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On the Ruins of Babel

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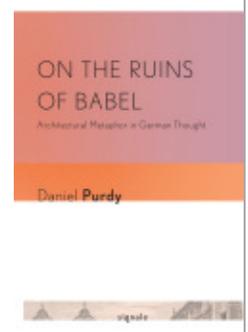
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The Decline of the Classical Orders

Architecture's place among the fine arts came undone at the end of the seventeenth century. First in France, and then across Europe, critics began to wonder whether architecture was still related to painting and sculpture, the two genres traditionally most closely associated with grand buildings, or whether it should be counted as a technological field, imbued more with the lessons of mathematics and engineering. This uncertainty had been initiated in Paris by a skeptical review of Renaissance theories of beauty in building. In 1683 Claude Perrault's careful reading of the classical treatises questioned whether the proportions of the columnal orders—Doric, Ionic, Corinthian, Composite, and Tuscan—really did correspond to other mathematical relations in the cosmos, such as the ratios that produced musical tones in string instruments.¹ The perceived correspondence between architectural rules and musical notes had long reinforced the belief that the universe itself was organized according to a divine mathematic order. Yet, as Rudolf Wittkower notes, "With the rise of the new science the synthesis which

1. Joseph Rykwert, *The First Moderns: The Architects of the Eighteenth Century* (Cambridge, MA: MIT Press, 1980), 33–39; Wolfgang Herrmann, *The Theory of Claude Perrault* (London: A. Zwemmer, 1973); Claude Perrault, *Ordonnance for the Five Kinds of Columns after the Method of the Ancients*, trans. Indra Kagis McEwen and intro. Alberto Pérez-Gómez (Santa Monica: Getty Center for the History of Art and the Humanities, 1993).

held microcosm and macrocosm together, that all-pervading order and harmony in which thinkers had believed from Pythagoras' days to the 16th and 17th centuries, began to disintegrate."² By the middle of the eighteenth century, Edmund Burke even questioned the more basic proposition, also espoused by Vitruvius, that the proportions that defined beautiful architecture were modeled on the human body. Burke gave perhaps the boldest dismissal of Renaissance claims: "I know that it has been said long since, and echoes backward and forward from one writer to another a thousand times, that the proportions of buildings have been taken from those of the human body. . . . But it appears very clearly to me, that the human figure never supplied the architect with any of his ideas."³ Burke's 1757 statement is symptomatic of the crisis in architectural theory.⁴ He acknowledges that the body/building analogy had been affirmed for centuries, yet he feels empowered to dismiss the claim simply because he does not perceive the relation. A Renaissance architect would have scorned an Englishman who held nothing more than his own opinion up against established tradition, but a new modern insistence that knowledge must be confirmed by empirical demonstrations and that beauty was necessarily subject to the whims of personal taste made Burke's rude statement typical of the times. The force of Burke's essay lay in its sharp negative attitude toward theories of beauty. He was much more accomplished at tearing down the older cosmological theory of beauty than developing his own. When he sought to define beauty's general qualities, the vigor of his argument weakened considerably. In the end, Burke's rules of beauty practically excluded architecture, for he considered beauty to be a property of objects that were small, smooth, and delicate and made no show of their own strength.⁵

While the five orders of columns lost their authority over the course of the eighteenth century, they did so slowly. The architectural historian Jens Bisky refers to a "turn away from Vitruvianism" that began with Johann Joachim Winckelmann's 1759 essay on Sicilian temples.⁶ Even during the French Revolution, there was no sudden rupture within architecture.⁷ Instead there is a growing awareness stretching across the eighteenth century that the classical treatises were insufficiently critical of their own rules of beauty, that they failed to justify *why* a particular design was beautiful. Antoine Picon characterizes the transition as "the exhaustion

2. Rudolf Wittkower, *Architectural Principles in the Age of Humanism* (New York: Norton, 1971), 143.

3. Edmund Burke, *A Philosophical Enquiry into the Sublime and Beautiful* (London: Penguin, 1998), 135–136.

4. Wittkower does not refer to a crisis; however, he does treat Burke as representative of English aesthetics at midcentury. Rudolf Wittkower, "Classical Theory and Eighteenth-Century Sensibility," in *Palladio and Palladianism* (New York: George Braziller, 1974), 200.

5. Burke, *Philosophical Enquiry*, 151.

6. Jens Bisky, *Poesie der Baukunst: Architekturästhetik von Winckelmann bis Boisserée* (Weimar: Hermann Böhlau Nachfolger, 2000), 11.

7. Wittkower, "Classical Theory and Eighteenth-Century Sensibility," 195.

of... architectural theory inherited from the *Grand Siècle*.⁸ Johann Georg Sulzer, the author of *A General Theory of the Beautiful Arts* (1751–1754), criticized the general lack of aesthetic reflection in the works of Andrea Palladio, Vincenzo Scamozzi, Il Vignola, Claude Perrault, and Nicolaus Goldmann: “It is almost a universal failure of these works, that they contain too little general investigation into taste and the various forms of beauty.”⁹ As the canon’s metaphysical legitimacy eroded, French architectural writers found a more polemical tone.¹⁰ Marc-Antoine Laugier, for example, understood that the older rules no longer guided contemporary builders, yet rather than develop a different, entirely new canon of forms, he proposed an altered aesthetic understanding of the older system. Buildings were no longer judged according to a code of measurement but by the effect they produced on a spectator. In his study of German architectural discourse in the eighteenth century, Ulrich Schütte uses the term *Wirkungsaesthetik* (reception aesthetics) to describe this new mode of architectural reception in the late eighteenth century. Goethe’s 1772 “On German Architecture” and Laugier’s *Essay on Architecture* sought to ground the value of architecture in the subject’s spectatorial relationship with buildings. Both writers assess buildings in terms of the emotional affect they produced in a person contemplating them. Beauty is thus understood as dependent upon a viewer’s judgment rather than on the properties inherent to the object, a thesis that Kant would develop in a more rational direction in his *Critique of Judgment*.

Already in 1683, the Sun King’s architect, Claude Perrault, took a decisive step away from the Renaissance tradition in his *Treatise of the Five Orders in Architecture*.¹¹ Histories of eighteenth-century architecture usually begin with his treatise.¹² A European-wide controversy emerged when François Blondel defended the established conventions within the French Academy against Perrault’s criticisms.¹³ Scandal could hardly have been Perrault’s intention, for he wrote his own treatise only after having already provided a scholarly translation and commentary on the source of all tradition, Vitruvius’s *Ten Books on Architecture*. As much as Perrault questions the cosmology of Renaissance architectural theory, he preserves its key

8. Antoine Picon, *French Architects and Engineers in the Age of Enlightenment*, trans. Martin Thom (Cambridge: Cambridge University Press, 1992), 1.

9. Quoted in Ulrich Schütte, *Ordnung und Verzierung: Untersuchungen zur deutschsprachigen Architekturtheorie des 18. Jahrhunderts* (Braunschweig: Vieweg, 1986), 26.

10. Antonio Hernandez, “Französische Architekturtheorie von Briseux bis Ledoux,” in *Revolutionsarchitektur: Klassische Beiträge zu einer unklassischen Architektur*, ed. Klaus Jan Philipp (Braunschweig: Vieweg, 1990), 87.

11. Claude Perrault, *A Treatise of the Five Orders in Architecture*, trans. John James, 2nd ed. (London, 1722); the most modern English translation is *Ordonnance for the Five Kinds of Columns*, trans. McEwen and intro. Pérez-Gómez (1993).

12. Rykwert, *First Moderns*, 22; Caroline van Eck, *Organicism in Nineteenth-Century Architecture: An Inquiry into Its Theoretical and Philosophical Background* (Amsterdam: Architectura & Natura Press, 1994), 84.

13. Antoine Picon provides a sympathetic portrayal of the debate. Antoine Picon, *French Architects and Engineers*, 26–34.

terms. Indeed, the history of classical architecture is noteworthy for the persistence of its central design features even in the midst of epistemological reversals. Perrault might have cast doubt on the mathematical and musical ontology of the orders, however he continued to defend them as a necessary component of all architecture. While he presents a scientific evaluation of the Platonism implicit in Renaissance treatises, he bends over backward to preserve some universal standard. As Robin Middleton notes, "Perrault was in no way intent upon rejecting the authority of classical architecture or the primacy of the orders as the embodiment of the highest standards of beauty and artistic expression. He aimed rather to subject them to new rules of assessment."¹⁴ Hanno-Walter Kruft, likewise insists that Perrault intended no assault on classical values: "Perrault's concern is not to abolish the concept of proportion but to make it less absolute."¹⁵ The trouble was that once Perrault's skepticism had been put in print, the critical evaluation of earlier treatises began in earnest, with implications beyond Perrault's expectations. Walter Kambartel states flatly that Perrault feared the license that his critique of the canon might permit, hence his writing maneuvers between scientific dismissals of basic assumptions to diplomatic recommendations to preserve traditional concepts.¹⁶ Within the Vitruvian tradition, "license" referred to the conscious disavowal of inherited rules in favor of more fantastical designs, and by all accounts Perrault was asked to translate Vitruvius as a response to baroque excesses. However, skepticism's gravest threat would have been its potential disregard of royal architecture in general. If Perrault too severely undermined the proposition that Vitruvian buildings reflected the natural order, then one might fear that magnificent buildings as a potent symbol of Louis XIV's royal authority might also be questioned. Given how assiduously Louis XIV reinforced his might through grand building schemes, an all-too-aggressive critique of the Roman tradition might well have been interpreted as a challenge to the present king as well. In this regard Perrault follows the example of Descartes, who also deployed architectural methods in his critical philosophy, and who, we shall show, also shied away from the strong political implications of his architectural thinking.

Despite his fame among architects, most of Perrault's life was devoted to medical research. A varied career was not unusual in the late seventeenth-century "Republic of Letters," where intellectuals moved within a range of subjects. Like many of his contemporaries, Perrault distinguished his own writing from that of the Scholastics, who were chastised for making narrow distinctions in their overly respectful commentaries on established texts. Late seventeenth-century critics

14. Robin Middleton, introduction to *The Genius of Architecture*, by Nicolas Le Camus de Mézières (Santa Monica: Getty Center for the History of Art and the Humanities, 1992), 19.

15. Hanno-Walter Kruft, *A History of Architectural Theory from Vitruvius to the Present* (New York: Princeton Architectural Press, 1994), 135.

16. Walter Kambartel, *Symmetrie und Schönheit: Über mögliche Voraussetzungen des neueren Kunstbewusstseins in der Architekturtheorie Claude Perraults* (Munich: Wilhelm Fink, 1972), 29.

perceived themselves as livelier, wittier, and more engaged in debate than older savants. They were more concerned with the personalities of the public writer, with maintaining a position in a debate, than with the specialized knowledge of ancient texts. The period has been described as the golden age of essays, commentaries, and translations.¹⁷

Perrault was originally trained as a doctor.¹⁸ In 1642 he passed his doctorate and established a medical practice. As a member of the medical faculty at the University of Paris, he lectured on physiology and pathology. In 1666 he was accepted into the Académie des Sciences, where he conducted biological investigations, and was also involved in the Academy's compilation of all newly invented machines. He died in 1688 at the age of seventy-five, having contracted an infection while performing a dissection on a camel. Alberto Pérez-Gómez connects Perrault's medical research to his sharp comments about the architectural tradition, for he quite explicitly compares architects' veneration of antiquity with Scholasticism's unquestioning adherence to the works of Aristotle.¹⁹ While trouncing medieval commentaries has long been a chestnut of Enlightenment self-celebration, we should not underestimate just how much ancient sources still defined scientific knowledge at the end of the seventeenth century. Even in his reports about animal anatomy, Perrault felt obliged to respond to ancient sources. In detailing his autopsy of a lion, for example, he mentions that the claws do not have cases as Pliny claims but are retractable just as Plutarch and Solinus observe.²⁰ However much scientific research was Perrault's lifetime occupation, he was known throughout Europe for the controversy surrounding his architectural commentaries, and famous for his Louvre design. Contrary to the classical ideal of proportion, the three arenas—academic science, scholarly commentary, and public design—could not be seamlessly integrated with one another.

Perrault's cautious approach needs to be placed within the context of seventeenth-century French censorship. His brother served as secretary to Louis XIV's minister Jean-Baptiste Colbert. As he consolidated the authority of the central state, Colbert had inherited from his ministerial predecessors the inclination to restrict the circulation of academic histories of the French monarchy. Perrault surely grasped that a complete dismissal of grand architecture could easily be perceived as an assault on the monarchy, from both within and without the government. The case of Pierre Bayle, a Huguenot professor of philosophy forced to flee to Rotterdam, was but one example of an academic whose philological commentaries on the

17. Patrick Lambe, "Critics and Sceptics in the Seventeenth-Century Republic of Letters," *Harvard Theological Review* 81 (1988): 277–281.

18. For a biography of Perrault, see Herrmann, *Theory of Claude Perrault*, 1–30.

19. Alberto Pérez-Gómez, *Architecture and the Crisis of Modern Science* (Cambridge, MA: MIT Press, 1983), 18–36.

20. Claude Perrault, *Memoirs for a Natural History of Animals: Containing the Anatomical Descriptions of Several Creatures Dissected by the Royal Academy of Science in Paris* (London: Alex Pitfield, 1688), 3.

Old Testament or Roman history brought severe chastisement.²¹ Perrault's cautious maneuverings reflect the tension that runs throughout the Enlightenment, the problem of the critical intellectual's relation to the absolute state. Architects were in the same bind as philosophy professors, perhaps even more so, for they sought the direct patronage of rulers. Perrault's career as commentator had to mesh with his place as an architect for the Louvre.²² More than theorists, architects are directly dependent on power. Frederic Jameson's point that "of all the arts, architecture is the closest constitutively to the economic, with which . . . it has a virtually unmediated relationship," applies just as strongly to the precapitalist society of patronage and feudal distinctions.²³ Indeed, Theodor Adorno has argued that the domination of absolutist patrons over architects was probably more thoroughgoing than within modern bureaucratic states.²⁴ Perrault was supremely adept at compromise, as demonstrated by his ability to win the Louvre competition. After the baroque design of Bernini was abandoned because of its lack of cohesion and its failure to consider the royal need for security, Perrault outmaneuvered other Parisian contenders. Emil Kaufmann described the Louvre design as "the Perrault compromise," and much the same may be said of his writing, a balance between rational inspection of convention and its reiteration as a French monarchical style.²⁵

Perrault's most striking claim was that no empirical correspondence existed between the proportions of the architectural orders and musical tones.²⁶ Vitruvius, and those Renaissance theorists guided by him, had maintained that the ratios of columns and spaces in the most successful buildings were organized to correspond to differences in the pitch of musical tones. The harmony of a building's elements was directly analogous to musical harmonies. The relationship between the length and width of a room matched the different tones, measured by octaves and fifths, that were produced by a musical chord played at different lengths. Even to the untrained ear, musical harmony sounded delightful; so, too, it was argued, a harmoniously arranged building pleased the eye. In both cases the observer and the listener might not understand the technical rules that underlay the relationship of

21. Jacob Soll, "Empirical History and the Transformation of Political Criticism in France from Bodin to Bayle," *Journal of the History of Ideas*, 2003, 297–316.

22. A great deal has been written about the debate over whether Perrault deserves sole credit for the Louvre design. Regardless of whether the question of attribution is resolved, little doubt remains that Claude Perrault was very closely connected to the royal decision. Christopher Tadgell argues indeed that the absence of a denial from Colbert, who could very easily have dismissed the claim, indicates that Perrault was the architect responsible. Christopher Tadgell, "Claude Perrault, François La Vau, and the Louvre Colonnade," *Burlington Magazine* 122 (1980): 326–337.

23. Frederic Jameson, *Postmodernism or, The Cultural Logic of Late Capitalism* (Durham, NC: Duke University Press, 1991), 5.

24. Theodor Adorno, "Culture and Administration," in *The Culture Industry* (London: Routledge, 1991), 115.

25. Emil Kaufmann, *Architecture in the Age of Reason* (Cambridge, MA: Harvard University Press 1955), 127.

26. Rykwert, *First Moderns*, 35–36, relates Perrault's arguments with contemporary theories on acoustics.

notes to each other, or of spatial forms, yet for the Renaissance thinkers, these rules were part of larger correspondences in the order of the universe. Beautiful buildings conformed to natural laws, and thus architecture could be understood as a science. Perrault, however, noted quite simply that all the authorities from Vitruvius to Scamozzi gave different ratios for the orders. Palladio's measurements for the Ionic were not the same as Alberti's, and so on. If the proportions of the different orders of columns were truly based on musical tones, there could be no variation in the proportions of Doric, Ionic, and Corinthian columns.

Perrault's skepticism developed from his critical comparison of authoritative texts. The more books one reads, the more the certainty of each treatise is undermined by another, equally canonical work. By the end of the sixteenth century, Vitruvian theory was understood as a coherent unity; thus its major thinkers could all be read as expounding a single truth, yet their specific calculations, Perrault noted, varied considerably. Despite this critical approach to reading treatises, Perrault's philological questions were not intended to thoroughly delegitimize the architectural orders, for, in his own treatise, he goes on to recapitulate them. As a careful interpretation of Perrault's own *Treatise of the Five Orders in Architecture* can show, he wrote within the classical tradition while exposing it as just that—a convention of inherited standards of beauty, and not a science based on natural law.

Perrault's method was based not only on empirical observation. His inclination to read treatises against each other has much in common with theological criticism. In the seventeenth century, critical commentaries on the Bible divided the divergent religious groups of the Reformation. However, as the religious wars came to an end in France, critical practices were no longer set in one particular denominational camp but drew instead on broader debates regarding the primacy of reason or revelation in Christian teaching. Reinhart Koselleck has argued that as interpretive methods removed themselves from the dogmatic battles of competing churches, philological critique began to assume a position above the partisan claims of one group or another.²⁷ Similarly, Perrault sets himself over the different versions of Vitruvian classicism, while at the same time turning one against the other. The force of his argument arises from his clear articulation of the contradictions between treatises. At points, Perrault approaches the ideal that Kant and Descartes admired in architectural thinking: that of an engineer who tests a proposition based on empirical knowledge rather than traditional authority. Indeed, Perrault's tone anticipates the even more radical arguments of the English Enlightenment, for when he dismisses beauty's ontological claims he comes close to Hume's critique of religion:

Neither the Imitation of Nature, nor Reason, nor good Sense, are then the Foundations of those Beauties, which we see in the Proportion, Order and Disposition of the

27. Reinhart Koselleck, *Critique and Crisis: Enlightenment and the Pathogenesis of Modern Society* (Oxford: Berg, 1988), 106–108.

Part of a Column; and it is impossible to assign any other Cause of their Agreeableness, than Custom.²⁸

Likewise, his arguments test the assertions of architectural theory against experience, as when, in order to dispute the musicological understanding of architectural harmony, he invokes Vitruvius's famous rule that a beautiful house is organized with the same sense of proportions as the human body. A human face can be beautiful, Perrault argues, not because it has particular proportions, but because its features embody grace, their smooth modifications are gentle even when the person expresses very different emotions. If the human body, and by implication the face, are the standard for architectural beauty, Perrault implies that beauty can vary significantly as to its exact shape and dimensions, but it is their relation to each other, as well as over time and in differing circumstances, that constitutes beauty:

The Beauty of a Building is so far like that of a humane Body, that it consists not so much in the exactness of one certain Proportion, or Conformity of Size, which the Parts have one with the other, as in the Grace of the Form, which is nothing else but its agreeable Modification, upon which, an excellent and perfect Beauty may be found, without strictly observing this very kind of proportion.²⁹

Grace is of course a much less precise term than the mathematical principles of Renaissance theory, for it leaves open the possibility of wide and even unexpected variations in beauty, and perhaps more importantly it implies a spiritual quality apart from the material shapes of a facade.

Perrault set one classically derived metaphor against the other. The fixed relationship between architectural drawings and musical pitches is called into question by the comparison between the human body and buildings. He points out that there is no single type of body, rather a great variety, and they have a surprising ability to please even in their unconventional form. Perrault invokes the metaphor without positing a universal, abstract anatomy that all humans share. Bodies are beautiful not because all eyes and ears are set at opposite sides of the face, but because their particular variations spur our aesthetic judgment. By emphasizing the differences between faces, he shifts the standard of beauty from surface geometry and proportion to the ineluctable quality of grace, which is discerned more through taste than measurement. In Perrault's argument there is no longer a single human face. We cannot speak of "the face" as if its appearance were constant and universally the same. Instead faces change shape, expressing different emotions. If one were to allow the classical metaphor to continue to influence architectural opinion, then Perrault's physiognomic account of emotionally fluid faces allows for the possibility of

28. Perrault, *Treatise of the Five Orders*, viii.

29. *Ibid.*, i.

many different modes of architectural expression. Just as faces represent different emotions, so do buildings show varying facades. From Perrault's emotionalized face, architectural discourse will develop the notion that buildings elicit emotions in those that look at their facades. The step from Perrault's critique of the Renaissance metaphor to the later claim that all buildings show a characteristic expression was not very great. How one perceives the beautiful face or facade, and how one responds to it sensually, Perrault argued, count for more than the accurate estimation of distances and ratios. While Renaissance theory certainly understood that beauty is intuited long before it is understood in philosophical terms as a series of harmonious relationships, Perrault claimed that Renaissance thinking mistakenly presumed that certain laws of proportion underlay any naive appreciation of loveliness.

Like later eighteenth-century theorists, Perrault refrains from defining absolute beauty. Instead, for "beauty" he substitutes "grace," which he defines as a smooth modification of form. He opens the door for a radical relativization of beauty when he postulates two forms, positive and arbitrary. The positive is least well defined: it consists of building qualities that every observer can agree are beautiful, such as the use of very fine marble. Positive beauty does not concern proportion as outlined by architectural treatises on the orders; instead it depends on qualities that are immediately visible, such as the grandeur of a building or the precision of its construction. Of the Vitruvian qualities, Perrault counts two types of proportion among the positive beauties. One consists in the proportional relationship of the parts to the whole, their integration into a coherent entity. The second is symmetry—the balanced correspondence of parts in terms of size, number, disposition, and order. Indeed, these two types of proportion become the primary terms in eighteenth-century aesthetics, not just for buildings but in other genres as well.

Having barely sketched out the qualities of positive beauty, Perrault describes arbitrary beauty as the passing fancies of a society, the ruling elite's preferences of a given moment. Perrault lays out the distinction between positive and arbitrary beauty in an effort to explain why classical architecture has been valued over centuries. Rather than assert some eternal quality in ancient styles, Perrault acknowledges that architects tend to overvalue tradition. In a gesture that sounds strikingly like the skeptical unmasking of self-love undertaken by French moralists such as La Rochefoucauld, Perrault strikes at his own profession by arguing that it treats antiquity as the embodiment of a mysterious truth, as a fetish, when in fact this presentation is but a ploy to bolster its own standing.³⁰ Likewise, the legends told by Vitruvius and other ancient authors about how the various orders came into being cannot serve as a foundation for their further use. At bottom, Perrault states that the architectural orders were created out of nothing more than whim and chance,

30. Henry C. Clark, *La Rochefoucauld and the Language of Unmasking in Seventeenth-Century France* (Geneva: Droz, 1994), 130–136.

a position that the first great Renaissance theorist, Alberti, had explicitly rejected as ignorant.³¹ Having pointed out the false ideology of the architectural profession, Perrault does not posit some radical alternative. He is writing after all a summary of the five architectural orders. His critique of the classical episteme is meant to serve as nothing more than a preface to the handbook that reiterates the rules of proportion in their many variations. The real possibility exists that Perrault's and his readers' preference for classical forms arises from nothing more than an arbitrary convention favored by public opinion and the ruling elite. Fashion and pride are powerful reasons to adore classical architecture. Perrault openly acknowledges the awkwardness of dismantling all claims to universal and naturally grounded rules of beauty while presenting them as standards for all to follow.³² Perrault's paradox runs far beyond the deconstructive moment of his preface; it permeates all eighteenth-century efforts to replace the Renaissance science of beauty with an aesthetics of taste. How does one define taste such that it does not devolve into mere fashion? On what basis can beauty be called universal? What value makes tradition worth preserving and emulating? How can personal perception be reconciled with a canonical history of art?

Later in the eighteenth century, Perrault's distinction between positive and arbitrary beauty manifested itself in the debate between aesthetics based on an anthropological history of human culture and aesthetics grounded in a universal standard of judgment. In the context of the German Enlightenment, this division reappeared in the differences between Kant and Herder's aesthetic understanding. Herder, while an ardent admirer of classical Greece, was nevertheless capable of arguing that beauty was understood differently depending on the culture within which a judgment was made. Kant had spent most of his philosophical career doubtful that aesthetic judgments could ever have an a priori basis, because for the young Kant, as for many English empiricists of the time, aesthetic judgments were determined by the sensual experience of individuals. According to this line of reasoning, there was no rational basis for asserting that a thing was universally acknowledged to

31. Perrault, *Treatise of the Five Orders*, xv: "No reason can be found... they have no other Foundation than Chance, and the Humour of the Workmen, who sought for no reason to guide them in the Determination of those things, the Preciseness of which, was of no Importance." Alberti anticipated this argument: "Yet some would disagree who maintain that beauty, and indeed every aspect of building, is judged by relative and variable criteria, and that the forms of buildings should vary according to individual taste and must not be bound by any rules of art. A common fault, this, among the ignorant." Leon Battista Alberti, *On the Art of Building in Ten Books*, trans. Joseph Rykwert, Neil Leach, and Robert Tavernor (Cambridge, MA: MIT Press, 1988), 157.

32. Both Herrmann and Pérez-Gómez note that the term *paradoxe* in seventeenth-century French would have been understood as meaning "unorthodox." The difference in meaning has important implications for Perrault's argument. If he is "unorthodox" in his argument, then he can be seen as a man of science arguing against tradition and authority. If he is understood as presenting a "paradox" in the contemporary sense—a contradiction in logic—then he would seem to be acknowledging his own divided commitment to critique and respect for the architectural tradition. It would seem simplistic to accept that *paradoxe* meant only "unorthodox" and had nothing of a logical connotation. It is more likely that both meanings are at play in Perrault's usage: his critical arguments have split his allegiances.

be beautiful. Only at the end of his career, with the *Critique of Judgment*, did Kant find what he considered a rational basis for universal aesthetic judgments. Both the empiricist and transcendental sought to explain the basis for “good taste”: was it a universally recognized judgment, or was it dependent on personal whim or at best social consensus?

By discrediting the Renaissance cosmology of architecture, Perrault lays the ground for the eighteenth-century application of “good taste” to the judgment of architectural beauty. The architect is a man whose discerning judgment supersedes other more superficial and flawed assessments of beauty. Eighteenth-century aesthetics devotes considerable effort to defining just what constituted a judgment of taste, yet the one presupposition that all critics of taste agreed upon was that, when presented as an aesthetic judgment, it was distinct from and superior to fashionable opinion. Already in Perrault we can recognize the aspirations and inadequacies of this position. While noting the many variations among manuals on the orders, Perrault claims that there are buildings that all architects can agree are beautiful. He acknowledges the variety of personal judgments but ultimately, like so many aestheticians after him, also wants to believe that beauty exists in a universally recognizable form. To accept that beauty is often only a matter of custom, as Perrault quite clearly argues in his preface, amounts to a thorough delegitimation of classical beauty. The resolution of this tension is attempted by employing the term “taste,” which incorporates both the sensual and the popular at one end along with art historical connoisseurship and artistic genius at the other. Taste was an elastic term that made it possible in theory to incorporate the increasingly diverse claims on beauty. Perrault recognizes that as a standard of rational judgment “good taste” is quite unstable. Given his claim that much of what gets held up as beautiful is nothing more than the arbitrary opinion of a given society, how does one distinguish between fashionable opinion and a higher aesthetic sense? What separates a technically sound building from a highly decorated one? At what point does engineering overlap with universal beauty to the exclusion of popular opinion? Perrault’s critical arguments have introduced the possibility that the architectural orders are the product of historical opinion and slavish devotion to tradition, with only an unrecognizable sliver of mechanical necessity as their justification.

The radical implications of Perrault’s distinction become obvious after the era of taste-driven aesthetics. The risks in his critique become clearer if we take the unhistoricist step of drawing a comparison with Charles Baudelaire’s celebration of fashion in *The Painter of Modern Life*.³³ More than just a century and a half separates Baudelaire and Perrault, and yet it is only in the nineteenth century that Perrault’s arbitrary beauty receives a committed proponent. When Baudelaire argues that “beauty is always and inevitably a double composition,” he does so in order

33. Charles Baudelaire, *The Painter of Modern Life* (New York: Phaidon, 1995), 3.

to celebrate the “relative, circumstantial element,” namely, fashion.³⁴ He defines modernity as that half of all art engaged in “the ephemeral, the fugitive, [and] the contingent.” The other side of beauty he quite flatly concedes to classicism, for he states that half of all art concerns “the eternal and the immutable.”³⁵ For modernist sensibilities, Baudelaire seems to concede too much to the older aesthetic, yet he adopts Perrault’s distinction in order to elevate the arbitrary, historically contingent moment in beauty. Fashion wants to believe in eternal beauty. The classical is regularly invoked by the ephemeral. Fashion insists that certain moments are transcendent, that a particular style is forever gorgeous. Similarly the eternal beauty of a Greek sculpture has to be convincingly lovely in the present, without any historicizing, antiquarian explanations. Apollo has to be fascinating without footnotes; hence the eternal ideal has to appeal even in the tumult of contemporary taste. Ultimately, Baudelaire accentuates this dialectic in order to move away from the rigid ideology classicism had become, yet his deployment of Perrault’s distinction shows just how close the architect came to enunciating a modernist position. Baudelaire breezily accepts a distinction that Perrault struggles to articulate and that his contemporaries found intolerable or absurd. For classical aesthetics there is no possibility of splitting the difference. Instead the aesthetics of taste becomes the means of integrating the eternal with the fashionable.

The discrepancies between Perrault’s criticisms of architectural epistemology, his continued devotion to the classical canon of beauty, and his successful design for the Louvre point to tensions particular to architectural discourse. Throughout the reception of Perrault’s work, there remains a distinction between the practice or craft of building design and its philosophical rationalizations.³⁶ Perrault can dispute the cosmological assumptions of Renaissance architecture, but he was widely understood to have affirmed the tradition through his design work. Eighteenth-century critics tried to reconcile the neoclassical rigor of the Louvre with the skepticism of Perrault’s commentary on the orders. For many, the problem was understood as a question about which medium should have precedence, the treatise or the building. Early modern architects were already confronting the problem that architecture existed not only as an object but also as a media representation. With Perrault, readers and spectators were challenged to resolve the difference between critical theory and architectural execution. Laugier, himself no more than a scholar and theorist, gives preference to Perrault’s architectural accomplishment: “A beautiful building speaks eloquently for its architect. In his writings M. Perrault is at most a scholar; the Colonnade of the Louvre makes him a great man.”³⁷ In his

34. Baudelaire, “Beauty, Fashion, and Happiness,” in *Painter of Modern Life*, 3.

35. Baudelaire, “Modernity,” in *Painter of Modern Life*, 13.

36. Herrmann, *Theory of Claude Perrault*, 138 ff., shows the incredulity with which Perrault’s critique was met in the eighteenth century.

37. Marc-Antoine Laugier, *An Essay on Architecture*, trans. Wolfgang Herrmann and Anni Herrmann (Los Angeles: Hennessey & Ingalls, 1977), 8.

summary of the debate between Perrault and Blondel, Jacques-Germain Soufflot expresses dismay at the motivations behind scholarly debate:

It would be difficult to understand how two architects who have such opposite views on an essential part of their art have created things of equal beauty if one did not know that scholars have sometimes, in fact much too often, the bad habit of not wanting to retract what they have advanced even though they sense inside that they were wrong, consequently they act on principles contrary to what they have declared.³⁸

Soufflot's remark highlights a feature often noted in French courtly discourse: the discrepancy between what one says and what one believes. Regardless of his standing within the Parisian scholarly world as an experimenting doctor, Perrault's critique of the orders was not read simply as the act of a committed scientist; it was understood as a sign of a divided self, unable to reconcile his scholarly statements with his artistic accomplishments. Decades after Perrault's views were first made public, both Laugier and Soufflot were struck by the discrepancy between Perrault's critique of the Renaissance and his successful, highly restrained classical design for the east wing of the Louvre. In order to reconcile the difference, they interpret Perrault from the point of view of courtiers who always make a distinction between statements and intentions. The theoretical debate is neither dismissed as false nor accepted at face value; it is instead read as a struggle for prominence.

This tendency to read on two levels, always juxtaposing the interior and the exterior, is particularly appropriate for architects and especially in the case of Perrault, whose most important architectural accomplishment was the design of a palace facade. Soufflot and Laugier presume that Perrault's criticisms of the classical orders are statements made in the fury of scholarly debate and that his real belief in classicism can be read from the walls of the Louvre. This preference for the work of art is itself an arbitrary distinction. One might ask: Why does a building more truly express an architect's opinion than a theoretical statement? Why not presume that Perrault was speaking sincerely in his treatise and acting astutely in his design?

These questions must unsettle Pérez-Gómez's reading of Perrault as a man of science who applied the critical methods of biology and physics to architecture. At least to his contemporaries, Perrault was understood as divided between sympathies. Furthermore, this division occurred not only when he moved between disciplines, from empirical science to classical architecture; it reemerged with the field of architecture as well. One might ask whether a similar division arose in Perrault's scientific writing. Those who celebrate him as a scientist who brought

38. Quoted in Étienne-Louis Boullée, *Architecture: Essai sur l'art*, ed. Jean-Marie Pérouse de Montclos (Paris: Hermann, 1968), 52.

critical thinking to architecture do not consider this possibility.³⁹ For them the scientific method is a coherent and consistent order, not one interlaced with old and new ideas, biases, and insights. Perrault's writing exposes the forces that pull on architecture as a field. As Soufflot suggests, there is a considerable difference between a scholar writing for the Academy and the same man serving on a three-person committee empowered to design a wing of the central palace of Europe's most powerful monarch. How one thinks may indeed vary in those two contexts. There is no one arena free from political considerations. The Academy is no less charged with questions of prestige and advancement, but these factors are altered quite substantially when designing a palace. Perrault himself acknowledged that the orders were appropriate for two kinds of structures: magnificent buildings and stage scenery. Later writers would give Perrault's clause a twist by noting that the palaces were often more artificial than theaters. Enlightenment irony aside, the seventeenth century understood grandiosity as an instrument of the state. Tremendous palaces were a means of demonstrating the overwhelming power of the monarch. A great public building gave the populace visual assurances of state authority and the strict application of the law. Renaissance treatises had guided the construction of triumphal arches since the sixteenth century.⁴⁰ By the reign of Louis XIV, the orders as defined by Serlio were codified as the visual representation of power. Given the political necessities of demonstrating the king's ancient legitimacy and his supreme authority, it should seem not at all surprising that Perrault would not introduce his skepticism into the Louvre design. If Louis XIV's ministry was at all inclined toward criticizing architecture treatises, it was with an interest in asserting French preeminence over Italian models, not in questioning the codification of power in classical iconography.⁴¹

The pressure on an architect to operate within the economic and political necessities of his patron adds an additional rupture to the methodological problems within his *Ordonnance*. In Perrault's preface there emerges a division between the claims of scientific knowledge and aesthetic judgment. His critique of Renaissance theory operates on a philosophical level distinct from beauty. Perrault can disprove Renaissance assertions about the cosmological import of proportions in building, but he cannot undo his own conviction that the rules of proportion are at least the basis for building beautifully. Even when Perrault seems willing to accept that his aesthetic conviction is no more than custom, he cannot abandon the belief

39. Pérez-Gómez, introduction to *Ordonnance of the Five Kinds of Columns*, 1: "Perrault's concern was to place architecture, already well established within the European tradition of *disegno* (design as a liberal art), into the framework of the new scientific mentality inaugurated by Galileo and René Descartes."

40. Roy Strong, *Splendor at Court: Renaissance Spectacle and the Theater of Power* (Boston: Houghton Mifflin, 1973), 65–73.

41. Rykwert, *First Moderns*, 25–31, provides a compelling account of the politics behind the Louvre project.

that beauty has a “universal” quality, a positive aspect that every architect, that is, every academically trained expert, would acknowledge. These tensions—between scientific knowledge and aesthetic judgment, and then within aesthetics between rationalist and anthropological standards of judgment—pervade not just Perrault’s preface but also much of the eighteenth century. Furthermore, as architecture splits itself between science and art, the troublesome question arises of whether an architect can work as a critical intellectual as well as a servant of the state. German architectural theory emerges in the eighteenth century as an attempt to answer this question.