

# From treatise to story : the changing nature of architectural discourse from the renaissance to the eighteenth century

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# From Treatise to Story: The Changing Nature of Architectural Discourse from the Renaissance to the Eighteenth Century

Alberto Pérez-Gómez

This essay traces the changing nature of architectural discourse in European treatises from the Renaissance to the late eighteenth century. Focusing mostly on French and Italian examples, it discusses transforming relationships to science, philosophy, history, and literature, emphasizing the richness and diversity of such discursive and narrative practices. It follows a roughly linear path from the “treatise as cosmology” (Palladio), to “theory as history” (Fischer von Erlach), culminating in “discourse as fiction” (Ledoux). This argument is set in opposition to a prevalent (scientistic) view of architectural theory as a set of merely technical or instrumental rules.

In the wake of nineteenth century positivism and its obsessive specialization, professional disciplines such as architecture have tended to disregard the true and changing nature of their theoretical discourses. Arguing for rational self-referentiality, architects have become more efficient, focusing on pragmatic or formal issues. In this process, however, the architectural mainstream has forsaken a rich set of options that is present in traditional theories, which may today offer significant alternatives that reconcile, in practice, the personal imagination of the artist with pressing political and ethical concerns.

Architectural treatises in the Western tradition were, since the time of Vitruvius’ unrecovered Greek sources, aligned with *theoria*, the contemplation of order in Nature associated by Plato with *mathemata*. This theory, Vitruvius tells us, is the same for a doctor or an architect (11-12). The actual practice of architecture, however, was never understood as the “application” of such theory. Rather, *techne* issued from a specific practical knowledge deemed to be essentially different from *theoria*.

Medieval Christianity, particularly after 1100 and Hugh of St. Victor's appreciation of *techne* as a form of wisdom synonymous with salvation, and embodied in the sacred books and in the new Gothic churches, prepared for the Renaissance "promotion" of architecture to the realm of the liberal arts. The way this new categorization was understood during the fifteenth century, however, was hardly homogeneous. Architectural theory could be incarnated in the endeavors of humanist philologists, such as Alberti's celebrated *De re aedificatoria* (Florence, 1485); it also could be found in treatises framed in terms of Aristotelian physics, such as Francesco di Giorgio Martini's manuscripts and commentaries on Vitruvius, written rather from the point of view of Renaissance practice and military engineering (ca. 1470-1492, published Turin, 1841 and Milan, 1967). Finally, architectural theory took the form of narratives, addressed either to a "prince," and aimed at associating the making of a new city with political hegemony – like Filarete's *Sforzinda* (ms. written ca. 1462-64, published Milan, 1972) – or to the lover of wisdom (Poliphilo), the hero of Francesco Colonna's erotic novel *Hypnerotomachia Poliphili* (Venice, 1499), who seeks personal enlightenment through the Neoplatonic ascent of the soul through images of architecture. Colonna associated architecture with theurgic magic (and indeed with painting) through its capacity to convey *lineamenti* or geometrical figures to the mind's eye. Architecture was also related to alchemy by Fra Luca Pacioli in his *Divina proportione* (Venice, 1509), particularly its edifying craft, guided by mystical geometry, deemed capable of transmuting lowly substances like stone into polished gems, ultimately conveying the experience of unity beyond number.

Modern categories to describe the nature of such fifteenth century discursive practices tend to be strained by the heterogeneous ways of giving significance to architecture. We can identify humanistic and technical commentaries of Vitruvius and other classical sources, didactic dialogues in narrative form, erotic/philosophical novels, philosophical allegory, and geometrical manuals of Christian theology. During the sixteenth century, however, the disciplinary boundaries of architectural theory became sharper. Thus a diachronic characterization of significant changes within the discourse becomes more fruitful if we start with the sixteenth century, particularly as such an account may offer the literary critic and historian some interesting cross-references.

I shall start with Andrea Palladio's *I quattro libri dell'architettura* (first published in Venice, 1570). This is perhaps the single most important

book for the dissemination of classical architecture, one that had an important following in early eighteenth century England and became central to the dissemination of Renaissance ideas in the English-speaking world. Palladio's *Four Books* mark the culmination of architectural theory as cosmology. The aim of his discourse is to align the belief in a universal mathematical order relating the macrocosm and the microcosm, with the experience of classical buildings, scrupulously observed and measured. Palladio's theory is *scientia* in the sense of the traditional liberal arts. Unlike modern scientific theories which substitute experience with experimentation, and abandon the original quest to "save the phenomenon" from a human perspective, for hypotheses structured from an "eccentric" view-point (such as Copernicus's theory of heliocentricity), Palladio's theory is wholly traditional.

His emphasis and key objective is "proportionality." His text is a demonstration of "proportionality" at work in ancient architectural models (which he freely reconstructs from his observations), pervading a divinely ordered cosmos, and ruling his own architectural works. Proportionality, a notion which he took most likely from his friend, the mathematician Sylvio Belli and from his patron, Danielle Barbaro, is a relationship of proportions among whole (natural) numbers in three-dimensional space. Unlike earlier Renaissance theories of proportion, such as Alberti's, that had always been understood in terms of planar (or painterly) dimensional relationships for the mind's eye, Palladio introduces the notion of proportionality as ruling the built volume, and thus being perceived (and constructed) as a sequence with a common term shared by consecutive rooms.

It could be argued that in this text, coupled with a systematization of the tools of architectural representation (plans, elevations and sections), there emerges a primary articulation of architecture as geometric space (a three-dimensional "modern" entity), modeled on the structure of the Platonic universe. And yet, this notion demands ample qualification.

Palladio's practice, his architectural *techne*, discloses not an application of theoretical knowing, but rather a special form of practical knowing, one which is specific, grounded, and driven by its ability to produce. When given the commission of "renovating" the Basilica in Vicenza (Fig. 1), for example, an obviously important building for the governance of the city but which, in its medieval form, was given over to many divergent uses – from the imparting of justice to Dionysian pleasures – a prudent attitude, cognizant of the embeddedness of mean-

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ings in the historic fabric, dominated his design decisions. Compared with the ideal Basilica as represented in his theoretical treatise, the real Basilica is infinitely compromised. And yet, in the absence of an orthogonal drawing, it is easy to believe that the ideal inhabits the real.

This is the genius of the architect, operating in a universe in which the space of human affairs, the Aristotelian sublunary realm, was still not homogenized with the geometric space of the supralunar Heaven.

Indeed, Palladio had no word for space in his architectural treatise. Despite the fact that much changed for architecture in the wake of the Galilean revolution, neither did his colleagues from the seventeenth and the eighteenth centuries. Nevertheless, once the space of human action was geometrized in philosophy and science, and truth became subject to experimental demonstration, the status of architectural discourse and its relationship to practice underwent an important transformation.

Descartes, as is well known, postulated the “self-evident” structure of reality as two absolutely distinct substances: a “thinking” substance, understood as the “who” we are, our soul or consciousness, and an “extended” substance that included the external world and also our bodies, and which we could legitimately know only through the clear quantitative mechanical relationships among their respective elements. The relationship between the two heterogeneous components of reality was problematic, and Nicolas Malebranche (*Recherche de la vérité*, 1674-75), a disciple of Descartes, tried to reconcile this problem with the truths of Christianity through his doctrine of *occasionalism*. He affirmed that only God is a *true cause* of all things, because only He knows *how* He makes things happen, including the perceived relationship between our minds and our bodies. The consequence of this belief is that, for example, we may will to move our arm, but because we don’t know *how* we move it, we are only witnessing an *occasional* cause, ultimately it is God that moves our arm. In the same vein, whenever we *know* mathematically – clearly and distinctly – *how* something happens, for example *how* a lever operates in terms of the proportions between distances to the fulcrum and applied forces, or *how* an architectural plan or elevation is generated from strict geometrical operations, then we are not only ethically and effectively creative, but our mind is in fact operating through the very same ideas that are “in God.” Thus “know-how,” the intended aim of instrumental theories, acquired the status of true knowledge. By establishing this relationship we avoid error, and by avoiding error, Malebranche concludes, we avoid sin.



It has been pointed out that the seventeenth century is a time of secular theology. It is the scientists and the philosophers, including architects such as Guarino Guarini, that carry on the tradition of theological speculation. Experimentation and the formulation and implementation of “instrumental” theories guided by transparent reason, whether mathematical or geometrical, became a path to the divine mind. Guarini’s treatise on *Civil Architecture*, written around 1680 but published posthumously in 1737, is constructed like a text on geometry. All other topics became secondary, yet the expectation was that out of this *combinatoria* of geometrical operations, a sensuous, whole material reality would come about, one truly different from the works of the tradition, yet respectful of the essence of the natural world. Witness Guarini’s own marvelous architectural projects, particularly the miraculous chapel of the Holy Shroud in Turin. This is the curious origin of our technological project, often evidenced in the desire to “build” the city of God on earth, a utopian project whose transcendental motivations were further engaged or dropped at a later date, but which remains grounded in the belief that the human mind is like God’s, perhaps because God (like Christ) could be man. The premises of occasionalism remained a powerful motivation in science and the arts into the eighteenth century, and in the short term produced the first truly proto-positivistic architectural theory in the Western tradition: the work of Claude Perrault.

The late seventeenth century writings of Claude Perrault and his brother Charles represent a significant shift away from the cosmological ground of prior practices. Though their contribution is complex and difficult to summarize, as they stand in the wake of Descartes as truly modern thinkers, while also playing an important role in the court of Louis XIV and France’s “Golden Age,” it is clear that they question the fundamental assumption about architecture being capable of representing the true order of the cosmos.<sup>1</sup> In doing so, they open up a modern awareness to the question of architecture’s meaning, its connection to the institutions of civil society, and its legitimacy as both artistic vision and social practice. Their position was perceived as highly polemical by most of their contemporary colleagues, and often incomprehensible, as witnessed by the early but partial translation of Perrault’s

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<sup>1</sup> For further elaboration of this topic, see Lily Chi, *An Arbitrary Authority: Claude Perrault and the Idea of Caractère in Jacques-François Blondel and Germain Boffrand*, Ph.D. dissertation, McGill University, 1997. See also my own “Introduction” to C. Perrault, *Ordonnance* (1993).

*Ordonnance des cinq espèces des colonnes* (Paris, 1683) into English, which simply avoided the polemical preface. The Perrault brothers believed that architecture, like human languages and civil law, changed in time and was the result of human conventions. The fact that the meanings of architecture may depend upon “custom” rather than “nature,” however, did not make it in their view any less important or culturally significant. Like the French language itself, at that point perceived to have attained its summit and proper codification at the *Académie Française*, architecture could and should be open to further refinement and “progress.”

The *Ordonnance* is Claude Perrault’s second book, written after having translated, scrupulously annotated and published in 1673 an edition of Vitruvius’s *The Ten Books of Architecture*. In the *Ordonnance* Perrault, who was primarily a physician and physicist, disputed some of the most cherished assumptions of traditional theory. His preface questions the analogy of architectural and musical harmony on the basis of the diversity of the two phenomena, the validity of optical corrections to reconcile theory with the reality of buildings, and the absolute certainty of architecture as an *analogon* of the cosmos. In other words, the fact that architecture could (and should) be guided by an efficient proportional system – the one he proposes in his *Ordonnance* and at which he arrives rationally, arguably by averaging past examples – is not a guarantee of architecture’s universal meaning. He emphasizes that the proportional rules guiding Roman and Renaissance architectural practice had no higher significance. They were the result of rational thought, and had come about as architects and writers struggled to spell out clear and simple rules that might be followed in practice. Obviously past theoreticians had failed, justifying the discrepancies among systems, and between theory and built works, by invoking “optical correction.” For Perrault optical correction, the adjustment of the dimensions or geometrical appearance of buildings to account for the distortions resulting from the spectator’s position – in order to compensate for the weakness of sight incapable of conveying to our consciousness the full truth of a tactile, kinesthetic world – was either an excuse or a delusion. In its Cartesian incarnation, the inherently mobile, multi-layered embodied soul of Neoplatonism became the static, punctual pineal gland in the brain. This was the site of optical impressions for Perrault. Therefore, the only purpose of mathematical rules in architecture could be to facilitate practice and systematize all dimensions in classical architecture, so that it could be built exactly following the designs of the architect: ideal (mathematical)



perfection externalized into built form. Once this was understood, it became the task of the architect to innovate within the “tradition,” now perceived as a sort of ornamental syntax, making works increasingly more refined and magnificent, capable of reflecting the glory and accomplishments of France.

Perrault’s famous East Wing of the Louvre, one of his very few built works, embodies precisely this intention. Its polemical message, conveyed through the use of paired columns and larger than usual intercolumnar distances, was clearly understood by his contemporaries, who still questioned the legitimacy of modern invention as it challenged the authority of the ancients and opened the way to license. Claude’s brother, the more famous writer Charles Perrault, came even closer to speculating that if we build the way we do, using the classical orders, it is only by historical circumstance, as it is evident that other cultures make buildings in very different ways (*Parallèle* 1: 132). Architecture acquired the status of a language, however refined.

Could architecture as a form of knowledge, as an embodiment of value, make sense once it was no longer understood as a microcosm of the cosmos? Architecture started to “fall into history” at the same time as the realms of nature and history themselves were being identified as truly autonomous. The first writer to try to derive “orientation” for practice exclusively from a compilation of “monuments” from the past, including not only Western but also Near- and Far-Eastern examples, was Johann Bernard Fischer von Erlach in his *Entwurf einer historischen Architectur* (1721). Fischer met Christopher Wren during a trip to England before writing his treatise, and was probably influenced by the English architect’s scientific and genealogical interests. Though Fischer could still believe that all differences might be reconciled in the present possibilities for architecture, imbued with the classical models from the Roman Empire, his book represents a significant change in orientation. Composed of lavish images with short captions, his book avoids all speculative – philosophical or scientific – discourse. The only hint of a transcendental order appears from within history, as a genealogy of buildings starting from the Temple of Solomon in Jerusalem, through the “Seven Wonders” of the world, through Egyptian and particularly Roman Imperial architecture, leading to his own projects.

Like Perrault, Fischer could only name visible attributes, such as the richness of materials, the grandeur of buildings, and a precision of execution, as signs of good architecture. In fact, architectural value itself,

the holistic “significance” of architecture as a frame of ritual, was being reduced to separate items, “aesthetics” being only one of them.

Not surprisingly, Perrault’s position became very controversial, particularly in France and for those that took the time to read his “Preface,” rather than simply using his book as one more treatise on the classical orders. His association of proportions, traditionally the clearest and most universal of languages kindred to the Divine Monad, with “arbitrary beauty,” was perceived by many contemporaries and successors as untenable and even contradictory. François Blondel declared that Perrault’s instrumental understanding of proportion was tantamount to denying the existence of real principles for architecture, and consequently ran the risk of reducing architectural value to relativity, possibly robbing architecture of its ultimate meaning (*Cours* 768-74). The cultural climate, however, was indeed changing. During the Enlightenment many architects took up the challenge of understanding architecture as a language and the problem of *expression* became primary, as did the need to shift questions of signification from the divine cosmos to human society.

The theories of character and expression that developed during the eighteenth century are manifold. They try to understand the potential significance of architecture in different terms, and I shall not attempt in this summary to do justice to their intricate subtleties. A central concern, however, was to adequately *express* the uses for which a building was destined, and the status of the building as if it were a social entity, the “mask” of its client. Jacques-François Blondel, the most important teacher of architects in Paris around 1750, believed that excellent buildings possessed “a mute poetry, a sweet, interesting, firm or vigorous style, in a word, a certain *melody* that could be tender, moving, strong, or terrible” (*Cours* 1: 376). Just as a piece of music communicated its character through harmony, evoking diverse states of nature and conveying sweet and vivid passions, so proportion acted as a vehicle for architectural expression. When used appropriately, proportion could present the spectator with terrifying or seductive buildings capable of expressing their essence, be it “the Temple of Vengeance or that of Love.” Also around mid-century, Charles-Etienne Briseux wrote a book consecrated to the issue of “essential beauty” in art and architecture, using Newton’s discovery of “universal harmony,” as well as Jean-Philippe Rameau’s theories of music, to make an argument similar to Blondel’s.

The association of architecture with the fine arts became commonplace during the eighteenth century. Arguing against Perrault, Blondel thought that beauty was immutable, and that architects, with an open spirit and keen sense of observation, should be capable of extrapolating it “from the productions of the fine arts and the infinite variety of Nature” (*Architecture française* 318). This reveals a different assumption about the reception of the work from that which had operated since the time of Vitruvius. While not totally immanent, the expression or significance of architecture was increasingly internalized and transformed into a problem of “composition” brought to fruition through an objectified building. The temporal dimension, which was always an issue in architectural meaning, and which was understood by the “user” through the *situation* housed by the architecture, receded in favor of the conception of architecture as “aesthetic object,” its potential significance being “read” out of time. The ultimate accomplishment of this project, to be achieved only after 1800, would be an architecture reduced either to a place for voyeuristic visits in linear time, a place for tourism often better understood through “pictures” than through genuine participatory experience, or to a literal framework for “discursive” writing, like in the case of the famous *Temple décadaire* by Durand, or the façades of Labrouste’s *Bibliothèque Sainte-Geneviève*.

Already in the wake of this reduction of architectural meaning to a “sign” of a function or an idea, one which was to plague architecture throughout the nineteenth and twentieth centuries, some early eighteenth century architects like Jean-Laurent Legeay and Giovanni Battista Piranesi, and later Jean-Jacques Lequeu, had sought to identify architecture with painting precisely in order to escape the tyranny of a space “out of time” best embodied in systematic, perspectival representation.<sup>2</sup> Etienne-Louis Boullée pushed this identification to the extreme, seeking a truly innovative “poetic language” of forms, closer to our sensuous *a priori* and therefore different from the classical tradition, whose theory he already identified with a kind of scientific “prose.” Architectural expression was characterized as *architecture parlante* (Fig.2). A truly significant architecture had to “speak” in order to engage the inhabitant in effective participation. If the architect “wrote,” therefore, he must write

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<sup>2</sup> For the analogy between Piranesi’s *Carceri* and modern film, refer to the well-known essay by Sergei Eisenstein, “Piranesi or the Fluidity of Form,” in *La Non-Indifférente Nature*, *Œuvres* 2, (Paris: Union Générale d’Editions 1976) 271-338. See also Pérez-Gómez and Pelletier, *Architectural Representation*, 370-383.

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“poetry,” a form of language that, unlike written prose, *had* to be actualized as “dialogical speech” and to resolve its inherent temporal distention into a “thick presence,” “temporalizing” space or “spatializing” time. Thus the architect, while acknowledging (like Perrault) that architecture was *a* language rather than the *analogon* of the cosmos, would be in a position to make a “second nature” (“mettre la nature en oeuvre”) from the recesses of his creative self, potentially “speaking” to all, while overcoming the eighteenth century paradigm for the fine arts – architecture as a representation of nature – which had run its course.

Two late eighteenth century French architects, Nicolas Le Camus de Mezières and Claude-Nicolas Ledoux, sought alternatives and tried to re-introduce a temporal dimension to architectural meaning through *open* narrative structures kindred to much-later surrealist techniques and cinematographic montage. The very nature of theoretical writing about architecture was also questioned. This implied a new concept of transmission and education, one that could no longer depend on the assumption of theory as *techne* or applied science. Boullée, Ledoux, and Charles-François Viel de Saint-Maux declared the need for a new architectural discourse capable of transcending the limitations of what they perceived as the limiting scientific framework of Vitruvian theory and its reincarnation in Renaissance and Neoclassical treatises. Thus, they thought, the intentions of a new poetic architecture could be better articulated by engaging literary forms. Narrative and emplotment gave architects such as Ledoux the tools to imagine an architecture that no longer simply reflected the conventional order of society, as did the “masks” of the earlier eighteenth century. Architecture, now fully in the realm of both human politics and fiction, devoid of intrinsic transcendence, acknowledged new responsibilities. Ledoux understood that it became necessary for architecture to project a better future for society, and that this project issued from the imagination of the architect/writer, and not from simple rational consensus. His ideal city of Chaux, described in exquisite literary form in his lavish *L'Architecture considérée sous le rapport de l'art, des mœurs et de la législation* (1804), proposes life as lived in new institutions, formally innovative yet always seeking a reconciliation with the natural world, a “space of appearance” for the “new man” of the French Revolution. The new political subject could not dwell in the old classical architecture. Drawing from Rousseau’s understanding of historicity, Ledoux was keenly aware of the fact that the new humanity was irremediably other than that of the *ancien régime*. Thus he de-



signed places for freedom and responsibility, and his literary description discloses the ethical and moral consequences of living in this new world.

Personal expression became a condition for this poetic possibility – a retrieval of the universal *in* the creative soul of the architect. This realization corresponds to the nascent paradigm of Romanticism. Le Camus de Mezières, writing in the 1780s, transferred the path of the soul in love from the Renaissance *Poliphili*, to the experience of the private home, shifting the emphasis from the public to the private. Employing descriptive narrative in his treatise *Le Génie de l'architecture* (1780), he illustrated the manner in which architects must seek to design intimate, “qualitative” spaces, joined and modulated as if in a theatrical experience, in a way that the house itself might seduce the inhabitant. Every space has its appropriate colours, ornaments, textures, and iconography, and prepares the inhabitant for the adjoining room, ultimately leading to a sense of recognition and wholeness in the *boudoir*, literally a space apart, the uncommon place which was the space for love. This is the first instance in the history of architectural discourse in which the *quality* of space becomes the subject matter. At the time when place, as an intersubjective cosmic *topos*, was being obliterated from the public’s memory, Le Camus sought to retrieve it in discourse, in the hope of actualizing it. And perhaps the best built example of this effort is Sir John Soane’s House/Museum in London.

It is surprising, at least for architects, to find that only during the second half of the nineteenth century was architecture qualified in theoretical terms as the “art of space” (by August Schmarzow), in the context of German aesthetics. Schmarzow finds this conscious manipulation of space to be architecture’s defining characteristic, as distinguished from sculpture, for instance. This point of view both reflects the dominant understanding of technological architecture as a manipulation of Descartes’ three-dimensional *res extensa*, and prepares the soon-to-appear phenomenological recovery of the Platonic *chora* in the philosophical works of Husserl and Merleau-Ponty.

During the nineteenth and twentieth centuries, the space of literature would acquire growing significance for an architectural practice seeking to resist the impoverishment of the physical world brought about by functionalism or ideological imperatives. I could cite as examples works by Baudelaire, Rilke, Bely, Joyce, Robbe-Grillet, Murakami and Sebald, among others. Architects today, with the help of digital media, are capable of proposing all sorts of novelties. In our pathological urban con-



texts, does it suffice to make contorted buildings to house the same shops and fashionable Italian designers? Self-edification, the architecture that completes us and lets us dwell, recognizing our human condition, will not issue from this pictorial, formal acrobatics. The problem of historical and ethical responsibility is often buried in a postmodern culture of pastiche and instrumentality. The literary imagination, drawing from language which is our being, forces an acknowledgement of ground, which is crucial for architecture both literally and metaphorically, in a time when building the “virtual,” for no reason at all, has become the leading edge of practice.

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