

# The Epistemological Limits of Neo-Rationalism

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Employing the taxonomy that Panofsky used in his 1968 book *Idea*, the present paper identifies an Aristotelian basis to the theories of Aldo Rossi and brothers Leon and Rob Krier. These theorists' epistemology is echoed in texts by their major apologists, Giulio Carlo Argan, Alan Colquhoun and Anthony Vidler, whose discussions of typology are predicated on the notion that type is deduced from the study of empirical stereotypes, not atemporal archetypes. The major criticism of Neo-Rationalist theory — that it is ultimately nostalgic — can be attributed to the movement's epistemological limits.

This is not to say that Neo-Rationalist theory could not have had a truly Rationalistic, or universal basis. Contributions to the topic by Geoffrey Broadbent, Paul-Alan Johnson and Leandro Madrazo Agudin, all point to Plato, whose ancient philosophy recommends a process referred to as "dialectic" as a way of deducing universal ideas. The paper argues that such a method has been employed by Louis Kahn, whose interest in typology did not lead inevitably to a nostalgic architecture.

By discussing Neo-Rationalist discourse of the 1970s in terms of Platonism and Aristotelianism, the paper highlights the epistemological limits of Neo-Rationalism, and suggests a possible strategy for the expansion of those limits.

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This paper will show how the Aristotelian based theories of Aldo Rossi and brothers Leon and Rob Krier is echoed in texts by their major apologists, Giulio Carlo Argan, Alan Colquhoun and Anthony Vidler, whose discussions of typology are predicated on the notion that type is deduced from the study of empirical stereotypes, not atemporal archetypes. It will be argued that the major criticism of Neo-Rationalist theory — that it is ultimately nostalgic — can be attributed to the movement's epistemological limits.

In works of architectural history, inquiries into the epistemological status of architects' generative ideas are uncommon. This paper's line of questioning and its significance can be better appreciated when held beside Erwin Panofsky's book, *Idea: A Concept in Art Theory*.<sup>1</sup> In this text, Panofsky traces the influence of Plato's idea of the beautiful, or *Beauty Itself*,<sup>2</sup> on art and architectural theory, from antiquity to Michelangelo. His survey is particularly concerned with the dilution of the metaphysical status of this *Idea* (capital "I") which, Panofsky argues, is conceived by most theorists in Aristotelian terms. The metaphysical value of the beautiful in Platonic doctrine is shown to have been reduced, since the Forms, or Ideas, are most often viewed as thoughts within an artist's mind, rather than anything transcendent and absolute.<sup>3</sup> The present inquiry into the ontological whereabouts of the NeoRationalists' ideal types, is based on a similar distinction to that made by Panofsky. Like Panofsky's text, the present paper focuses on the ontological whereabouts of designers' generative ideas, asking whether or not those ideas are truly transcendent as Plato would imagine them to be. Furthermore, Platonism should be seen as a relevant interpretive lens through which to critique NeoRationalist discourse; both Geoffrey Broadbent and Leandro Madrazo Agudin, compare the NeoRationalist's belief in ideal types to Plato's theory of Forms, the apparent antecedent of this strategy.

### Philosophical Rationalism

Were a philosopher to read of an architectural movement with the word Rationalism in its title, and with an interest in the universal essence of various building types, they would expect the movement to have its epistemological roots in Rationalism also. To a philosopher, the term Rationalism refers to a belief in innate knowledge, known *a priori*, and a rejection of all kinds of sensible phenomena. While this distinction is fundamental to philosophical discourse, the matter is commonly blurred in literature pertaining to architecture and urban design.

One architectural writer with an uncommon astuteness to epistemological matters is Geoffrey Broadbent. In his text *Emerging Concepts in Urban Space Design*,<sup>4</sup> Broadbent cites instances where Quatramère de Quincy describes individual types as concepts that can only be relayed in vague terms, or in rough sketch form, and he identifies Quatramère's notion of type as "a rather fuzzy version of Plato's ideal [F]orm".<sup>5</sup> Meanwhile, what Quatramère terms a model can be copied literally in its every detail. In the language of Platonic philosophy, Quatramère's models participate in, or partake of, what he calls types. Broadbent traces this theory to Plato's parable of the bed maker in *The Republic*. There *The Bed Itself* serves as a type, and particular beds could be described, in Quatramère's terms, as models, the latter participating in the former. Supporting Broadbent's analysis, Sylvia Lavin argues that Quatramère made specific efforts to advance Plato's views regarding art and mimesis as expressed in *The Republic*.<sup>6</sup>

Reference to Quatramère's notion of type is frequently found under the heading of typology, and within texts associated with the Italian NeoRationalist movement of the 1970s. While discourse under this heading resonates well with Plato's notion of particulars participating in corresponding Forms,<sup>7</sup> discussions on the topic of typology often do not adequately differentiate between types that would appeal to a Rationalist philosopher (those with *a priori* validity, like Plato's Forms), and what Quatramère would call models.

### NeoRationalist Epistemology

The departure from a Rationalistic conception of type begins with Giulio Carlo Argan from whom NeoRationalist literature inherits its metaphysical parameters. In his article, "On the Typology of Architecture", Argan provides an Aristotelian definition of the word type, according to which the existence of a type-class is "never formulated *a priori* but is always deduced from a series of instances".<sup>8</sup> Argan identifies a class-type or a common "root form" through the observation of many similar buildings. Metaphysically higher Forms — Quatramère's types — do not figure at all within Argan's discussion.

When Aristotelian definitions of type are placed beside Platonic illustrations, further confusion is inevitable. In his introduction to the topic of typology, Alan Colquhoun pictures a craftsman fashioning a use item, such as a kitchen utensil, according to a mind's eye image, an image which is in turn universal, since it exists in the minds of those who would eventually use that utensil.<sup>9</sup> From a Platonic standpoint, this illustration, with its equivalencies to Plato's parable of the bed maker, contains the promise of a Platonic theory of types to follow. Ultimately though, Colquhoun promotes the use by architects of what Quatramère would term models. He promotes these based on their ability to communicate shared meanings, not universally, but within a given culture, like the words of a language. In fact, his conception of type is identical to those Aristotelian conceptions of the Ideas that Panofsky derides.

By identifying what he terms The Third Typology,<sup>10</sup> Anthony Vidler opens the possibility for a truly Rationalistic paradigm, one which does not appeal to nature or conceptions of a primitive hut as sources for second generation mimesis, as the Modern Movement and eighteenth-century rationalists had done. According to Vidler, the exponents of this new approach — Aldo Rossi and brothers Leon and Rob Krier — do not attempt to validate their work by copying nature. Rather, their “columns, houses, and urban spaces, [...] refer only to their own nature as architectural elements”.<sup>11</sup> Yet in Vidler’s work, as in Argan’s, it appears that types are to be derived from the observation of many particular buildings, those found in extant European cities. From the standpoint of Rationalistic philosophy, types of this kind are no more than historical accidents if they are not themselves modeled on transcendent Ideas, known a priori. Rossi employs the “ontology of the city” (to use Vidler’s phrase), not the ontology of Plato’s ideal realm of Form. His types share the metaphysical status of the sensible artifacts that are found in cities, which, according to Platonism, are objects of mere opinion.

### Epistemological Alternatives

This is not to say that Neo-Rationalist theory could not have had a truly Rationalistic, or universal basis. Of those who address the Italian NeoRationalists’ interest in typology, one scholar who is unusually astute to the epistemological strictures of Rationalism is Rafael Moneo. In his article, “On Typology”, Moneo identifies “Louis Kahn’s search for origins [...] [as] a possible rebirth of Quatramère’s ideas”.<sup>12</sup> In other words, Kahn’s concept of “form” is synonymous with Quatramère’s concept of type. Aware of the fact that Kahn’s greatest influence is related to aspects of his work other than his fascination with ideal types, Moneo laments that Kahn’s view of “form” is “not necessarily present in the work of his followers”.<sup>13</sup> Within the present context, it is notable that writers on the topic of typology often disregard the Platonic nuances of Quatramère’s work. Despite the fact that Quatramère’s notion of type is central to theories of typology, scholars including Argan, Vidler and Colquhoun do not uphold Quatramère’s Platonic attitude towards good and bad mimesis.<sup>14</sup> Rather, their work reflects a general shift towards positivistic, and perhaps instrumentalist thought paradigms, of the kind referred to by Perez-Gomez.<sup>15</sup>

When trying to unravel theories which advocate a relationship between particular buildings and universal types, it is useful to think in terms of archetypes, prototypes and stereotypes, as Paul-Alan Johnson does in his review of theoretical texts pertaining to the topic of typology.<sup>16</sup> Johnson describes archetypes as abstract images, comparing them specifically to Plato’s Forms. Prototypes, like the craftsman’s bed in Plato’s parable, are first instances of an archetype. Stereotypes, according to Johnson, are subsequent and often repeated copies of a prototype. When applied to late twentieth-century discussions of typology, Johnson’s terms highlight the fact the Italian NeoRationalists imagined their buildings participating in corresponding essences which could be distilled from the observation of

stereotypes. A truly Rationalist approach would have buildings participate in what Johnson calls an archetype.

In an age that has been profoundly influenced by empirical science, it could easily be assumed that only a mystic would claim to appreciate ideal types without recourse to some kind of observable phenomena. However, consideration of Plato’s method for approaching the Forms reveals a reasoned approach that is not entirely unacceptable today.

According to Alfred Taylor, Plato’s theory of knowledge stands at the centre of his philosophy,<sup>17</sup> and true knowledge, or science, in Plato’s philosophy

is a body of consistent and fixed convictions, a system of truths, valid absolutely, always, and for every one, in which the various members are connected by a bond of logical necessity — in a word, a body of reasoned deductions from true principles.<sup>18</sup>

The Republic’s epistemological argument begins in Book 7, where it is claimed that knowledge is of what is, ignorance is of what is not, (476e-477a) and opinion lies somewhere in between (478c). Since it is argued that visible things of beauty are always partly ugly (479a), and that big things are small when compared to bigger things (479b), any particular thing both is and is not. The Forms — the existence of which Socrates’ otherwise argumentative interlocutors accept with compliance — are presented as examples of what truly is. Within this framework, a person’s observation of a beautiful thing can therefore only lead to an opinion about beauty and people whose eyes are distracted by beautiful objects will never behold Beauty Itself, or any other Form which entirely is. Knowledge of what is, therefore requires a complete rejection of the world of everyday experience.

Essentially, Plato argues that the same deductive process that can be used to conceive mathematical entities, applies to other kinds of entities also. In The Republic he writes:

I think you know that geometers and arithmeticians and so forth assume the odd and the even, the figures, the three kinds of angles, and all the other things that pertain to each field. They posit these as assumptions, as if they were known, and consider them so self-evident that they needn’t give any further account of them either to themselves or to others. Starting from these, they go through the rest of their inquiry and finally reach the logically consistent conclusion they were looking for when they began.<sup>19</sup>

Plato then describes the process in more general terms, as it could be applied to the deduction of such ideal Forms as Justice Itself, and perhaps, it could be argued, building types as well.

Then understand that by the other intelligible segment, I mean the one that reason itself

grasps by the power of dialectic [Plato is here referring to the Form realm], taking assumptions not as sources, but in the literal sense — as starting points or rungs — to climb to the unassumed up to the source of the whole, grasp it, and then, clinging to the consequences clinging to it, climb back down to a final conclusion, using nothing perceptible at all, but only forms themselves by themselves to themselves, ending at forms.<sup>20</sup>

Dialectic, rather than some sudden cathartic recollection, is the method which Plato exercises throughout *The Republic* to deduce the nature of various Forms. For example, Book 9 critiques various models of governance — timarchy, oligarchy, democracy and tyranny — as a way of demonstrating the need for philosopher kings. By interrogating a series of assumptions about each of these systems, that dialogue approaches an irrefutable definition of ideal governance.

In my 1998 paper titled “Louis Kahn and Platonic mimesis: Kahn as artist or craftsman?”<sup>21</sup> I argued that Kahn does not make recourse to empirical phenomena, including past buildings, when conceiving ideal “forms” or types. The following section of the present paper considers Kahn’s approach to “form-realization” (as he calls it), in terms of the Platonic method called dialectic.

Kahn’s primary text concerning typology, titled “Form and Design”<sup>22</sup> describes particular design proposals proceeding from a priori “forms”, that are derived through a process of realisation. Contrary to the principles of Platonic dialectic, Kahn often gives the impression that his realisation process involves some kind of sudden catharsis. For example, in 1965 he writes that he had fallen out of bed with the realisation that political assembly buildings are of a transcendent nature.<sup>23</sup> Likewise, the majority of Kahn’s text “Form and Design” speaks of “forms” as though they are apprehended during a heightened state, “[w]hen personal feeling transcends into Religion [...] and Thought leads to Philosophy.”<sup>24</sup> His words clearly have mystical overtones, and would disenfranchise many modern readers. However, in the final paragraph of “Form and Design”, Kahn makes a statement which seems to allow for a deductive process, whereby numerous “design” proposals are subjected to systematic interrogation, in the manner that Plato interrogates assumptions. “From all I have said,” Kahn writes,

I do not mean to imply a system of thought and work leading to realization from Form to Design. Designs could just as well lead to realizations in Form. This interplay is the constant excitement of Architecture.<sup>25</sup>

If Kahn’s claim that “design” can lead to “form” implies a process of elimination, by which particular designs are destroyed in the manner that Plato destroys wrong assumptions until only a first principle, or “Form”, is left standing, then indeed, the final paragraph of “Form and Design” would be very much in the grain of Plato’s epistemology. Dialectic, Plato writes

is the only procedure which proceeds by the destruction of assumptions to the very first principle, so as to give itself a firm base. When the eye of the mind gets really bogged down in a morass of ignorance, dialectic gently pulls it out and leads it up.<sup>26</sup>

On this point, a claim by Anne Tyng that Kahn’s design process is one of testing innumerable planning strategies in search of Jung’s archetypes,<sup>27</sup> suggests that Kahn’s late admission of an apparently deductive process actually betrays his normal way of distilling the essence of a building. During her time in Kahn’s office, Tyng claims to have witnessed Kahn experimenting with many “designs”, until arriving, through a process of trial and error, at particular schemes which he thought reflected ideal “forms”.

In his text, *The Church Incarnate*,<sup>28</sup> Rudolf Schwarz goes through precisely this kind of deductive process to arrive at his conception of the ideal church type. Schwarz posits many assumptions as though they were self-evident.

The altar itself is simply a table but it is raised and emphasised by means of steps. The people stand around it in a ring and if there are more people than can be contained in one ring then they stand ring within ring, ordered concentrically.<sup>29</sup>

Schwarz does not refer to Scripture to justify these claims, or to observable styles of worship as actually practiced by any sample group of worshippers. Neither would he refer to the traditional cathedral to justify his claims, since it is his expressed aim to deduce an ideal church type anew. His claim that Christians stand in concentric rings about altars is made as though it required no justification. It is an idea about the nature of worship. To use Plato’s terminology, the statement “[t]he people stand around it [the altar] in a ring”,<sup>30</sup> can be thought of as a Form, as it is considered to be known, yet it has no empirical basis. Schwarz constructs a picture of an ideal church type based solely on these kinds of claims. As Plato prescribes, Schwarz uses assumptions as rungs to conclusions, “using nothing perceptible at all, but only forms themselves by themselves to themselves”,<sup>31</sup> ending at *The Church Itself*, his model for the church incarnate.

## Conclusion

Kahn’s and Schwarz’s examples demonstrate that it might be possible to conceive ideal types without recourse to sensible phenomena, in a truly Rationalistic manner. While NeoRationalist theory was rational and systematic, it was not Rationalistic in epistemological terms. Since it drew on empirical first principles, namely, the extant European city, it was predisposed towards nostalgia and pastiche.

Closer investigation of the movement’s apparent antecedent, Plato’s theory of Forms, suggests an epistemological alternative to the positivism that limited the movement. Had the NeoRationalists, or their apologists, seriously considered Platonic dialectic as a process by which to conceive types with a priori validity, the movement might not only have

been rational, it could have been Rationalistic in the full sense of that term as used within philosophical circles. However, given the present intellectual climate, in which the mere mention of a building's "essence" can conjure hegemonic associations, and where Platonism has been widely anathematised, it would be pointless to suggest that Rossi's and the Kriers' project could be resuscitated with the breath of Platonism in 2004.

As well as making a small contribution to the historical record, some contemporary ramifications can be drawn from this paper. The discussion of NeoRationalist discourse highlights architecture's problematic relationship with the discipline of philosophy. Within the discipline of architecture, dilettantes far outnumber those with formal philosophical training. Despite our fascination with philosophy, and the latently philosophical nature of both architectural practice and scholarship, our discipline continually risks misappropriating philosophical thought, for the simple reason that philosophical studies are not required as part of an architect's education. NeoRationalism was not limited because it backed an outdated philosopher, but because participants in its discourse did not have a common grounding in philosophical and epistemological terminology, as this paper has shown. While the problem may not be so apparent right now, as we grapple to comprehend and appropriate the philosophies of the moment, there is every likelihood that epistemological limitations continue to undermine our good intentions.

1Erwin Panofsky, *Idea: A Concept in Art Theory*, trans. Joseph J.S. Peake, Columbia: University of South Carolina Press, 1968.

2As art theorists and aestheticians are prone to do when discussing Platonism, Panofsky only concerns himself with one of the Forms, Beauty Itself, and not such Forms as The Church Itself, or The House Itself.

3 Panofsky's work is taken as a point of departure in David Summers' book, *The Judgment of Sense*. Whereas Panofsky defends Plato's position, Summers defends Aristotle's. Summers is not so pessimistic about the debasement of Plato's Forms as Panofsky is. Rather, he views the influence of Aristotle — who believes that "the human soul, from sensation upward, is suited to its world" — as a positive influence on art theory. As one who personally favours Aristotle's position, Summers goes on to argue that "the beautiful itself is conformity to human sense before it is evidence of transcendental value". In so doing, Summers could be seen to join the ranks of the many Aristotelians whom Panofsky derides. See: David Summers, *The Judgment of Sense: Renaissance Naturalism and the Rise of Aesthetics*, Cambridge: Cambridge University Press, 1987.

4Geoffrey Broadbent, *Emerging Concepts in Urban Space Design*, London: Van Nostrand Reinhold, 1990.

5Broadbent, *Emerging Concepts in Urban Space Design*, p. 91.

6Sylvia Lavin, *Quatramère de Quincy and the Invention of a Modern Language of Architecture*, Cambridge, Massachusetts: The MIT Press, 1992, pp. 164-165.

7 Leando Madrazo Agudin provides a comprehensive review of discourse related to typology, with specific reference to the Platonic origins of this topic. See: Leando Madrazo Agudin, "The concept of type in architecture: An inquiry into the nature of architectural form," Ph.D thesis, the Swiss Federal Institute of Technology, 1995.

8Giulio Carlo Argan, "On the typology of architecture", trans. Joseph Rykwert, in *Architectural Design*, No. 33 (1963): 564-565.

9Alan Colquhoun, "Typology and design method", in Charles Jencks and George Baird (eds.), *Meaning in Architecture*, New York: Braziller, 1969, pp. 267-277.

10Anthony Vidler, "The third typology", in *Oppositions*, 7 (1976): 1-4.

11Vidler, "The third typology", p. 2.

12Rafael Moneo, "On typology", in *Oppositions*, 13 (1978): 22-45. See pp. 37-38.

13Moneo, "On typology", pp. 37-38.

14It is noted that these scholars do not purport to make Platonic metaphysics a part of their agendas. Each of these theorists openly advocates an empirical approach to the distillation of types based on the sensory observation of many particulars.

15Alberto Pérez-Gómez, *Architecture and the Crisis of Modern Science*, Cambridge, Massachusetts: MIT Press, 1984.

16 Paul-Alan Johnson, *The Theory of Architecture: Concepts, Themes & Practices*, New York: Van Nostrand Reinhold, 1994., pp. 289-290.

17Taylor, A. E., *The Mind of Plato*, First American Edition, Michigan: The University of Michigan Press, 1978., p. 36.

18Taylor, *The Mind of Plato*, p. 37.

19Plato, *The Republic*, trans. Raymond Larson, Illinois: AHM Publishing Corporation, 1979, p. 173.

20Plato, *The Republic*, in Larson, p. 174.

21 Steven Fleming, "Louis Kahn and Platonic mimesis: Kahn as artist or craftsman?", in *Architectural Theory Review*, Vol. 3, No. 1 (1998): 88-103.

22 Louis I. Kahn, "Form and Design", in *Architectural Design* 31, No. 4 (April 1961):145-154.

23Louis I. Kahn, "Remarks", in Alessandra Latour (ed.), *Louis I. Kahn: Writings, Lectures, Interviews*, New York: Rizzoli International Publications Inc., 1991, pp. 191-207.p. 195.

24Louis Kahn, "Form and Design", See pp.145, 148. (Emphasis in original).

25 Kahn, "Form and Design", p. 152.

26Plato, *The Republic* (533d), 2nd. edn. (revised), trans. Desmond Lee, London: Penguin Books Ltd., 1987. p. 283. See also: Plato, *The Republic* (510c).

27Anne Tyng, "Simultaneous randomness and order: The Fibonacci-Divine proportion as a universal forming principle", Ph.D thesis, Graduate School of Arts and Sciences, The University of Pennsylvania, 1975.

28Rudolf Schwarz, *The Church Incarnate: The Sacred Function of Christian Architecture*, trans. Cynthia Harris, Chicago: Henry Regnery Company, 1958.

29Schwarz, *The Church Incarnate: The Sacred Function of Christian Architecture*, p.36.

30Schwarz, *The Church Incarnate: The Sacred Function of Christian Architecture*, p.36.

31Schwarz, *The Church Incarnate: The Sacred Function of Christian Architecture*, P.174.