prima volta in area francofona — l'architettura giapponese con quella europea (stabilendo, di fatto, l'applicabilità del termine anche alle costruzioni del Sol Levante)¹⁸.

Quando, nel 1873, l'ufficio tecnico del governo centrale (*Kōgakuryō*) istituì una scuola che offriva una formazione in architettura, la denominazione ufficiale oscillò tra il nome di *kenchikugaku* (studio del *kenchiku*) e *zōkajutsu* (arte dello *zōka*), anche se il piano di studi rimase invariato¹⁹. Nel 1880 il governo giapponese cominciò ad inviare in Europa i propri studenti col proposito di apprendere direttamente sul campo le tecnologie industriali avanzate — soprattutto quelle con caratteristiche *dual-use* — per poi essere in grado di replicarle ed insegnarle in patria. Riflettendo le analoghe tensioni che, soprattutto in Francia, vedevano le discipline architettoniche suddivise tra *École des Beaux-Arts* (a vocazione artistica) e *École Polytechnique* (a vocazione tecnica), Okakura Kakuzō (1863-1913), il demiurgo culturale dell'era Meiji, aveva struttu-

rato in maniera analoga la Tokyo School of Fine Arts, demandando la formazione ingegneristica all'Imperial College. Il fermento degli allievi di Conder — tra i quali era emerso Tatsuno Kingo (1854-1919), che al ritorno dall'Inghilterra era divenuto titolare, nel 1884, della cattedra di Architettura Occidentale — li condusse a fondare nel 1886 la Società di *Zōka* (*Zōka Gakkai*), la prima organizzazione professionale giapponese di architetti, per distinguersi dagli ingegneri che avevano formato in precedenza la Società di Ingegneria (*Kō Gakkai*).

A chiudere questa prima fase di controversia sull'uso terminologico, intervenne Itō Chūta (1867-1954)²⁰, allievo di Tatsuno, il quale sostenne la necessità di cambiare il nome della Società degli architetti da *Zōka Gakkai* a *Kenchiku Gakkai*²¹. Itō poneva in relazione *zōka* con le 'arti industriali' e *kenchiku* con le 'belle arti', utilizzando gli analoghi concetti inglesi per giustificare le differenze.

Come ha osservato Alice Tseng relativamente al dibattito avviato da Itō Chūta²² per la collocazione dell'architettura nel panorama teorico delle arti, "il punto cruciale della sua argomentazione consisteva nel catturare il significato originale della parola occidentale architettura (*ākit-ekuchūru*) con un termine giapponese adeguatamente flessibile per trasmettere l'aspirazione della professione e della pratica"²³. Il tentativo

¹⁷ Si veda C. ITO, *Hōryūji kenchikuron*, "Kenchiku zasshi", 7, 1893, 83, pp. 317-350.

¹⁸ CLUZEL, *L'architecture éternelle du Japon...* cit., p. 126.

¹⁹ A.J. TSENG, In *Defense of Kenchiku: Itō Chūta's Theorization of Architecture as a Fine Art in the Meiji Period*, "Review of Japanese Culture and Society", 24, 2012, pp. 155-167: 161.

²⁰ Si rimanda a Y. NUSSAUME, *Anthologie critique de la théorie architecturale japonaise. Le regard du milieu*, Bruxelles 2004; B. JACQUET, *Itō Chūta et son Étude architecturale du Hōryūji* (1893). *Comment et pourquoi intégrer l'architecture japonaise dans une histoire mondiale*, "Ebisu Études japonaises", 52, 2015, pp. 89-115.



di Itō sottendeva in tal senso la sfida di restituire, in una singola accezione terminologica, la complessità di una disciplina multispettrale.

Le politiche del progetto tra dimensione artistica, artigianato e meccanizzazione

Seppure per ragioni diverse rispetto a quelle intervenute dopo il Rinnovamento Meiji, il ruolo della storia dell'architettura e il dibattito tradizione-innovazione ritroveranno grande centralità nel periodo successivo al Secondo Conflitto Mondiale. Il 1945 rappresenta infatti un secondo *discrimen* temporale nell'evoluzione concettuale e linguistica dell'architettura nipponica e costituisce un punto di svolta per l'emergere e il consolidarsi di nuove importanti figure del panorama nazionale. Tra gli autori chiamati — sia tra i ranghi dell'accademia che del mondo professionale — a traghettare il Giappone verso nuovi lidi dopo il disastro bellico (fig. 5), un ruolo preminente è occupato da Kenzo Tange (Tange Kenzō; 1913-2005)²⁴, il quale fu tra i primi a selezionare nel repertorio della millenaria storia del paese famiglie tipologiche da poter adottare nella progettazione architettonica e urbana. L'operazione di Tange — il quale, pur essendo un progettista e un urbanista, non vedeva nella storia

un settore 'distinto' e di natura statica, ma una disciplina operante²⁵ — si poneva dichiaratamente un fine pedagogico, quello cioè di fondare una nuova scuola di progettisti consapevoli del passato nazionale, per poi proiettarli verso discipline innovative, che sarebbero state di fondamentale importanza nei decenni a venire. Questa intersezione di storia, tecnologia e progetto rappresenta una interessante evoluzione, in senso interdisciplinare, rispetto alle ricerche iniziate prima della guerra in Giappone, all'interno delle quali l'intellettualizzazione degli aspetti cosmologico/simbolici aveva prodotto risultati indubbiamente singolari, seppure non sempre di immediata comprensione²⁶.

Di particolare importanza risulta l'esperienza del cosiddetto Tange Lab (*Tange kenkyūshitsu*), il laboratorio universitario diretto da Tange in seno al Dipartimento di Architettura dell'Università di Tokyo sin dal 1948, all'interno del quale il maestro sperimentò un programma didattico-operativo fortemente interdisciplinare. Qui Tange riuscì infatti a far cooperare artisti, specialisti delle nuove tecnologie e sociologi, con l'intento di elaborare una sintesi tra metodologia scientifica, progettazione e disciplina storiografica. In particolare, la collaborazione con Taro Okamo-

Fig. 5 K. Tange, *Il Centro per la Pace, Hiroshima, 1949-1955* (foto M. Falsetti).

²¹ TSENG, *In Defense of Kenchiku...* cit., p. 164.

²² Il saggio intende soffermarsi sull'eccezionalità nipponica nel panorama storico-progettuale; pertanto, non si approfondisce l'influenza di personaggi quali Frank Lloyd Wright e Bruno Taut. Per un quadro più comprensivo rispetto al ruolo di questi architetti occidentali rispetto alla storia dell'architettura del Sol Levante, si rimanda ai seguenti testi: B. TAUT, *Fundamentals of Japanese Architecture*, Tokyo 1936; F.L. WRIGHT, *An Autobiography*, London 1977; K. NUTE, *Frank Lloyd Wright and Japan: The Role of Traditional Japanese Art and Architecture in the Work of Frank Lloyd Wright*, London-Glasgow-New York-Tokyo-Melbourne-Madras 1993; G. CIOTOLI, M. FALSETTI, *Ad Oriente: il Grand Tour nella terra di Yamato, in I viaggi dell'architetto: la scoperta della natura e l'invenzione del paesaggio*, a cura di G. Belli, F. Mangone, R. Sessa, Roma 2024, pp. 107-115.

²³ TSENG, *In Defense of Kenchiku...* cit., p. 156.

²⁴ In giapponese, il cognome precede il nome, ma i nomi della maggior parte degli architetti moderni e contemporanei (come Kenzo Tange) vengono riportati secondo l'ordine occidentale nella storiografia dell'architettura e nella maggior parte delle pubblicazioni internazionali, incluso il presente volume.

²⁵ Cfr. M. TAFURI, *L'architettura moderna in Giappone*, Bologna 1964.

²⁶ B. JACQUET, *Principle of Latent Monumentality in Tange Kenzo's Concepts of Tradition and Creation. Study of the Formation of Tange Kenzo's Architectural Discourse*, "Journal of Architecture and Planning", 601, 2006, pp. 211-216.

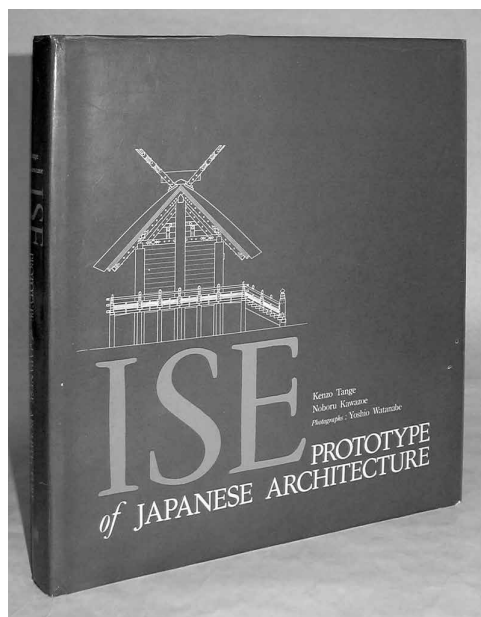


Fig. 6 Copertina del volume di K. Tange, *Ise: Prototype of Japanese Architecture*, Cambridge 1965.

to (Okamoto Tarō; 1911-1996) diede a Tange la possibilità di promuovere una personale visione del progetto e della storia dell'architettura tesa ad aggiornare il concetto di 'tradizione' implementando, al contempo, l'utilizzo correlato di materiali e sistemi industrializzati con *murales*, disegni e produzioni artigianali. In tal senso i *murales* richiesti a Okamoto per la hall del Tokyo Metropolitan Government Building si possono considerare una manifestazione della visione sinergica tanghiana della modernità e della tradizione²⁷ (fig. 1), all'interno della quale persino il conflitto tra artigianato e industria poteva risolversi in una "riunione di architettura, pittura e scultura"²⁸.

L'ibridazione didattica di Tange costituiva una sintesi tra arte, estetica e logica costruttiva, rispetto alle quali l'indagine sulle figure archetipiche del Giappone medioevale diveniva una sorta di pretesto, da una parte per superare, ancora una volta, il gap tecnologico attraverso l'uso di materiali e sistemi costruttivi d'avanguardia, dall'altra per rinverdire il concetto di 'tradizione', allontanandolo dalla politica imperialistica che aveva condotto al conflitto e che, almeno fino al 1952, era proibita dall'occupante americano²⁹. Per Tange, "la nostra teoria non deve negare la natura cumulativa della tecnologia, ma deve portare una prospettiva pratica su come superare le attuali contraddizioni della tecnologia"³⁰.

In seno al laboratorio furono portate avanti tutte le ricerche storiche e progettuali che, nei successivi anni Sessanta, diedero fama internazionale al maestro e ai suoi discepoli³¹: dai progetti-manifesto, quali Plan for Tokyo 1960 e il Piano di Tsukiji, alle pubblicazioni *Katsura: Tradition and Creation in Japanese Architecture* (di Tange, Walter Gropius e Yasuhiro Ishimoto, 1960)³² e *Ise: Prototype of Japanese Architecture* (di Tange e Noboru Kawazoe, 1965)³³ (fig. 6). Nel testo *The Tradition Leading Up to Katsura*, in particolare, il maestro riprese le fila del dibattito sulla tradizione, approfondendo la dicotomia

Jomon-Yayoi anticipata, soltanto qualche anno prima, da Okamoto³⁴ e poi da Kawazoe. Se, con ogni probabilità, l'artista nipponico era stato tra i primi a indagare la profonda diversità tra il sistema simbolico-formale dell'arte Jomon rispetto a quella del periodo Yayoi, sia Kawazoe³⁵ che Tange si mostreranno interessati a fornire una peculiare interpretazione della tradizione e della sua utilità didattica nei confronti della progettazione e dell'insegnamento della storia. Del resto, la decodificazione delle opere del passato (*in primis* il tempio di Ise e la villa di Katsura) avvenne al di fuori di un criterio storico-processuale (né tantomeno archeologico, considerata la natura dei manufatti), riducendo il contesto temporale ad un'unica dimensione critica, proiettata all'enucleazione dei soli elementi adattabili al presente del progetto.

Un altro aspetto fondamentale del discorso tanghiano è l'attenzione dedicata al problema dell'integrazione della dimensione artigianale-produttiva nell'architettura. Itō Chūta aveva infatti orientato la figura dell'architetto verso quella dell'intellettuale, ma sebbene quest'opera gli fosse riuscita solo in parte (come dimostra l'assenza degli architetti al fondativo simposio prebellico *Overcoming Modernism*)³⁶, coloro i quali occupavano i vertici della professione erano percepiti come tali, o aspiravano ad esserlo. In tal senso, tale visione rifletteva quella dell'artista-architetto di matrice occidentale, ma lasciava fuori tutta la sfera artigianale della produzione, così radicata nella tradizione giapponese (fig. 7). Nel 1956 Tange, ormai acclamato maestro internazionale, notava come "in Europa, una classe di architetti è già apparsa nelle società antiche. Tuttavia, non posso menzionare lo stesso in Giappone. Vorrei piuttosto soffermarmi sul fatto che gli architetti erano *kenchiku shokunin*"³⁷ (artigiani dell'architettura) o *tōryō* (capomastri) nel Medioevo feudale e che da questa posizione ridotta sono riemersi gli architetti in senso moderno"³⁸. È bene rammentare come, prima del Rinnova-

²⁷ Cfr. T. SAIKAKU, *The Core System and Social Scale: Design Methodology at the Tange Laboratory*, in Kenzo Tange: *Architecture for the World* a cura di S. Kuan, Y. Lippit, Zürich 2012, p. 21.

²⁸ K. TANGE, *Kenchiku, kaiga, chokoku no reunion*, "Atorie", 1952, pp. 54-55.

²⁹ M.E. CAPRIO, Y. SUGITA, *Democracy in Occupied Japan: The U.S. Occupation and Japanese Politics and Society*, London-New York 2007; F. FUKUNAGA, *The Occupation of Japan, 1945-1952: Tokyo, Washington, and Okinawa*, Tokyo 2021.

³⁰ K. TANGE, *An Attempt to the Realization of the Methodology of Architectural Creation*, "Shinkenchiku", giugno 1956, pp. 69-80: 79.

³¹ Cfr. SAIKAKU, *The Core System and Social Scale...* cit., pp. 15-28.

³² W. GROPIUS, K. TANGE, Y. ISHIMOTO, *Katsura: Tradition and Creation in Japanese Architecture*, New Haven 1960.

³³ K. TANGE, N. KAWAZOE, *Ise: Prototype of Japanese Architecture*, Cambridge 1965.

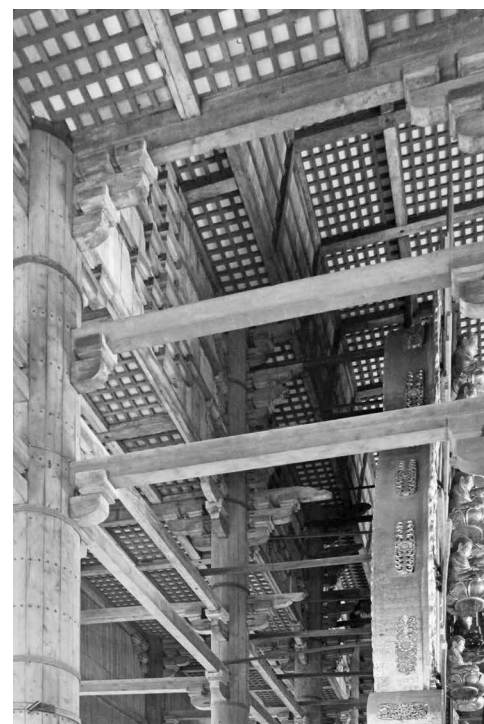
³⁴ T. OKAMOTO, *Yojigen to no taiwa: Jōmon doki ron*, "Mizue", 558, febbraio 1952, pp. 3-10: 4.

³⁵ Si rimanda all'editoriale firmato da Kawazoe per il numero di luglio 1953 della rivista "Shinkenchiku".

³⁶ CIOTOLI, FALSETTI, *Kenzo Tange...* cit., pp. 53-82.

³⁷ Il neologismo è stato definito da Tange. Cfr. <https://www.adan.or.jp/en/critics-list/architecture-against-tradition> (consultato il 15 novembre 2024).

³⁸ K. TANGE, *日本の建築家—その内部の現実と外部の現実 [The Japanese Architect. Its Internal Reality and External Reality]*, "Shinkenchiku", ottobre 1956, pp. 7-13: 9.



mento Meiji, il Giappone fosse carente di meccanismi prescrittivi per i diversi tipi di elementi architettonici (ornamento o soluzione tecnica) (figg. 8-9; immagine di copertina); tale aspetto era radicalmente diverso dalla moderna gerarchia produttiva, articolata attraverso disegni di progetto redatti esternamente al cantiere vero e proprio. Non era stata ancora individuata una figura capace di sovrintendere (o semplicemente comprendere) tutto il complesso delle lavorazioni, che era invece portato avanti dai singoli maestri e, più raramente, dal *tōryō*³⁹ un artigiano chiamato a svolgere il ruolo di capo-cantiere. Il *tōryō* era però a capo del cantiere solo da un punto di vista ‘amministrativo’ essendo in realtà, come gli altri, esperto di una lavorazione specialistica e non aveva una formazione capace di guidare una comprensione globale. Gabriel Kogan e Tamura Masamichi hanno osservato come in Giappone

la mancanza di istruzioni precise dall’alto verso il basso attraverso i disegni tecnici ha permesso ai lavoratori in loco di esercitare le proprie competenze e intuizioni collettive per partecipare in modo pro-attivo alla costruzione, anziché limitarsi a eseguire compiti prestabiliti. Così, in questa risposta dal basso verso l’alto del cantiere, ci sono state piccole deviazioni tra la concezione e la costruzione, a differenza dell’architettura che dipende dalla separazione tra progettazione e produzione, cioè tra gli uffici di architettura o ingegneria e i cantieri. L’assenza del primato dei disegni tecnici genera un rapporto diverso con l’organizzazione del lavoro, sia nella mediazione tra le istanze gerarchiche

superiori e la produzione, sia nel rapporto tra gli agenti coinvolti nella vita quotidiana del cantiere, che devono stabilire un dialogo costante attraverso la pratica e il *know-how*⁴⁰.

Nel periodo pre-Meiji i disegni tecnici fungevano generalmente da documentazione successiva al progetto costruito, piuttosto che da linee guida per la sua realizzazione; talvolta erano redatti solo per documentare i processi costruttivi di un’opera⁴¹, altre volte possedevano una valenza puramente didattica quali strumenti per l’apprendimento delle nuove generazioni di artigiani e addetti ai lavori⁴².

La rivalutazione dell’artigiano e, più in generale, il peso dato al problema della produzione divenne centrale all’interno del dibattito del dopoguerra, sia per ragioni politiche, sia come sotterranea (e forse inconscia) contestazione alla figura dell’architetto importata dall’Occidente. Nel passaggio dal Giappone medievale al Giappone moderno, sia la gestione del cantiere che l’organizzazione delle fasi di lavoro avevano infatti subito trasformazioni radicali, in grado di proiettare l’insegnamento della disciplina architettonica e la sua concreta applicazione verso una dimensione scientifica e specialistica. Nel secondo dopoguerra, tale questione assunse una connotazione politica, dando la possibilità a socialisti o simpatizzanti di sinistra — come Noboru Kawazoe (Kawazoe Noboru; 1926-2015) e Uzo Nishiyama (Nishiyama Uzō; 1911-1994)⁴³ — di esprimere con forza le proprie opinioni riguardo i processi di meccanizzazione applicati all’e-

Fig. 7 Portale d’ingresso di una casa, Kyoto (foto M. Falsetti).

Fig. 8 Il Daibutsuden del Tōdai-ji, Nara (foto M. Falsetti).

³⁹ L. BUTLER, *Patronage and the Building Arts in Tokugawa Japan*, “Early Modern Japan”, 12, 2004, 2, pp. 39-52.

⁴⁰ Si rimanda al link: <https://www.adan.or.jp/en/critics-list/architecture-against-tradition> (consultato il 15 novembre 2024).

⁴¹ Si pensi, in tal senso, ai disegni ricostruttivi redatti a posteriori dai capomastri o dagli artigiani impegnati nei cantieri, come nel caso della costruzione della torre (*tenshu*) del Castello di Edo. Si rimanda a W. COALDRAKE, *Architecture and Authority in Japan*, London-New York 1996, pp. 132-137.

⁴² CLUZEL, *L’architecture éternelle du Japon...* cit., pp. 178-182.

⁴³ Cfr. C. HEIN, *Nishiyama Uzō. Reflections on Urban, Regional and National Space: Three Essays*, London-New York 2017.



Fig. 9 Particolare della terrazza del Kiyomizu-dera (清水寺), Kyoto, 2013 (foto M. Falsetti).

⁴⁴ R. KOOLHAAS, H.U. OBRIST, *Project Japan: Metabolism Talks...*, Cologne 2011.

⁴⁵ N. KAWAZOE, *Metabolism* (1), "Japan Architect", 44, 1969, pp. 103-108. Questa è la versione in lingua inglese della rivista "Shinkenchiku", che pubblicò il suo primo numero nel 1956.

⁴⁶ Il termine fu coniato dal giapponese Yujiro Hayashi nel 1969. Hyunjung Cho ha avanzato l'ipotesi per cui il gruppo di Metabolism (Kikutake e Kurokawa in particolare) così come Tange, Kawazoe e Isozaki fossero a conoscenza della pubblicazione di Hayashi dal titolo *Jouhouka Shakai: Hado na Shakai kara Sofuto na Shakai*. Del resto, Hayashi era docente presso il Tokyo Institute of Technology e, come dimostrato da conferenze e testi degli architetti sopracitati, il ruolo multipartitico dell'architettura e della città erano tematiche fortemente dibattute. Si rimanda a H. CHO, *Expo '70: A Model City of an Information Society*, in *Expo '70 and Japanese Art: Dissonant Voices*, volume speciale della rivista "Review of Japanese Culture and Society", 23, 2011, pp. 57-71.

dilizia. In particolare, Kawazoe, globalmente riconosciuto come il critico fautore del manifesto di Metabolism⁴⁴, rifacendosi al pensiero sociale di Karl Marx, aveva delineato i valori formali e sociali dell'architettura — da lui definiti puri, in netta opposizione a quelli pragmatici dell'edilizia — stabilendo nessi concettuali tra le diverse fasi storiche della tradizione costruttiva nipponica. Nel saggio *Metabolism* (1), pubblicato sulle pagine della rivista "Japan Architect", il critico ripercorse la storia dell'architettura nipponica isolando alcune opere specifiche, come lo Shōkin-tei (casa del tè) della villa imperiale di Katsura (fig. 10), ritenute elementi organici di quella "forma di civiltà" che esprime l'unione tra Società, Natura e Uomo⁴⁵. La storia dell'architettura è scandita da una successione di ere (dei re, dell'aristocrazia, del guerriero e del cittadino) delineando, all'interno di ciascuna, i momenti di innovazione tecnologica e di integrazione spaziale. La selezione degli edifici attuata da Kawazoe non segue un rigore cronologico ma critico, e l'opera è analizzata per i valori universali che riesce a trasmettere; di conseguenza,

maggiore è la valenza simbolica di un'architettura (come il tempio di Ise, il palazzo imperiale di Kyoto, la villa di Katsura, ecc.), maggiore sarà il suo lascito per la collettività. La rilettura di Kawazoe ebbe grande eco in Giappone, riuscendo a influenzare l'insegnamento della progettazione architettonica in senso aperto e dinamico, diretto a integrare le nuove tecnologie sia alla scala dell'edificio che a quella urbana. Nell'approccio metabolico suggerito da Kawazoe, infatti, la città avrebbe dovuto accogliere in maniera attiva i più recenti sviluppi riguardanti il trasporto di massa, la meccanizzazione, l'information society⁴⁶, mentre l'abitazione — intesa come unità base del processo di civilizzazione — sarebbe stata conformata rispondendo a una maggiore standardizzazione e iper-specializzazione (elettronica, tecnica, domotica, ecc.) dei suoi interni. Quindi, oltre agli aspetti legati alla meccanizzazione del cantiere e, più in generale, della disciplina architettonica nella sua totalità e complessità, Kawazoe fu tra i primi a intuire l'impatto che la prefabbricazione industriale avrebbe avuto nella vita quotidiana dei cittadini. Le implicazioni sociali da



lui prefigurate saranno poi perfezionate e sistematizzate da Kisho Kurokawa (Kurokawa Kishō; 1934-2007), e sintetizzate nella definizione di “capsula”. Secondo l’architetto di Nagoya,

la produzione industriale di edifici diventa possibile quando il processo produttivo viene separato dall’industria edilizia convenzionale. L’industria ferroviaria, quella aeronautica e automobilistica sono modelli di questo processo. Come la produzione di massa è stata rivoluzionata dal Modello T della Ford, così la capsula renderà possibile la conversione qualitativa della produzione industriale di edifici. Come nel caso della Ford Mustang, le capsule saranno prodotte in serie con un sistema selettivo che combina i pezzi, non con un sistema standardizzato di produzione di massa. Verrà il momento in cui la produzione di massa non produrrà standardizzazione, ma garantirà varietà⁴⁷.

Attualità di Kenchiku

Benché eccentrica rispetto a quella occidentale, l’esperienza giapponese testimonia la molteplicità di fattori intervenuti nel dare forma alla moderna idea di architettura; se da un lato essa riflette tutte le incognite di una imperfetta comprensione del contesto culturale da parte della storiografia

euroatlantica, dall’altro offre l’inedita occasione di osservare come, in un ragionevole lasso di tempo, la concomitanza di istanze diverse ma convergenti abbia definito una parabola architettonica realmente interdisciplinare. Come ha osservato Reynolds, “in Giappone, la storia dell’architettura è stata introdotta come componente di un programma sistematico dell’istruzione accademica pensata per soddisfare le esigenze dei futuri architetti. L’insegnamento in questo campo ha continuato a essere strettamente legato alla pratica dell’architettura”⁴⁸. Questo aspetto risulta evidente ancora oggi nell’insegnamento accademico della storia dell’architettura che, seppure individuata dallo specifico ambito disciplinare, tuttora risente della proiezione in chiave operativa conferitale dalla scuola tanghiana. Non è un caso che i testi storiografici di questi ultimi anni (Fumihiko Maki, Arata Isozaki, Terunobu Fujimori, Kozo Kadowaki, ecc.) siano stati scritti da progettisti militanti, a riprova di come l’interdisciplinarietà sia insita nella concezione teorica di *kenchiku*, così come è andata sviluppandosi negli ultimi cento anni.

Fig. 10 *Shōkin-tei* (casa del tè) della villa imperiale di Katsura, Kyoto (foto R. Azevedo Franca, public domain).

⁴⁷ K. KUROKAWA, *Metabolism in Architecture*, London 1977, p. 83.

⁴⁸ REYNOLDS, *Teaching Architectural History in Japan...* cit., p. 535.

THE GLOBAL AND THE PLANETARY: POSTCOLONIAL ECOCRITICISM IN ARCHITECTURAL HISTORIOGRAPHY

While architectural historians today continue to demonstrate an unprecedented commitment to issues of globalization and transculturality, there is an emerging body of literature on ecology, environmentalism, and environmentality as key subjects that attend to the interconnectedness of our vastly heterogeneous world. This ‘environmentalization’ of the discipline is noticeably less concerned with the asymmetries of geopolitically determined cultures. It diverges from decades of interdisciplinary conversations about the dismantling of Eurocentric canons, suggesting that the new ‘planetary perspective’ – with its ecospheric inclusivity beyond human subjectivity – will replace rather than extend the ‘global perspective’ of geographical inclusivity beyond European subjectivity. By considering an ecocritical direction in the humanities that is based on the critical insights of postcolonial literature, this essay contemplates a decolonized approach to studying architecture and ecology. Its methodological analysis supports the growth of architectural history into a trans-disciplinary field, one that advances knowledge of the built, natural, and social environments as deeply entangled, without privileging the Global North’s postindustrial interests over the assessment of Southern, Indigenous, and diasporic developments. Just as the modifier ‘global’ is anti-globalist and resists cultural hegemony, so too must ‘planetary’ signify more than a universalist vision of ecology that presupposes an undifferentiated humanity imperiling a generalized nature.

Architectural history is fundamentally interdisciplinary. For decades, scholars in this discipline have engaged in the same intellectual discourses as their contemporaries from other branches of the humanities. Many of these discourses, including New Left Marxism, poststructuralist feminism, and postcolonialism, have informed historical research through socially conscious critical theories that succeeded the multidisciplinary Frankfurt School of continental philosophy¹. Only in recent years, with environmentalist concerns of the postindustrial world pulling the humanities closer to the sciences, have historians opted to mute critical theories as a primary methodological source and turned to a post-critical form of interdisciplinarity². Curious about how architectural history, as a self-assertive yet outward-looking discipline, will stay in conversation with other humanities disciplines, this essay reflects on the ecologically conscious ‘planetary perspective’ with the postcolonial insights that undergird the ‘global perspective’³. More specifically, by reevaluating the concept of ambivalence from postcolonial literature, the present analysis extends an ecocritical position that acknowledges the value of intertwined histories for a decolonized study of architecture and ecology.

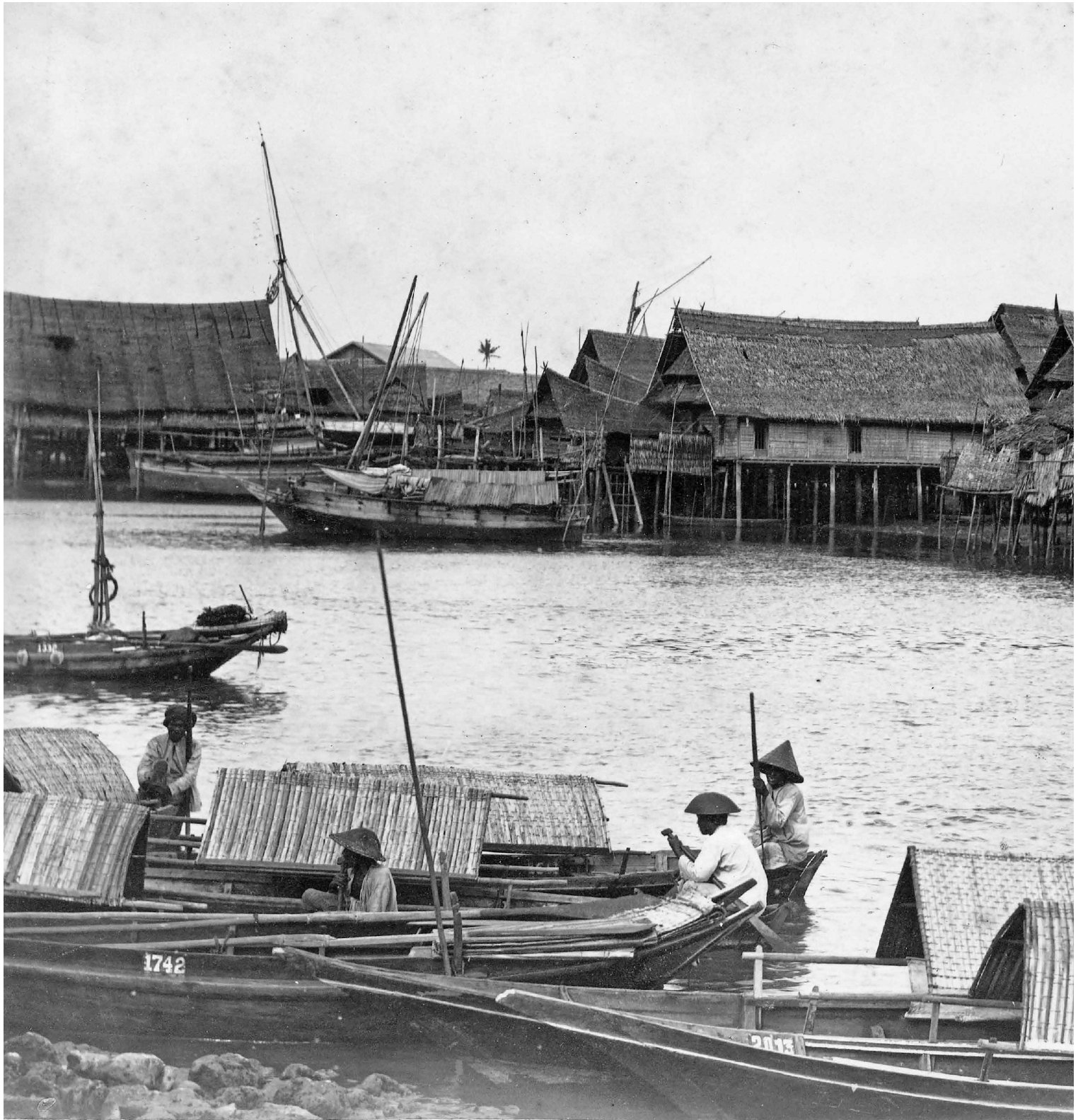
The question of a global architectural history

Around the turn of the millennium, historians began to move away from the colonial model of narrating the world’s heritages. Critical thinkers of the late twentieth century’s postcolonial front

– most notably Edward Said, Gayatri Chakravorty Spivak, and Homi Bhabha – mobilized a generation of architectural historians, alongside art historians and scholars across the humanities, to interrogate Eurocentric conceptions of cultural development⁴. While existing approaches to locating more geographically diverse and inclusive knowledge are far from consistent, the rather unspecific and open-ended aim for a ‘global perspective’ of history to replace ‘world history’ has undeniably become a disciplinary norm. The reassessment of canonical textbooks and their colonial roots, traced to the fourth edition of Banister F. Fletcher’s *A History of Architecture on the Comparative Method for the Student, Craftsman, and Amateur* (1901), has been a vital contribution of architectural historians attentive to the postcolonial cause⁵. Francis Ching, Mark Jarzombek, and Vikramaditya Prakash presented a connective survey of historic sites from all continents in *A Global History of Architecture* (2006), with an innovatively global chronology that contrasts Fletcher’s Mediterranean-Atlantic pedigree. Nearly two decades later, architectural scholarship continues to exhibit unprecedented commitment to addressing globalization and transculturality⁶. Nevertheless, it appears that the postcolonial answer to the colonial marginalization of cultures outside Europe and European-settled America in survey texts is increasingly about distancing from this type of literature altogether, in preference of revising a problematic timeline⁷. One observable consequence

of the discipline foregoing a shared chronological framework is the proliferation of research directions that remain isolated from one another, shackled to divisive categories of the past, and unevenly valued on an international stage⁸.

Cautious of the “anti-survey” trend, especially in the liberal training of building design professionals, architectural historian Esra Akcan has proposed the excavation of intertwined histories as a means of globalizing architectural studies⁹. Intertwined histories focus on moments of parallel, overlap, and fluidity between two or more cultures – particularly those that historians have traditionally kept polarized. The contemplation of history’s multicultural, intercultural, and trans-cultural layers draws from post-nationalist as well as postcolonial dialogues on globalization and globality. It implores our historically Eurocentric and elitist discipline to engage with a broader set of actors and spaces in order to comprehend the ethnocultural, gender, and socio-economic disparities that have been created through the intercontinental flow of power and resources. Akcan’s consideration of the translatability of German architecture in post-Ottoman Türkiye, for instance, does not only inform that lesser-recognized protagonists from around the world are involved in the privileged account of Europe’s industrialization and modernization. It also entertains a post-colonial renewal of the survey that relates new findings on the Global South to the extensively researched Global North, as opposed to retreating from the latter to devote to the former¹⁰.



Campoung Bazas

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Fig. 1 *Kampung Bugis, Singapore, ca. 1890-1910. Stilted neighborhood of Singapore's Bugis migrants from South Sulawesi, Indonesia (Rijksmuseum, Amsterdam, RF-F-00-5018-41).*

¹ Also notable is the interdisciplinary commitment of twentieth-century architectural historians to continental philosophy's phenomenological-existentialist and psychoanalytic-semiotic branches. These two related intellectual traditions, when compared to New Left Marxism, poststructuralist feminism, and postcolonialism, are more focused on the subjective individual than the objective collective.

² 'Post-critical' is a response to critical theory's dominance in the academic study of architectural design, referenced here to denote critical theory's absence in ecological scholarship. See R. SOMOL, S. WHITING, *Notes Around the Doppler Effect and Other Moods of Modernism*, "Perspecta", 33, 2002, pp. 72-77; G. BAIRD, "Criticality" and Its Discontents, in *The New Architectural Pragmatism: A Harvard Design Magazine Reader*, edited by W.S. Saunders, Minneapolis 2007, pp. 136-149; R. MARTIN, *Critical of What? Toward a Utopian Realism*, *ivi*, pp. 150-161.

³ A notable title that considers the humanities shifting from 'global' to 'planetary' is O. MOULD, *From globalisation to the planetary: Towards a critical framework of planetary thinking in geography*, "Geography Compass", 17, 2023, 9, pp. 1-13, <https://compass.onlinelibrary.wiley.com/doi/full/10.1111/gec3.12720> (last accessed 20 October 2024).

⁴ E. SAID, *Orientalism*, New York 1978, pp. 49-73; G.C. SPIVAK, *Can the Subaltern Speak?*, in *Can the Subaltern Speak? Reflections on the History of an Idea*, edited by R.C. Morris, New York 2010⁵ (first ed. New York 1985), pp. 21-78: 37-38, 62-63; H.K. BHABHA, *The Location of Culture*, London 2004² (first ed. London 1994), pp. 28-56. Notable titles that discuss postcolonial theory as a methodology for architectural historians include: E. AKCAN, *Postcolonial Theories in Architecture*, in *A Critical History of Contemporary Architecture: 1960-2010*, edited by E.G. Haddad, D. Rifkind, London 2014, pp. 115-136; Z. ÇELİK, *Reflections on Architectural History Forty Years after Edward Said's Orientalism*, "Journal of the Society of Architectural Historians", 77, 2018, 4, pp. 381-387; I. OSAYIMWESE, *From Postcolonial to Decolonial Architecture: A Method*, in *Architectures of Colonialism: Constructed Histories, Conflicting Memories*, edited by V. Egbers et al., Berlin-Boston 2024, pp. 17-42.

⁵ See critiques of Fletcher in G. BAYDAR NALBANTOĞLU, *Toward Postcolonial Openings: Rereading Sir Banister Fletcher's History of Architecture*, "Assemblage", 35, 1998, pp. 7-17; K. JAMES-CHAKRABORTY, *Beyond Postcolonialism: New Directions for the History of Nonwestern Architecture*, "Frontiers of Architectural Research", 3, 2014, 1, pp. 1-9.

⁶ Another notable example of a survey text that queries Eurocentric precedents is EAD., *Architecture Since 1400*, Minneapolis 2014, pp. vi-xx.

⁷ Fletcher's *History of Architecture* was first published in 1896. The twenty-first and latest edition, retitled *Global History of Architecture*, was published in 2019. At the time Ching, Jarzombek, and Prakash published *A Global History of Architecture*, a number of textbooks adhered to Fletcher's emphasis on Europe and North America. Two notable titles that are still in print are M.W. FAZIO, M. MOFFETT, L. WODEHOUSE, O. HOPKINS, *Buildings Across Time: An Introduction to World Architecture*, Boston 2023⁶ (first ed. Knoxville 1983); and R. INGERSOLL, *World Architecture: A Cross-Cultural History*, New York 2019² (first ed. New York 2012).

⁸ E. AKCAN, *Writing a Global History Through Translation: An Afterword on Pedagogical Perspectives*, "Art in Translation", 10, 2018, 1, pp. 136-142: 138.

⁹ *Ivi*, pp. 138-141. Chattopadhyay notes that Upton refers to such an approach as "webs and flows". See S. CHATTOPADHYAY, *The Globality of Architectural History*, "Journal of the Society of Architectural Historians", 74, 2015, 4, pp. 411-415: 413-414; D. UPTON, *Starting from Baalbek: Noah, Solomon, Saladin, and the Fluidity of Architectural History*, "Journal of the Society of Architectural Historians", 68, 2009, 4, pp. 457-465: 465.

Despite such a promising horizon for more inclusive scholarship, there is an emerging body of literature on ecology, environmentalism, and environmentality as key subjects that attend to the interconnectedness of our vastly heterogeneous world¹¹. This 'environmentalization' of architectural history, referred to as the 'ecological shift' in this essay, is noticeably less concerned with the asymmetry of geopolitically determined cultures. Previously colonized or less rapidly industrialized regions of the Global South are not necessarily omitted from discussions of land use, water management, climate control, natural resources, energy supply, environmental regulation, and rural systems as architectural issues. However, the intellectual foundation is no longer postcolonialism's critique of hegemonic 'Western' traditions and Northern modernity. Instead of navigating away from Europe's colonial legacy, the current 'ecological shift' tends to re-center history around industrialization, an enterprise of European origin and imperialist function¹².

Ambiguity of the Anthropocene

The rise in research on architecture and ecology as more than a technical subject requiring quantitative analysis is to rectify the typically minor role of the natural environment in the study of built environments. Within this loosely delimited field, some historians have adopted the interdisciplinary method of ecocriticism, which is critical of any strictly environmentalist revision of history and seeks to pluralize ecology's meaning for humanities research¹³. Yet, much of the momentum behind the current 'ecological shift' is the work of several Latourian scholars from architecture schools who are more closely allied with architects than with art historians¹⁴. Daniel Barber, Kim Förster, and Lydia Kallipoliti converge in their emphasis on the 'Anthropocene', a term borrowed from the sciences to entertain the unbinding of cultur-

al studies from anthropocentric precedents¹⁵. In the postcolonial disciplines of the humanities, could the framing of ecological scholarship around the Anthropocene be capitalizing on the term's scientific ambiguity to understate the variation, segmentation, and stratification of human cultures? There is no practical justification for historians to latch onto this label, as scientists are still undecided on whether to date anthropogenic impact to the onset of a major industrial phase (e.g., mechanization, electrification, chemicalization) or an earlier period of technological breakthrough (e.g., stone tools, agriculture, metalworking)¹⁶.

On a more ideological level, the Anthropocene (along with related neologisms such as 'Capitalocene' and 'Plantationocene') functions as a catchphrase that promotes the conformity of all human societies to the ecological knowledge and intelligence defined by the visions of certain authoritative economies¹⁷. Generalizing humanity's interaction and coexistence with nature across time, regions, and cultures distracts from the fact that Europe's historical ambitions to colonize, industrialize, and modernize the world is the very seed of past architectural research alienating the natural environment¹⁸. Thus, the ecocritical reexamination of architectural history should proceed with the critical insights of postcolonialism as a continually relevant branch of poststructuralist-Marxist thought. It is merely skimming the surface to resist the apparatus of centralized power that Förster describes as "the reproduction of a white, Western, male perspective" in *Environmental Histories of Architecture* (2022)¹⁹. More crucial is the unravelling of this 'ecological shift' in architectural historiography as a latently self-referential, inward-looking, and neocolonial discourse of the Global North that reinforces Southern, Indigenous, and diasporic 'Otherness'. Presently, a noteworthy oversight has less to do with ethnocultural, geopolitical,

or gender heterogeneity than the profound intertwinement of built and natural environments for many lesser-studied heritage groups, which contrasts the prevailing modern sense of architecture and nature as discrete yet reconcilable domains. An example of this intertwinement in history is Tenochtitlan, an urban ecosystem of the Mexica people on Lake Texcoco that was lost in the seventeenth century to Spanish colonization and is now undergoing restoration as an environmentalist project (figs. 2-3).

Postcolonialism and ambivalence

While the most apparent indication of postcolonialism stimulating a global architectural history is the departure from Eurocentric, nationalist, and patriarchal scholarship, applying postcolonial methodology in historical research does not constitute a Global South subfield that shuns the North. It simply fosters an intellectually rigorous look at globalization as communicative of the world's fragmentation into connectible pieces rather than its coalescence into a singular future. According to Bhabha's theory of cultural difference, postcoloniality is a condition of hybridity and ambivalence specific to the decolonized Global South, in which formerly subjugated nations establish their sovereignty by negotiating between precolonial recollections and colonial influences²⁰. This discernment of history's ambivalent layers should not be likened to the postindustrial environmentalist perception of humanity as a singular, undifferentiated entity burdening the planet. Ambivalence is the fluid 'in-between' that defies the binary 'either-or', whereas ambiguity is generalization that disregards nuance. Bhabha's equation of cultural hybridity with the emancipative 'third space' was pivotal in empowering the Global South as a key scholarly target at the end of the twentieth century, when the North's colonial mindset continued to shape humanis-

tic knowledge even decades after the formal decolonization of Asia and Africa.

Largely aligned with the feminist scholar Chandra Talpade Mohanty's idea of the 'composite Other' and Spivak's contemporaneous theory of the 'voiceless subaltern', a number of postcolonial thinkers have continued to develop this relatively young intellectual tradition in the post-millennial decades²¹. Their work exposes and explains the acutely marginalized segments of a world globalized through neoliberalism, techno-progressivism, and environmentality. Cultural historian Robert Young contends that "postcolonialism remains" because the humanities have not given up on the subaltern, and historians still strive to bring "the invisible" into visibility²². Nevertheless, literary scholar Amar Acheraïou recommends "decolonization of postcolonialism" by continually analyzing the intersectional dynamics of power and submission that maintain ethnocultural, gender, and socio-economic hierarchies. Concurring with Acheraïou's line of reasoning for remediating postcolonialism's fundamental principles of hybridity, ambivalence, and 'third space', Ian Baucom apprehends that the global magnitude of human actions intensifies "unfreedom" by fomenting "subaltern[ity], inequality, and vulnerability"²³. As a postcolonial theorist of historiography in the environmentalist age, Baucom is adamant that the planetary magnitude of climate change, carbon-cycle acceleration, sea-level instability, and other naturally occurring 'forcings' emblematic of injustice to the ecosphere, is inextricably linked to synthesized 'forces' of social injustice. For historians exploring the ecological dimensions of human cultures, including architectural historians, Baucom's reflection on the forcing-force dialectic points to postcolonialism's capacity to unravel humanity's complex tensions as a critical countermeasure against the eco-hegemonic trivialization of cultural vectors²⁴.

¹⁰ E. AKCAN, *Architecture in Translation*, Durham 2012, pp. 3-5.

¹¹ Barber explains the Foucauldian concept of 'environmentality' and its relevance to architectural history in D.A. BARBER, *Environmentalisation and Environmentality: Re-Conceiving the History of 20thc Architecture*, "Design Philosophy Papers", 7, 2009, 3, pp. 145-160. Whereas environmentalism is generally defined as the social response to human impact on nature, the neologism 'environmentality' references Foucault's 'governmentality' to denote the exercise of power through environmental policies. A notable title that elaborates on this subject is A. AGRAWAL, *Environmentality: Technologies of Government and the Making of Subjects*, Durham 2005, p. 8.

¹² For examples of scholarship that has presented timelines of ecologically conscious architecture: L. KALLIPOLITI, *Histories of Ecological Design: An Unfinished Cyclopedia*, New York 2024, pp. 17-26; P.J. TABB, A.S. DEVIREN, *The Greening of Architecture: A Critical History and Survey of Contemporary Sustainable Architecture and Urban Design*, London 2016, pp. 1-3; J. STEELE, *Ecological Architecture: A Critical History*, London 2005, p. 11. A recent volume that addresses preindustrial developments is *Land Air Sea: Architecture and Environment in the Early Modern Era*, edited by J. Ferng, L. Jacobi, Leiden 2024, pp. 1-24. Titles exceptional in their consideration of preindustrial Asia include: S. HOSSEINI, *The Invisible Lake of Sa'adat-ābād and the Safavid Architecture of Affect*, "Journal of the Society of Architectural Historians", 82, 2023, 4, pp. 395-419; V.D. DAMAYANTI, *The Political Economy of Banjarmasin's River Landscape During the Sultanate Period (1526-1860)*, in *River Cities in Asia: Waterways in Urban Development and History*, edited by R. Padavangi, P. Rabé, A. Perkasa, Amsterdam 2022, pp. 85-109; M.P. SOBTI, *Eurasia's Historical Space of Palimpsest – Desert, Border, Riparian and Steppe*, in *Architecture on the Borderland: Boundary Politics and Built Space*, edited by A. Pieris, New York 2019, pp. 15-35.

¹³ The origin of ecocriticism is in literary studies. See C. GLOTFELTY, *Introduction: Literary Studies in an Age of Environmental Crisis*, in *The Ecocriticism Reader: Landmarks in Literary Ecology*, edited by C. Glotfelty, H. Fromm, Athens 1996, pp. xv-xxxvii: xvii-xviii. Two notable titles on the subject for scholars of visual culture are: T. MORTON, *Ecology Without Nature: Rethinking Environmental Aesthetics*, Cambridge 2007, pp. 11-14; A.C. BRADDOCK, *Implication: An Ecocritical Dictionary for Art History*, New Haven 2023, pp. 12-13. A recent monograph that exemplifies an ecocritical approach to architectural history is M. ZARMAKOUPI, *Shaping Roman Landscape: Ecocritical Approaches to Architecture and Wall Painting in Early Imperial Italy*, Los Angeles 2023, pp. 20-22.

¹⁴ Influential for these scholars are social scientist Bruno Latour's theories of 'actor-network' and 'nature-culture': B. LATOUR, *Nous n'avons jamais été modernes. Essai d'anthropologie symétrique*, Paris 1991, English trans. *We Have Never Been Modern*, Cambridge 1993, p. 106; Id., *On Actor-Network Theory: A Few Clarifications*, "Soziale Welt", 47, 1996, 4, pp. 369-381; Id., A. YANEVA, "Give Me a Gun and I Will Make All Buildings Move": An ANT's View of Architecture, in *Explorations in Architecture: Teaching, Design, Research*, edited by R. Geiser, Basel 2008, pp. 80-89.

¹⁵ K. FÖRSTER, *Introduction*, in *Environmental Histories of Architecture*, edited by Id., Montreal 2022, n.p.; D.A. BARBER, *Architectural History in the Anthropocene: Introduction*, "The Journal of Architecture", 21, 2016, 8, pp. 1165-1170: 1165; L. KALLIPOLITI, *History of Ecological Design*, in *Oxford Research Encyclopedia of Environmental Science*, Oxford 2016, pp. 1-60: 3. Eugene Stoermer and Paul Crutzen are credited with the coining of the term 'Anthropocene' in J. DAVIES, *The Birth of the Anthropocene*, Oakland 2016, pp. 42-45.



Fig. 2 Map of Mexico City and Lake Texcoco (from G. BRAUN, F. HOGENBERG, *Civitates Orbis Terrarum*, *Coloniae Agrippinae* 1572, I, p. 58; © Utrecht University Library Special Collections).



Fig. 3 Lake Texcoco restoration project, Mexico City, commissioned 2020 (© KARI/ESA).

¹⁶ R.K. LOGAN, *The Evolution of the Anthropocene and Climate Change: A Media Ecology Approach and a Call to Action*, "New Explorations: Studies in Culture and Communication", 2, 2022, 3, pp. 182-228: 188-214.

¹⁷ A notable title on these neologisms is D. HARAWAY, *Anthropocene, Capitalocene, Plantationocene, Chthulucene: Making Kin*, "Environmental Humanities", 6, 2015, 1, pp. 159-165: 160.

¹⁸ Ahuja has presented a similar argument, though not specific to architectural history, concerning "environmental injustices [...] as components of longer processes of colonialism and racial disposability generated by extractive capitalist development": N. AHUJA, *Planetary Specters: Race, Migration, and Climate Change in the Twenty-First Century*, Chapel Hill 2021, p. 11.

¹⁹ FÖRSTER, *Introduction...* cit., n.p.

²⁰ BHABHA, *The Location...* cit., pp. 49-52.

²¹ C.T. MOHANTY, *Under Western Eyes: Feminist Scholarship and Colonial Discourses*, "Boundary 2", 12, 1984, 3, pp. 333-358: 334; SPIVAK, *Can the Subaltern Speak?*... cit., pp. 62-63.

²² R.J.C. YOUNG, *Postcolonial Remains*, "New Literary History", 43, 2012, 1, pp. 19-42: 23-24.

²³ I. BAUCOM, *History 4 °Celsius: Search for a Method in the Age of the Anthropocene*, Durham 2020, pp. 16-17.

²⁴ Ivi, p. 13.

²⁵ From Wölfflin's scholarship on Baroque Italy in the late nineteenth century to Bergdoll's scholarship on Revolutionary France at the turn of the millennium, generations of modern historians have been interested in moments of radical shift for architectural expressions and ideologies: H. WÖLFFLIN, *Renaissance und Barock: Eine Untersuchung über Wesen und Entstehung des Barockstils in Italien*, München 1888, English trans. *Renaissance and Baroque*, Ithaca 1967, pp. 15-17; B. BERGDOLL, *European Architecture 1750-1890*, Oxford 2000, pp. 1-5.

Toward a decolonized ecological shift

The notion of rupture is a familiar and favored one in modern architectural scholarship²⁵. Perhaps this has incentivized an 'ecological shift' that readily circumvents and distances itself from decades of interdisciplinary conversations about the dismantling of geopolitically or ethnoculturally based elitism, such as Eurocentrism. Architectural historians have yet to connect postcolonialism and ecocriticism. In other branches of the humanities, critical discussions of ecology with the insights of postcolonial theory affirm that the 'global perspective' of geographical inclusivity beyond European subjectivity is not supplanted by a 'planetary perspective' of ecospheric inclusivity beyond human subjectivity. Two premillennial titles that exemplify this continuity are *Green Orientalism* (1993) by philosopher Larry Lohmann and *Green Imperialism* (1995) by historian Richard Hugh Grove²⁶.

At the turn of the twenty-first century, when the majority of postcolonial scholars saw capitalism as a lingering form of imperialism oppressive to decolonized nations and their diasporas, anthropologist Vassos Argyrou presciently confronted the neocolonial implications of environmentalism²⁷. In *The Logic of Environmentalism* (2005), Argyrou foresees the Global North's sustainability agenda, an unwinnable race for the Global South, as

a reversion of postindustrial societies to the colonial age, with the same economic and political levathans from the 'West' expected to lead the entire planet forward.²⁸ While Dipesh Chakrabarty and Leela Gandhi, two esteemed voices of the postcolonial discourse, have since celebrated ecological awareness as an inspiring frontier for historians, social theorist Neel Ahuja warns that such optimism can obscure deep-rooted and well-known structures of inequity, such as racism, ableism, and poverty²⁹. An intricate point in Ahuja's *Planetary Specters* (2021) is that othering, exploitation, disempowerment, and dehumanization – historically imposed on Global Southern, Indigenous, and diasporic populations – often serve as the most elucidative instances of society's entanglement with the environment³⁰. These global forces inductively and descriptively reveal the broader picture of planetary forcings acting upon humanity. Furthermore, they lay bare the mainstream ecological discourse's propensity to pedestal nature (ecosphere, ecosystems, natural resources) with the end goal of deductively and prescriptively rationalizing cultural responses to environmental pressures (environmentalism, environmentalism, sustainability science).

For architectural historians, concepts such as Ahuja's 'planetary specter' of eco-social subalternity, Baucom's 'force-forcing' dialectic, and



Fig. 4 Nautical chart of South China's Zhujiang Delta (from "Guangdong tong zhi", 1731, III, p. 34; © Harvard-Yenching Library).

Acheraiou's 'third space' of hybrid oppression provide an intellectual compass for 'postcolonial ecocriticism' – a critical approach that bridges postcolonial and ecological contents. Like ecocriticism, this was first theorized in literary studies, originally as an intervention against ecocriticism's neocolonial tendency to reserve the right to "speak for nature" to the postindustrial Global North³¹. It is an alarming sign of the 'planetary perspective' eclipsing rather than enhancing the 'global perspective' when historians of other cultural productions, such as art and architecture, have welcomed ecocritical methods without considering postcolonial ecocriticism. The integration of environmental and historical studies to reframe our understanding of the world, its cultures, and their natural contexts is not about creating an open terrain – the 'degree zero' in Roland Barthes's semiotic terminology – in which post-humanist research is unburdened by existing knowledge of human predicaments³². Yet, as literary scholars Elizabeth DeLoughrey and George Handley point out in *Postcolonial Ecologies* (2011), "those who tend to prioritize the environment over all human needs" have been at odds with "those in the social justice movement who insist that human equity must precede green conservation and preservation"³³. This ideological conflict, with both

sides reducing the ecological camp to environmentalism and the postcolonial camp to Global Southern studies, has kept architectural historians from new knowledge of the built environments as embodiments of power that entails human forces and natural forcings.

Paradoxically, when recounted from the new 'global perspective' rather than the outdated 'world perspective' of Eurocentrism, the history of preindustrial colonialism is valuable for decolonizing the ecological discourse. By setting aside postindustrial assumptions about humankind's obligation to honor and protect the ecosphere, historians no longer allow environmentalism, environmentality, and environmental science to dictate the terms of ecological research. In *Green Imperialism*, Grove suggests that "any attempt to understand the foundations of western environmental concerns actually involves writing a history of the human responses to nature that have developed at the periphery of an expanding European system"³⁴. Grove's discussion of colonial activities on tropical Asian, African, and American islands does not merely cover the spread of environmental degradation from Europe to other continents. It also shows how global powers appropriated Indigenous knowledge of the biodiverse tropics to construct scientific views on human-nature relations.

²⁶ L. LOHMANN, *Green Orientalism*, "The Ecologist", 23, 1993, 6, pp. 202-204; R.H. GROVE, *Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism, 1600-1860*, Cambridge 1995, p. 12.

²⁷ Two notable titles on the postcolonial discourse of capitalism as imperialism are: M. HART, A. NEGRI, *Empire*, Cambridge 2000, pp. xii-xiii; and C.T. MOHANTY, *Feminism Without Borders: Decolonizing Theory, Practicing Solidarity*, Durham 2003, pp. 8-9.

²⁸ V. ARGYROU, *The Logic of Environmentalism: Anthropology, Ecology and Postcoloniality*, New York 2005, p. 165.

²⁹ D. CHAKRABARTY, *The Climate of History: Four Theses*, "Critical Inquiry", 35, 2009, 2, pp. 197-222; L. GANDHI, *Postcolonial Theory: A Critical Introduction*, New York 2019² (first ed. Edinburgh 1998), p. 183; AHUJA, *Planetary Specters...* cit., pp. 3-6.

³⁰ This point summarizes the field of environmental injustice. Notable recent titles include: D. ANDREUCCI, C. ZOGRAFOS, *Between Improvement and Sacrifice: Othering and the (Bio) political Ecology of Climate Change*, "Political Geography", 92, 2022, <https://www.sciencedirect.com/science/article/pii/S0962629821001724> (last accessed 23 November 2024); *Indigenous Resurgence: Decolonization and Movements for Environmental Justice*, edited by J. Dhillon, New York 2022, pp. 1-4; *Environment, Power, and Justice: Southern African Histories*, edited by G. Wynn, J. Carruthers, N.J. Jacobs, Athens 2022, pp. 30-35.

³¹ E. DELOUGHREY, G.B. HANDLEY, *Introduction: Toward an Aesthetics of the Earth*, in *Postcolonial Ecologies: Literatures of the Environment*, edited by E. DeLoughrey, G.B. Handley, Oxford 2011, pp. 3-39: 20-25.

³² R. BARTHES, *Le Degré zéro de l'écriture*, Paris 1953, English trans. *Writing Degree Zero*, London 1967, p. 5.

³³ Ivi, p. 21.

³⁴ GROVE, *Green Imperialism...* cit., p. 12.

Three decades after Grove's pioneering work, the field of colonialism and ecology is finally gaining traction, as evidenced by a recent surge of studies on the Haudenosaunee Great Lakes, Caribbean Sea, Yunnan-Bengal Corridor, and other historically underrepresented crossroads of the early modern 'colonial periphery'³⁵. Scholars across the humanities have contributed to this growing discourse over the years with their assessments of built or inhabited environments, emphasizing the physical spaces of human societies, cultures, and politics in environmental history. Art historian Barbara Mundy's study of Tenochtitlan's aquatic landscape, environmental historian Chad Anderson's study of Haudenosaunee land development, and historian of geography Christopher Morris's study of Asia's, Africa's, and America's 'wetland colonies' are a few examples³⁶. They demonstrate that behind the subject of architectural history are historians from various disciplines, brought together by an interdisciplinary methodology of theoretical depth and wide applicability in the humanities, such as postcolonial ecocriticism.

Among the small but active group of architectural historians focusing on ecology before industrialization, the works of Christy Anderson and Jennifer Ferng recall Grove's inclusion of Indigenous protagonists in narratives of colonial enterprises³⁷. Anderson's reconstruction of Newfoundland's Beothuk fishery infrastructure and Ferng's dissection of the Aboriginal Australians' climate control systems are further examples of how ecocritical scholarship integrates the postcolonial reinterpretation of colonialism. For Anderson, the migratory patterns of Beothuk fishers and their transient habitats, in existence a century before the 1610 settlement of English merchants on North America's Atlantic coast, tell a story of water, land, and human lives that sheds light on the environmental impact of more permanent colonial constructions³⁸. Similarly, Ferng examines

the Aboriginal observance of atmospheric and celestial phenomena in their land settlement practices, with the intent to unmask Europe's Cartesian reverence for the scientific mind over the intuitive body that has displaced Indigenous knowledge since the late eighteenth century³⁹. In their research on the early modern world, not only are Anderson and Ferng stepping away from the colonial characterization of Indigenous developments as primitive, atemporal, and illustrative of European progress, but they are also exploring the ambivalent circumstances of colonization, migration, and globalization to learn about ecology as independent of postindustrial environmentalism and the mainstream ecological discourse's teleology.

My own research on early modern urbanization around the South China Sea and Indonesia reveals that the European colonizers' imported ways of mediating built and natural environments co-evolved with the divergent local systems of Chinese and Muslim diasporas, as well as those of the Indigenous Southeast Asians. A plurality of ideologies for inhabiting the land, harnessing water, coping with climatic features, utilizing natural resources, and administering public health was already in place. To adapt to the same littoral conditions in the stormy tropics, while Southeast Asia's interisland migrants constructed neighborhoods on stilts to accommodate flooding (fig. 1), Dutch engineers transformed shallow seas into port cities with diked canals. This precursor of modern land reclamation demonstrates that our industrialized society's distinction of architecture from ecology was surfacing well before industrialization, alongside many remarkable traditions of building habitable structures in accordance with geological, atmospheric, and biological factors. Furthermore, attached to these examples of architectural history overlapping with environmental history is the social history of in-between experiences, anom-

³⁵ E.E. JONES, *Haudenosaunee Settlement Ecology Before and After Contact in Northeastern North America*, in *Frontiers of Colonialism*, edited by C.D. Beaulieu, Gainesville 2017, pp. 31-58; D.S. Yü, *Environmental Edging of Empires, Chiefdoms, and States: Corridors as Transregions*, in *Yunnan-Burma-Bengal Corridor Geographies: Protean Edging of Habitats and Empires*, edited by Id., K. Dean, London 2021, pp. 46-67; M. FERDINAND, *Une écologie décoloniale: Penser l'écologie depuis le monde caribéen*, Paris 2019, English trans. *Decolonial Ecology: Thinking from the Caribbean World*, Cambridge 2022, pp. 25-35.

³⁶ B.E. MUNDY, *The Death of Aztec Tenochtitlan, The Life of Mexico City*, Austin 2015, pp. 25-51; C. ANDERSON, *The Built Landscape and the Conquest of Iroquoia, 1750-1820*, in *Investing in the Early Modern Built Environment: Europeans, Asians, Settlers and Indigenous Societies*, edited by C. Shammas, Leiden-Boston 2012, pp. 265-294; C. MORRIS, *Wetland Colonies: Louisiana, Guangzhou, Pondicherry, and Senegal*, in *Cultivating the Colonies: Colonial States and Their Environmental Legacies*, edited by C.F. Ax et al., Athens 2011, pp. 135-163.

³⁷ Architectural historians generally work on colonialism after industrialization. Among the considerable number of titles in this field, a recent volume that represents the current direction of scholarship is *Architectures of Colonialism...* cit., pp. 7-10.

³⁸ C. ANDERSON, *Left on Shore: Iron and Fish in the North Atlantic*, in *Land Air Sea...* cit., pp. 211-232; 215-218.

³⁹ J. FERNG, *Cosmogenic Histories: Aboriginal Observations on Catastrophe and Climate*, in *Land Air Sea...* cit., pp. 173-207; 176, 180.



Fig. 5 Mazu Temple, Lantau Island, Hong Kong, founded in 1644. Conserved cultural site in the Zhujiang River Delta (photo S.H. Wan).

alous heritages, and compound oppression arising from multiple trans-regional powers grappling with natural forcings in their occupation of foreign territories⁴⁰.

South China's Zhujiang (Pearl River) Delta, home to one of the world's most populated megalopolises, stands as a striking example of the consolidation of former European colonies and the modern Asian nation-state. Spawned from the estuarine region's archipelagic landscape of jagged coastlines, precipitous mountains, and isolated coves was a rhizomatic, decentralized form of settlement that thrived on maritime trade beside the imperial Chinese, Portuguese, and British authorities who laid out hierarchically concentric cities. From nautical charts to conserved sites, I have relied on a miscellany of records to piece together a history of urban morphology, architectural traditions, and environmental responses that reclaims the presence of the minoritized Hakka, Hokkien, and Teochew Chinese cultures during the European colonization of Asia (figs. 4-5). Such a culturally conscious direction of scholarship will, on the one hand, synchronize the 'ecological shift' in architectural historiography – thus far riveted to the sciences – with the growth of postcolonial ecocriticism in the humanities as a unifying thread. On the other hand, architectural history will gain from researchers interpreting archival materials with environmental and social contents that the discipline found extrinsic in the past. Architectur-

al historians are uniquely skilled in mining visual documents of physical spaces, such as the extensive Dutch colonial collections of cartographic images, geotechnical drawings, and travel sketches that I consult in my research (figs. 6-7). These underutilized sources might be less accessible to historians with other specializations.

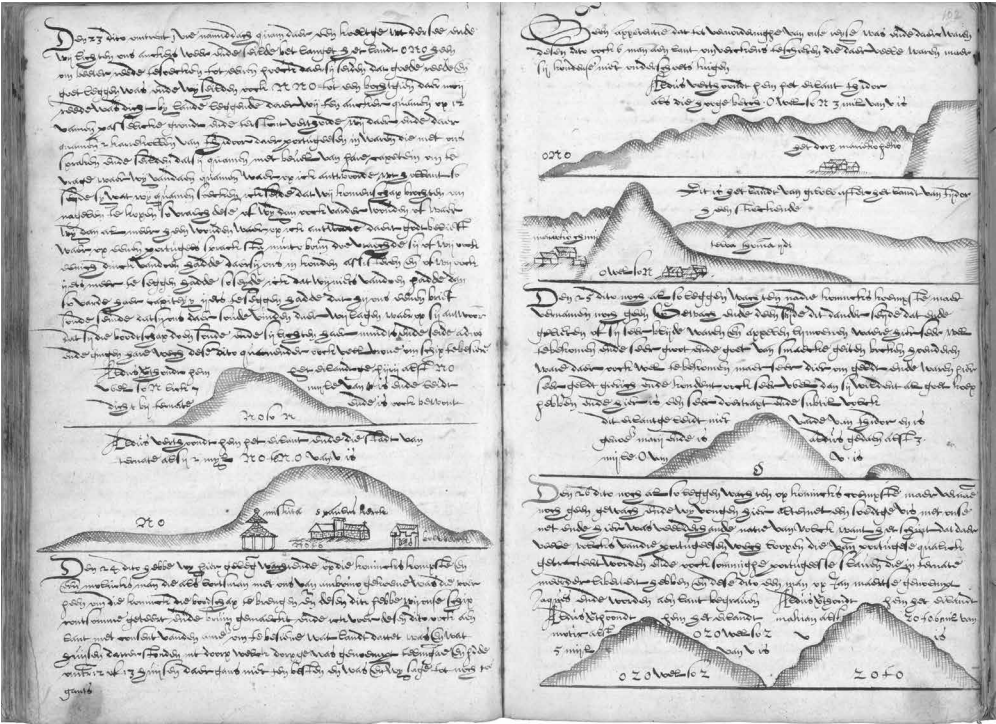
The question of a planetary architectural history

By addressing the theoretical underpinnings of 'globality' and 'planetary' – two seemingly analogous expressions representing separate discourses on inclusivity – this essay has argued that any 'ecological shift' in architectural historiography must not diverge from the postcolonial critique of Eurocentrism and hegemony. On the contrary, the lessons of postcolonialism, which illuminate cultural difference and power relations, should usher in a constellational history of architecture and ecology – one that is decentralized yet interconnected, pushing back on the resurgence of scholarship with neocolonial, exclusionary, and post-critical overtones. Resituating the 'global perspective' and the emerging 'planetary perspective' as complementary rather than successive is also to dispute any instrumentalizing of methodological shifts to redraw rigid boundaries for the discipline. Enriched by interdisciplinary engagement with the postcolonial humanities and the environmental sciences, architectural history should evolve into a *trans-dis-*

⁴⁰ For a discussion of architectural historians addressing the social history of in-between experiences, anomalous heritages, and compound oppression, see S.H. WAN, *Disciplining Otherness in the Tropics: Dutch Philanthropic Sites and the Urbanization of Indonesian Ports, 1640-1730*, "Journal of the Society of Architectural Historians", 81, 2022, 4, pp. 420-440: 436-437.

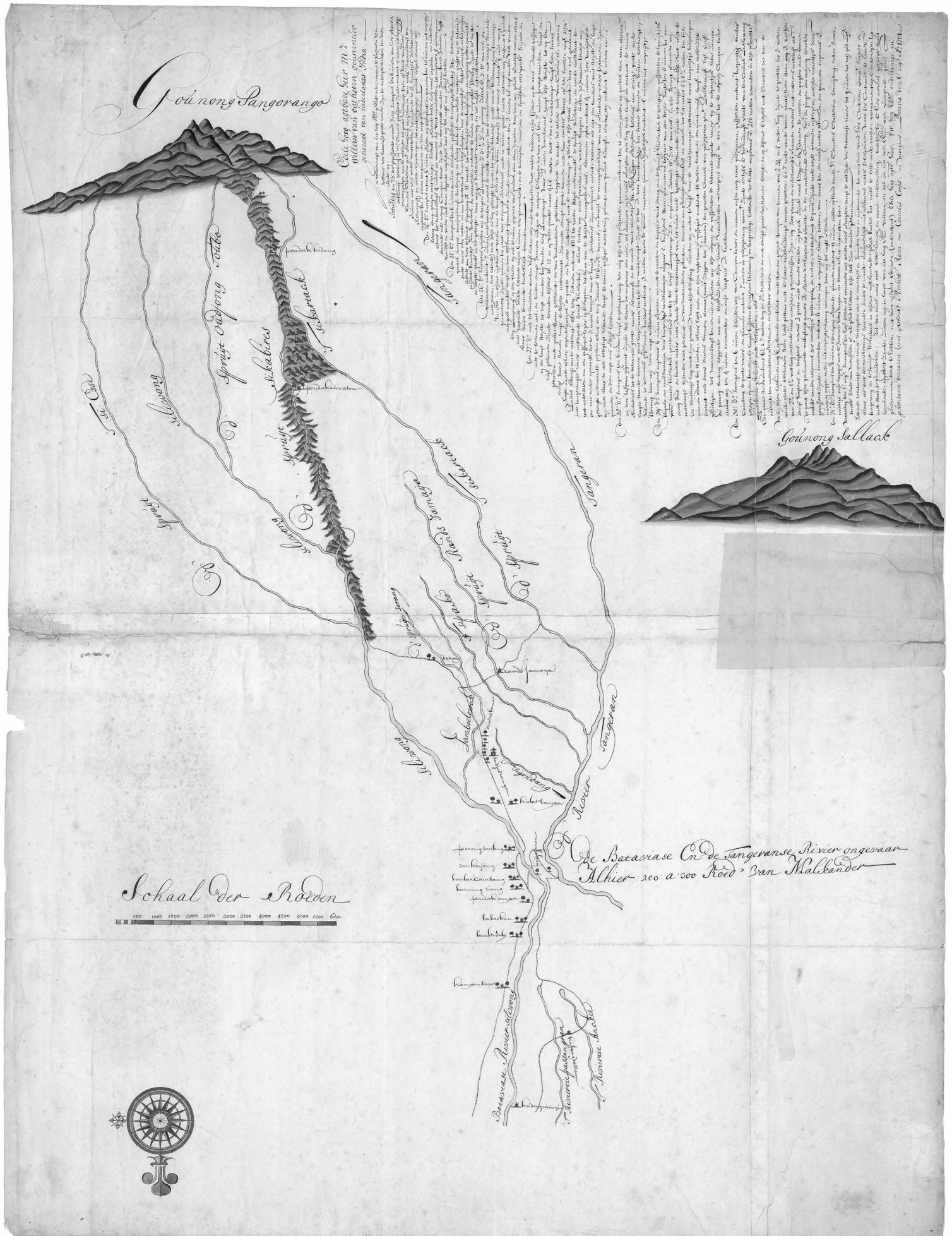
Fig. 6 H.D. Jolinck, *Journal of a Dutch voyager* documenting the survey of Ternate and Tidore in North Maluku, Indonesia, May 1599 (National Archives of the Netherlands, The Hague, 1.04.01, inv. n. 60, fols. 101-102).

Fig. 7 C. Coops, M. Ram, Dutch chart showing part of the Ciliwung River in West Java, Indonesia, 1701 (National Archives of the Netherlands, The Hague, VEL1168).



disciplinary study of built, natural, and social environments, not merely remaining an *intra*-disciplinary subject of historical developments reaffirming sustainable architecture. The discipline's current fragmentation, stemming from dissatisfaction with the canon's center-periphery model and the pursuit of a more 'global perspective', cannot be mended by reuniting historians around the interests of the postindustrial Global North. We must ask instead: how can we develop a 'planetary history of architecture' that does not disown, but rather thoughtfully and constructively inherits, the 'global perspective'? With this weighty question, we return to the chronological survey as a concluding reflection. By embracing the concept of intertwined histories, the discipline is not only capable of weaving the multidirectional research foci on the world's regions into a 'global' chronology. It also has the potential to reformulate the existing timeline of human cultures into a 'planetary' chronology. This requires a closer look at the built environments in their ecological contexts – recognizing them as historically specific, irreducible to postindustrial 'green' frameworks, and more entangled with than set apart from other architectural variables. Just as the modifier 'global' is anti-globalist and resists cultural hegemony, the modifier 'planetary' must signify more than a universalist vision of ecology that presupposes an undifferentiated humanity imperiling a general-

ized nature. From Paleolithic hominins inhabiting protective landforms and wild fauna assembling shelters to the modern city's public health measures and the industrialized world's vernacular remnants, a 'planetary' survey of architecture needs to be an open synopsis of a humanities subject that broadens environmental studies. The inclusion of Global Southern, Indigenous, and diasporic cases between prehistory and the present would not be an afterthought symptomatic of the Northern 'Self' spotlighting its culturally diverse 'Other' to mask environmentalization's neocolonial undercurrents. Attuned to the dovetailed interdisciplinarity of postcolonial and ecological discourses, such a post-canonical shift in architectural history does not have to discard the survey format to reject Eurocentric and anthropocentric linearity. Ultimately, it should advance transdisciplinary scholarship that communicates the value of architectural, urban, and spatial research to those outside of, but not to those within, the confining circle of historians guarding the disciplinarity of architecture.





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