

Readings/Rereadings

La figurazione dello spazio architettonico by Gaspare De Fiore

Andrea Giordano, Francesco Maggio

La figurazione dello spazio architettonico in art

From 1967, when Gaspare De Fiore published *La figurazione dello spazio architettonico*, to the present day, exactly 50 years have gone by, yet the work retains the same freshness I discovered when I started reading it, for the first time, during our academic education.

Perhaps the secret is to be found in the ultimate spirit of the book, which, as the author states in the introduction: "[...] wants to be just a research proposal of this 'sense of space'" [De Fiore 1967, p. 8]. Or in the wise distribution of the information it holds: the main text is articulated in an elegant, simple and straightforward manner to reach the general public, while the footnotes deepen the problems with a scientific, accurate, and circumspect tone, proposing original critical analyses or comments on the most qualified theories, all complemented by a dense and wide-ranging bibliography on the debated topics.

Affronting the problem of architectural space, De Fiore distinguishes between its ideation and its representation, in particular by addressing the latter from multiple points of view and in a time span that embraces the

whole of human history, from pre-classic to contemporary art, through the representation of Roman architecture, the conceptual dynamics of the Middle Ages, the optical certainty of the Renaissance and Baroque illusionism. For obvious reasons of chronology, there are no developments after the 1960s concerning perspective. I refer in particular to the influence that the Renaissance rediscovery of Ptolemy's *Geography* might have exerted in this field [Edgerton 1975; Veltman 1980]; to the relationship between the principles of geometric optics and Medieval and Renaissance measurement techniques [Beltrame 1973; Kemp 1978]; to the theory that anticipates the invention of perspective in the thirteenth century by attributing its scientific paternity to Oxford philosophers and the first practical application to Giotto [Raynaud 1988].

However, in De Fiore's book, the main sources of perspective research and its applications to the representation of architectural space are clearly and thoroughly analyzed, paying particular attention to Erwin Panofsky's essential contribution to curvilinear perspective in the classical epoch, as reported in the famous essay *Die Perspektive als 'symbolische Form'* [Panofsky 1924].

Fig. 1. De Fiore 1967.



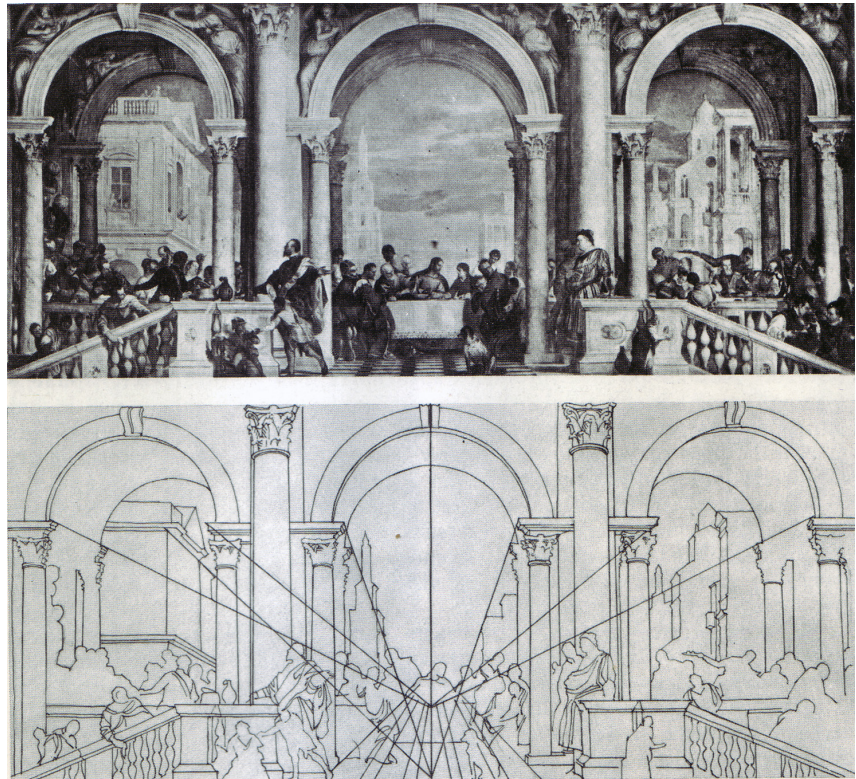
But in this analysis there are also the hypotheses of an ancient perspective with the geometric principles 'rediscovered' in the Renaissance [Gioseffi 1957; White 1957], as well as the link between the medieval optical sources and the *perspectiva artificialis* [Parronchi 1958, Federici Vescovini 1965], and, finally, the developments offered by the *anamorphosis* in relation to the dynamic perception of seventeenth-century quadraturism [Baltrušaitis 1955].

De Fiore rightly identifies the first significant pictorial manifestation of architectural space in Roman times, lacking in previous centuries a minimum of representational coherence of space: "In ancient painting, that includes the long period of Paleolithic art up to Romanesque, the main interest of the artist seems to be to represent isolated figures and objects rather than the composition of a scene, and in the case of a scene, action rather than the environment and background" [De Fiore 1967, p. 37]. Having fixed this first point, the book goes into the analysis of the following centuries remarking that the general tendency of the representation of architecture is to move gradually from *conceptual* space to *optical* space (the same adjectives used widely by De Fiore in his work). The representation of architectural space in the Roman epoch is acutely emphasized as: "despite being represented in optical rather than conceptual form, figures and objects are not yet 'interdependent'; their form and size do not depend on the position of a theoretical observer, as will happen in the Renaissance, but conform to the general 'vision' of composition with greater or lesser coherence" [De Fiore 1967, p. 41].

Although in the Middle Ages every interest in the illusion of a real space is lost, triggering a conceptual process of 'flattening' forms that renounce any coherent optical three-dimensionality, the author has not missed the contribution of this historical period in reference to the evolution of architectural space when he emphasizes that: "In Byzantine painting, through the entire medieval period, the principle of the scenic space is developed; the picture plane is divided into two parts: the ground floor (the stage), and the

vertical background (the backdrop)" [De Fiore 1967, p. 49]. In Footnote 11 of the chapter entitled *The meaning of architectural space* [De Fiore 1967, p. 14] the revolutionary impact of this conquest of the Middle Ages is implicitly clarified with the comparison between the 'stage set' and the 'spatial box,' the latter transformed by the scientific maturity of the Renaissance into a world beyond the pictorial surface, a universe that is 'alluded' to through the famous Albertian window.

Fig. 2. P. Veronese, *The Feast in the House of Levi*, Venice, Accademia di Belle Arti (De Fiore 1967, Tav. 18, p. 137).



With reference to the representation of architectural space during the Renaissance, and returning to De Fiore's hope to instill new ideas in the field of research, it should be noted that a statement such as: "it is not without significance that the first practical realization and the first theoretical treatise on the representation of space in figurative arts have been made by architects; because it is not so much a matter of inventing a new system to represent spatial depth in paintings or frescoes [...]; it is rather a system of unifying space [...], to measure it, to make it 'for man', on which the whole world is now measured" [De Fiore 1967, p. 56], he is evidently ahead of the aforementioned positions of Renzo Beltrame and Martin Kemp, who see, in the architects education at the *scuole d'abaco* and, in particular, in the strategies of architectural survey through 'a vista' measurements, the 'discovery or rediscovery' of perspective in the fifteenth century. However, since the Renaissance and in the following centuries, it is the *perspectiva artificialis* that puts artists and architects in a position to paint and realize architecturally proportionate and optically coherent spaces. As quoted by our author, mathematical, scientific and philosophical discoveries have unmistakable repercussions in the artistic world, obliging the observer, within the represented architectural space, to abandon his original static position in favor of dynamic behavior; especially when he is immersed in the most successful examples of quadraturism. The peak will be in the Baroque age when architecture becomes a representation of itself through solid perspectives, for which De Fiore conjures a particularly happy expression: "perspectives of perspectives" [De Fiore 1967, p. 77].

In *La figurazione dello spazio architettonico* the author moves up to the modern age and, once again, his acute interpretations anticipate the times. Quoting the great historian of French art Pierre Francastel, and in particular the effects of Impressionism analyzed in the work entitled *Peinture et société. Naissance et destruction d'un espace plastique, de la Renaissance au cubisme* [Francastel 1951], De Fiore reconnects the contemporary rupture of the traditional patterns of representation with the: "discovery of new laws that threw the principles of classical science into crisis, transforming philosophical convictions and starting a new dialectic of thought" [De Fiore 1967, p. 82]. The author, then, in the same study lists the 'tools' through which contemporary architectural space is manifested as an optical and conceptual representation at the same time: luminous values; color; photography (to be considered as technological machinery). Therefore, those briefly listed are the same 'tools' that artists today use in their maximum expression to define and to represent space in art. For example, the experiments of James Turrell [De Rosa 2007] and, in particular, the light installations called *Afrum* are 'space boxes' in which the observer is dynamically immersed, relating to three-dimensional objects made by light generated by a projector; only the observer's movement in space reveals the two-dimensional nature of these objects of light. Or even the art-historical citation made by Olafur Eliasson with his *Your Black Horizon*, realized in 2005 for the Venice Biennale on the island of San Lazzaro, an installation in which the observer is forced, in a completely dark 'space

box'—recalling a *camera obscura*—, to stare at a horizontal line of intense light that runs around all four walls. The visitor, re-emerging from this sort of 'cavern' into the open lagoon environment, exploits the principle known as 'after image' and unintentionally superimposes the vision of a temporary artificial line on the natural horizon, transforming himself into a kind of entoptic projector [Monteleone 2012].

After 50 years, these anticipations and the scientific rigor in the historic analysis of represented architectural space maintain the validity of this book written by Gaspare De Fiore, a man who is obviously among the first in Italy to have understood how contemporary art continues increasingly to experiment with new possibilities that go far beyond the spatial schemes inaugurated in the Renaissance: "developing in fairly different ways, towards a compromise between imaginary spaces and effective depth, in an experience 'that combines the intrinsic qualities of color with the acute feeling of the enveloping elasticity of the atmosphere'" [De Fiore 1967, p. 89].

La figurazione dello spazio architettonico in architecture

In the volume *La figurazione dello spazio architettonico* Gaspare De Fiore uses painting as a medium for expressing his relationship with architecture. Moreover, the title of the book clearly expresses the author's intentions referring architecture to its 'figuration' throughout history, which almost seems to find a field of unilateral application for the reading of architectural space.

Today reading this volume may probably seem anachronistic, and perhaps it is, but it seems necessary for those who deal with representation and, more specifically, with the history of representation conceived as a subject of study through drawing, and not as a simple *excursus*.

Placing the text in its era is essential for analyzing the relationship between Gaspare De Fiore and architecture and for giving at least one interpretation of the phenomena that produced it. Among them, of course, Bruno Zevi and Giulio Carlo Argan's thoughts, respectively expressed in the volumes *Saper vedere l'architettura* and *Progetto e Destino*, where the 'theorization' of the spatial value, rather than the architectural body in its essence, is the protagonist. According to Zevi, following Giedion's path in *Space, Time, Architecture*, in fact: "architecture does not derive from a sum of widths, lengths and heights of building elements enclosing space but from void, fenced space, inner space where men walk and live [...] the inner space that [...] cannot be fully represented in any form, that cannot be learned and lived except by direct experience. It is the protagonist of the architectural fact. Possessing space, knowing how 'to see' it, constitutes the key to understanding buildings. Until we have learned not only to understand it theoretically, but also to apply it as a substantial element in architectural criticism, a history and hence an enjoyment of architecture will only be vaguely granted to us" [Zevi 1948, pp. 22-23].

While Zevi strictly relates interior space to architecture, De Fiore links it to sentiment and to the human spirit. In fact, in the volume, referring to space he comments the painting by

Victor Hugo *Ma Destinée*, almost tracing an 'interior' rather than architectural spatiality. As Giedion does, in this short chapter De Fiore finds, in the great space of Paxton's Crystal Palace, an "effect of side-swaying reality" [De Fiore 1967, p. 151] as a value of the inner space; this short chapter highlights the continuous references of the book to painting rather than to architecture. Some interesting statements in the book reveal a "stance" on some historical/critical aspects of architecture, such as when the author intends the Baroque as a continuation rather than a denial of Renaissance classicism. Here De Fiore stands in a clear antithesis with Heinrich Wölfflin who thought that classicism is rigor, order, objectivity, logical synthesis of forms while the Baroque, on the contrary, is freedom, disorder, subjectivity, total synthesis effort and not only logical synthesis. Between the two periods, Wölfflin does not find complementarities but an irreconcilable contrast.

On the other hand, Gaspare De Fiore is closer to the art historian Arnold Hauser, author of the famous *Social History of Art*, according to whom the Baroque is not the opposition of the Renaissance but its natural continuation and completion. According to the Hungarian historian there are no 'tears' but a linearity, no irreconcilable points of view, but partial aspects of a single movement aimed at unity and synthesis. And this concordance of thought is clear when De Fiore affirms that: "in the Baroque, unity becomes substantial, and the works, although rich and complex, are also more concise in a vision that nullifies the meaning of individual forms in a wider and uninterrupted breath, towards one effect" [De Fiore 1967, pp. 75-76].

The relationship between De Fiore and architecture is only in the drawing, which being substantial prevails, in the author's view, in any criticism of space. This may now appear reductive in the volume because, for example, when he speaks about Le Corbusier, he merely accompanies the brief chapter of the *Tavole* section, with three photographs of Ronchamp chapel, writing that the drama of architecture is the same as that of man. He omits any reference to spatial values in favor of a 'sentimental' one. Although highlighting the wall-light, space-light, space-sound issues, which can be studied starting from De Fiore's brief considerations, the author makes a summary reflection on the Swiss master. Something that he does not do in the descriptions of Giovanni Michelucci and Pier Luigi Nervi's work, leaving aside, in the *Tavole* section, Pablo Picasso, who, although not being an architect, certainly could have been given more attention by an extraordinary 'draftsman' like Gaspare De Fiore.

His only giving attention to the architecture of the Tuscan architect and the bold constructions of the Ligurian engineer is due to two reasons: firstly, because De Fiore can afford to make value judgments on the two Italian masters since he is not prisoner of an asphyxiating historicism; and secondly, probably because he finds in Michelucci a feeling for space, a theme dear to him, and in Pier Luigi Nervi, engineering as art, even as technique. Gaspare De Fiore finds in Michelucci the figure that combines architecture and town planning conceived as "spatial function that one lives more than one sees" [De Fiore 1967, p. 91].

In fact, Giovanni Michelucci wanted to bring the public/private conflict to a

higher or deeper level of action. At the level of *tout court* space meant as a dimension without adjectives: that dimension was for him the city. In Brunelleschi's lesson, Michelucci states that: "[space], although enclosed and privately owned, has a 'public' aspect, it does not intend to force itself to stay within a perimeter, and becomes one with the outside urban space and surrounding nature. It is 'everyone's' space. Although only one man created it, one feels that that man was gathering the 'hope of the citizens', as Vasari said". So the public space "will be the space dedicated to the free interweaving of communicative relationships [...] and the 'private' one will not be a place of private property, but the moment of individual

gathering (in group life)" [Michelucci, 1972, pp. 64-65].

Describing the viaduct of Corso Francia in Rome by Pier Luigi Nervi, De Fiore 'intercepts' the questions of the architecture of the time. "It is evident that one of the directions of contemporary spatiality seems to be oriented towards a constructive and technical solution before which [...] lies the other path that seems to seek in individualism [...] the new living space of man, the new architectural dimension" [De Fiore 1957, p. 90].

However, why does the author look at architecture with apparent detachment both in the text and in the *Tavole* section?

De Fiore claims to move away from investigations on contemporaneity, rejecting them because, in his opinion, it is not describable, since: "after the cubist decomposition and the neoplastic and expressionist explosion, one loses the concept of spatial cube, to reach, through the temporal dimension, the concept of a fluid space, suggesting the feeling of contemporary spatiality, not entirely investigated and difficult to define" [De Fiore 1967, p. 17].

Nevertheless, it could not be otherwise. The author published the book when he was 40 years old and he was not an architectural critic or historian. He started his university career in Rome in 1950 as voluntary assistant of Luigi Vagnetti, dealing mainly with real-life drawing, and his attention to architecture was always investigated through drawing, never with the written word, without the expression of a clear judgment of value or even a clear position. Aldo Rossi writes: "From a certain point of my life I considered craft or art as a description of things and of ourselves. For this reason, I have al-

ways admired Dante's *Commedia* that begins when the poet is thirty years old. At the age of thirty, one must complete or start something definitive and deal with one's own training" [Rossi 1990, p. 7].

In this *modus* of approaching architecture, only through drawing, Gaspare De Fiore was always coherent. Even in the last years of his life, he wrote: "Drawing gives me confidence, it reveals the deeper aspects of things and people: truth rather than in objects and people is hidden in vision. The moral aspect of what 'drawing' means intrigues me. Before understanding what drawing means today I am very interested in figuring out what is the meaning of drawing for me, how it 'defines' my life" [De Fiore 2007, p. 7].

This 'moral aspect' is a constant in De Fiore's thought, and in the book is evident when he, raising some questions about the study of architecture and its relationship to history, wonders: "to what extent our means of representation can express contemporary space: not so much architecture, that obviously finds no place in the spatiality of contemporary painting, but just the feeling of space, or rather the crisis of that sentiment, so clearly highlighted by the contrast between technique and art, crucial point of contemporary civilization" [De Fiore 1967, p. 23].

This statement, contained in the chapter *La crisi del nostro tempo*, on the one hand outlines the division between science and art identified by the author, while on the other hand it is a premonition of what would subsequently take place in the relationship between drawing and architecture that De Fiore, in a sense intuited, even if, of course, he could not imagine its impact.

Fig. 3. G. Michelucci, Church of the Blessed Virgin Mary Our Lady of Consolation, Republic of San Marino. Interior (De Fiore 1967, Tav. 32, p. 165).



Authors*

Andrea Giordano, Department of Civil, Construction and Environmental Engineering, University of Padua, andrea.giordano@unipd.it
 Francesco Maggio, Department of Architecture, University of Palermo, francesco.maggio@unipa.it

[*] While sharing the positions expressed in this article, the fruit of joint elaborations, the paragraph “*La figurazione dello spazio architettonico in art*” can be attributed to Andrea Giordano, while the paragraph “*La figurazione dello spazio architettonico in architecture*”, to Francesco Maggio.

References

- Baltrušaitis, J. (1955). *Anamorphoses ou magie artificielle des effets merveilleux*. Paris: Olivier Perrin.
- Beltrame, R. (1973). Gli esperimenti prospettici del Brunelleschi. In *Rendiconti dell'Accademia nazionale dei Lincei*, VIII 28, 3-4, pp. 417-468.
- De Fiore, G. (1967). *La figurazione dello spazio architettonico*. Genova: Vitali e Ghianda.
- De Fiore, G. (2007). Evoluzione del disegno. In *Proceedings of III UID Congress. 28th International Meeting of Representation Disciplines. "De Amicitia"*. Genova: Graphic Sector.
- De Rosa, A. (2007). *James Turrell. Geometrie di luce. Roden Crater Project*. Milano: Electa.
- Edgerton, S.Y. (1975). *The Renaissance Rediscovery of Linear perspective*. New York: Basic Books.
- Federici Vescovini, G. (1965). *Studi sulla prospettiva medievale*. Torino: Giappichelli.
- Francastel, P. (1951). *Peinture et société. Naissance et destruction d'un espace plastique, de la Renaissance au cubisme*. Paris: Audin.
- Gioseffi, D. (1957). *Perspectiva artificialis. Per la storia della prospettiva, spigolature e appunti*. Trieste: Istituto di Storia dell'Arte antica e moderna.
- Kemp, M. (1978). Science, Non-Science and Nonsense: The interpretation of Brunelleschi's Perspective. In *Art History*, 1, 2, pp. 134-161.
- Michelucci, G. (1972). *Brunelleschi Mago*. Pistoia: Tellini.
- Monteleone, C. (2012). Memories from the Past: The Permanence of Optics and Geometry in Contemporary Art. In Rossi, M. (ed.), *Descriptive Geometry and Digital Representation: Memory and Innovation*. Milano: McGraw-Hill.
- Panofsky, E. (1924). Die Perspektive als 'symbolische Form'. In *Wortrage der Bibliothek Warburg*, 25, pp. 258-330.
- Parronchi, A. (1958). Le due tavole prospettiche del Brunelleschi. In *Paragone*, 107, pp. 226-295.
- Raynaud, D. (1998). *L'hypothèse d'Oxford*. Paris: PUF.
- Rossi, A. (1990). *Autobiografia scientifica*. Parma: Pratiche Editrice.
- Veltman, K. (1980). Ptolemy and the Origin of Linear Perspective. In Dalai Emiliani M. (ed.), *La Prospettiva Rinascimentale. Codificazioni e trasgressioni*. Proceedings of International Meeting on Perspective studies, pp. 565-584. Milan, 1977, October 11-15. Firenze: Centro Di.
- White, J. (1957). *The birth and rebirth of pictorial Space*. London: Faber & Faber.
- Zevi, B. (1962). *Saper vedere l'architettura*. Torino: Einaudi.