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Positio(n)

(Dis)Connection

The second half of the twentieth century has seen dramatic changes in the discipline of architecture: the appearance of myriad new concepts, conceptions, and a sudden expansion of architectural curricula in schools of architecture. Architects and students of architecture are now expected to write, meticulously explain and justify what they do and are doing, publish academic texts about their activities, analyze the work of other architects, produce complicated and extensive doctoral theses. All this has created in architecture an overt need for theory or philosophy, which can be termed the turn to theory or philosophy in architecture. The task of the philosopher is threefold: to awaken the philosopher in the architect (or perhaps recognize the architect-philosopher), who will then be better capable to thematize their own or joint work with other architects; to produce, construct, and deconstruct, with other architects, a system (a register, order, protocol) of concepts that will in the future be architectonic, such as opening the possibility of an eminently architectural language or terminology; finally, to discipline or institutionalize architecture, to assist in the essential project of autonomy of the architect and architecture.

The task of the architect is to always guard the distance, that is, the conjunction AND or AND *(&; \cdot; ^) between architecture and philosophy as the interval of the third or third space that gives birth to novelty. Further, their task is to examine the geometry of connections and relations, which means to bind the two fields, to reprogram the AND, to be the coordinator between the two – to preserve the uncertainty of the coordinating conjunction.*

1. By choosing the verb χωρεῖν *(go forward, advance, move, be in motion, grow), and not the noun,* χώρα*, we wished to emphasize the importance of the act and activity in the construction of social reality, including of course the architectural reality around us.*

2. Conject is a bond or mix of the first two architectural protocols and the first two key words of both architecture and *philosophy: concept and project. The third holds the two together, architecture* and *philosophy, by throwing them forward together (*conjicere*).*

3. As positio *AND is a conjecture of position, a phase in the advancement towards non-position, the letting down (dejection) of position, which always vanishes in the new.*

4. Architecture AND Philosophy (AND is really a moving AND or AND*) is a gesture to do away with and replace the constructions and grimaces such as Philosophy of Architecture, Architectural Philosophy, Architecture + Philosophy, Architecture/Philosophy, Philosophy for Architects, Philosophy and Architecture, or Architecture and Philosophy.*

5. AND is infinite. That which inclines never falls and is never erased in drawing closer and equating architecture ^ philosophy, text ^ object.

Χωρεῖν

Χώρα [*khōra*] is the word in the *Timaeus* (48a–53b) with which Plato introduces the reader into the exemplary world of aporias, where thought encounters a solution, often of the third kind (*τρίτον γένος*), on the border between two contradictions, in an area that remains stubbornly everyone's and no one's, escaping the logic of binarity usually so useful to philosophical argumentation. The Demiurge (so Plato tells us through *Timaeus*) created: the world of ideal models (*παραδείγματα*), which alone is intelligible; but also another, equivalent world of images (*εἰκόνες*), which remains sensory. One set of created beings is intelligible and ordered, while the other set is ruled by *ἀνάγκη* (necessity, force, constraint). It would seem that *χώρα*, like a parathesis, is written into the context of the *Timaeus* cosmology to preserve the coherence of the *λόγος*, speech, in which Plato has already elaborated all the oppositions between the intelligible and sensory world. *Χώρα* designates everything left in the shadow (which is always left in the shadow), present without presenting itself, which in Plato's words is "a kind invisible and formless" (*ἀνόρατον εἶδός τι καὶ ἄμορφον*; Pl. *Tim*. 51a) (beyond all understanding and order), that which never appears in the light of day, that which forces philosophers to acknowledge the existence of the third kind, as impossible to prove as it is to disprove. Aristotle radically reorients the interpretation of Plato's *χώρα*. Many centuries later, Aristotle's swerve allows the development of the idea in Jacques Derrida and Peter Eisenman that the

concept, which is not really concept (*χώρα*), can be presented, rendered visible, and indeed deformed.

The etymology of the word *χώρα* is entirely uncertain. Translated literally, *χώρα* is open space (place, spot, field, land, country, landed estate, country town, position) or setting (space *or* room in which a thing is, defined as partly occupied space). Our insistence on the verb *χωρεῖν* [*khōrein*] is a defense of the eternal motion that preserves the gap or "space between," which is really always infinite. *Χωρεῖν* is an act or set of acts that defend that which is between two or more entities or attributes. The movement of the between or space of the in between itself ensures opposition, closeness, autonomy, but also the eternal antagonism of various forms and bounded fields and objects.

Conject

We would like to position this word, "conject," as a very specific part of the architectural act. The task, then, is strictly epistemological in that we are attempting to defend or construct the existence of something called the "architectural act," which contains numerous sub-acts or operations that can be distinguished: concept, conception, platform, diagram, plan, project, program, etc. Among them, we are seeking a place and time for still one more facet of the architectural act, adding it here and calling it "conject."

We are making a few assumptions here: first, that there is a plurality of various acts that together potentially comprise the architectural act, which then has an author or subject (the architect); second, that there is yet another operation that could be part of the "architectural chain of acts," the "conject;" third, that "conject" is complementary or epistemologically symmetrical to the institution of what we designate as "city" (which is to say with the encounters, opinions, or imaginations of common life); and fourth, that it is possible to foresee the existence of a sort of regulative analogy that would harmonize the architectural act with the philosophical one (thus architecture and philosophy, with emphasis on the conjunction "and" in between). The last point, implying proximity to what we can for now leave to the attributes "architectural" and "philosophical," seems to us could be one of the more convincing hypotheses we are formulating here. Namely, the appearance of the city, and the connection between the city and conject ("city as a conject"), substantively grounds and harmoniously orders architecture and philosophy.

How might we correctly reconstruct this (dis)connection and show its importance? Indeed, even more important and urgent, how might we differentiate the layers within this connection, which in entirely divergent ways determine the strength of this or these connections?

Before we attempt to execute our main task of fixing the protocol we call "conject(ure)" within the "real" architectural act and show the unbreakable tie between "community" and "conject," to merely sketch a few problems that result from "city," which continuously binds the fields of architecture and philosophy, making them overlap, causing confusion. If we leave aside the production of concepts as one of the crucial characteristics of philosophy (from Aristotle, through Hegel, to Deleuze), and also leaving aside philosophy's role in clearing up conceptual confusion across various genres while at once also re-institutionalizing those genres (for which reason, some 50 years ago, some philosophers and some architects grew closer together, considering it the task of architecture to also produce "architectural concepts" and its autonomy) – "city" is a concept (a figure or protocol) which draws attention through its incompleteness. All we can say about what city "does" is that it draws attention and unease with its incompleteness and infinity.

The first problem here, or the first comment, is that the word or phenomenon or term "city" draws attention in the field of architecture and philosophy. The philosopher and architect are brought closer, or they can be recognized exclusively if they deal with the city or have the capacity to deal with the city (which is primarily a legal construction and juridical fiction) or announce and then thematize their own inability and incapacity to deal with the city. A philosopher or architect is by definition one attempting, wondering, and announcing their own task to do something with the city or with *présence* of the city (to think it, perceive it, experience it), and then abandon the task admitting their own impotence; or even one who never gives up, all the while knowing that the task is impossible.

Let us now attempt to translate this experience of encounter with community and surpassing the common as such into an imaginary interval within the architectural act by placing conject between the concept (the architectural concept) and the project (always a social construction that brings novelty and change to a city). Conject(ure) is a transitional category, but temporally clearly determined, characterized by uncertainty in magnitude or monstrosity of an entity, the multiplicity of elements and dependence on others (which are all consequences of the

seductiveness and resistance towards what we call "city"). Three consequences might arise as the product of this difficulty: restructuring and the art of restructuring elements before us (which always concerns future time; restructuring is the aspect of the concept that leads to conception and the aspect of the project that concerns the future); the production of new elements and addition of the novel into their existing order (restructuring produces excess, incorporating the external, the additional into the conceptual protocol); and finally, the preliminary production of bonds and ties (*conjunctur*) with others, collective readiness to alter (and restructure) the city and affirm the future and a new joint action (to conject[us], past participle of *conjicere*, to throw together).

AND

Why does AND not have an end? And why does AND, even when it bends, and curves, and quivers and ceaselessly moves, never end by melting into the other (into what precedes it – architecture, or in what supersedes it – philosophy)? Our urgent attempt to defend and nurture relations as well as (dis)connections between architecture and philosophy (of various genres, theoretical protocols and demonstrations that simultaneously justify the abstract and the real) has two goals: first, to prevent and infinitely delay the end of architecture and the end of philosophy – AND is the eternal absence and the eternal more; two or more disciplines mix, overlap, separate, change, and remain in motion towards the future; as ever-the-third, AND ensures the existence of innovation.

The status of "novelty" and the various figures of what belongs to the register of the "new," innovative, unclassified, unexpected, unrecognizable, etc., as well as the possibility of the "new," the creation and production of the "new," or its discovery – are profoundly tied to the conjunctor and separator AND.

Our aim is to think what is most difficult to reflect, because not present or not yet present, or else successfully evades all projection and thematization. Our intention is to identify, across scientific fields and disciplines (such as art, aesthetics, technology, technics, semiology), how something that has never appeared or perceived as extant is created, produced, and conceptualized. How is change possible, and how does the "new" manifest and present? Is the "new" ever really "new?"

What might be crucial in attempting to carefully consider the meaning of uncertainty and the quotation marks deployed around the "new"

("discovery," "invention," "event," "the present," or "now") is the role of a group or a group of experts that works together (this is the aim of the journal, as well as the various related schools and seminars on architecture and philosophy), constructs problems and resolves them in a unique way. Since the erection of the Tower of Babel, this monstrous project, the unconditional condition of the existence of a counter-institution was technological innovation and discovery of the new (material and concepts). Without AND, there can be no life together, and no better life and world.

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Mark Wigley*

"And" Anarchitectures

ABSTRACT: Architecture and Philosophy are so deeply entangled with each other that the "and" between them at once splits and rejoins a single common fabric. This enigmatic joint, and the mutual jealousies, clumsiness, and blindness it puts in motion, has a very long history. The interdependency it shapes made possible the emergence of both discourses in Ancient Greece. Architecture appeared as an exemplary theoretical art, yet already subordinated to the discourse of Philosophy that is covertly dependent on it. This essay explores the anarchitectural ecology that made both discourses possible, along with the implications for contemporary theory, and possible unexpected architectures.

KEYWORDS: *arkhitekton*, anarchitecture, joint, jealousy, contingency

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The word "and" is never simple, stable, or innocent. But how to look at its complexity, mobility, and transgressions in the seemingly collegial formulation "Architecture and Philosophy"? We cannot treat it either architecturally or philosophically without a hesitation, a lingering question that can never be resolved. After all, the most obvious operation of the word here is to mark Architecture as something different from Philosophy, literally spacing them apart, even as it binds them together. It simultaneously separates and joins, but also sequences. "Architecture and Philosophy" is not the same as "Philosophy and Architecture," or anything like it. The implication is a concern for the future of Architecture rather than Philosophy, for what happens when something is added to it. This trajectory is already written into the two terms with the usual association of Architecture with projection and Philosophy with reflection. In a simplistic but deeply resonant sense, Architecture is seen as projecting things forward and the question here is what happens to its throw with the addition of reflection. Neither term seems troubled by this formula.

But what is it to start from Architecture, to put Architecture first, or act as if it is already there? More precisely, what is it to do so when Philosophy cannot start itself without thinking about architects? What if Philosophy depends on the idea of the architect meditating on and through structure? Philosophy thereby continually constructs itself out of something seemingly outside and before it – as if only able to see itself in a mirror fashioned out of another material, something other because it is material precisely, and only able to be itself in such a mirroring, or that possibility. Likewise, the discipline of Architecture needs Philosophy in order to invent itself, subordinating itself to the reflecting it made possible. Neither simply precedes the other.

To speak of "Architecture and Philosophy" then is to speak of entanglements rather than an addition, or to rethink addition. Inasmuch as Philosophy is reflection on the ground of things, on that which allows things to stand, to be present, to be, then perhaps it is never concerned with anything other than the possibility of Architecture, or sees everything other in its terms. Yet the "and" also suggests that philosophers see architectures differently than architects, or simply see something different. The most obvious promise is to add their other way of thinking to enrich, refine, critique, extend, or clarify. Philosophy as some kind of gift to Architecture.

The sentence "Architecture and Philosophy" remains in this sense routinely philosophical, the very promise of Philosophy even. But this doesn't mean that its only proper reading is philosophical. On the

contrary, the "and" also invites, even demands, an other than philosophical reading. There is at least the call to read the sentence architecturally, to consider its surprisingly convoluted architecture, or even the possibility that the word Architecture always refers to a certain kind of convolution, albeit disguised, Architecture as the disguising of structural convolution. In at once spacing and binding, the "and" is essential to both yet exceeds them. Its capacity to stage a kind of collegial diplomacy takes advantage of a mobility and a geometry that cannot be tamed by either side. The "and" offers the promise of going beyond the conventional limits of both, to alternative modes of thought that are neither architectural nor philosophical in any conventional sense but might paradoxically lurk within each.

The sentence "Architecture and Philosophy" most obviously invokes two disciplines, two distinct departments in most universities, for example. One is usually seen to be a professional school, because directed towards engagement in the material-technical-political-economic world. The other seeing itself to be tied to very origin of the university around the 12th century by being seemingly disconnected from that material world as a scholarly mode of mediation and reflection with no fixed abode. These disciplines appear to be pushed apart by the most classical of chain of binaries: material-ideal, action-reflection, object-word, practical-theoretical, applied-pure, interest-disinterest, and so on. But the formula "Architecture and Philosophy" invites consideration of the internal complications of this chain, starting with the architecture congenital to the discipline of Philosophy and the philosophy congenital to the discipline of Architecture. That is, the architecture that makes Philosophy possible and the philosophy that makes Architecture possible, the hidden infrastructural ties that secretly cross any campus and might even allow Philosophy to survive there today when the inside of the university is a concentrated form of its outside rather than a theatrical detachment from it – a space defined more by worldly engagement than reflection.

In fact, the "and" in the middle actually comes first, preceding the Architecture-Philosophy binary it shapes. It could even be a kind of tool, slicing one multi-veined or woven material to stage a sense of distance between what are then thought to be distinct disciplines only to stich "them" back together. This surgical operation of cutting and joining is the defining skill of the *τέκτων*, the ancient Greek figure of the craftsperson skilled with hard materials like wood and stone that preceded the roughly 6th century BC invention of the figure of the *ἀρχιτέκτων,* the chief of the *τέκτονες*, that not by chance paralleled the invention of

so-called Western Philosophy. The defining attribute of the *ἀρχιτέκτων* for philosophers is theory. The architect is by definition a theorist, crafting theory in conceiving, constructing, and explaining work. Theory is invested in the work, produced during the work, and retroactively applied to the work. Newly articulate builders are entangled with articulate buildings in a vibrant ecology of theory that doesn't allow for a simple binary between theory and practice.

Plato's late dialogue *The Statesman*, a text on politics that is already concerned with the built environment inasmuch as its goal is the excellence of the city based on principles, immediately divides expert knowledge (*ἐπιστήμη)* into practical and theoretical. The building arts are the first example offered of practical knowledge necessarily embedded in the physical. The newer figure of the *ἀρχιτέκτων* is then identified with purely theoretical knowledge not necessarily embedded. The architect is a first and foremost a theorist:

> Stranger: Every architect (*ἀρχιτέκτων*), too, is a ruler of workmen, not a workman himself.
> Younger Socrates: Yes.
> Stranger: As supplying knowledge (*γνῶσιν*), not manual labor.
> Younger Socrates: True.
> Stranger: So he may fairly be said to participate in intellectual science (*γνωστικῆς ἐπιστήμης*).
> Younger Socrates: Certainly. (Pl. *Polit*. 259e–260a)

It makes no sense then to refer to a recent turn to theory by architects since theory is the very mark of the architect. We cannot even speak of an originary turn to theory in Architecture since Architecture is only itself in being theoretical, and the category was not yet invented when Plato was speaking. The canonic form of the rebuilt Parthenon completed around 70 years earlier, for example, which would become and remains the very exemplar of Classical Architecture, was strictly speaking not a work of Architecture. It was the supervised work for 15 years of its lowly paid official architects, Iktinos and Kallicrates, who were in turn supervised by the sculptor Phidias. Iktinos reinforced the idea of architect-as-theorist by co-writing a now lost treatise on the proportions of the building that influenced the codification of a discipline of architectural theorizing 400 years later. Yet the building could only be retroactively treated as Architecture by that discipline.

There can of course be turns to or away from specific theories or ways of theorizing, with the history of theory in the architectural discipline being a plural history of multiple theories in diverse interactions. The mutual fascination of architects and philosophers with the interdependencies of their disciplines in the 1980s did reorganize potentials for new kinds of thinking about architecture and new sensitivities to existing and historical architectural thinking. But even then, architectural turns to alternative modes of theory, turns that pose an ongoing challenge to disciplinary assumptions, are never simply turns outwards to Philosophy, or something recognizably philosophical. If anything, they are turns inwards to those repressed qualities in architectural discourse that might elude, confuse, offend, or disinterest philosophers, yet also mark and even organize their discipline.

Having straightforwardly opposed the *ἀρχιτέκτων* to the *τέκτων* as theory to practice, Plato's dialogue immediately complicated the binary. The architect has a specialized form of theoretical knowledge that doesn't need to be embedded in the physical and yet is embedded through the medium of those that build. The responsibility to coordinate a diversity of multiple skilled others in a way that maintains an overall objective requires a flexible relationship with what is learned in the multi-dimensionality and unpredictability of ongoing material, economic, and social transactions. The new figure of the architect had been invented to deal with the growing multiplicity and heterogeneity of elements in public buildings. It was a salaried civic appointment to give ongoing orders in the face of complexity and contingency. The ever-shifting complications could not be synthesized into a single order or fixed set of general principles. Yet the theoretical skill of the architect was to conceive a geometry and system of ornamentation that conveyed principle, order those carrying it out, and dynamically respond to the specificities of all contingencies in a way that sustained the coherent conception. The work of the architect, and the object it forms, is an active veiling of complications, incompatibilities, gaps, uncertainties, and instabilities. It is the model in Plato's dialogue for the political leadership that paradoxically is philosophically rigorous in its resistance to predetermined formulae and is finally understood as a form of weaving of heterogeneous elements into a singular shared fabric.

This sense of an interactional architectural ecology of theory, or more precisely, an anarchitectural ecology inasumuch as it makes the idea of architecture possible, was captured in the ten scrolls of the military

engineer and architect Vitruvius in the time of Augustus Ceasar that drew on Greek sources to establish the discipline of Architecture in a way that is still directly echoed in the syllabi of most schools of architecture today. Vitruvius constructed the figure of the architect as an intellectual positioned at the intersection of *ratiocinatio* (theory-reasoning) and *fabrica* (practice-craft) and traced the mutually interdependent co-production of knowledge before, during, and after construction, in conceiving, making, and explaining a building or city – but equally in attacking or defending them militarily.

The word *architectura* had only recently been used by Marcus Tullius Cicero in *De officiis* to name an art worthy of a higher social status because, like Medicine, it requires "a higher degree of intelligence" and confers "no small benefit to society" (Cic. *De off*. I, 151). Cicero had written in defense of a foundational "liberal arts" education, but implied a certain limit to the elevation of these two more arts, affording them a kind of in-between status. The text was contrasting the arts appropriate for a gentleman (*liberales*) to the vulgar ones (*sordidae*) that are not. Architecture and Medicine "are proper for those whose social position they become." It is as if Architecture elevates the architect above the vulgar arts (which have their own hierarchy) but is not fully proper to the gentleman. An upgrade then rather than a full promotion. A decade later, the extraordinarily prolific scholar Marcus Terentius Varro, another older contemporary of Vitruvius, went the crucial step further by adding Architecture and Medicine to the set of seven essential disciplines that Plato had specified for a properly philosophical education after ten years of primarily physical education. Each student in the Platonic scheme was understood to be on an upward journey from the material body to the immaterial soul. The figure of the philosopher was always embodied, but rigorously trained at great length to pass up through and beyond its own body, and all forms of body, to bodiless ideas. In his now lost encyclopedia *Disciplinarum libri IX*, Varro introduced the seemingly bodily art of Architecture into that core philosophical training. Architecture was not just a discipline, but an integral part of the disciplining that incubates rational thought.

The two seemingly more materially oriented newcomers would eventually be removed from the set of thinking arts that formed the core of "higher" learning. Yet the demotion was never as straightforward or complete as it seemed. The canonization of the resulting set of seven as the basis for centuries of higher education is credited to Martianus Capella,

whose early fifth-century AD *De nuptiis Philologiae et Mercurii* (or *De septem disciplinis*) was the standard textbook of the liberal arts up until the 15th century. It presented them as seven bridesmaids at a wedding between Mercury, the immortal messenger of the gods personifying eloquence, and the "extremely learned" maiden Philology. Philology, who is made immortal by the gods during the ceremony, personifies learning, a form of continuous exhausting questioning that has already uncovered all celestial secrets and so is destined for immortality. Learning is a form of transit between material and immaterial that is not simply located within either. Even Mercury has tried to make himself more attractive to Philology by taking the seven disciplines "into his household" to educate himself. His wedding gift is to offer them to her as servants. Each gives an extended discourse on their subject at the celestial ceremony. The maidens Architecture (*architectonica*) and Medicine (*medicina*) have also been invited to the event and expect to speak but are symptomatically asked to remain silent. They "are concerned with mortal subjects and their skill lies in mundane matters". (Mart. Cap. *De nupt*. IX, 891). The invitation had acknowledged their claim to be part of the elevated and elevating world of learning but only to emphatically exclude them. They should not speak in the highest company of deities, even if it is expected that "they will be examined in detail later by the maiden herself." Architecture and Medicine will serve learning. They will be uplifting but not uplifted.

It is as if the material bodies of buildings and humans somehow contaminate or constrain the forms of knowledge devoted to them in a way that the philosopher's own body does not. The institutions of higher education were premised on this definition of their own lower limit. And the body of buildings was seen to be even more earthly than that of humans. Medicine would be admitted into some of the first universities in the 12th century while Architecture was excluded for another seven centuries – despite a sustained campaign to elevate it by reviving the Vitruvius argument.

This complication already organizes the text of Vitruvius and its belated yet astonishingly extended influence. He drew extensively on many of Varro's texts and refers to the book on architecture as one of his sources, without citing it directly. Architecture is described in terms of the interrelationships of different forms of knowledge. The first chapter of the first book of Vitruvius lists the moral qualities that Philosophy imparts to the architect. Philosophy is one of the many disciplines (*pluribus disciplinis*) that the architectural intellectual needs to be educated

in, and emulate in prescribing and describing buildings (Vitr. I, 1, 1). The architect needs to be "a diligent student of philosophy" (*philosophos diligenter audierit*) (I, 1, 3). The architect is defined as an explainer rather than a maker, or a maker of explanation. But the knowledge required to make things, and the knowledge gained through making, is equally crucial. Practice is itself a form of *meditatio* and building is seen to generate theory as much as demonstrate it. Vitruvius codified the still ongoing discipline in which Architecture is not a certain kind of thing but a way of thinking about and through things, a vibration between thinking about and thinking through.

Vitruvius formulates architectural intelligence as the ability to accommodate diverse and often incompatible forms of knowledge. His scrolls have the double, seemingly antithetical, task to promote architecture as a unique form of object more in tune with the immutable harmonies of the universe than anything found in the natural or human-made world, and at the same time to give the architect license to negotiate with all the contingent material, legal, political, meteorological, and personal forces in any project. In a kind of echo of Plato's argument, the sense of the ideal is preserved by real-time improvisation in the face of the contingent, even constructed in the bed of material contingency. Indeed, the double expertise in theory and practice that defines the architect, understood as two modes of intellectual reflection, ultimately treats theory as another material effect. Philosophical texts can even be one of the contingent materials for the architect, a way to improvise, invent, and sustain certain concepts.

This wider ecology of theory is alluring to philosophers as an environment in which Philosophy itself can be found or framed. Yet philosophers find it difficult not to patronize architects and architectural scholars, even when trying to warn themselves against doing so. Architecture is treated as a kind of colony, a source of invaluable material to extract, while disciplining-educating-restricting the local population. Philosophers are surely capable of unique insights about architecture as a mode of thinking but more often than not dispense crudities, confusions, simplifications, and blindness that is overlooked since the very idea of philosophers being unthoughtful about architecture has been preempted. Architects and architectural scholars on the other hand are routinely treated as pathological, emotional, ambitious, confused, and inherently compromised. It is as if the discipline of Philosophy cannot imagine, let alone face, its own compromises, jealousies, ambitions, blind-spots, and repressions – let alone the thought that Architecture acts as their own pathological trigger.

The clumsiness of architectural readings of Philosophy are mirrored by the clumsiness of philosophical readings of Architecture, yet only the architects are made to feel clumsy, to internalize that subordination and await reeducation or simply invite the master's voice into their narratives. For Vitruvius, the architect by definition cannot excel in any of the many other disciplines that are indispensable to Architecture yet cannot be "unskilled" in them either, needing at least a "moderate knowledge" of each to understand how their general principles impact architectural judgements. Even the expert knowledge that the architect needs of all the many crafts that contribute to a building is necessarily exceeded by each craftsperson's expertise. Philosophers don't grant themselves the same license to be inexpert in order to curate disciplinary hybridities. The traces of Architecture are to be found everywhere in Philosophy but the endless citations of philosophers in Architecture is not mirrored by citations of architects-architectural theorists in Philosophy. Philosophers are often hosted in Architecture conferences, lecture series, journals, reading lists, and schools, where they are highly appreciated – sometimes even taking permanent positions. Architects or architectural scholars rarely receive the same hospitality and the idea of an architect as a permanent professor in a Philosophy department is simply inconceivable, even in the unlikely event that an architectural scholar would wish such a thing.

The point here is not to imagine a world beyond this asymmetry, mutual clumsiness, confusions, and ancient jealousies. On the contrary, the question is how to learn and think from the psycho-pathological investments – the hidden precision and insight of systemic misunderstandings, and the advantages of different forms of blindness. The ability of certain objects to compel thought is not a product of the precision, clarity, or consistency of the theories used to conceive, construct, and convey them. Similarly, the rigor of Philosophy is not a product of the precision of its invocations of Architecture. On the contrary, philosophers are so dependent on a certain image of architecture that they never look at it. The buildings that keep being redrawn in philosophical arguments without realizing it don't leak, creak, sweat, vibrate, crack, disguise, obscure, repress, confuse, infect, unsettle, sooth, menace, hesitate, terrorize, arouse, or host trillions of micro-organisms that in turn host humans. Philosophy typically sees only an uncomplicated structure, the highly crafted effect of veiling complications, the very convolutions and uncertainties that philosophers are uniquely attuned to in other contexts. It as if Philosophy is dependent on the intellectual labor of architects to

absorb abject, destabilizing, or enigmatic conditions, then inattentive to both the unique form of that labor and what it encloses. If the main work of Architecture is to house certain species of enigma, then adding Philosophy to Architecture must dissect and undo that work, and thereby both disciplines.

After all, for the "and" to do its splitting-joining work it must also internally split-join each side of the Architecture-Philosophy divide. The "and" that constructs a sense of two interiors is already inside what it constructs, with all its complications and their generative capacity. The hidden complexities of adding one thing to another already structures the things being added. This is something like a structural principle, or even the very thought of structure that drives both Architecture "and" Philosophy, drives them into each other. After all, in even its least complicated conception, building is nothing more than a certain choreography of countless "ands," slicing and joining together what will be in retrospect thought as the elements of a building. The theory that renders this architectural presides over nothing other than "ands" multiplied and interwoven to form a fabric that represents stability, even if no "and" can ever be domesticated. For all the crafted illusion of immobility and singularity, no architecture is simply an object. Architecture is more a question than an answer. No simple line can be drawn between adding material elements to each other and adding theory to that assemblage, or extracting it. The question of "Architecture and Philosophy" is permanent but compelling only inasmuch as both are destabilized. To treat the "and" that organizes this formula as the anarchitectural possibility of multiple unexpected architectures is to think otherwise simply by finally letting the question be asked.

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Architecture and Philosophy

ABSTRACT: What might be meant by the phrase "architecture and philosophy"? I distinguish what it might mean from three other possibilities, "philosophy of architecture," "philosophy as architecture," and "architecture as philosophy." The first refers to a subfield of academic aesthetics, itself a subfield of academic philosophy; the second to the use of architectural metaphors in philosophical writing; the third to the idea that works of architecture should express abstract, philosophical ideas. I discuss the pitfalls in the last of these. Instead, I argue, going back to Vitruvius, that the phrase "architecture and philosophy" should be taken to connote the architect's obligation to satisfy through her building (*firmitas*) the program for her work, thus the client's and users' needs (*utilitas*) as well as aesthetic considerations (*venustas*), but beyond that to be sensitive to all ethical issues broached by her work and to have an understanding of the way or ways of life in which her work and its use will become involved."

KEYWORDS: architecture, philosophy, ethics, expression, functionality

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Philosophy *of* Architecture and Architecture *as* Philosophy

The editors have asked me to write on the topic "Architecture and Philosophy." What kind of question is that? Don't we all know perfectly well what all three terms, "architecture," "philosophy," and "and," mean? Or even if there is some room for debate about precisely what the extensions of "architecture" and "philosophy" are, certainly we all know what "and" means, indeed would we not be unable to think, speak, read, or write if we did not know what "and" (or its equivalent in other languages) means? Don't we know that when it conjoins two propositions, both must be true for the conjunction to be true, if it links two terms for objects, both must exist, if it links two terms for properties, both must be instantiated, and so on? In that case, shouldn't I focus on the meaning of "architecture" and "philosophy," thus trying to make those two common but perhaps vague terms more precise and thereby make clearer what could be meant by conjoining them? Well, "architecture" and "philosophy" are both big words, so let me start with the little word "and." Then I will turn to the word "philosophy." But perhaps to the disappointment of readers of this piece, I will not say anything much about the definition of "architecture."

But I will take "and" in context, thus I begin by distinguishing the phrase "philosophy and architecture" from three that might seem similar, namely "philosophy of architecture," "architecture as philosophy," and "philosophy as architecture." "Philosophy of architecture" suggests something conventional, a subfield of philosophical aesthetics in which various kinds of questions common in general aesthetics are applied to the special case of architecture. These would include ontological questions like "What is the work of architecture," a design, a plan, a built structure? Or is architecture, to use Nelson Goodman's contrast, an "autographic" or an "allographic" art[1]: is only one structure built from a design, by the architect's own hand (only so to speak, of course, given how many people are involved in actually building a structure) the original, and all others only copies, or can there be equally authentic multiples from one plan (as in a housing development) which are all still genuine works of architecture? Or questions of definition, like "Is architecture a fine art or a visual art, like painting and sculpture?" or does the fact that most buildings must answer to a client's program, defined by the

[1] N. Goodman, *Languages of Art*, Bobbs-Merrill, Indianapolis, 1968.

client's self-conceived needs and goals, answer to various sorts of legal constraints such as zoning regulations and building codes, and be built with all sorts of technical assistance from engineers of various kinds, materials specialists, lighting specialists, and so on, mean that architecture cannot be properly counted as an art at all? Should architects be considered artists, or something else? And then there are questions about values and evaluation: Should satisfaction of the program, of legal and financial constraints, of technical constraints, etc., be necessary conditions for any judgment of architectural value, with aesthetic considerations coming in only later, or are practical and aesthetic concerns to be related in some other way? Should architects be considered artists, aesthetically refined engineers, or something else? No doubt some philosophers interested in architecture might be interested in all of these questions, and more; some interested only in some or one; some perhaps interested in something else entirely. But none of these will be my concern here.

So what about "architecture as philosophy" or "philosophy as architecture"? The latter of these will not be my topic either. By "philosophy as architecture" I have in mind the use of architectural language and imagery within philosophy or other disciplines, such as mathematics, as when, to justify his project of re-establishing all of philosophy from some single, indubitable premise, Descartes writes "that buildings undertaken and completed by a single architect are usually more attractive and better planned than those which several have tried to patch up by adapting old walls built for different purposes. Again, ancient cities which have gradually grown from mere villages are usually ill-proportioned, compared with those orderly towns which planners lay out as they fancy on level ground."[2] This is what the 2022 winner of the Berggruen Prize, Kojin Karatani, has called "architecture as metaphor."[3] I am not going to pursue this topic because even if such metaphors might tell us something useful about the disciplines to or in which they are applied, such as philosophy, mathematics, economics, and so on, they usually do not tell us very much about architecture itself but rather presuppose something about architecture. A metaphor is supposed to take us from something more obvious to something less obvious, and you do not have to know more about buildings and cities than an average child does to get

[2] R. Descartes, *Discourse on the Method*, *The Philosophical Writings of Descartes*, vol. 1, Cambridge University Press, Cambridge, 1985, p. 116

[3] K. Karatani, *Architecture as Metaphor: Language, Number, Money*, MIT Press, Cambridge, Mass., 1995.

Descartes's point, or the point of his contrast between shaky and secure "foundations" for the "edifice" of knowledge.[4]

What about the reverse, "architecture as philosophy"? This needs discussion. What I have in mind here is the use of a building or other built structure (a monument, a plaza, etc.; here is where some discussion of the definition of "architecture" might be needed) to express an abstract idea or assert a proposition that might be thought to be philosophical, and is not itself about building, the nature of buildings, or anything obviously architectural. That is, such buildings would be referential but not self-referential. Examples of this, all mercifully unbuilt, might be designs like Étienne-Louis Boulée's design for a Cenotaph for Newton[5], Claude-Nicholas Ledoux's houses for charcoal burners and lumbermen in the shapes of their ovens and logs[6], Jean-Nicholas Sobre's "Temple of Immortality,"[7] Antoine Laurent Thomas Vaudoyer's "House of a Cosmopolite,"[8] or a more recent project like Steven Holl's early (1980–1984) project for "Autonomous Artisans' Housing," in which, in the words of Robert McCarter, "each house articulates the character of the occupant's occupation by employing their craft material in its realization."[9] There are several problems with such projects. For one, like program music, where you typically cannot tell what the music is supposed to be about without the discursive program in front of you (a different problem from not being able to hear the words in an opera or oratorio without the libretto or text in front of you), you might not be able to tell what idea such a work is supposed to express without some sort of external aid, a discursive explanation in print, from a guide, or perhaps inscribed on the building itself. Or, just as the Viennese music critic Eduard Hanslick argued, while music might be able to suggest *emotions* by properly musical features such as tempo, rhythm, keys, etc., it cannot articulate or express *abstract ideas* by strictly musical means[10] – it is not a *language* with semantic content. Talk of architectural "language" is just as metaphorical as is talk of musical

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[4] R. Descartes, *Discourse on the Method*, p. 115.

[5] E. Kaufmann, *Three Revolutionary Architects: Boullée, Ledoux, and Lequeu*, The American Philosophical Society, Philadelphia, 1952, p. 462; K. Harries, *The Ethical Function of Architecture*, MIT Press, Cambridge, Mass., 1997, pp. 306–309; B. Bergdoll, *European Architecture 1750-1890*, Oxford University Press, Oxford, 2000, p. 86–88.

[6] E. Kaufmann, *Three Revolutionary Architects,* pp. 527, 532.

[7] E. Kaufmann, *Architecture in the Age of Reason: Baroque and Post-Baroque in England, Italy, France*, Harvard University Press, Cambridge, Mass., 1955, figure 191.

[8] *Ibid*., figure 192.

[9] R. McCarter, *Steven Holl*, Phaidon, London, 2015, p. 29.

[10] E. Hanslick, *The Beautiful in Music*, Novello, London, 1891.

"language." Another problem is that such a structure might be felt to be constraining or even pigeon-holing for the proposed user: would the artisans envisioned by Holl really want to take their work home with them, or never to be able to escape the identity conferred by their work? Perhaps the cobbler or tinsmith might like his house to announce his trade to every passer-by, but perhaps he would rather be identified by something else, like his hobby, his faith, or his spouse's preferences, perhaps he would like his house to be compatible with various interests he might develop or identities he might adopt during his tenancy, or perhaps he would just like to live in happy anonymity. Even philosophers might not like to live in houses shaped like books and covered with leather-look sheathing (although when my wife was looking with her mother for an urn for her father's ashes, she saw one in the shape of a bronze book, which she thought might be nice, when the time came, for my ashes to be placed next to my actual books. I wouldn't have objected had she bought it then, and won't be able to object if she buys it when the time does come).

As I noted, these examples of philosophical, semantic but not self-referential architecture, have all gone unbuilt, and perhaps were never even imagined as being really built, because no client would want to pay for or occupy such structures. But now let's consider what we might think of as more self-referential architecture aimed at expressing abstract ideas, that is, ideas about architecture itself. Here we can consider some structures that have actually been built, for example, some of the early house designs by Peter Eisenman. (Some of Eisenman's residential designs during this period, say 1968-1978, were built, some not.) As Rafael Moneo has described Eisenman's approach at this time, his

> obsession was to free architecture of all shackles and allow it to unfold without contaminations, whether of place, function, or building systems. The goal was architecture at its purest: an architecture that, by adopting the new and unfortunately already forgotten formal principles of modernity, aspired to the same thing as physicists did when discovering the world through new (and not forgotten) formulas from the theory of relativity, or as those involved in knowledge of the human psyche did through the use of new (and not forgotten) psychoanalytic techniques[11] –

[11] R. Moneo, *Theoretical Anxiety and Design Strategies in the Work of Eight Contemporary Architects*, MIT Press, Cambridge, Mass., 2004, pp. 147–148.

or, we might add, as formalist mathematicians, logicians, and philosophers did. Or, as Moneo quotes Mario Gandelsonas as writing,

> Eisenman has introduced an important idea from generative, or transformational grammar, in which language is seen as a generative activity rather than as a description of semantic and syntactic relationships. In this view of language, syntactics takes on a new meaning, where syntactic structure itself is seen as the primary generator of language.[12]

I understand this to mean that in Eisenman's view at that time, architecture was not to concern itself with anything external to pure form, neither the intended function nor use of the building nor any reference form might have to anything other than itself, but was simply to create formal relationships among the most basic elements of architecture, planes as in walls, floors and ceilings (what they are made of being, pardon the pun, largely immaterial), the spaces they might enclose or that might enclose them, and other tectonic features such as columns, staircases seen as triangles or the hypotenuses of triangles with a serrated edge, and so on. Eisenman designed houses by rotating conjoined solids, surrounding the core of houses with frames of post and beams that might suggest *brises soleil* but would not actually provide any shade (e.g. House III, 1971[13]), constructing staircases without railings, which would endanger any small child or older adult, and so on. The point is that such designs – plug in your favorite examples – are intended above all to express some abstract idea, but an abstract and reductive idea of architecture itself reduced to its formal components. The houses do have walls and roofs that can keep out the elements, to be sure, but any other concession to the uses and the comfort of occupants seems quite secondary to the exercise in formalism, as if the house were a mathematical or logical construction, or a piece of philosophy. Indeed, as Moneo further reports, when "Massimo Vignelli [...] set about to 'decorate' House VI with furniture and flowers for publication in *House & Garden*, Eisenman took offense. As far as he was concerned, the house had been defiled. Indeed, House VI lost some of its value and interest as soon as it took on the dynamics of

[12] *Ibid*., p. 152, quoting M. Gandelsonas, "On Reading Architecture: Peter Eisenman, the Syntactic Dimension," *Progressive Architecture*, March, 1972, p. 82.
[13] R. Moneo, *Theoretical Anxiety and Design Strategies in the Work of Eight Contemporary Architects*, p. 161

everyday life."[14] This anecdote might remind one of Adolf Loos's satirical "Story of the Poor Little Rich Man" (1900), who is barked at by his architect for displaying some of the birthday presents he has just received in his newly renovated house. "What do you think you are doing, getting presents given you? Have I not designed everything for you? Have I not thought of everything? You don't need anything else. You are complete." Upon being so spoken to, the poor little rich man sheepishly put his new things away, instead of kicking the architect out of his house.[15] To be sure, the architect that Loos was imagining in 1900 was no doubt imagined to have designed and decorated in an ornate *K. und K.* or *fin de siécle* style, precisely what Loos would break from in his own work of the following decades, which one might even think of as the beginning of the path that led to Eisenman. But I would venture to say that in the hands of Loos the geometrical simplicity of his designs always remained in the service of the use, comfort, and pleasure of the client, while I would not say that about these early designs of Eisenman. Loos did not treat architecture *as* philosophy, that is, as the expression of an abstract idea *rather* than a building meant for use, comfort, and pleasure, which *might* express or exemplify some abstract idea along with serving those ends. But these designs of Eisenman illustrate the risk of doing so.

Another contrast to these built and unbuilt early designs of Peter Eisenman might be the "Case Study" houses published in *Art & Architecture* from 1945-1966 under its editor John Entenza.[16] These designs, again some built and some unbuilt, were commissioned by Entenza and designed by a variety of mid-century modernist, mostly California architects, some still well-known and others now less known, including Charles and Ray Eames, Richard Neutra, William Wurster, Raphael Soriano, Craig Ellwood, and others. These designs certainly *had* or *exemplified* a philosophy in one sense of that word: they were meant to be buildable by people of middle-class means, not the very rich; they used lots of glass, sliding doors, and so on, to be open to the pleasant California climate; like many modernist residential designs from Frank Lloyd Wright's Prairie houses on they combined free-flowing public living and

[14] *Ibid*., p. 165.

[15] A. Loos, "Story of the Poor Little Rich Man", *On Architecture*, Ariadne Press, Riverside, CA, 2002, p. 51.

[16] See E. A. T. Smith, *Case Study Houses: The Complete CSH Program 1945-1966*, Taschen, Cologne, 2002, with the fabulous photographs of Julius Shulman.

dining spaces with modest bedrooms and baths; they were to be easily maintained without the servants who could no longer be found in post-WW II America; and so on. But they did not try to *express* or *refer* to any abstract ideas; one might say they expressed a certain philosophy *of* architecture but were certainly not architecture *as* philosophy. And they had an extensive, I would say beneficial influence on American residential architecture in many parts of the country, at least until the rise of the psuedo-neo-Colonial or neo-Georgian McMansions, with a Palladian window no matter what, that have blanketed the American landscape since the decline of Wrightian and modernist paradigms (although always, without regard to their exterior style, with the "open floor plan" pioneered by Wright).

But now it will be noted that I have just used the word "philosophy" and the phrase "philosophy of architecture" in a different sense than that I defined at the beginning of this essay. I will comment on that ambiguity in the course of now considering what might be a valuable conjunction of architecture and philosophy in contrast to those I have just rejected.

Philosophy *and* Architecture

Architecture has always involved an "and." Vitruvius defined the aims of architecture by means of a conjunction of three terms, *firmitas, utilitas*, and *venustas*, rendered in several recent translations as "soundness, utility, and attractiveness"[17] or "durabililty, utility, and beauty."[18] I like to render Vitruvius's Latin terms loosely as "good construction, functionality, and aesthetic appeal" to make clear that both the intended uses of works of architecture and the sources of its aesthetic appeal must be understood broadly rather than narrowly.[19] I also think that the category of good construction should be understood less as an independent third goal of architecture rather than as whatever is necessary to maintain the functionality of an architectural work on the one hand and its aesthetic appeal on the other, given the relevant conception of each of these – after all, what will count as appropriate constructional methods and technology to secure

[17] Vitruvius, *Ten Books on Architecture*, Cambridge University Press, Cambridge, 1999, p. 26.

[18] Vitruvius, *On Architecture*, Penguin, London, 2009, p. 19; on the transmission of the ancient text to the Renaissance and beyond, see the fascinating book A. Tavares, *Vitruvius without Text: The Biography of a Book*, gta Verlag, Zürich, 2022.

[19] P. Guyer, *A Philosopher Looks at Architecture*, Cambridge University Press, Cambridge, 2021, pp. 15–34.

the functionality, including the safety, of an exposition pavilion intended to last for several months, a business property expected to be profitable for forty years, and a temple or courthouse intended to last for centuries will differ greatly, and likewise what materials it will take to maintain the aesthetic appeal of such different structures will also differ greatly.[20] Immanuel Kant also thought of works of architecture as answering two demands, that of functionality on the one hand and aesthetic appeal on the other, when he used categories of architectural works as his examples of his category of "adherent beauty" (*anhängende Schönheit*, *pulcritudo adhaerens*): adherent beauty is "conditioned beauty" that is "ascribed to objects that stand under the concept of a particular end," which in the case of an artifact, such as a work of architecture, is its intended use(s) or function(s). Kant's most straightforward illustration of this definition is precisely the adherent beauty "of a building (such as a church, a palace, an arsenal, or a garden-house), [which] presuppose[s] a concept of the end that determines what the thing should be, hence a concept of its perfection."[21] Kant is not very explicit about exactly how the concept of its end "conditions" the beauty of an object with adherent beauty, but at the very least he seems to mean that the object's suitability to its intended purpose is a *necessary* but not a *sufficient* condition of our finding it beautiful: an object's unsuitability to its intended purpose may be enough to prevent us from taking any or perhaps much pleasure in its appearance and our experience of it, but its satisfaction of its purpose alone is not typically enough to make us find it beautiful – for that it also has to trigger the "free play" of imagination and understanding that is the basis of any beauty according to Kant.[22] Kant also does not explain what the basis of this conception of adherent beauty as "conditioned" by the (perceived, of course) functionality of its object is. Perhaps it is just a basic fact about human psychology that we are incapable of taking pleasure in that which we judge to be contrapurposive even though we might otherwise be capable of experiencing pleasure in aspects of objects other than their suitability for ordinary purposes, such as housing various human

[20] For a contrary view of the significance of the category of *firmitas*, see S. Koller, *The Birth of Ethics from the Spirit of Tectonics*, Dissertation, Technical University Delft, 2015.

[21] I. Kant, *Critique of the Power of Judgment*, Cambridge University Press, Cambridge, 2000, §16, 5:229–230. (Pagination in this edition reproduced from *Kants Gesammelte Schriften*, vol. 5, Georg Reimer, Berlin, 1913.)

[22] *Ibid*., Introduction, section VII, 5:189–190; §9, 5:5:217–229; §21, 5:238–239; §35, 5:287.

activities, as Kant's conception of our experience of beauty as "without interest" supposes. If Kant has any sort of non-empirical argument for the conditioning role of functionality in cases of adherent beauty, he has not shared it with us.

Be the details what they may, Kant's conception of architecture as a case of adherent beauty clearly means that our experience and judgment of architecture must in some way *conjoin* our experience of its functionality and our experience of its aesthetic appeal – in other words, Vitruvius's *utilitas* and *venustas*. Now to come back to Vitruvius, whether we should think of his triplex of *firmitas*, *utilitas*, and *venustas* as a conjunction of two fundamental terms and a supporting player or of three equally fundamental terms, either way it is clear that architecture typically has to answer to *at least* two demands: functionality on the one hand, that is, suitability to some intended use or uses, and aesthetic appeal on the other hand, some form of satisfaction in the appearance and the use of the building that goes beyond its use and is, at least sometimes, available to those who may only experience the building without actually entering and using it, whether that appeal is achieved through the construction and materials of the building itself (the "poetics of construction," in Kenneth Frampton's phrase[23]), as many twentieth-century ideologies of architecture have insisted, or by ornament, as John Ruskin asserted.[24] (Some have interpreted Louis Sullivan's famous dictum that "form follows function" to mean that the function of a building should fully determine its appearance and the basis of its aesthetic appeal, but given that Sullivan's glorious ornamentation is hardly dictated by the function of an office tower, a department store, or a small-town bank, that could hardly be what *he* meant; he could only have meant that the function of a building is a necessary condition of its success, so that its ornamentation cannot conflict with its function.)

But while this might explain the conjunction of utility and beauty in the aims of architecture, this conjunction is not equivalent to the conjunction of architecture and philosophy. But neither will these two conjunctions turn out to be unrelated. To see why not, let us return now to the ambiguity in the term "philosophy" that I noted at the end of the previous section. (As already suggested, I will just pretend that the term

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[23] K. Frampton, *Studies in Tectonic Culture*: *The Poetics of Construction in Nineteenth and Twentieth Century Architecture*, MIT Press, Cambridge, Mass., 1995.

[24] J. Ruskin, *The Seven Lamps of Architecture*, George Allen, Orpington, UK, 1880.

"architecture" is well-defined, even though of course it is not, and like any empirical concept has both paradigmatic and borderline instances or applications, like landscape architecture, naval architecture, monumental and funerary design, perhaps branded service station design, and so on.) On the one hand, the word "philosophy" (and its cognates at least in other Indo-European languages) can mean a specialized academic subject and professional practice, the subject and practice that we can think of as having begun with Plato and Aristotle, having continued through the Hellenistic and Neo-Platonic periods in the Greco-Roman world, having been taken up in Arabic, Moorish, and Persian circles while Europe suffered through its "Dark Ages," having re-emerged in Europe during the Renaissance and the "scientific revolution" of the seventeenth century, having then divided into "rationalist" and "empiricist" or "continental" and "anglophone" branches, and so on – this is hardly the place for a complete narrative of the history of philosophy – until it became a well-recognized academic subject studied primarily at the college and university level (although now threatened by the overwhelmingly vocational concerns of so many students and their families and of the higher-education industry serving them). Since antiquity, this academic subject has been divided into the three main branches, in John Locke's terminology, for example, of "physics, ethics, and logic," or the study of the fundamental concepts and principles of "The Nature of Things, as they are in themselves, their Relations, and their Manner of Operations," of "That which Man ought to do, as a rational and voluntary Agent, for the Attainment of any End, especially Happiness," and of "The ways and means, whereby the knowledge of both the one and the other of these, are attained and communicated"[25] – although of course other names and descriptions of the parts of philosophy in this sense are available. On the other hand, the word "philosophy" in everyday usage means something like the attitudes and approaches of ordinary, reflective but not academic or specialist, people to various sorts of matters, perhaps especially practices, perhaps especially important matters and practices such as their professions but above all their conceptions of how they ought to live their lives, or their principles for so doing, without necessarily implying that they have or seek any rigorous justification for their approaches or principles in the way that professional philosophers would want. In this

[25] J. Locke, *An Essay Concerning Human Understanding*, Clarendon Press, Oxford, 1975, Book IV, Chapter XXI, §1, p. 720.

sense, "philosophy" may be used in the plural, "philosophies," and may be founded in some form of prudence or faith rather than the rational analysis and argumentation of academic philosophy.

Virtuvius's own conception of philosophy, in his opening chapter on "The Education of the Architect," comprehends both of these definitions. On the one hand, after having specified that the architect must be literate in letters and geometry, that he must have studied draftsmanship and history, and so on, he says that the architect must also have a philosophy in the sense of a conception of how human life should be lived:

> Philosophy completes the architect's character by instilling loftiness of spirit, so that he will not be arrogant, but rather tolerant, fair, and trustworthy, and, most important of all, free from greed. For there is no work that can be truly done without honesty and disinterestedness; let him not be too grasping, nor fix his mind on receiving gifts or rewards, but let him pay serious attention to protecting his dignity by maintaining a good reputation – for these are the things that philosophy recommends.[26]

In other words, the architect should be "philosophical" about life, and he need not study Plato and Aristotle, Stoics or Epicureans, to satisfy that requirement. On the other hand, Vitruvius also uses "philosophy" to connote specialized knowledge that he thinks the architect needs, thus "philosophy serves to explain the science which in Greek is called *physiology*," or what we might call physics or knowledge of the "facts of nature" – to properly design an aqueduct, the architect must know which way water flows! – as well as music, which provides a grasp of "*canonical* and *mathematical* relations," "the science of medicine," which includes knowledge of healthful "climates" and "airs," and so on.[27] Here Vitruvius is using "philosophy" in the broad sense that lingered into modernity in the phrase "natural philosophy" as the name for what we now call natural science and is not confined to the present-day academic subject of philosophy, which may concern itself with the *foundations* of mathematics or natural science, for instance, their fundamental concepts and principles, but which does not comprise or include those subjects themselves. It would be anachronistic to think that Vitruvius used "philosophy" in

[26] Vitruvius, *On Architecture*, p. 22.
[27] *Ibid*., pp. 22–23.

its contemporary academic sense, thus that he drew any rigid distinction between what we would think of as various sciences themselves and the analytical study of the concepts and principles or premises of such sciences. By "philosophy" in his second usage of it he meant something like all rigorous knowledge. But this remains distinct from his first usage of "philosophy," where it connotes something like a philosophical attitude toward the conduct of human life. In his view philosophy in both of its senses is necessary for the successful practice of architecture.

Vitruvius does not elaborate on the necessity of philosophy in the first sense; that should be self-evident, and necessary for any kind of successful commerce with other human beings. Why philosophy in his second sense is necessary for the successful architect becomes clear over the course of his ten books: the architect is not simply making beautiful forms, but designing houses, temples, markets, fortifications, and so on, that need to be properly sited for their function, made of proper materials, suited to the climate and weather of their locations, properly situated with respect to the sun and its changing position during the year, and so on. And without a raft of technical specialists to assist him, structural engineers, HVAC specialists, acoustic engineers, and so on, the architect himself has to know everything relevant to the *utilitas* and *firmitas* of what he will build as well as to its *venustas* or aesthetic appeal. But one thing that Vitruvius certainly does not say is that the architect has to know all this philosophy in order to *express* it, to *express* abstract ideas, through his buildings. He is not completely immune to the potential semantic content of *some* buildings or elements of buildings: for example, he explains that the Athenians used Caryatids in the Erechtheion of the Acropolis, which (supposedly) represent the captured matrons of the vanquished city of Caryae, to send a message about the fate of any other city that might think of siding with the Persians.[28] But he hardly suggests that *all* buildings should express messages or ideas, let alone the abstract ideas of philosophy as a discipline. He certainly does not suppose that buildings should or could express the abstract ideas of Platonic or Stoic philosophy, nor does he suggest that built structures should express what we would consider scientific ideas. The architect who would design a successful aqueduct has to know that gravity causes water to flow downhill rather than uphill, but his design for an aqueduct does not express or refer to that idea, principle, or law of nature.

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[28] *Ibid*., p. 22.

Kant might seem to come closer to the view that works of architecture should actually express abstract, philosophical ideas. He holds that the "spirit" of artistic "genius," that is, the *sine qua non* of successful beautiful or fine (*schöne*) art is the expression of "aesthetic ideas," which is in turn analyzed as the *aesthetic* expression – the expression through indeterminate but beautiful products of the imagination – of *ideas of reason*, "approximations" in artistic media of "concepts of reason (intellectual ideas)" to which no ordinary experience is "fully adequate," that is, which cannot be directly and completely exemplified in ordinary experience. Kant has in mind above all moral ideas, such as those of "the kingdom of the blessed, the kingdom of hell, [...] death, envy, and all sorts of vices, as well as love, fame, etc."[29] Kant does not exempt any medium of art from this claim, indeed in spite of having earlier claimed that the "free" beauties of nature "do not represent anything, no object under a determinate concept,"[30] he now goes on to say that *all* beauty, "(whether it be beauty of nature, or of art), can in general be called the *expression* of aesthetic ideas."[31] Once again, he does not pause to explain this apparent reversal of position, but presumably he thinks it is permissible because aesthetic ideas are not determinate but indeterminate, and plausible that once we have become accustomed to the expression of abstract ideas in art we also come to read the expression of such ideas back into our experience of nature. But when it comes to the special case of architecture, Kant does not in fact say that works of architecture must express general moral ideas. Rather, he says that architecture is the "art of presenting," with this intention but yet in an aesthetically purposive way, "concepts of things that are possible *only through art*, and whose form has as its determining ground not nature but a voluntary end. In the latter a certain *use* of the artistic object is the main thing, to which, as a condition, the aesthetic ideas are restricted."[32] The first part of this obscure statement is part of Kant's contrast between architecture and sculpture: the latter creates images of natural objects, such as human or animal bodies; architecture does not, but creates its own forms without imitating other forms in nature. The second sentence alludes back to Kant's conception of the intended function or use of a work of architecture as a necessary and limiting condition on its aesthetic aspects, including now the expression of

[29] I. Kant, *Critique of the Power of Judgment*, §49, 5:314.
[30] *Ibid*., §16, 5:229.
[31] *Ibid*., §51, 5:320.
[32] *Ibid*., §51, 5:322.

aesthetic ideas, or aesthetic expression of ideas. The second part of the first sentence is obscure, but might be taken to suggest that the form of an architectural work, broadly speaking its aesthetic aspect, should express its intended use, what kind of structure it is meant to be, rather than en external idea such as that of heaven or hell, virtue or vice. That is, a house should look like a house, a temple like a temple, or maybe a house should express domesticity, a temple divinity (whatever these would look like). In any case, Kant seems to be shying away from any suggestion that works of architecture should express any other sort of abstract ideas, or that architecture should be philosophical in that sense.

So neither Vitruvius nor Kant commit themselves to the view that architecture and philosophy should be conjoined in the sense of architecture attempting to express abstract, philosophical ideas.[33] Perhaps we can find some cases in the history of architecture where works do successfully express abstract ideas, at least to those who experience them with appropriate background knowledge – which is required to interpret almost any sort of expression, and should not be thought of as undermining the claim to successful expression. For example, the high, dimly lit ceilings and towering spires of Gothic cathedrals have long been interpreted to express the immensity of God exceeding human understanding.[34] Perhaps the house that philosopher Karsten Harries had built for himself and his wife in Vieques, Puerto Rico, by architect Edward Knowles is not just "open to the seemingly eternal firmament" and "allow[s] the morning sun to wake [him and his wife] and draw [them] out of the house" but also expresses how humans should relate to the firmament.[35] Nevertheless, in general the means of architecture are too indeterminate to convey any particular, precise meaning. In his remarkable book on Bramante, Pier Paolo Tamburelli imputes the recognition of this fact to the Renaissance architect:

> Bramante *renounced linguistic invention*, but this does not mean that he tried to shelter his work from language. On the contrary, he designed deliberately sticky buildings, able to let themselves be covered with words, to become figures, to celebrate and advertise – it didn't matter what. Bramante was willing to pretend that buildings could

[33] The case of Hegel would be another story; see P. Guyer, *A History of Modern Aesthetics*, vol. 2, Cambridge University Press, Cambridge, 2014, pp. 119–143.
[34] K. Harries, *The Ethical Function of Architecture*, MIT Press, Cambridge, Mass., 1997, pp. 184–187.
[35] *Ibid*., pp. 193–195.

> speak, if that was a condition of making them. Nothing was precluded: Bramante saw "meanings" as essentially uncontrollable and transitory and therefore endless negotiable and adaptable to the requirements of the client. His lack of confidence in the possibility of communicating through architecture ended up justifying the most extreme opportunism.[36]

Supposing this to be right about Bramante, then his position is a subtle but profound correction to Kant: whereas the philosopher is confident that even architecture can express abstract ideas although indeterminately, the indeterminacy of such expression being necessary to their beauty ("free play"), the architect realizes that indeterminacy is the enemy of any particular expression at all – any meaning can be inscribed into a particular building by an observer so inclined, which means that it does not make sense to talk of the building as really having a particular meaning at all. Architecture and philosophy should not be conjoined in this way, because the conjunction will generally fail.

Nevertheless, there remains an important connection between architecture and philosophy, or one that ought to obtain, and this is one that links the first, popular conception of philosophy as a conception of how people should live with one part of the academic subject of philosophy, namely ethics, or morality. Of course, architects ought to be legally and ethically scrupulous in their dealings with others, just as everyone ought to be, but especially those in a position to spend large amounts of other people's money and to affect how their lives are going to go for some significant period of time. But architects have the special burden of bringing to the conference table a view of how life, or a part of life, might and should be lived – a philosophy in the first sense – but also of remaining open to the actual views of others, the client, other stakeholders, the general public – an ethical burden, thus part of philosophy in its more specialized sense. Frank Lloyd Wright's exposition of the principles of his "organicism" offers a good example of how a particular conception of how life should be lived must be combined with ethical principles valid for all. Wright's organicism is his philosophy, in the everyday sense of the term, that humans are part of nature, that our buildings, particularly our homes, should open us up to nature as far as is practicable (depending on climate, need for privacy, etc.), but perhaps also represent our link to

[36] P. P. Tamburelli, *On Bramante*, MIT Press, Cambridge, Mass., 2022, p. 116.

nature by themselves fitting into their sites, using materials in natural form where possible (fieldstone, etc.), natural colors, and so on. "A building should appear to grow easily from its site and be shaped to harmonize with its surroundings if Nature is manifest there [...] Colors require the same conventionalizing process to make them fit to live with that natural forms do; so go to the woods and fields for color schemes. [...] Bring out the nature of the materials, let their nature intimately into your scheme." This might well be thought to have been Wright's personal philosophy, in the everyday sense in which a philosophy can be personal, and something that might be imposed upon clients who had different personal philosophies, different conceptions of how they would like to relate to nature. But Wright's creed also included what we might think of as an ethical aspect that is more objective than idiosyncratic, and that is or can be formulated in ethics as a part of philosophy in its more specialized sense: "There should be as many kinds (styles) of houses as there are kinds (styles) of people and as many differentiations as there are individuals," he says, in other words, architects are not simply to impose their own philosophies on their clients, but to recognize the preferences of the clients as well, and ideally to work out designs that express the preferences of both architects and clients. Indeed, Wright's creed even included concern for the financial well-being of his clients, for their houses as investments: "A house that has character has a good chance of growing more valuable as it grows older while a house in the prevailing mode, whatever that mode may be, is soon out of fashion, stale, and unprofitable."[37] Whether Wright actually lived up to his creed is, of course, another matter, as it always is when it comes to compliance with rather than the content of moral principles: allegedly, when Herbert Johnson, Wright's client for one of his greatest accomplishments, the Johnson Wax office and research complex in Racine, Wisconsin (1936-1950), called Wright to complain that the roof of the house that Wright had also designed (1927-1939) for him was leaking right over him in the midst of a dinner party, the architect told his client just to move his seat over a few inches – not treating his patron and his needs with much respect, indeed biting the hand that had fed him. But that personal failing does not detract from the fact that Wright's creed, as stated three decades earlier, actually represented a double conjunction of architecture and philosophy: first, Wright's architecture was informed

[37] All from F. L. Wright, "In the Cause of Architecture, I," *Architectural Record*, March, 1908, p. 157; previously cited in P. Guyer, *A Philosopher Looks at Architecture*, p. 131.

by a philosophy of human nature and its proper place in the rest of nature, and second his practice of architecture was supposed to be governed not merely by whatever public laws and codes might be in force where and when he built but also by objectively valid moral principles. Yet at no point did Wright appear to suppose that his buildings should *say* or *express* any of this: the buildings and the process of building should *exemplify* both his philosophy of life and objective ethical constraints on simply imposing one's own philosophy of life on others, but not try to *articulate* concepts in a non-conceptual medium.

On an initial reading, Kant might appear to have tried to insulate art, including architecture, from morality altogether. He famously illustrates his claim that judgments of taste, that is, judgments about beauty, are independent of "interest" in the existence of their objects, whether personal and prudential or moral, with this example:

> If someone asks me whether I find the palace before me beautiful, I may well say that I don't like that sort of thing, which is made merely to be gaped at, . . . in true *Rousseauesque* style I might even vilify the vanity of the great who waste the sweat of the people on such superfluous things . . . All of this might be conceded to me and approved; but that is not what is at issue here. One only wants to know whether the mere representation of the object is accompanied with pleasure in me, however indifferent I might be with regard to the existence of the object of this representation.[38]

But the point of this passage is only to highlight a feature of our specific response to beauty and therefore the proper object of a "pure" judgment of taste, namely that it is a response to the "representation" or appearance of an object, the response that Kant will then characterize as the free play of imagination and understanding with that representation. But Kant is by no means here characterizing what should be the whole of our response to even a beautiful artifact or what should be our all-things-considered judgment of it. Beautiful objects in non-human nature are not products of human intentional action and therefore not liable to moral evaluation, to be sure, but all free human actions are potentially subject to moral evaluation, and therefore their products are as well – there may be such a thing as "poetic license" when it comes to

[38] I. Kant, *Critique of the Power of Judgment*, §2, 5:204–205.

departing from established conventions of rhythm, rhyme, and diction to achieve a new effect, and similarly in other arts, but there is no such thing as "artistic license" when it comes to moral evaluation of the conditions under which objects are produced and their effects on the human beings who use or encounter them – how the needs of clients are recognized, how their money is spent, the labor conditions while a building is being constructed including those within the architectural office as well as on the job-site, the environmental impacts of the material used and the operation of the finished building, and much more. These are morally relevant aspects of the actual practice of architecture, and subject to moral evaluation like other human actions and activities. Much later in his text Kant suggests this point when he writes that "If the beautiful arts are not combined, whether closely or at distance, with moral ideas, which alone carry with them a self-sufficient satisfaction, [...] their ultimate fate" will be to make the "spirit" of the would-be appreciator "dull, the object by and by loathsome, and the mind, because it is aware that its disposition is contrapurposive in the judgment of reason," that is, pure practical reason, in other words, morality, "dissatisfied with itself and moody."[39] Here Kant has in mind that to be enduringly pleasurable art should have some moral *content*, and I have already argued that thinking of architecture as possibly let alone necessarily having conceptual content of an abstract character is not a promising way to think about it. But Kant's point may be generalized to suggest that even when from a strictly aesthetic point of view a work of architecture or other art might be found beautiful or otherwise satisfactory, moral considerations certainly can and must enter into our all-things-considered response to objects, and something immoral, for example in the circumstances of the production of an object, can certainly render us "dissatisfied" with ourselves if we focus exclusively on its beauty or other aesthetic appeal.

This is not to say that every moral judgment that we might make about an artist, architect or otherwise, must preclude any enjoyment of their work. Either psychologically or morally, we might not need to take Dickens's failings as a husband or a parent as sufficient reason not to enjoy *Great Expectations* or *Bleak House*, Wright's abandonment of his first wife as a reason to reject all his work after the Prairie period, Picasso's acceptance of the conditions of life in German-occupied Paris as a reason to stop enjoying his painting (although perhaps its manifest sexism would

[39] *Ibid*., §52, 5:325.

be a sufficient reason to turn away from some of his work), or Corbusier's continuing to work in Vichy France as a reason to stop admiring his buildings (if we do admire them). But there are moral limits: some of the official architecture of Fascist Italy or even Nazi Germany was actually pretty good, in much the same way that some of the simplified neo-Roman Classicism of the US in the 1930s was also pretty good (for example, the Philadelphia General Post Office, now an Internal Revenue Service processing facility), but yet our well-founded moral disapprobation of the first two regimes might reasonably be extended to their surviving buildings, entailing perhaps if not that they should be torn down then at least that money should not be spent on their preservation or that their continued existence should be accompanied by official disclaimers of the values they originally represented, while no right-thinking person should have any qualms about preserving and/or adaptively re-using structures built at a high-point for social democracy in the US. And even if such real-life cases may be complex, as philosophers well-practiced in cooking up thought-experiments we can readily imagine cases where moral considerations must outweigh any aesthetic considerations. Imagine that instead of being a dauber, the young Adolf Hitler had actually been a good and successful painter before turning to the political career that he actually had: we certainly would still not want to hang his paintings in our museums of fine arts. Or Hitler's actual "Eagle's Nest" at Berchtesgaden, not designed by him but built for him: shouldn't it have been leveled, regardless of how good a piece of architecture it might have been, rather than turned into a tourist attraction?! Aesthetic considerations aside, architecture is no more immune from normal moral evaluation than is any other intentional human action or its product. That is the most important point about architecture *and* philosophy.

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Architecture ∩ Project ∩ Philosophy

ABSTRACT: The title of this first issue of *Khōrein* is written in the language of Boolean algebra: *Architecture* ∧ *Philosophy*. This formal codification allows me to make three premises and begin to outline my project. First, I would like to make a distinction between symbols, starting with the consideration that the symbol representing intersection in set theory (∩) is different from the symbol representing the Boolean operator *AND* (∧). Given the formal "correspondence" between Boolean AND and intersection in set theory, I would tend to use this second meaning for my reasoning: thus, to begin with, I would place "Architecture ∩ Philosophy" as the premise, instead of "Architecture ∧ Philosophy." Secondly, it is necessary for me to introduce another set into the discourse, namely the "project." Thirdly, I must ask myself whether it is possible to find a further intersection between "architectural project" and "philosophy." For this purpose, I will proceed through a series of statements, constructing them as transitions from a term X to a term Y. Each transit ("from X to Y") should be verified in two stages: first by describing how it belongs to the intersection set 'architecture ∩ project'. In a second step, I should provide some references to philosophy texts that have made each transit viable within the architectural project. Both operations will only be carried out on the first two statements in a sketchy manner, then my project draft will stop.

KEYWORDS: architectural design theory, project of architecture, architectural practice, process innovation, intersection set

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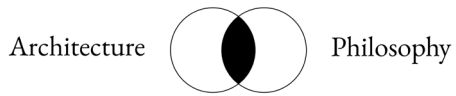
I will approach this text as if it were a draft for a book, in which I must establish a formal criterion to order the topics within a readable structure, without, however, developing them exhaustively. Consequently, the text is structurally homologous to a distribution scheme, in which the main elements are the distinctions between the parts, and not their detailed and definitive development. Furthermore, some parts of the distribution are developed less than others, or simply sketched for further development or modification. Consequently, the text may provoke some dissatisfaction in the reader since it comes across as incomplete or apparently interrupted work.

The title of this first issue of *Khōrein* is written in the language of Boolean algebra: *Architecture* ∧ *Philosophy*. This formal codification allows me to make three premises and begin to outline my project.

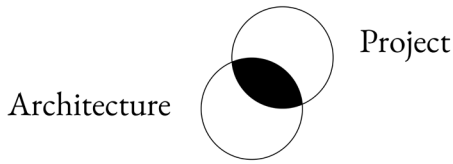
First, I would like to make a distinction between symbols, starting with the consideration that the symbol representing intersection in set theory (∩) is different from the symbol representing the Boolean operator *AND* (∧). The Boolean operator *AND*, intersection of sets and conjunction in logic are considered corresponding. However, the consistency of Boolean operations, which take place between "true" and "false," or between 0 and 1, is different from the intersections that occur between sets, and even more so from what is understood in computer graphics, where "Boolean" operations denote the transformation algorithms of polygons or solids and, in particular in the case of *AND*, the intersection between two plane or three-dimensional shapes. Given the formal "correspondence" between Boolean *AND* and intersection in set theory, I would tend to use this second meaning for my reasoning: thus, to begin with, I would place "Architecture ∩ Philosophy" as the premise, instead of "Architecture ∧ Philosophy." Using sets, I can also draw a diagram of the *Khōrein* issue's title – whereas in Boolean writing I can only draw a matrix.



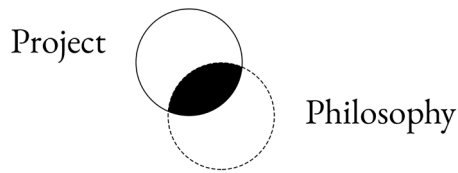
« Architecture ∩ Philosophy »

A	P	« A ∧ P »
0	0	0
1	0	0
0	1	0
1	1	1

Secondly, it is necessary for me to introduce another set into the discourse, namely the "project." Immediately the problem arises of the intersections that result with the other two sets. I have some arguments to support the hypothesis that "architecture ∩ project" is not an empty set, whereas I find it more difficult to have well-founded arguments for "philosophy ∩ project." Put in less formal terms, I am sure I can find a way to develop an argument about the "project of architecture/architectural project," whereas I would not be capable to discuss the "project of philosophy/philosophical project." I will assume, however, in a completely abstract way, that this second intersecting set is not empty either.

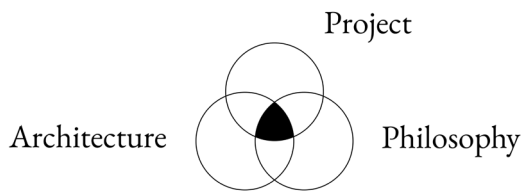


« Architecture ∩ Project »

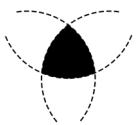


« Project ∩ Philosophy » (?)

Thirdly, I must ask myself whether it is possible to find a further intersection between "architectural project" and "philosophy," i.e., I must define the set "architecture ∩ project ∩ philosophy," which I can draw with a Venn diagram. For this purpose, I will proceed through a series of statements, constructing them as transitions from a term X to a term Y. Each transit ("from X to Y") should be verified in two stages: first by describing how it belongs to the intersection set "architecture ∩ project," with respect to which I must inscribe my competency as architect project-maker and university researcher.[1] In a second step, I should provide some references to philosophy texts that have made each transit viable within the architectural project. Both operations will only be carried out on the first two statements as a sketch, then my design draft will stop.



« Architecture ∩ Project ∩ Philosophy » (?)



X→Y

[1] It is a competency, moreover, certified by a public university institution, according to which I am qualified to do research in the field of architectural and urban design, ICAR/14. Where in truth "design" does not appear, but it is "composition" (*Composizione architettonica e urbana*). The definition of "architect project-maker" is necessary to specify the centrality of design and project activity, which is not the case for all architects within academia.

X	Y
Object	Thing
Design	Project
Idea	Trace
Concept	Effect
Revolution	Explication
Engagement	Deployment
Instrument	Prosthesis
Complexity	Complication
(...)	(...)

The aim of the text is to show that the construction of a theoretical hypothesis for the architectural project can be effectively delineated (designed) through a series of paradigmatic transitions that affect the practice of the project itself, and that these transitions are possible thanks to the translation of philosophy texts into project operations. The pairs of transitions enunciated here are a partial set, compared to those that could usefully be carried out in a more comprehensive exercise.

From Object to Thing

1. *The architect as a subject who thinks his object*: this is the initial scene from which theories of design, from Leon Battista Alberti to Peter Eisenman, take their starting point. The thought object is architecture as a built work (*aliquas aedificationes*).[2] In Alberti, for example, it is a matter of drawing the object and then building it.[3]

This first scene, which would appear to be synchronous and complete, is followed by others in which this object unfolds over time and must be developed, both conceptually and materially: in essence, the need for a project emerges, which allows the object to be completed. Being considered an object, in this hypothesis architecture is perfectly identified

[2] "*Et quam saepe venit, ut etiam rebus aliis occupati nequeamus non facer, quin mente et animo aliquas aedificationes commentemur!*" [How many times has it happened to us, even in the midst of other occupations, to feel the need to conceive of some construction in our minds!], L. B. Alberti, *L'architettura*, Il Polifilo, Milano, 1966, p. 11.

[3] *Ibid*., p. 16.

and separable from the material space in which it arises as a built work. Good design of an object requires a precise description of its parts that converges within a coherent definition of the whole. Any disputes, regarding the principles of coherence or the correct execution of those precise descriptions, are obstacles, which the experienced architect must be able to resolve by demonstrating all the resilience of which he/she is capable. In the end, the quality of the object-architecture and the value of the subject-architect will depend on how well the work corresponds to the initial scene, according to a principle of mirroring.

2. *Some architects as actors grappling with a thing*: it is a different scene that needs to be located in order to take shape. The thing is first and foremost a problem, a stumbling block in which the characters are already grappling with something as the scene opens. Who was on the phone? What are they asking us to do? Did they send you a signed letter or did they just call you? How much money do they have, how much time do we have? Etc.

The scenes that follow are no less complicated. Project operations respond to fragmented, contradictory, changing demands. The architects aim for project approval, then prepare for the course of events: when (and if) the construction site opens, other actors will intervene, bringing other unforeseen and unpredictable variables. When (and if) the building site is completed, the material effect of these vicissitudes will show the real point of accumulation of all the discourses, conflicts, changes in the trajectory of the architects' project-labyrinth. Architecture will not be an object, but a thing: i.e., a hybrid assemblage that holds together building components, rules, values, institutional bodies, infrastructures, biological materials, etc., as the temporarily stable result of a chain of adjustments that occurred after many detours.

> As every reader of Heidegger knows, or as every glance at an English dictionary under the heading "Thing" will certify, the old word "Thing" or "Ding" designated originally a certain type of archaic assembly. Many parliaments in Nordic or Saxon nations still activate the old root of this etymology: Norwegian congressmen assemble in the *Storting*; Icelandic deputies called the equivalent of "thingmen" gather in the *Althing*; Isle of Man seniors used to gather around the *Ting*; the German landscape is dotted with *Thingstäten* and you can see in many places the circles of stones where the Thing used to stand. Thus, long before designating an object thrown out of the political

> sphere and standing there objectively and independently, the *Ding* or Thing has for many centuries meant the issue that brings people together because it divides them. The same etymology lies dormant in the Latin *res*, the Greek *aitia* and the French or Italian *cause*. Even the Russian *soviet* still dreams of bridges and churches.[4]

From Design to Project

I can enumerate at least four criteria that distinguish design from project to show that architects distinguish themselves from other designers by their peculiar ability to make projects, rather than design works.

1. *Insularization*

The notion of design presupposes the possibility of operating undisturbed, within an environment in which the concept, prototyping and testing operations take place separately from the external environment, allowing the optimization of an autonomous result. A good design object responds coherently to a program that was established at the beginning of the process. In other words, design presupposes a technical island. Peter Sloterdijk named the operative environment of design and technology as "absolute island." Of course, the absolute island is itself a design product.

The notion of architectural project presupposes that any action of transformation of space takes place in an open situation. The effects of a project are the assemblage of conditions which arise unpredictably during the process, and which cannot be calculated at the outset. In other words, the architectural project presupposes the continuity of the geographical and geopolitical space. Sloterdijk defined this situation as a "natural island" or "relative island." In general terms, each architectural project attempts to act on a continuum through operations aimed to modify the space in a permanent and unique way.

> It is therefore insularization that makes the island what it is. What the frame does for the image, excluding it from the context of the world, and what fortified borders do for peoples and groups, the sea, the insulating element, does for the island. If islands are models of

[4] B. Latour, "From Realpolitik to Dingpolitik, or How to Make Things Public," B. Latour, P. Weibel (eds.), *Making Things Public: Atmospheres of Democracy*, Center for Art and Media, Karslruhe, 2005, pp. 22–23.

> the world, it is precisely because they are sufficiently separated from the rest of the worldly context to accommodate an experiment about the institution [*Aufstellung*] of a totality in a limited format. If, according to Heidegger, the work of art institutes a world, then the sea institutes a world.[5]
>
> Absolute islands emerge through the radicalisation of the principle of building enclaves. Simple pieces of land framed by the sea are not capable of this effect because they only lead to a horizontal insularisation, in which the vertical remains open. [...] The absolute island presupposes three-dimensional insularity – including the transition from frame to capsule or, to borrow an analogy from art, from painting on wood to installation in space. Without vertical insularisation, there is no complete closure.
>
> In order to be absolute, a technically created island must also put the premises of fixity out of play and become a mobile island. The insuperable relativity of natural islands is therefore doubly conditioned: by the two-dimensionality of its own insularisation and the immobility of its own condition. For an absolute, three-dimensional, and mobile island, a revision of its relationship with its surroundings is indispensable. It no longer stands still within it, but navigates it in a relatively mobile manner, swimming or floating.[6]

2. *Temporality*

A design work represents the final frame or the happy ending, that is, the promise of a future result that must be pursued as consistently as possible. The designed frame is *an* end as well as *the* end, frozen in a synchronic representation of final fulfilment.

The project of a building represents an entire film, of which the design work is only the last frame. The project concerns the design of the action that takes place through the spacing and timing of many different operations, carried out by a multitude of entities, with the aim of converging towards a material transformation of a place on Earth.

> We should finally be able to picture a building as a *navigation* through a controversial datascape: as an animated series of projects, successful

[5] P. Sloterdijk, *Sfere III: Schiume*, Raffaello Cortina Editore, Milano, 2015, p. 293.
[6] *Ibid*., p. 299.

> and failing, as a changing and criss-crossing trajectory of unstable definitions and expertise, of recalcitrant materials and building technologies, of flip-flopping users' concerns and communities' appraisals. That is, we should finally be able to picture a building as a moving modulator regulating different intensities of engagement, redirecting users' attention, mixing and putting people together, *concentrating* flows of actors and *distributing* them so as to *compose* a productive force in time-space. Rather than peacefully occupying a distinct analogical space, a building-on-the-move leaves behind the spaces labeled and conceptualized as enclosed, to navigate easily in open circuits. That is why as a gull-in-a-flight in a complex and multiverse argumentative space, a building appears to be composed of apertures and closures enabling, impeding and even changing the speed of the free-floating actors, data and resources, links and opinions, which are all in orbit, in a network, and never *within* static enclosures.[7]

3. *Singularity*

Design can be repeated: from one (patented) design you can make many identical objects. Although even mass-designed objects are not entirely separable from the accidents of the world, it is possible to emphasize their difference from an architectural work. The space of serial design and production is the factory (which in turn is an architecture), within which the object is designed, produced as a prototype, tested and finally stabilized through the registration of a design-patent. The factory functions as an absolute island, within certain limits. Once put into production, the object is produced as a series and released into the world, from which it will receive an endless series of feedback. Consequently, technical deviations affect serial objects after they have been manufactured, so that we can study technical "innovations" as transformations of models, i.e., groups of objects that have been manufactured from a single design.

A project is always a singularity: once you have completed it, you will need a new one (you can eventually archive the old ones, as clinical cases). A project is always something whose outcome we do not know in advance, which takes place in a unique and contingent situation, which depends on unforeseeable accidents. The exchange with someone else,

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[7] B. Latour, A. Yaneva, "'Give Me a Gun and I Will Make All Buildings Move': An ANT's View of Architecture," R. Geiser (ed.), *Explorations in Architecture: Teaching, Design, Research*, Birkhäuser, Basel, 2008, p. 87.

in the course of a negotiation necessary to form a shared objective, brings forth a form that is recorded and becomes the common element of composition. Architectural composition (as a project) is precisely that operation that allows two initially opposing parties to become co-operative. It is not so much a transaction based on initial values, but a transaction that produces values at the end of it. Design is a moral act, whereas Project is an ethical operation.

> The classical conception requires man to reunite with his unfinished essence, which exists in potency. Morality would therefore be the process of realising human essence. How can the essence be realised? Through morality. Realising the essence of man will therefore be the end of the truly existing man. Conducting life rationally is thus to realise the essence: this is the purpose of morality. Consequently, value becomes the essence set as the end. [...] I call this whole complex of things "morality," which instead disappears in the ethical worldview. [...] In ethics there are no general ideas, there is you, one person, or another: singularities. The word essence definitely changes meaning. When Spinoza speaks of essence, he is not interested in abstract essence, but in existence and beings.
>
> [...] In ethics, one always remains within existing modes, never seeking transcendent values: this brings everything back to the level of immanence [...] The point of view of an ethic is: what are you capable of? What is it possible for you to do? Let us take up Spinoza's prompt: what is a body capable of? We will never know in advance, we will never know how a body will organise itself, or how its modes of existence will change. Furthermore, Spinoza emphasises that it is never a question of the possibilities of a body generically understood, but of you, of us, of what you alone can, only and exclusively you.[8]

4. *Thinking*

Design is primarily about thinking, it is even considered as a way of thinking: we can establish a general notion of design, which is prior to any disciplinary or professional categorization.

Project is primarily about making. Architects make projects in a specific way because they deal with a specific matter, that is trying to modify

[8] G. Deleuze, *Cosa può un corpo? Lezioni su Spinoza*, Obre Corte, Verona, 2010, pp. 78–80.

the shaping of the Earth to make people (and other organisms) inhabit and dwell. Because of a such challenging task, they design the trajectories of the transformation of a place, by pretending to design its final shape. Making a Project means first of all regulating operations within a hybrid assembly, rather than thinking up an autonomous content to translate it into a material form. This practice of regulation can be likened to the type of activity required for the operation of a machine, where the "machine" in this case is the technical ensemble constituted by the project documents, structured as a complicated chain of contracts and descriptions that produce institutional effects.

> There is something alive in a technical ensemble, and the integrative function of life can be ensured only by human beings; the human being has the capacity to understand the functioning of the machine, on the one hand, and the capacity to live, on the other: one can speak of technical life as being that which actualizes this relation between these two functions in man. Man is capable of taken upon himself the relation between the living being that he is and the machine he fabricates; the technical operation requires both technical and natural life. [...]
>
> The technician is indeed in a certain sense the man of ensembles, but in a very different way from the one that characterizes the industrialist. The industrialist, in the same way as the worker, is pushed by finality: he targets a result; herein lies their alienation; the technician is the man of the operation in the course of its accomplishment; he does not take charge of directing the ensemble but rather guides its self-regulation during functioning. He absorbs within himself the sense of the work and the sense of the industrial direction. He is the man who knows the internal schemas of functioning and organizes them in relation to each other. On the contrary, machines are ignorant of general solutions and cannot resolve general problems.[9]

The series of transitions should continue further, to describe in an increasingly articulate manner the pragmatic shifts that the architectural project can mark, crossing the discursive space of philosophy. However, the text stops here, up to the point where it was outlined as a working

[9] G. Simondon, *On the Mode of Existence of Technical Objects*, Univocal Publishing, Minneapolis, 2017, p. 140.

hypothesis. I can only transcribe the last notes, from which it would be necessary to start again in order to extend the list I drew up at the beginning.

Consider what is materially marked (the *trace*) as antecedent to the possibility of "having an *idea*." Consequently, admitting that a design act is located from the *effect* that the trace produces, as registration and inscription, before it can be given as a *concept*. But also questioning the perspective of *revolution*, as leap or cut, re-reading radical upheavals (and their project) as *explications* of an already existing state of affairs. Hence, among other things, a transition from *engagement*, built on a moral and coherent form of one's disposition to act, to a kind of ethical *deployment*, towards what I can do from the situation of immanence in which I find myself. Without forgetting the technological dimension that these transitions imply, to the point of assuming the *instruments* of design production as co-extensive *prostheses* with respect to the body of those who think by drawing, that is, projecting. And who always find themselves inside a tangle, whose *complication* cannot be generalized according to the systemic laws of *complexity*, but remains prisoner of its own contingency.

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Declarative and Tacit Knowledge in Vitruvius: *Disciplina*, *fabrica* and *ratiocinatio* in *De architectura* I, 1

ABSTRACT: In the opening chapter of *De architectura* Vitruvius examines the knowledge required to practice architecture and the means to acquire it. These, he claims, are manual skills and rational thought on one hand, deductive reasoning on the other. While the former suffice to make sound buildings, the latter is needed to integrate the building-to-be in the world order. A scheme emerges: the knowledge required is both procedural and declarative. Vitruvius' approach was uncommon, because it put these two kinds of knowledge on the same footing. By associating manual skill with rational thought, and claiming that it creates new knowledge, as does deductive reasoning, Vitruvius places himself on the side of modern scholarship, rather, than on that of his contemporary philosophy, as much as he depended on it.

KEYWORDS: Vitruvius, craft, manual skills, reasoning, abstraction

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In Western antiquity, the task of what was eventually called "philosophy" was the acquisition of knowledge – of the natural world in general and of the human being as individual and as a member of society. The task of architecture was the creation of appropriate buildings. Did these two very different activities share some common ground? What kind of knowledge was involved in architecture? Vitruvius, the author of *De architectura*, the only treatise on this subject that has survives from antiquity, tackles the issue in the first chapter of its first book.

In it Vitruvius appears to distinguish between declarative and procedural or tacit knowledge, both of which he considers essential for architects.

By his time there was neither a clear concept of these quite different kinds of knowledge, nor the terms to describe it. It is only natural, then, that the distinction Vitruvius makes between knowledge that can be explicitly taught and transmitted though specific oral and written instructions and knowledge that can be acquired through practice and bodily involvement is not precise. Moreover, he uses the terms that mirror this distinction without the strictness and consistency one would expect from a modern-day scientific paper. He rather lets us sense the distinction by presenting them in pair with their counterparts: *disciplinae-eruditiones, fabrica-ratiocinatio, litterae-*[*essere*] *manibus exercitati.*

The distinction between declarative and tacit knowledge seems to be crucial for Vitruvius in his attempt to define the very special character of architecture as an activity deserving respect: In the first passage of *De architectura*'s first book, and before explaining what architecture is, Vitruvius presents the kind of knowledge architects should be equipped with to successfully accomplish their mission. By exploring how knowledge of architecture is acquired, rather than stating what architecture is about, the Roman author, willingly or not, puts himself in good company: Plato opens *Meno* in a similar way, by having an interlocutor ask how is virtue acquired, and not what it actually is (Pl. *Men*. 70a). Vitruvius, then, claims that the knowledge an architect should possess stretches over various *disciplinae* and *eruditiones*, and has two sources, *fabrica* and *ratiocinatio*. Actually, the Latin original reads: "*Architecti est scientia pluribus disciplinis et variis eruditionibus ornata* [...] *Ea nascitur e fabrica et ratiocinatione*" (Vitr. I, 1, 1).

The meaning of this passage has proven controversial, and translations into modern languages vary significantly. I argue that *disciplina* has the meaning of explicit, and *eruditio* of implicit knowledge; while *fabrica*

has the meaning of craft and *ratiocinatio* of deductive reasoning, and are therefore crosswise interconnected.

The first of the controversial terms, *disciplina* occurs 15 times in book 1, of which 13 in chapter 1. It was widely used in Latin of this period and indicated all kinds of learning and study. *Eruditio* too denoted learning, teaching, knowledge, expertise, and a variety of related meanings. However, the author of *De architectura* apparently attaches different meanings to each one of them, as is evident not only in his aforementioned opening passage, but also in I, 1, 11 where he points out that architecture is a great *disciplina* adorned with a wide range of *eruditiones*.

A more detailed examination of how both terms are used in *De architectura* is therefore needed.

Vitruvius uses the term *disciplina* in general to indicate a branch of knowledge, a field of study, what we could today call a (scientific) "discipline," as is the case with the *disciplina medicinae*, the science (and art) of medicine (I, 1, 11). He uses the word *scientia* to denote knowledge related to that field; tellingly, he closes the first chapter of Book 1 by admitting that his *scientia* (knowledge) of some *disciplinae*, such as rhetoric is only mediocre (I, 1,18). He points out that he is not ignorant of several other branches of knowledge, because the various *disciplinae* are interconnected with each other (I, 1, 12), having common principles. However, since each one of them has specific requirements, no ordinary person can have in-depth knowledge of a wide range of them; only the extremely gifted people do, and they, he claims, abandon the duties of architects, and become mathematicians (I, 1, 16).

A strong indication that *disciplina* denotes a field of knowledge that can be accessed by declarative learning, can be found in I, 1, 3, where Vitruvius juxtaposes it to natural talent. He claims that for one to be an architect, they must be *ingeniosus* and *ad disciplinam docilis,* receptive of *disciplina*. *Ingeniosus* literary means inhabited or possessed by *genius*, by divine spirit. Creation driven by "divine spirit" is on the opposite end of creation resulting from a series of conscious choices. Plato called such an untamed creative force *μανία*, divine madness. As pointed out in *Phaedrus*, poems inspired by "divine madness" are incomparably better than poems created by scholars guided by reason; the latter "vanish into nothingness before that of the inspired madmen" (Pl. *Phaedr*. 245a).

> But he who without the divine madness comes to the doors of the Muses, confident that he will be a good poet by art, meets with no

> success, and the poetry of the sane man vanishes into nothingness before that of the inspired madmen. (Pl. *Phaedr*. 245a)

Therefore, there is good reason to believe that Vitruvius' *eruditio* is a field of knowledge acquired through means other than declarative learning.

The knowledge required to practice or, better, to perform architecture is gained, as mentioned in I, 1, 1, by *fabrica* and *ratiocinatio*. The exact meaning of these terms has proven to be notoriously difficult to pinpoint, which is made apparent in the range of translations attempted by modern scholars. Cesare Cesariano, who provided in 1521. the first translation into Italian left both terms in Latin[1]; Jean Martin, in 1547, in the first French translation, also left *fabrica* untranslated, and translated *ratiocinatio* as "discourse."[2] Daniele Barbaro, the famous Renaissance scholar and patron of Andrea Palladio, followed in Martin's footsteps.[3] Carl Watzinger, Edmond Frezouls, Louis Callebat, and Pierre Gros understand *fabrica* as the work executed manually, and *ratiocinatio* as the reflection on the work executed.[4] In the same spirit, Frank Granger translated *fabrica* as "craftmanship," and *ratiocinatio* as "calculation" or "technology," but he changed the position of the full stop between the first two sentences of I, 1, 1, so as to suggest that the architect's job – and not his knowledge – involves *fabrica* and *ratiocinatio*, whatever these terms may mean.[5]

Fabrica is the work accomplished by artisans, *fabri*, working manually to produce artefacts out of raw material. *Fabrica*, claims Vitruvius in

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[1] C. Cesariano, *Di Lucio Vitruvio Pollione de architectura libri dece traducti de latino in vulgare affigurati, commentati & con mirando ordine insigniti*, Gotardus de Ponte, Como, 1521.

[2] J. Martin, *Vitruve: Architecture, ou art de bien bastir*, J. Gazeau, Paris, 1547.

[3] D. Barbaro, *Vitruvius, De architectura*, F. Marcolini, Venice, 1556.

[4] C. Watzinger, "Vitruvstudien," *Rheinisches Museum für Philologie,* 64, 1909, pp. 202–223; E. Frezouls, "Fondements scientifiques, armature conceptuelle et *praxis* dans le *De architectura*," in J. J. De Jong, H. Geertman (eds.), *Munus non ingratum: Proceedings of the International Symposium on Vitruvius' De Architectura and the Hellenistic and Republican Architecture*, Stichting Bulletin Antieke Beschaving, Leiden, 1987, pp. 39–48; L. Callebat, "*Fabrica et Ratiocinatio dans le De Architectura*," in M. Courrént, J. Thomas (eds.), *Imaginaire et modes de construction du savoir antique dans les textes scientifiques et techniques*, Presses Universitaires de Perpignan, Perpignan, 2001, pp. 145–154; P. Gros, "Vitruve: l'architecture et sa théorie, à la lumière des études récentes," in *Vitruve et la tradition des traités d'architecture:* fabrica et ratiocinatio, l'École Française de Rome, Rome, 2006, pp. 173–209.

[5] F. Granger, "Vitruvius' Definition of Architecture," *Classical Review*, XXXIX, 3–4, 1925, pp. 67–69; F. Granger, *On Architecture*, Harvard University Press, Cambridge, Mass., 1934.

I, 1, 2 is the *continuata ac trita usus meditatio*, the continual and repeated thoughtful exercise of an activity, accomplished *manibus*, with hands (it is handwork), *ad propositum deformationis*, seeking to form (some artefact) *e materia*, out of raw material. Bodily involvement is a crucial part of any activity being categorized as *fabrica*. Thus, the crafts of carpentry and stonemasonry differ substantially from the arts of rhetoric or poetry.

Artisan activity involves repetition of movements performed almost mechanically. The repetitive character of the activity of *fabri* was snubbed by philosophers such as Plato, Aristotle, and the Stoics.

Plato held the view that artisans involved in hard manual labour are unfree people whose "souls are bowed and mutilated by their vulgar occupations" (Pl. *Resp.* 495d). The apparently spiritless repetition of movements made the philosopher claim that "the knowledge (*ἐπιστήμη*) possessed by the arts relating to building and to handicraft in general is inherent in their application" (Pl. *Polit*. 258d), implying that these arts are neither conscious nor intentional.[6] Of course, Plato's view on artisans and the knowledge they possess evolved over time, as did his views on art, and was not free of contradictions. In *Apology* (22d) Socrates acknowledged that artisans "knew many fine things" he was ignorant of, and therefore they were "wiser" than him. However this knowledge was not part of a wider body of knowledge, just as one would expect from a kind of knowledge "inherent in their application"; on the contrary, it was partial and obscured the "big picture," and as such detrimental to truth. As Socrates pointed out, "good artisans [...] have the same failings as the poets; because of practicing his art well, each one thought he was very wise in the other most important matters" (Pl. *Apol.* 22d).

Artisan knowledge was therefore incomparably inferior to the knowledge philosophers sought, or the *επιτακτική*, knowledge of "commanding" possessed by sovereigns and leaders (Pl. *Polit*. 260b; 261c); the latter was also required from architects, who supplied "knowledge, not manual labour." (Pl. *Polit*. 259e)

Zeno considered art involved in working on matter "a habitual activity ... making things by [following an established] path and [a tested] method" (SVF 72), likewise implying that it did not leave much space for the development of free will, which was severely curtailed by the constraints imposed by the material as opposed to liberal arts. Zeno's

[6] M. Masterson, "Status, Pay, and Pleasure in the 'De Architectura' of Vitruvius," *American Journal of Philology*, 125, 2004, pp. 387–416.

approach was partly adopted later by Seneca in whose view manual *artes* do "contribute greatly toward the equipment of life [...] [but they] have nothing to do with virtue" (Sen. *Ep*. 88, 20). Admittedly, Seneca calls his guidance of Lucilius a "handiwork" (Sen. *Ep*. 34.2), but it is a quite different kind of handiwork than the one applied on shoemaking or on stonemasonry: Seneca's "handiwork" fits well into the Stoic concept of knowledge as a process involving the body: spiritus, the force that permeates nature and breathes life into it, was after all, of corporeal nature. Zeno himself pointed out the embodied character of abstract knowledge, by his famous gesticulation: the hand with fingers stressed indicated perception; with fingers slightly contracted, assent; bunched up in a fist, comprehension; and with the other hand on top, holding it tight, knowledge (Cic. *Acad*. 144–145).

To accomplish their task, the artisan employs what is nowadays called tacit knowledge.

This kind of knowledge has recently been the object of serious research by hard science.[7] Instead of being dismissed as purely automated, it is now considered an indication of expertise, and in some occasions fundamental to creative activities such as design.[8] In activities performed with bodily involvement, such as the arts and crafts related to building, the movements of skilled practitioners depend less and less on conscious choices. Motor learning progresses from cognitive to associative before becoming autonomous.[9] Initially the carpenter or builder or plasterer has to receive instructions, employ their knowledge, and follow rules in a very conscious way in order to perform a movement. Either the instructor or they pinpoint the errors in a declarative manner. Gradually, the

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[7] S. E. Dreyfus, H. L. Dreyfus, *A Five-Stage Model of the Mental Activities Involved in Directed Skill Acquisition*, Storming Media, Washington, DC, 1980; F. Gobet, P. Chassy (2009), "Expertise and Intuition: A Tale of Three Theories," *Minds and Machines,* 19, 2009, pp. 151–180.

[8] D. Schoen, *The Reflective Practitioner: How Professionals Think in Action*, Routledge, London, 1992; B. Lawson, *What Designers Know*, Architectural Press, Oxford, 1988; N. Cross, "Designerly Ways of Knowing," *Design Studies*, III, 4, 1988, pp. 221–227; N. Cross, *Designerly Ways of Knowing*, Springer, London, 2006; N. Nimkulrat, "Hands-on Intellect: Integrating Craft Practice into Design Research," *International Journal of Design,* VI, 3, 2012, pp. 1–14; N. Lefa, "Can the 'Designerly Way of Thinking' Be Taught Remotely?," *Serbian Architectural Journal,* XIII, 1, 2021, pp. 39–54.

[9] L. Marinelli *et al*., "The Many Facets of Motor Learning and their Relevance for Parkinson's Disease," *Clinical Neurophysiology,* CXXVIII, 7, 2017, pp. 1127–1141; M. Filippi *et al.*, "Functional MRI in Idiopathic Parkinson's Disease," *International Review of Neurobiology*, 141, 2018, pp. 439–467.

movements consolidate, they become more accurate and refined. After a lot of practice, movements become precise and fluid, almost automated.[10] Autonomous movement is the indicator of the highest level of expertise, not of its lack.

Aristotle's approach was more nuanced. He, too, thought that artisans, in general, act as "inanimate objects." He pointed out, though, that they accomplish their task through "habit," while inanimate objects perform their activities "in virtue of a natural quality." On the other hand, master craftsmen, possess a kind of knowledge that allows them to see the big picture. They may not be better than fellow craftsmen in the accomplishment of tasks performed manually but they are "more estimable and know more and are wiser than the artisans, because they know the reasons of the things which are done" (Arist. *Met.* 981a-b).

Aristotle, then acknowledges that master-craftsmen could ascend to a level of expertise resulting in and requiring abstract thought.

Philosophers' and popular view created a vicious circle of derogation of heavy manual work. Although ancient Greek and Roman language had each a singl word, *τέχνη* and *ars* respectively, to name arts and crafts, mirroring a remarkable value system, the classification and comparative evaluation of *τέχναι* and *artes* was not uncommon; however, there was no consensus on which ones were included in each category; Varro was the only major Western scholar who in his lost treatise *Disciplinarum libri IX* listed architecture, as well as medicine, along with disciplines such as rhetoric, geometry or music.[11]

In Poseidonius' classification, adopted by the likes of Seneca the evaluation of *τέχναι* ranged from "common and low" to liberal (Sen. *Ep*. 88). Liberal arts were those freed from material constraints, and therefore appropriate for the social elite, political leaders and philosophers.

However, the manual construction of artefacts requires not just the skill to make complex hand movements but also the ability to solve novel problems that inevitably occur during the production of the artefact, even if this means applying known methods in different circumstances; especially if the products are highly complex such as buildings.

Moreover, the seemingly repetitive movements performed during an artisan's work are not all exactly the same, since the result of each one of

[10] *Ibid*.

[11] G. Boissier, *Etude sur la vie et ouvrages de M. T. Varron,* Hachette, Paris, 1861, pp. 333, 336.

them is instantly evaluated so that the next movement can amend any deviations from the path leading to the desired outcome. It also requires rational thought, oversight of the whole procedure, ability to foresee eventual problems and make the right choices, and taking the necessary measures to prevent undesired effects.[12]

Vitruvius seems to have understood how complex a procedure *fabrica* is, and pointed out that it is deliberate and driven by decisions based on reason: explaining what the objective of *ratiocinatio* is, he refers to the *res fabricatas sollertiae ac rationis,* the products of dexterity and reason, closely associating the work of artisans with skill and rational thought (Vitr. I, 1, 1).

In light of this, Plato's disrespect of "knowledge of action" appears to be too biased, while Vitruvius' claim that the artisan's knowledge is a mixture of embodied expertise and rational thought seems to correspond to the conclusions of modern research. Plato's "powers of guessing, which is commonly called arts" (Pl. *Phil*. 55e) are knowledge in the full sense of the word.

The author of *De architectura*, then, held tacit knowledge to an esteem comparable to that of declarative knowledge, which aligns him with modern scholarship, rather, than with his contemporary philosophy. This kind of knowledge did not fit well with the solid and watertight theories developed during the quest for the "first causes" on which philosophers normally embarked.

Furthermore, Vitruvius points out that *fabrica* doesn't solely use knowledge; it is a means to acquire the knowledge required by architects. Aristotle had pointed to the fact that master craftsmen knew the causes of things produced, but neglected to suggest how the knowledge was acquired. The implication of Vitruvius' statement is clear: contrary to a widely held view, the Roman military engineer told his audience (among whom Augustus' sister Octavia) that manual labour, always supported by rational thought, can be beneficial to the one who performs it in that it creates new knowledge. Aristotle had probably such a development in mind when he noticed that "the man of experience is held to be wiser than the mere possessors of any power of sensation, the artisan than the man of experience, the master craftsman than the artisan" (Arist. *Met*.

[12] G. Adamson, *Thinking through Craft,* Berg, Oxford, 2009; C. Gray, G. Burnett, "Making Sense: An Exploration of Ways of Knowing Generated through Practice and Reflection in Craft," in L. K. Kaukinen (ed.), *Proceedings of the Crafticulation and Education Conference,* NordFo, Helsinki, 2009, pp. 44–51.

981b). The process of acquiring knowledge culminates in the artisan's wisdom, which transcends manual expertise and crosses into the domain of theory: "art is produced when from many notions of experience a single universal judgement is formed with regard to like objects," Aristotle noted (*Met*. 981a). Single universal judgement is equivalent to abstract thought, that can transcend the given circumstances and allow the finding of solutions to whatever difficulty arises. The kind of knowledge on which this kind of abstract thought is based is, I believe, described by Vitruvius as *eruditio.*

Ratiocinatio is according to Vitruvius what allows the products of *fabrica* to fit into the world order. Application of reason and dexterity in handwork may suffice to construct a sound building, but it is not necessarily immediately part of the world order. Only when universal laws are respected, only if there is a parallel between the principles followed by a building, and the principles governing the world can building activity be called architecture. Vitruvius is quite clear: *fabrica*, craft, suffices to erect buildings, which are products of "dexterity and reason." But, architecture happens when, on top of that, a building is made also *proportio* (Vitr. I, 1, 1), which can be understood as meaning either "proportionally," "on the basis of analogy" – in my opinion "on the basis of analogy to the cosmos, the well-ordered universe," or "with the proportions" also of the cosmos, the meaning being roughly the same.

Vitruvius presents the principles that must be followed in I, 2, 1–9; they are: order, arrangement, eurythmy, symmetry, propriety and economy. Imitation of the most sophisticated product of nature, the well-formed human body, is a shortcut for ensuring the architectural principles emulating the principles governing the world are being followed;[13] the members of the human body form an ordered whole, are well-arranged, distinguished by eurythmy, keeping with symmetry, are appropriate, and respect basic guidelines for economy, however we understand these terms.

This is what *ratiocinatio* can accomplish. But, what is it after all? *Ratiocinatio* is closely related to *ratio*, reason. But it is a special kind of reason.

Cicero, who was admired by Vitruvius (IX, Pr., 17), claimed that there are two types of argumentation, induction and *ratiocinatio*, the

[13] P. Lefas, "A Contemporary Reading of Vitruvius' Opening Statements and a Proposed New Partial Translation of *De Architectura* I.1," *Architectural Theory Review,* XXVI, 2, 2022, pp. 326–344.

latter being a form of argument which draws a probable conclusion from the fact under consideration itself; when this probable conclusion is set forth and recognized by itself it proves itself by its own import and reasoning" (Cic. *De inv*. I, XXXIV, 57). "Deductive reasoning" is probably the most adequate translation of Cicero's, and Vitruvius' *ratiocinatio*.

Deductive reasoning begins from general principles and moves to the specific. In some cases, it can be indistinguishable from common sense reasoning, especially if the semantic content is familiar: e.g., the most powerful people rule over their community; Augustus has become the most powerful person in Rome; Augustus will rule over Rome.

However, deductive reasoning can be highly creative – think of a difficult mathematical problem: from a set of axioms, already proven theorems, and general principles one must proceed to indisputable results; the crucial thing is to determine which axioms, which theorems, and which principles must be evoked, and in which order.[14]

Vitruvius' *ratiocinatio* is probably what needed in order for an architect to transcribe the general principles governing the world (the knowledge of which, Vitruvius implies in I. 1,15, is shared with all intellectuals) into guidelines for architecture. This transcription is a highly original and demanding process. *Ratiocinatio*, deductive reasoning, is not the theory of architecture, but the method of transcribing the "theory" common to all disciplines onto buildings-in-the-making. And it creates new knowledge.

As is the case with mathematical problems, the "solution" of architectural problems, is not straightforward. Which principles, when, in which order, have to be applied in order for the transcription of the laws governing the universe into forms made of stones and mortar to be successful, is hard to decide; and they differ from project to project.

With each new commission, which requires a fresh application of deductive reasoning, architects become more experienced, they gain more knowledge of how to solve problems, enriching their repertoire, and ultimately their expertise. *Ratiocinatio* expands the architect's *scientia* (knowledge) by allowing them to approach each time anew, from a better position, the unique challenge of designing a building.

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[14] A. Wohlgemuth, "Deductive Mathematics: An Introduction to Proof and Discovery for Mathematics Education", *Mathematics and Statistics Faculty Scholarship 1*, 2003, https://digitalcommons.library.umain.edu/mat_facpub/1 (accessed November 24, 2022).

In this sense, Vitruvius is in line with Aristotle who seems to have claimed that new knowledge can be obtained from general principles by applying deductive reasoning:

> Scientific Knowledge can be communicated by teaching, and that what is scientifically known must be learnt. But all teaching starts from facts previously known [...] since it proceeds either by way of induction (*επαγωγή*), or else by way of deduction (*συλλογισμός*). Now [...] deduction works *from* universals; therefore there are first principles from which deduction starts, which cannot be proved by deduction; [...] Scientific Knowledge, therefore, is the quality whereby [...] a man knows a thing scientifically when he possesses a conviction arrived at in a certain way, and when the first principles on which that conviction rests are known to him with certainty (Arist. *NE* 1139b).

Aristotle's argument, I believe, further indicates that Vitruvius' *ratiocinatio,* deductive reasoning, is related to explicit knowledge. A bipolarity therefore is shaped: on one side are *ratiocinatio* and *disciplina*, depending on declarative knowledge, and on the other *fabrica* and *eruditio*, which depend heavily, but not exclusively, on tacit knowledge.

In his effort to help upgrade architecture as a respectable activity Vitruvius followed in the footsteps of Varro. Varro's treatise has been lost, as did several other treatises on architecture, although most of them probably dealt with specific issues or buildings, rather than general principles. We are therefore left with the question of how much of what Vitruvius writes are his own ideas or are taken from other sources. This given, Vitruvius' first set of arguments focused on clarifying that architecture requires both declarative and procedural knowledge; it requires on one hand manual skills and rational thought, and on the other hand knowledge of the principles governing the world, and the ability to transcribe them into the building-to-be.

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Architecture and Philosophy: The Failure of Translation

ABSTRACT: In the connection between architecture and philosophy, the "and" connects and separates at the same time. In classical rhetoric, the concept and technique of ekphrasis stands for this. Ekphrasis means transfer from the medium of sensual experience into the medium of language and back into the realm of sensual imagination. As will be shown here, however, the "and" unfolds its full functionality only in the failure of ekphrasis. Only in failure does the "and" become the medium of intellectuality and sensuality, that is, when the "and" no longer designates a center and a place of symmetry, but when it describes a marginal condition, when it shifts the discourse toward the margins, when it clears the space and gives freedom a place. An example of the creative failure of ekphrasis is the Memorial to the Murdered Jews of Europe in Berlin by Peter Eisenman. In the failed translation of sensory and cognitive experience, Eisenman forces architecture and philosophy into a unity that cannot be resolved into a dialectical third. Thus, the memorial creates a void in the center of Berlin that becomes a trigger of sensual and intellectual imagination for the unimaginable of the Holocaust.

KEYWORDS: ekphrasis, *enargeia*, architecture, Holocaust, philosophy, memorial, Eisenman

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"And" is both a necessity and an impossibility. It is always more than conjunction and translation. In the connection between architecture and philosophy, the "and" is simultaneously connecting and dividing. Or should we say that the "and" keeps two things at a distance, both of which vie for the same thing, namely the way man is in the world.

In this sense, the "and" signifies a certain gain for both sides: the material practice of architecture gains its conceptual extension, while the thinking of philosophy receives its necessary orientation in everyday life. With one reservation: this transfer can never transpire fully and completely. It can only succeed when both architecture and philosophy refuse to engage in mimesis of their counterpart medium, striving instead to find the gap and problematize the in-between.

The gap is the gain. This shows that the "and" is a dynamizing medium, which sets both architecture and philosophy in motion, at the same time preventing them from being absorbed in each other. The "and" keeps the processes open, it marks the place of the difference. In fact, it is only in the failure of translation that the "and" as conjunction can unfurl its full function, when it calls, strives and yearns for a translation, without actually reaching it.

However, architecture enters the equation with philosophy as a process at the conceptually-theoretical, constructively-material and performatively-sensual level. Thus, architecture manifests itself at three levels: thinking, producing and acting. Each of these levels relates to philosophy in its own way and presents its own "and."

In classical rhetoric, the "and" is expressed through the concept and the method of ekphrasis. Ekphrasis means transference from the medium of sensual experience into the medium of language, which does not exhaust itself at reaching the latter, but attempts to evoke in the listener a vivid representation of what is being described. In ekphrasis, the language becomes the "and." It only becomes the medium of the new when the transmission process has failed, when "and" no more describes a center and a place of symmetry but instead a marginal condition, when it displaces the discourse towards its edges, when it clears the space and gives place to freedom. How does, then, the "and" function in failure? The function of the "and" is to enable creativity in architecture and philosophy.

Such a place of creativity in the failure of ekphrasis is the Memorial to the Murdered Jews of Europe in Berlin by the architect Peter Eisenman. In the failing translation from sensual to cognitive experience,

Eisenman forces architecture and philosophy into a new kind of unity which cannot be resolved in a dialectical third stage. The memorial's refusal of representation creates an emptiness in the center of Berlin, which triggers a sensual and intellectual imagination for the unimaginable of the Holocaust.

This text will first attempt to clarify the concept and the act of ekphrasis (ἔκφρασις), extending it by the concepts of *enargeia* (ενάργεια) and *energeia* (ἐνέργεια), followed by an introduction to the Memorial to the Murdered Jews of Europe, on the basis of which, it will explain the failure of ekphrasis as catalyst for consciousness processes.

Enargeia and *Energeia*

The term "ekphrasis" generally describes the process of transferring visual into conceptual experience. This presupposes switching from the medium of image to the medium of language. This happens whenever we speak of architecture and describe our experiences therewith. However, defining it simply as transferring visual into linguistic representations does not do justice to the cultural significance of ekphrasis. Aelius Theon, a Greek rhetorician from the first century CE, writes: "Ekphrasis is a descriptive speech which vividly brings the subject shown before the eyes."[1] The emphasis here is on visual demonstration. Cicero also writes of *illustratio* or "bringing into the light" as well as *evidentia* or "being before the eyes."[2] According to these, ekphrasis is transferring images into words, in order to make the description less abstract and to stimulate the listener's imagination by causing images and visions in their mind.

An examination of ekphrasis, which means describing architecture in word or writing, implies that ekphrasis is not a neutral action, and therefore fundamentally differs from factual and scientific reports. The mental images it causes are no simple pictures, they have already passed through two media and are therefore the result of a double translation. This process inscribes itself in the images and leaves a trace in them. The resulting images are tinged by the patterns of conceptual thinking, without fully adopting its logical structure.

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[1] Quoted from R. Webb, *Ekphrasis, Imagination and Persuasion in Ancient Rhetorical Theory and Practice*, Ashgate, Farnham, 2009, p. 197.

[2] For more on this, see F. Graf, "Ekphrasis: Die Entstehung der Gattung in der Antike," in G. Böhm, H. Pfotenhauer (eds.), *Beschreibungskunst – Kunstbeschreibung: Ekphrasis von der Antike bis zur Gegenwart*, Fink Verlag, München, 1995, p. 145.

Moreover, ekphrasis always transcends describing only visible things. In the sense of classical rhetoric, ekphrasis is always paired with *enargeia* and *energeia*, the power of producing images and sentiments. "The vivid aspects (*enargeia*) of a description put what is discussed before the eyes of the audience by using words that signify motion or actuality (*energeia*),"[3] as Caroline van Eck puts it. The paradoxical constellation of ekphrasis manifests in its striving to transcend the verbal by using words.

Ekphrasis is the vivid description, the *energeia*, of an image or an architectonic situation, which induces in the listener an effect, *enargeia*. Architectonic perception always being more than visual experience gives ekphrasis a special position in architecture. If it based its transference only on the visible, it would fall short of architecture's complexity, the latter ekphrasis being experienced with the totality of our senses – balance, sight, smell, hearing or corporeality, to name a few.

By demanding a way of "thinking in visible and tangible procedures,"[4] as Friedrich Nietzsche calls it, not abstract but in images, ekphrasis appears as a cultural technique which is the very foundation of thinking. In his work *On Truth and Lies in a Nonmoral Sense* Nietzsche writes about the peril of concepts becoming rigid[5] (*Hart- und Starr-Werden*), and about the threat that the loss of sensually-aesthetic content of concepts poses for the faculties of cognition and perception. Every thinking is deficient if it stays abstract and trapped in ossified concepts that do not allow for free association of images and sensual experience, thus suppressing its imaginative dimension that is the very guarantee of the concepts' humanity and vitality.

But we can also go further back behind Nietzsche to Immanuel Kant. With him, the process of ekphrasis becomes understandable as the free play of imagination and understanding, in which the linking of image and language is a prerequisite for the images to "let one think more than one can express in a concept determined by words."[6]

Mediated through language, images become thought images. Thus, by means of ekphrasis, reflection enters architecture, as critical reflection

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[3] C. van Eck, *Art, Agency and Living Presence: From the Animated Image to the Excessive Object*, Walter de Gruyter, Berlin / München / Boston, 2015, p. 31.

[4] F. Nietzsche, "[11 = U II 9. Mp XIII 4, 6-8. 47. Sommer 1875]," *Sämtliche Werke*, *Nachlass 1875–1879*, vol. 8, Deutscher Taschenbuch Verlag, München, 1999, p. 203

[5] F. Nietzsche, *Ueber Wahrheit und Lüge im aussermoralischen Sinne*, *Sämtliche Werke*, vol. 1, Deutscher Taschenbuch Verlag, München, 1999, p. 883.

[6] I. Kant, *Critique of the Power of Judgment*, Cambridge University Press, Cambridge, 2000, p. 193 (§ 49).

when the insights gained through the process of ekphrasis get applied to the images which had initiated it. In this sense the designing architect works critically-reflexively, imagining the future architecture by means of a process of ekphratic mediations between the image processes of sketch, drawing and model.

In architecture, we can distinguish between two procedures of ekphrasis: first as a mode of communicating architectural experience to others, through speech, literature, itineraries and articles in scientific journals, but also in tourist brochures, blogs and tweets; second as a mode of reflecting on architecture which, by freely combining play and understanding, breaks through the automated and unconscious perception in everyday life. This is the case whenever the beholder surpasses the mere form and its utility by asking in which way the building or building complex relates to the general cultural force field, or, to speak with Ernst Cassirer, what is its significance as a symbolic form.

Through ekphrasis, architecture becomes eloquent and an intellectual and artistic medium. It liberates architecture from the realm of unconscious, ritual practices, whether in the religious and mythical, or in the everyday sense. Architecture, which as a material practice is bound to the experience of presence, gains access to the other, particularly the absent. Wherever it refuses to stop at the dry concept and aims at imagination, ekphrasis pushes perception beyond the mere identification of things and opens architecture up to poetics.

The Big Invisible Force

The significance of ekphrasis for architecture especially becomes clear when it fails, when the transfer into language and further into images meets resistance, that is when architecture cannot be reduced to concepts. Then the beholder becomes the center of an active, searching process of transferring the irritating experience into language and comprehensible images. Peter Eisenman's Memorial to the Murdered Jews of Europe in Berlin is such architecture, which deliberately prevents simple conceptualizations and thereby initiates a complex process of reflection. The monument is not comparable to known architectural experiences, it cannot be subsumed under established concepts and imagery.

The Memorial to the Murdered Jews of Europe consists of 2700 concrete cubes, called stelae, arranged in a gridiron pattern. The stelae are identical in base but differ in height. The latter changes continuously

from one stela to the next, creating a dynamic, wavelike surface seen from a distance, intensified by the ground between the stelae also undulating. While stelae at the edges are at ground level, towards the center one can dive deep into the concrete canyons between them. Furthermore, additional tension is created by the fact that each stela has a slight and unique slant to it. This creates the impression that the whole field is being moved by a big, invisible force.

The irritation with this arrangement is exacerbated by the fact that there is no hint to the purpose of this football field sized memorial. But even if one knows its dedication, even then it remains mysterious what the concrete blocks of different heights have to do with it. They elude any explicit explanation, the field remains oddly empty. It could be said that this is architecture at the zero-point of aesthetics. Yet, it goes beyond irritation, for everything that is unknown and incomprehensible not only causes unease as an affect, but also triggers a process of reflection and active searching for conceptual and visual analogies, in order to recognize the unknown, to give it a meaningful place in the total framework of culture's symbolic forms.

Due to its muteness, the memorial, which was inaugurated in 2005 after long debates, two competitions and several revisions, has been controversial from day one. Critics bemoaned its abstractness, which could easily have served to commemorate any other historic event. For example, in Hans-Ernst Mittig's provocative words, "the demise of Hitler's sixth army at Stalingrad."[7] More generally, many doubted the very possibility of artistically and architecturally expressing such an event as the Holocaust. How would one go about representing the unrepresentable which transcends human imagination. James E. Young has therefore introduced the concept of "Antimemorial."[8] Gerhard Schweppenhäuser spoke of aesthetic and ethical *aporiae*[9] which the monument is bound to create. This articulates the difficulties in searching for concepts and images to describe the indescribable of the Holocaust.

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[7] H.-E. Mittig, *Gegen das Holocaustdenkmal der Berliner Republik*, Kramer, Berlin, 2005, p. 52.

[8] J. E. Young, "The Counter-Monument: Memory against Itself in Germany Today," *Critical Inquiry*, XVIII, 2, 1992, pp. 267–296.

[9] Comp. G. Schweppenhäuser, "Das Denkmal-Dilemma," G. Schweppenhäuer, J. H. Gleiter (eds.), *Wegschauen? Weiterdenken! Zur Berliner Mahnmal-Debatte*, Universitätsverlag, Weimar, 1999, pp. 20–27.

The peculiarity of the memorial consists in the productive failure of ekphrasis, this is program and essential part of the concept of the memorial. This failure addresses the impossibility of representing the unrepresentable Holocaust and the extermination of the European Jews. The concrete field does not depict anything, which means that it refuses to transfer the Holocaust to the visual level of architecture. It rejects visual reproduction and therefore the iconography of the Holocaust. This sets it apart from other monuments, like Alfred Hrdlicka's Memorial against War and Fascism (1988) in Vienna, Nathan Rapaport's Monument for the Fallen of the Jewish Ghetto Uprising (1948) in Warsaw or Memorial for the Deportations (1985) in Berlin by Jürgen Wenzel, Theseus Bappert and Peter Herbrich. These memorials utilize drastic imagery of tortured bodies which aims to cause empathy, thus limiting the memory of the Holocaust to a specific phase, keeping it within narrow boundaries of interpretation.

Productive Failure

The Memorial to the Murdered Jews of Europe approaches the issue differently, using the very difficulties of achieving ekphrasis to instigate reflection. What is notable is that ekphrasis can very well serve to associate metaphors and images; these however are deficient, for only providing weak a relation to the Holocaust. They are weak metaphors. For instance, the slanted stelae, reminiscent of tombstones in old Jewish cemeteries, the deep corridors evoking canyons in a rocky and barren landscape; if one observes the memorial's rectangular, gridiron shape, images of Nazi marches at the Nuremberg Reichsparteitag come to mind. Eisenman himself allowed even for far removed associations, for instance of a heaving cornfield.

However, the so induced images and visual associations are weak, they only loosely or partially connect to the Holocaust, which is predominantly associated with pictures of concentration camps and crematoriums, heaps of bodies and scared people at the selection ramps in Auschwitz, or simply with the publicly worn yellow stars of David, with which it all began. The memorial eludes the known descriptions and visual associations and redirects the ekphratic image emission to peripheral themes, only indirectly pertaining to the Holocaust, like cemetery, desert, ruins and cornfields. The failure of translation keeps throwing the beholder back to a pre-linguistic position.

Figure 1. Peter Eisenman, Memorial to the Murdered Jews of Europe, Berlin, 2005.

Figure 2. Peter Eisenman, Memorial to the Murdered Jews of Europe, Berlin, 2005.

The open nature of the memorial calls for continuous work on the ekphrasis. Eisenman's monument does not in fact reject images, on the contrary, it develops a procedure of visualizing even the unrepresentable, but moving from the edges of visual memory inwards. Each beholder can individually venture this journey, according to their intellectual and emotional capacities, with the chance to introduce personal, familial and national traumas, experiences and thoughts into the reflection of genocide and the Holocaust. The documentation center situated underneath the memorial provides the option of focus on the subject of Holocaust itself.

The case of the Memorial to the Murdered Jews of Europe illustrates the productive failure of ekphrasis, whereby the aspect of productivity is not limited to reflection alone, it also includes the acting force of *enargeia*. The search for concepts and images is a vitalizing act, not only mentally but also emotionally. This relates the memorial to the affective-aesthetical notion of the sublime (*das Erhabene*), which is not unproblematic if we accept Kant's strict definition of the term in his *Critique of the Power of Judgment*.[10] According to Kant, the sublime is solely an aesthetic category of experiencing nature, it does not appear in man-made environment. However, the use of this term has a place in the context of the memorial, as the heavy concrete blocks give the impression that they are being moved by an invisible and uncanny force, whose source and cause remain a mystery. This force can however be intuitively discerned and given historical and social context in the process of reflecting upon the murdered Jews of Europe.

The Memorial to the Murdered Jews of Europe binds ekphrasis and *enargeia*, verbal reflection and emotional experience in a close relation, that cannot be resolved on either side. It sets in motion dynamic processes of questioning and scrutiny, without allowing these processes to ever be completed. The memorial keeps the connection between ekphrasis and *enargeia* open, thus not allowing for an end point or a conclusion to historical memory.

[10] For more on this, consult the elaborations in J. H. Gleiter, "Ästhetik am Nullpunkt," *Urgeschichte der Moderne: Theorie der Geschichte der Architektur*, Transcript Verlag, Bielefeld, 2010, pp. 87–104.

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Diptych Logic: Interview with Peter Eisenman

KHŌREIN: In principle, how do you see the relationship between architecture and philosophy?

PETER EISENMAN: I'm only interested in architecture and philosophy in the sense that we need to change the priority from architecture *and* philosophy to architecture *slash* philosophy. In other words, there should not be second nor primary element in that relationship; it should be the same together: architecture / philosophy, philosophy / architecture. And the *and* needs to be erased.

For example, there's no priority in a painterly diptych between left and right, while in a literary diptych, in A + B, A always gets a priority. So in your example, architecture has the priority? What we're trying to do is overcome that priority. That's one of the things in my projects, to overcoming priority in duality.

KH: You would put a slash between these two disciplines. What's the difference between slash and conjunction here?

PE: There should be no temporal priority in studying precedents. If we talk about ideality and architecture, what we're trying to do is to say that ideality is not first, nor second. I don't think the *and* is useful. There is no duality... My work is trying to overcome ideality in architecture.

KH: "Architectural philosophy" is your phrase. You use it in a text published in *Journal of Philosophy and the Visual* Arts in 1990, when speaking about The Wexner Center for the Arts. You didn't say philosophy of architecture, nor philosophy for architects. The question is what does this syntagma mean for you?

PE: Maybe Alberti's book could answer that. Alberti dealt with the problem of relationship in architecture. This was a very famous part of his

theory, presented in his 10 books. Part to whole means that there is a priority or duality between them. Whole is both complete, more complete than part, but incomplete. It needs part. Part to whole is really important to all architects, whether today, or 500 years ago. This idea that still captivates them, whether they're for environment or function, etc. It is dominant.

Part to whole presupposes, again, an ideality. And what I'm writing about is showing that, in fact, Alberti may have written about part to whole, but in fact in his architecture he was far from that. Most theoreticians and critics say, well, you don't have to look at Alberti's buildings, because it's in the text, the theoretical text. I'm doing a book on the five buildings of Alberti, and I want ot show that this is a fiction that he was interested in, but it was not in any of his buildings.

KH: How is Alberti using philosophy? Or theory?

PE: He uses theory, not philosophy. In Latin the title of his book is *De re aedificatoria*. It's hard for me to translate it; Manuel [Orazi] probably could translate it better. But Alberti was not interested in philosophy. He was interested in a theory of building. He was interested in space. He was the first architect to write the word *spatium* in an architectural text. Vitruvius never mentioned it.

So, what is space? Space became a really interesting idea, because it became a substance, not just empty. Seeing for an architect; to see space as solid is not what a philosopher does. Philosophers can't see solid space. Architecture has to deal with the idea of solid space.

KH: Alberti is a writer, as you are. He wrote several treatises.

PE: He was a brilliant man. He wrote a book on painting. He wrote a book on the family, too. He wrote many books. Alberti is an intellectual. People didn't like his buildings because they say he is too intellectual. He thought too much about what he was doing.

KH: There are two essays of yours, Peter, I'm very interested in, because of my studies about translation. In both, you mention Alberti. These essays are "Misreading Peter Eisenman" (1987), and "Architecture as a Second Language" (1988). For decades you were interested in architecture as a text. Maybe you changed your mind about that, going back to

form or space. I think this concept of architecture is fascinating, because it has to do with translation.

PE: Yes, Manuel. I'm working on language. Music is a first language, painting is a first language, but architecture isn't. You have to teach people to take the color and the shape and the form and the space, and do something with it. Therefore, it was not a first language. People don't understand that; they think architecture has to do with building. It may have to do with building, I don't know.

KH: You said more than once that Jacques Derrida was one of your mentors. Why did you spend time with philosophers?

PE: First of all, I spent time with painters who are philosophers. To me David Salle is a philosopher. Richard Serra, too. Michael Heizer is a philosopher. To me, dealing with people who are of philosophic bent, let's say, is important. Of three major architectural critics of the past half century, Banham, Tafuri and Rowe, I had interactions with two of them, Rowe and Tafuri, and it was important to me. In those interactions, I learned a lot about what I was doing. I didn't learn much from architects.

From Jacques I learned the most important... The reason why deconstruction was important to me and remains to be important to me, is that there is no one to one relationship between the sign and the object. In other words, there is what he called a free play of signifiers.

KH: In the relationship between Peter and Jacques, what is the position of this *and*? How can you pose this & between an architect and a philosopher?

PE: We did a book *Chora L Works* together with Jeff Kipnis. Jacques hated that we punched holes in the text. It was always my intention to mark the book with the absence. In other words, we paid a lot of money to cut the holes in the book. He really said, "Why are you doing this? I want a book without the holes. I want to be able to read it."

We were designing the Parc de la Villette, and Jacques said to me: "Where are the trees?," because it was a garden. I replied: "Where are the trees in your texts?." "Where are the benches?," he said. "People sit down." I said: "Where are the benches in your projects? There are no benches in them." In certain ways, I learned a lot, but it was very difficult.

KH: In the book *Peter Eisenman: in Dialogue with Architects and Philosophers* we read that you say: "I realized that one of the important issues in architecture was the ability and capacity to be able to *see* as an architect, and I realized that philosophers don't *see*. Certainly, they do not see as architects. It is difficult for a philosopher to understand what is meant by *seeing* architecture." Could you explain what you mean by that? Why is it difficult for philosopher to understand what is meant by seeing architecture as an architect?

PE: I can tell you what it means to see as an architect. You see what's not present, what's present in absence. That's what made Palladio great. That everything he was talking about was not actually there. It was in the mind. Being able to see what isn't physically necessarily present... that architecture is not only presence, but presence of absence. What is presence? In my book on Palladio, I explain clearly for hundreds of pages what the presence of absence is for architecture.

I teach students to see as an architect, as opposed to just seeing the physical. The objects they make have no conceptual being, no discipline.

KH: What is the relation between concept and discipline then?

PE: Discipline is the collected wisdom of concepts. It is a framework. Discipline is a framework for concepts.

KH: Is something entirely new possible in architecture?

PE: First of all, your question is problematic because if I knew, it wouldn't be new. I'm not interested in the new, because it's old, I guess. I've never been interested in the new.

KH: What about women in architecture?

PE: Architecture is a phallogocentric discipline.

KH: Can you say what is your best project?

PE: Obviously the Berlin project is the most significant, but I don't think it's the best. I think that the Wexner, Cincinnati and the Cultural Center in Galicia are also very good projects. One of the houses, probably House X is. I don't know. What makes a good project for me is that it has a disciplinary

precedence and articulates that disciplinary precedence in a text. I think that some of my projects do that. I don't know which is the best. But some of them are better than others. I have to think about it again.

KH: Is it possible to talk about style in architecture? If it is possible, do you have your own style? How do you see relation between architectural object and aesthetics?

PE: I think that aesthetics as a philosophical category is really important, and I would like to think that we are always searching for ways of deploying an aesthetic frame. About style... I don't know what that is. I think my work has a core.

KH: Let me add something about style. Rudolf Wittkower wrote that Carlo Rainald designed Church Santa Maria in Campitelli in Rome, that you love so much. Rainaldi did the church in a certain style, he was forced to do it in a style he didn't like. He was forced to embrace it. It was the style of his father Girolamo. I want to ask you if you were ever forced to embrace a style you didn't like?

PE: Never, Manuel. I think Santa Maria in Campatelli is an amazing work, very different than any. Yes, it is not pure baroque. My view of Rainaldi is that he is a cross between Palladio and Borromini. There's Palladio, there's Borromini; that is very poignant in his work.

KH: What is a meta-project for you?

PE: What is a meta-project? I think precedence, for example, is a meta-project. I think that to understand the role of precedents in creation is a meta-project. I teach that as a primary thing, because my students need to know the nature of precedents. I'm interested in architects who deal with that kind of idea. Certainly, Alberti was one, Palladio was another. There are many architects who were dealing with precedents. I believe that education, that is, the discipline of architecture, depends upon the understanding of precedence. Without understanding you can't move forward. You have to understand what has been.

Interview conducted by Petar Bojanić, Snežana Vesnić, and Manuel Orazi.

Horizons of Theory: Interview with Sarah Whiting

KHŌREIN: You rarely explicitly speak of philosophy. You use "theory," "theoretical," and sometimes "intellectual." Then, architecture *and* philosophy – how do you see this relation?

SARAH WHITING: We've used *theory* for a long time, which is also a little bit more embracing than philosophy. Theory is not just the discipline of philosophy, it includes legal studies, literary criticism, etc. – it is a broader field than philosophy. And I think architecture relates to that broader field. Architecture and design are inherently cultural, and so I think we have a responsibility to understand that cultural landscape. And for me that cultural landscape includes writers who make you think about relations between people, relations of how we live in the world, relations between subjects and objects, and for me also, politics. That's why I reference certain writers.

In terms of the *and*, I'm fascinated by your journal focusing on that conjunction. Those 3 little letters can have so much impact. Although honestly, I would probably resist and say I see architecture already having this cultural realm *within* it.

KH: You often mention Rorty, Deleuze, Derrida. Did you read the French philosophers? And, since your mother is French, have you read them in French?

SW: Yes, both in French and in English. It's also because my father taught French and French literature. I've read Derrida and Deleuze more in English than in French, but I love to consider the importance of translation, and like looking at different versions. I like reading these writers, especially Derrida, for the sheer pleasure of language, as well as the sophistication of argument, that I think is very present in their writing.

KH: I studied the issue of translation in architecture, and I still think it is undervalued. Because it's not only a question of translating a drawing

into a building. With Antoine Berman, I think that translation became an autonomous form of knowledge. One can understand things due to translation, just like you can understand many things by reading or writing. But I think that architects often don't have the consciousness about that.

SW: Exactly, Manuel. I would say that translating, and also the work of editing, is very important, and that both are very much part of our work as architects as well as our work as writers. There's nothing more exquisite than a beautiful sentence, and the same is true in architecture. Translation is part of that, it's also the almost physical work on and of language. I am attracted to certain theorists is because I feel that their writing *constructs*. It's too easy to use that parallel "it's like a building," but there is a real craft to writing.

KH: Where do you see the significance of the conjunction "and" in the field of architecture and politics, or architecture and society? You have paid particular interest to how the built environment shapes the nature of public life – where do you see the capacity of philosophy to help architecture in this "shaping?"

SW: I'm interested in philosophers, theorists, and writers (novelists even) who are interested in the question of the social and the public. How do we interact together in a world? How do we live together in a world? Philosophy helps us understand that. One of the people you don't mention here, who is incredibly important on this question, is Simone de Beauvoir. As she constantly reminds us: you think you know the other, but actually you're always kept from fully knowing the other. That gap is something that is very easy to forget as a designer; we can make the mistake of assuming a generalized other or a generalized public. If you read someone like Simone de Beauvoir, or if you think of this idea of Deleuze that I cite in the introduction to the texts of Ignasi de Solà-Morales, where Deleuze is saying that it is the idea of the group not as a bond that homogenizes everyone, but the group as something that pushes against the individual, that compels you to de-individualize yourself. To me, that's incredibly powerful and not easy as a concept. If you drop that specific idea into how we think about the city, it makes you understand the city better, and it also makes you think about how to design for individuals and for groups in a given city.

KH: Here is the quote of Deleuze from the Introduction to the book you have just mentioned, *Differences*: "The individual is the product of power. What is needed is to 'de-individualise' by means of multiplication and displacement, diverse combination. The group must not be the organic bond uniting hierarchized individuals, but a constant generator for de – individualisation." The significance of the group: does the group serve to de-individualize the individual or on the contrary, does the individual create the group? We think that architectural engagement is important to you.

SW: Yes, that's the very quote I was talking about. And yes, engagement is important to me. Buildings that are *projects* engage a public. They are buildings that you can't ignore, and that actually have an impact on you – on your perception, on your movement, and/or on your being. They also have an impact on how we think about architecture. So, engagement can either be engagement physically with the building – being struck by the building, being affected by it, being thrown into different relationships. Even through publications, a building can make you think differently, you can engage with it as a project. I think projects engage their audiences and actually create audiences.

KH: You worked in Peter Eisenman's studio. Peter frequently used the word concept, and "project" only later. What can you tell us about how you understand their relation?

SW: I would say that already when I was working for Peter, he had already shifted to using the term project, and that at that point, he used the concept when he was writing about other figures. He shifted to the project maybe when he started doing projects that were beyond the houses. Here I'm speculating, so I may be entirely wrong, but the distinction makes sense to me. His houses were part of his understanding architecture conceptually. I think a house remains something that is more singular and more theoretical for Peter. In his work the project is also an exercise of the concept. I think there are fewer and fewer architects who are engaging just in the concept, but that might also be my bias, my interest in the project, the future, and the projective.

KH: Without the project, there is no future and there is no collectivity.

SW: That's my sense. Yes, exactly. I don't know if everyone would agree with me, but that would be part of my argument – that the term project is absolutely tied to the construction of a future, even if it is an envisioned future.

KH: But is there a project without the concept?

SW: I would say no. I think that's a very important point. A project is not just a fulfilling of architecture, it's not just "oh, 'a very beautiful building," and "look how that cantilever hovers so powerfully or so elegantly." To me, you can have great or beautiful architecture, perhaps, that is not the architecture of a project. Beautiful architecture does not always map out a future. A project for me is architecture that has a concept.

KH: Your dissertation thematizes the words "public," and "critique." Almost certainly, your insistence on "collective subject" or "collective subjectivity" can be read as a kind of architectural social ontology or architecture as social ontology. Critique certainly indicates a critical theory of society. Who were you reading when you were thematizing these concepts?

SW: There is a little bit of Habermas's influence, but more through people like Nancy Fraser and Craig Calhoun. Remember that Habermas was translated into English very late. His translation into English was very convenient for people like me because it coincided with a critical reading of his work. I took a class with Seyla Benhabib at Harvard while I was working on my dissertation. She was, you know, very beholden to Habermas, but pushed him in new directions. Nancy Fraser is an even greater touchstone for me. Fraser sees the public sphere as a series of umbrellas, a series of groupings – we are all members of multiple public spheres, rather than belonging to some mythical, singular public sphere. Her more recent work has been phenomenal in terms of offering transnational readings of the public realm. She's just a fantastic scholar for opening new directions that impact all of us interested in the public. Someone like Fraser helps to turn some of the thinking that is more philosophical to the social. Finally, Simone de Beauvoir was in the background, but not foregrounded. I'm interested in de Beauvoir's fiction. I think her politics comes through her fiction slightly better than through her non-fiction. There's a lot of fiction that actually influences how I understand social relations and how we design for different publics.

KH: We spoke about your introduction to the book *Differences: Topographies of Contemporary Architecture*. It was published in 1996. Nearly three decades have passed since. How do you see the "change" in topography of contemporary architecture in the intervening period?

SW: What fascinated me with Ignasi was he was really trying to struggle to articulate and capture a very specific moment. What would he think of the moment today? I think there are very few architects today who are reading a lot. I'm going to digress, but let me, please, as I think it's relevant to this conversation we are having: There's a very interesting and important article on the current decline of the humanities that came out in the *Atlantic*, maybe last month or the month before. Obviously, the rise of media has led to the decline of reading. And so, people receive their information in different ways today, and that change has had a huge effect on our field of architectural thinking. Even if you get beyond architectural philosophy or architectural theory, let's just say *architectural thinking*. What common thinking do we have that unites us in a school talking about architecture? It's harder to find those common texts today. For me that's the biggest change in the topography of contemporary architecture; you no longer have that landscape of common references. Or if you do, they're abbreviated, and they tend to be mediated references. We now live in a culture of speed that doesn't give us time for extensive thinking. You don't have people taking the time to read things that are important and interesting. The acceleration of our moment has weakened theory specifically, and thinking more broadly.

KH: You often insist on the future. The site of WW Architecture features the following sentence: "We use ideas to hold architecture together, and to assure that tomorrow is always at least a little better than today." What is the new that we can expect or seek in architecture?

SW: I'm more interested in the future than I am in the new, and I think there's an important distinction between the two. The new is a necessary component of capitalism, of the need to constantly provide a market for new things that replace old things. Therefore, we all find ourselves constantly striving for the new. I would oppose this economic way of thinking and I think universities *have* to oppose it. The new seems very individualized, whereas for me the future is something that we *share*.

KH: At that conference *ISSUES? Concerning The Projects Of Peter Eisenman*, held in Belgrade in 2013, you spoke about the crisis of the object in the contemporary discourse of architecture. Varying one of Manfredo Tafuri's theses, you noted: "I would say today that the end of the object, or this discourse of the object, of its end, is tied to the eclipse of theory." What is the current status of the architectural object as such?

SW: I don't know if that's a particularly American question, or situation. It's even more acute right now, especially when talking about the urban. There are urban thinkers in this country – and here, I'm going to speak in grossly generalized terms – that tend to think "we *either* talk about the social, *or* we talk about built form as form and space." It's as if there are two different camps. That distinction between form and objecthood on the one hand, and the social on the other hand has been in place for a long time now in urban theory. In architectural theory we were interested in the relationship of the subject and the object, in the object as a whole, as a totality. That approach was thrown into question, maybe 15 years ago, by saying "rather than talk about the object, we really need to talk about how much energy a given object uses up," where the materials are coming from, etc. We moved from thoughts to facts.

It's getting harder and harder to talk about the architectural object without being called irresponsible because theoretical talk doesn't have facts or data, but only ideas. This crisis of architectural theory is even more serious today than it was when we were together in Belgrade, at that conference, partly because the social and climatic issues are so pressing here, right now. And don't get me wrong: these issues are terribly critical right now, but I strongly believe that you need to talk about climate and architecture, while also acknowledging the role that the object plays in constructing our given world and our potential futures.

KH: "Projective architecture" – did you coin this phrase? Is this your phrase?

SW: I *think* it is; I think that Bob Somol and I coined it. I don't know if other people have used it before us, but it's definitely tied to us. So I'm not going to say that we are the only ones who've ever used it, but I think that it's associated with us. The key for me here is that architecture is projective, and that we've never used the term post-critical. There's a big and very important difference between the projective and the post-critical.

The projective includes the critical and extends it to the future. We understand the critique, but now what do we do about it? Some people are saying you don't need to spend that time with the critique or the conceptual, you can just produce, which is where the post-critical headed.

KH: How do you see the difference between men and women in architecture and in particular in architectural design? If you had to put a conjunction between the two W's, how would you define the "and"?

SW: The beauty of WW is that no one knows which one is first, whether it's Witte, or whether it's Whiting. The funny thing is the two names derive from the color white. So they're already almost the same name – different versions of the same name. I do not see architecture as gendered. I see the profession is gendered, because it's still dominated by men in boardrooms, in senior positions, and among powerful clients. But I see that more of an issue with the economic and social fabric of our context. Without more social support, we're still going to have a problem with all professions being dominated by men. Professions are gendered, and that's an economic argument.

KH: What does it mean to be to be a Dean, and to be a leader as a woman, today? You act institutionally. Does a leader have gender?

SW: I don't think a leader has a gender. A leader has to be decisive, and I find it remarkably superficial (and insulting) when people say that a woman who is decisive, or who speaks strongly has "male attributes." I disagree. They're simply leadership attributes; someone has to make a decision. Maybe women consult more with others as they make decisions, but that tendency is also something that's been socialized and has an economic basis. A lot of our society is stuck in the model that capitalism has put in place, and it's very hard to disentangle ourselves from that model.

I don't like being identified by my gender. Everyone who says to me, "you're the first woman Dean at Harvard." To me that seems incredibly boring, and also actually quite insulting. For me, the exciting part of being a Dean is that a school is a project. A school can't just be a place to fulfill requirements; it is a place for incubating how to think about architecture culturally.

KH: How would you describe your method of working with students?

SW: One has to be very clear and know the consequences of the direction that you're taking, the references that you bring along with it. So, my method tends to be very thorough in working with students. My style of working with them is to combine being very direct and very rigorous, with empathy and humor. One has to always remember what it's like to be a student. And one has to remember that they can be incredibly naïve, which is also very refreshing. But it's our job to get them to try and be more methodical and channel their naïveté into directions that really try things out, testing whether they work or not, for them or for their result.

I'm not teaching right now, and that's simply because this is the first normal year I've had here as Dean, because of COVID. It's only now that I feel like I'm starting as Dean, and there's an enormous amount of work for that. I do hope to return to teaching because I love it.

KH: With regard to your academic professional experience, and the fact that you are Dean, do you think that the position of philosophy as a discipline in the academic education of architects should be improved? From an institutional point of view, what needs to be done in order to affirm the value of philosophy at the schools or faculties of architecture?

SW: Here, I would return to my first point, which is that I see it less a question of philosophy per se and more a question of ensuring that a school of architecture values culture broadly and for me, culture means thinkers and writers who get us to think differently about the world, who get us to open our minds – and therefore our designs – to new futures. That means philosophers, yes, but also novelists, historians, critics – *thinkers*.

Interview conducted by Petar Bojanić, Snežana Vesnić, and Manuel Orazi.

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Željko Radinković*

Ludger Schwarte, *Philosophie der Architektur*, Wilhelm Fink Verlag, Paderborn, 2009.

In his introduction, Ludger Schwarte discusses the concept of architecture, which he understands as "constructing possibilities."[1] Architecture is being reflected with respect to the original meaning of the term *ἀρχή* as beginning, principle, source, foundation of the world, as understood in ancient Greek philosophy. Thus, Schwarte's starting point is the incipience, originality of architecture, preceding language itself. Language is not the place of the beginning, but rather space provides room for language to even appear. In this sense, architecture can be considered the condition of possibility of language. According to Schwarte, punctuation is the architectural structure of language – the cracks and voids enabling its expressivity.

Schwarte differentiates between theory of architecture and philosophy of architecture. While the former's objective is determining relations between means and purpose, the latter focuses on legitimizing the very form of building. It is not concerned with the premises and maxims of the practice of building and is not, like architectural theory, part of the "ideology of planning:" "Philosophy of architecture, on the other hand, posits a more extensive and less certain concept of architecture; it does not take as a given that the essence of architecture is planning and constructing buildings. In order to understand how architecture forms the environment, one must attain insight not only into the basic skills of building and interacting, but also into the negation of building, if not fully negative architecture, which in the end also encompasses the removal of mental blockades."[2] Schwarte sets upon the task of not only determining precisely such a concept of architecture, through detailed analyses of historical public spaces, but also of "possibly developing an

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even more comprehensive and less certain concept of architecture."[3] By doing so, he wishes to address the previous approaches within philosophy of architecture, which have primarily dealt with aesthetic, linguistic and spatial issues, and expand them to questions of politics, analogous to Foucault's analysis of architecture as a technology of power, but specifically focusing on its role as a dispositive of emancipatory and liberational political movements.

Elaborating on his introductory considerations about architecture as principle, tenet, Greek *ἀρχή*, and Husserl's *Urstiftung*, Schwarte puts forward the concept of anarchy and introduces the term anarchitecture (*Anarchitektur*). Namely, every thought and act based on principle is fundamentally anarchic. The beginning arises from anarchy, the lack of *ἀρχή*, which is in fact constitutive for any beginning and principle. "Every act of architecture is necessarily anarchic."[4] Architecture turns out to be the negation of architecture, perceived as a tool of the powers.

Considering the genesis of public space, Schwarte emphasizes the key significance of the architectural basis of political agency and power. The architectural basis here figures also as material *a priori* that transcends even the intentionality of architects themselves. It is an attempt to understand public space as the product of a specific shaping of architectural space. In doing so, those approaches that link the origin of public space to spaces of communication are being recognized as "uncritical." Contrary to that, political action, especially revolutionary practice, should be considered a recomposition or destruction of architectural solutions that decide who is included or excluded from the process of making political decisions. Revolutionary events destroy "spaces of control," and show that the media of crucial societal changes are not discursive but spatial in nature, which means that they generally take place at specific locations, in materially determined spaces:

> In order for revolution to happen, it is necessary to break the chains, disempower architectural constraints and (rather "non-symbolic") forces, some doors have to be kicked in. For acts of liberation to have a chance, we cannot content ourselves with redistributing ownership of or access to (media of communication): the very architectural basis of the system of power has to change. Hence, instead of

[3] *Ibid*., p. 22
[4] *Ibid*., p. 29.

> differentiating between technical, political, economic, cultural and other kinds of public, the approach of philosophy of architecture attempts to show the tight connection between spatial structures and options of perceiving and acting.[5]

Consequently, Schwarte demonstrates how John Dewey ignores the true nature of the architectural dispositive. Taking perception as the organizational principle, Dewey places publicity in a sphere which eludes collective intentionality. With that in mind, political action is understood as something that does not completely overlap with the intentions of the planning and expertly competent subject. The public figures as "the blind spot of sovereignty,"[6] that which eludes identity. According to Schwarte, Dewey does not take into account the architectural conditions to this kind of organization of public space, which is neither cosmological, nor causal, nor evolutionary in origin. What applies to the public, the prerequisite of social relations without necessarily being part of them, is equally valid for public spaces, which cannot be completely included into the representation and the functioning of political systems.

Aiming to transcend Foucault's concept of power, Schwarte points to the phenomenon of anti-power, which establishes itself as a counter-pole to the actualization of power in the public. The author of *Philosophie der Architektur* finds it necessary to consider that any power is also subject to someone's perception and reception; based on this fact, in the same public an anti-power is being spatialized, which has the same architectural means of action at its disposal: limiting, appropriation, arranging, representing, identifying, organizing and directing.[7]

Schwarte also shows how representative democracy can be observed in terms of its architectural conditions of possibility. For instance, how can the architectural configuration of the parliament, with its capacity, arrangement and accessibility, address the challenge of adequately representing the will of the people. Through an exhaustive historical overview, Schwarte first notes the transformation of parliamentary buildings from open places of gathering to closed structures. The key here is the constitutive role of architecture, which in a sense becomes a subject of

[5] *Ibid*., p. 148.
[6] *Ibid*., p. 163.
[7] *Ibid*., p. 281.

forming political life, at the levels of its material enabling and symbolic designating.

The architectural combination of enabling and symbolizing, in particular characteristic of scientific institutions, is also applied to parliamentary buildings. Thus the anatomic theatre with its spectator rows arranged in a semicircle around the dissecting table served as model for the arrangement of parliamentary seats and speaker podiums, attempting to fully represent "societal anatomy," in the words of French nobleman and author Mirabeau, as cited by Schwarte.[8] In this regard, Schwarte will assign the architecture of parliaments a crucial role in shaping political life, which he puts on the same level as the role of the constitution. In a Foucauldian manner, Schwarte identifies the parliament as the disposition of parliamentary communication, illustrating it with the example of the French revolution, namely how the inadequacy of court of Versailles as provisional parliament shows the selective function of architecture in including and excluding individuals and groups from parliamentary activities. Architecture also determines who gets to speak and how, who is in the center and who at the periphery of a debate, as well as whose vote counts. Schwarte shows how the parliament is constructed as a political space separated from public space: the separate rooms of parliament become the place of seeming publicity, i.e., of the so-called public opinion. The architectural equivalent of this illusion of deliberation and publicity is the introduction of auditorium, whose circular shape is supposed to suggest the inclusion of a political public, but in fact excludes the very possibility of direct political participation.[9] For understanding democracy, including modern democracy, a key factor are the so-called public parliaments that remove the usual boundary between actor and viewer; the auditorium becomes an instance of anti-authoritarian critique. On the other hand, Schwarte points out that not even in a projection of direct democracy would it be feasible to completely remove the boundary between public and political space. This is the double asymmetry of public and political space, meaning that on one side the large majority of citizens is situated in the public, but not political space, and that on the other side, most decisions are made within the political but not public space. The author of *Philosophie der Architektur* says that the democratic nature of a society is premised on the possibility of opening the

[8] *Ibid*., p. 319.
[9] *Ibid*., pp. 324ff.

political space towards the public, including the public not necessarily characterized by political agency. The political space thus opening up towards the extra-parliamentary space does not include the latter merely as an instance of control or criticism, but as a complex space comprising different groups with different degrees and modalities of social inclusion.

According to Schwarte, architecture can also be seen as a condition of enabling the phenomenality of things. It does not in fact define, but produces events, is itself an event, creates tensions and rhythms that make possible the appearing of that which is coming, that which cannot be controlled. In this very Heideggerian and Gadamerian part, exhibiting some of the central moments of fundamental ontology and philosophical hermeneutics, Schwarte links architecture to the dynamic of revealing, in which the architectural organization of space is based on the irrevocable principle of openness, the absence of determination and the exposing of alterity.[10] Architectural spaces configure fields of action, they identify, facilitate and make understandable the doings that transpire within. Architecture prevents space from remaining an indifferent, homogenous sequence, creating places of significance for acting, perceiving, confronting. "Contemplating dispersion, locating congregation, giving rhythm to tension, situating, opening and exhibiting all work to spatialize the shaping of events."[11]

Finally, Schwarte confronts the architecture of public space with the architecture of power, or the concept of the sovereign architectural subject. Public space is featured as the place of procedurality, situationality, of refuting and overcoming strict concepts and orders. The town square, as a paradigm of public space, exhibits what is crucial to the latter: it is not formed by that which is made, built, material, on the contrary: public space is constituted by the absent, the unbuilt, the immaterial. Schwarte speaks of "creative anarchy" characterizing public space, thus rejecting the functionalist approach. By questioning or deconstructing any kind of order, public space constitutes itself as the "basis of eventful interaction."[12]

The philosophical interpretation of architecture as the *a priori* starting point, as the enabling that ontologically precedes the causal nexus and practical purpose, raises questions about the constitution of architecture,

[10] *Ibid*., p. 340.
[11] *Ibid*., p. 341.
[12] *Ibid*., p. 346.

which further in the book pick up some post-structuralist points. This is especially the case with the Foucauldian elements of Schwarte's analyses, allowing a certain analogy between Schwarte's architectural and Foucault's historical *a priori*. However, this narrative of architecture's constitution also overlaps with hermeneutic and existentially-ontological understandings of apriority. We could go a step further and claim that parallels can also be shown with theories that delve into the constitutive nature of technology and the media, even though Schwarte does not explicitly articulate any such thesis.

Tommaso Listo*

Branko Mitrović, *Philosophy for Architects*, Princeton Architectural Press, New York, 2011.

It seems necessary to start the review of a 2011 book explaining why this book has been chosen to be reviewed more than ten years after it was published. First of all, the review's context. *Philosophy for Architects*, written by the architectural historian Branko Mitrović, who graduated with degrees in both philosophy and architecture, right from the title operates as a programmatic manifesto for the journal in which this review is published and that intends to explore the relationship between philosophy and architecture.

The title tells us something more. It is not a philosophy of architecture, nor some architect's philosophy and much less an architecture of philosophy – it is philosophy *for* architects. It is worth considering this more closely, given the second reason to write about the book, which is the interest of architects, architecture schools, and even the contemporary publishing market in philosophy. To give but one example: Routledge is publishing an entire series, *Thinkers for Architects*, with each volume dedicated to a different philosopher.

What can be said about the preposition *for* then, why should architects be interested in philosophy and philosophers? The author provides an answer in the opening pages: architects face philosophical questions on a daily basis, and pretending not to have to face them just because the architect moves on the level of practice is nothing more than acting according to some implicit philosophical premise or other; it is better, therefore, to at least be aware of these assumptions.

But this can be said for many other practices; after all, it is in the nature of philosophy to deal with foundational questions of the empirical sphere, in which they are grasped by other human activities. Having

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personally experienced the environment of two schools of architecture and being immersed in their theoretical production activity, I have ascertained that philosophy is indeed a very present discipline. Courses and bibliographies of architecture schools probably contain more philosophical references than of telecommunications engineering or biology schools. Yet, Mitrović writes about something even more specific, namely that among the philosophical problems that interest architects, he has selected only a well-defined class: the problems that an architecture student will encounter along his path of learning, coming up, for example, at an exam.

Still, this evidence – the references in the courses, questions during the exams – are a consequence rather than explanation, and do not answer why philosophy is a fact (something that happens) in architecture schools. Again, we cannot precisely say that the problems of philosophy concern more architecture than other human activities. Perhaps, we can find an indication by returning to telecommunications engineering and biology. These two disciplines have a scientific foundation of their knowledge in mathematical physics and the experimental method, something that can only be true for certain field of knowledge internal to architectural practice, but not for architecture *tout court*. Is it architecture's uncertain scientific status and the range of dimensions that it traverses in practice, from technique to legislation to aesthetics, which brings architecture to seek a foundational confirmation in philosophy? *Philosophy for Architects* does not problematize this question, having as its objective to provide an agile manual for students, professors and also for curious practitioners.

The book is organized by chapters that gather, around the main figures of the philosophical tradition (starting from the four greats of Plato, Aristotle, Kand and Hegel), a series of thematic paths that cross and cut through the history of thought up to debates in the 1900s; a solution that allows Mitrović to present both the classics and the most cited recent authors. Each chapter provides historical background and offers the main lines for which the philosophers treated have been canonized. Then, for each author, a question of particular interest is brought out. Finally, the philosophical question passes into the field of architecture, through what can be called an architectural application of different philosophical positions (e.g., Palladio's Platonism, Alberti's conception of beauty, the history of perspective, the end of the Euclidean system as the only geometry available, etc.).

Clearly, such a broad presentation of currents, histories, authors and topics has to simplify here and there: the position of Alberti, and Humanism in general, with respect to the advent of modern science, is a debatable and more complex topic than presented in the second chapter.[1] However, these are the limits of any manual; its purpose is to open up to knowledge, rather than to follow its ramifications in the direction of some specialism.

This quality is particularly evident in the chapter dealing with Immanuel Kant and aesthetics.[2] In fact, Mitrović takes the opportunity to focus on the notion of "beauty," clearly fundamental to the discourses that inform (education of) the practice of architecture. Here the central question is conveniently made evident to the reader: can we have a non-relativistic conception of beauty? Mitrović asks, after having retraced the Kantian arguments of the first part of the *Critique of the Power of Judgment*, "what is, after all, the purpose of talking about beauty if one does not say how the judgment of beauty can be impartial"[3]? Even before answering, to ask the question is of the utmost importance for those who dedicate themselves to architectural design, and it is an essential preparatory moment for its formation.It should also be noted that although Kant's argument is logically sharp, to force the understanding that a question like this triggers, his reasoning could have been followed,

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[1] The consequentiality between humanism and the scientific revolution is given in temporal terms, but beyond that, it could in part be a deformation of modern teleological reconstructions as regards the notion of "technical and scientific progress," as well as of German classical philology of the nineteenth and twentieth centuries regarding the notion of *Kultur* and civilization. Thus, it seems that humanism is always a "functional to" moment, a presupposition of something else that will come later (see M. Cacciari, "Ripensare l'Umanesimo," in R. Ebgi (ed.), *Umanisti italiani: pensiero e destino,* Einaudi, Torino, 2016, pp. vii-ci). For similar concerns about architecture; see for example Françoise Choay according to whom a more properly functionalist conception (and therefore a scientific conception in the modern sense; Cassirer) is not in Alberti and arrives after him (F. Choay, *La règle et le modèle: sur la théorie de l'architecture et de l'urbanisme,* Seuil, Paris, 1996). In short, the question is specialized: regardless whether a book that has other ambitions has followed mainstream historiographical reconstructions, perhaps a set of notes for the more curious readers would have been an interesting addition.

[2] Mention is made of the fact that "during the eighteenth century, the very word aesthetics started to be used as a term denoting the problems of beauty and the arts" (B. Mitrović, *Philosophy for Architects,* p. 70), but it should be pointed out in the exposition of Kant's work, even if it is a presentation of the general features, that the term is not exclusive to the *Critique of the Power of Judgment* and indeed belongs to that of *Pure Reason* (with a specific meaning, not pertaining to the notion of beauty).

[3] *Ibid*., p. 86.

perhaps, by a critical analysis, rather than drawing direct consequences. Mitrović writes that for Kant

> beauty is not an objective property of a beautiful thing. Objective here means a property that belongs to the thing, such as "being hard" or "being fast." Rather, beauty is subjective, Kant says. Subjective here does not mean, as it does in everyday usage of the word, "relative to individuals." Rather, it means that the judgment of beauty is the result of the subject's (i.e., that person's) cognitive mental processes. It is sometimes said that beauty is in the eye of the beholder; Kant's position could be described as the view that beauty is in the mind of the beholder. At the same time, Kant does not say that judgments of beauty are generally valid for everyone or universal. However, he does point out that when people make judgments that are genuinely nonconceptual and disinterested, they expect that everyone else will make the same judgment as well.[4]

Mitrović thus shows readers how theoretically stratified is reasoning that (tries to) resolves the question of an impartial judgment on beauty. It would have been therefore very interesting to have an equally stratified literature that critically addresses Kant and the attempt to provide a scientific foundation of anthropology (see *Les mots et les choses*). The author chooses instead, and the choice is perfectly consistent with the structure of the book, to bring the discussion to the level that he believes is more relevant for architecture, writing about aesthetic theories rather than philosophical ones in the broadest sense, and to continue alternating theoretical proposals, even when in conflict with each other. One wonders whether a discourse on beauty today, such as when this term appears in funding schemes by the European Commission (New European Bauhaus), may rely on purely aesthetic theories, or whether an overview of more radical and foundational approaches is needed.

It is worth writing something more about the purpose of a philosophy textbook for architecture schools, something also Mitrović seems aware of, when he writes that knowing how to use reason, rather than conforming to the most common opinion, is one of the most important qualities of philosophy (much more useful than some notions to get a good grade at an exam!).

What *Philosophy for Architects* fruitfully discusses – and will make readers discuss – in its introductory part are the effects of this use of

reason for the (soon to be) architect, regardless of why philosophy is sought by those who teach and study architecture. Why is the ability not to conform to an opinion but try to use reason so important for architects especially? Because the main learning model in architecture schools is the atelier, where know-hows are in action much more than know-whats: follow what the teacher does, and imitate him. The student thus learns design methods and concepts following a principle of authority and looking at best practices: having the conceptual and logical tools to express, rearticulating and connecting what is transmitted by the authority at work in the ateliers, and therefore not taking this authority for granted but knowing how to compare it with other reasoning and with experience, are all invaluable skills for any student.

In a system of transmission of knowledge such as that of the ateliers then, where authority and example play a major role in the master-student relationship, the exercise of criticism in which philosophy trains becomes an emancipatory force; a necessary complement to the training of an architect who knows how to autonomously take charge of their work.

Finally, the third, and by far most important reason why this book is still worth writing about is that it is an excellent book: clear, rich and accessible, but also rigorous, and should be available in every architecture department.

 Received: April 21, 2023

Marko Ristić*

Catherine Ingraham, *Architecture's Theory*, MIT Press, Cambridge, Mass., 2023.

The *Writing Architecture Series* of the MIT Press has recently extended its list of publications with the book *Architecture's Theory*, authored by Catherine Ingraham. The book's seemingly general title appears at first to come from the thematic diversity of the twelve essays collected in it. However, the title cannot be considered general. The author's decision not to use the common term "architectural theory," but *architecture's* instead, is a subtle intervention that epitomizes a specific relationship of architecture to theory questioned throughout the book. This relationship is that of *property*, which introduces the idea of theory that is "architecture's own."

Ingraham addresses the issue of property (and also propriety) multiple times in the book. In the sixth chapter,[1] which strongly echoes Jacques Derrida's critique of *the proper name*, we find an illustrative definition of the architect's work: instead of practically using what is given, immediate, or at hand, the architect "imports materials from elsewhere."[2] This, according to Ingraham, constitutes architecture's status of epistemic plurality. The discipline of architecture institutes itself through the act of importation and, consequently, *appropriation* of what is always outside it. To appropriate, in this regard, implies structuring that cannot but be considered simultaneously and doubly as a matter of property/propriety.

[1] This chapter is titled "'This Earth Has Lines upon Its Face'." Quoting the ethnologist Robert Ferris Thompson, Ingraham explains that the title is the literal translation of "This country has become civilized" from Yoruba. She uses this association of lines with civilization in Yoruba culture to introduce the issue of linearity as the structuring principle. C. Ingraham, "'This Earth Has Lines upon Its Face'," *Architecture's Theory*, p. 68.
[2] *Ibid*., p. 77.

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What the architect brings from elsewhere must be made proper,[3] which means to be put in order of what Ingraham calls architectural precedents. The discourse of the proper thus represents the epistemological ordering as "the entire engagement of architecture with its own disciplinary history and proprietorial structure."[4] It seems that the need to say "architecture's," in this sense, indicates a particular resistance to the state of instability caused by the rupture of the unknown brought "from elsewhere." As a response to such a crisis, appropriation represents the (re)construction of the (architecture's) self, or more precisely, its *line* of development.[5]

The issue of linearity holds an important place in the book, as well as in Ingraham's work in general. Her frequent phrase "burdens of linearity"[6] refers to the problem of reduction to which linearity as a system of thought leads. Its idealizing principle, she argues, imposes the constraints of the Cartesian *cogito*, making one give in to the "desire for 'passage to the limit'."[7] The "burdens" of linearity are, in that sense, the burdens of the dream about the pure, the proper, and the autonomous.

It is interesting that the book's last chapter begins with a quote from Le Corbusier, in which he juxtaposes his Modulor and the image of the donkey – the *purist* idea of the most proper and the figure of the animal as the absolute improper. This juxtaposition seems to introduce an alternative or at least a different reading of linearity. Namely, the position *between* the perfect and the accidental makes the line in some way drawn into the dialectic of these two extremes. Within that dialectic, the discourse about linearity takes the form of a qualitative polemic between the straight and the curved line, the proper and the improper, the Modulor and the donkey, the human and the animal.[8] Referring to the impossibility of absolute propriety, Ingraham asks at one point: "Does Le Corbusier really mean 'relatively straight lines'?".[9] The meaning of

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[3] Derrida, for example, links the word *proper* with both the Latin *prope* and *proprius*, where the former introduces the idea of proximity, while the latter directly refers to the meaning of property, "own-ness," and "self-proximity." J. Derrida, *Of Grammatology*, trans. G. Chakravorty Spivak, The John Hopkins University Press, Baltimore / London, 1997, p. 107.

[4] C. Ingraham, "'This Earth Has Lines upon Its Face'," p. 74.

[5] *Ibid*., p. 78.

[6] See C. Ingraham, *Architecture and the Burdens of Linearity*, Yale University Press, New Haven / London, 1998.

[7] C. Ingraham, "The Donkey's Way," *Architecture's Theory*, p. 199.

[8] See C. Ingraham, *Architecture, Animal, Human: The Asymmetrical Condition*, Routledge, London, 2006.

[9] C. Ingraham, "The Donkey's Way," *Architecture's Theory*, MIT Press, Cambridge, Mass., 2023, p. 191.

the "relatively straight," – that is, *approximately* straight – refers to the condition of the line being deprived of its ordering power. Ingraham theorizes this condition of the line's movement between exactitude and inexactness using the concept of *figural play*, defined as "a way of combining the symbolic, the real (as unstable givens), and the senses."[10] The introduction of this concept points to the urge for thematizing the position "in-between," the position in which architecture's appropriation is a never-ending process of both institution and deconstruction of its property. In other words, the process of constantly reviving architecture by opening the possibility for the theory of its *future* own. Ingraham sees this dialectic (between self-construction and the transgression of the self) as a consequence of, on the one hand, architecture's inability to speak for itself and, on the other, its "need for a formal and autonomous architectural object that has been properly constructed within."[11] The tension between these two poles forces architecture into a figural play as the process of self-transcendence and autopoiesis. Architecture is, in that regard, defined as a constant oscillation between the search for the improper and, subsequently, its discursive structuring. That is, between the search for the beast and then its taming with lines.[12]

Ingraham notes that her formal education in comparative literature influenced her strategies of going into theories that were not architecture's.[13] The essays in this book, quite different from one another, best document those strategies. From that multitude of topics, this review can single out only a select few, itself drawing lines through the book. The task for other readers is to look for yet more beasts in it.

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[10] C. Ingraham, "Creative Omnipotence: Architectural Objects," *Architecture's Theory*, p. 44. As she explains, the concept of figural play is a combination of Derridean play, Winnicott's analysis of play in children, and Deleuze's definitions of the figural in *Francis Bacon: The Logic of Sensation*. "It [figural play] points to paradoxical forces at work in architecture that result in the realization of a material object through a process of design and is directly related to the dialectic between concepts of originality and creativity and pressures of what is given as a precedent or rule set." *Ibid*., p. 42.

[11] C. Ingraham, "'This Earth Has Lines upon Its Face'," p. 73.

[12] "Lines and beasts occupy fundamentally different orders – the inanimate versus the animate is only the most obvious distinction." C. Ingraham, "The Donkey's Way," p. 185.

[13] C. Ingraham, "'This Earth Has Lines upon Its Face'," p. 69.

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