

**Entwurf of the Method
and Ethics of its Discourse:
Cartesianism Reconsidered**

New European Bauhaus

There is currently a process underway to build a New European Bauhaus—a place dedicated to concerting together to invent future ways of living. It is supposed to become a platform to cultivate radical inclusion—inclusion regarding arts, technologies, science disciplines, and differences in cultural and social identities. With this initiative, the European Union responds to the digital transformations underway. These transformations challenge us to invent adequate instruments that would be in support of circular and cyclic modes of process and qualitative transformations that follow a logic of mutual commerce and endowment, saturation rather than separation, disjunct synthesis, and cohabitation rather than demarcation and classification; keywords are data science and the algorithmic

condition, machine learning, artificial intelligence, circular economy, green deal, climate. What makes this initiative perhaps especially timely is the question put center stage by Ursula von der Leyen, the initiator of the idea: How can this ecological and economic project also become a project of culture?¹

This text proposes an unorthodox reconsideration of Cartesian rationalism in light of these ambitions. Its interest is in thinking of its proposed universal method without eclipsing the algebraic role of code in the analytical geometry that Descartes is employing. This constitutive role of how code works within it promises a fruitful tuning between his and our historic constellations; it also legitimates such a counter-canon reconsideration in Cartesian rationalism. What we can learn from Descartes, in this light, is not only a form of circular writing but also an idea of how architectonic contemplation differs from philosophical contemplation by departing from and returning to the primacy of common-sense intellection. Such rationalism needs to respect metaphysics as a first philosophy (*Prima Philosophia*)—but *via negativa*: an appreciation of metaphysical speculation alone will never run out of cause for doubt, with which

1 https://europa.eu/new-european-bauhaus/index_en (accessed February 23, 2022).

the universal method in Cartesian rationalism always needs to be endowed (doctrine of methodic doubt). Effectively, I will argue that metaphysics becomes the wellspring of abstractly embodied gestures for thinking, with which architecture ideates mathematically. There is an aesthetic side to such ideation, which will be outlined by turning to Paul Valéry, who is admittedly a great admirer of Descartes and who gives us, with his *Introduction to the Method of Leonardo da Vinci*, as well as with *Eupalinos or the Architect*, two texts that help to grasp how we might reconnect with an architectonic understanding of analytical thought.

Witness to the reformation wars, Descartes sought to constitute a scientific form of rationalism that would be capable of preserving a certain autonomy for science from both religion/theology and politics—an autonomy in ethics, which he put into the authority of architectonics, and which he made the principle of his geocentric philosophy. His geocentrism was essentially concerned with mediating between knowledge and the world. His famous text “Discours de la méthode pour bien conduire sa raison” originated in the context of his book entitled *The World, A Treatise on Light*. It was about how to think and speak about the physical nature of light that was in proportion with the light of insight cast

by the human intellect. Inevitably, such a novel physics was bound to challenge the theological codifications of divine insight and intellection, and Descartes never dared to publish this book during his lifetime. Today, the famous text “Discourse on Method” is usually read as a stand-alone piece, detached from this context. Reconnecting what has become the founding document of modern rationalism within its proper context of inception is enough to find oneself engaged in a reading of Cartesian rationalism deemed unorthodox. Let us embark on this adventure!²

In the light this text seeks to cast, we can find how in Cartesian rationalism discourse is the subject of an architectonic *Entwurf* that aims at hosting the cohabitation of politics with philosophy. Against the common reading, the Cartesian method was not concerned with identifying and determining the essence of what can be known in terms of the objective description of things. Rather, it was an impredicative method that had, as I will argue, nothing in particular to teach. His rationalist

2 Michel Foucault’s book on method, *Archaeology of Knowledge and the Discourse on Language* (1969) is one of the rare attempts to engage with Cartesian architectonics in its own right—i.e., by neither subjecting him to a transcendentalist approach via Kantianism or phenomenology, nor by stripping his mathematical proposals from their metaphysical context by regarding him through the lens of formalist epistemologies.

method considers the process of clarification as a procedure capable of accomplishing the ideation of any (not every) imaginable opinion. It is a subtractive and analytical method but cannot be reduced to formalism. The special peculiarity of Cartesian Rationalism is that the method he proposes for the analytics of such a procedure is itself subject to *Entwurf*—and this is the case for each particular case such a procedure is sought for. Method itself is rendered topical in an analogical way (once the method to setup the procedure in a particular case and once the method as it is to solve a particular problem); hence his notion of method itself is subject to architectonic constitution. To speak of the *Entwurf* of the method, algebraically and hence together with its inverse sense (that method needs to be followed by proceeding analytically), this means that the analytical space is indeed one that exists in parallel to the real, the physical one. But this parallelism is the architectonic site of an active and vibrant analogy, according to which self-formation is set up in parallel to world-formation. This is (very likely) why his book *The World* was written in the rhetorical form of a fable and “Discourse on Method” in the poetic gesture of an autobiography. His *Meditationes de Prima Philosophia*, where Descartes foregrounds the importance of methodical doubt,

appear as an inversive form to that of theosophical contemplation—they appear as a form of architectonic contemplation.

The active analogy that edifies the architectonic site of this parallelism (between the domain of analysis and that of the real) is embodied in the instruments (and the abstract instrumentality) that relate knowledge and the world. This is also where a reconsideration of Cartesian rationalism holds great potential for our situation today, that is, for coming to terms with those novel mentalities of data science: social media platforms, artificial intelligence, and machine learning. The Cartesian method is akin to a circular form of writing with which we seek to come to terms today—namely, a notion of method, in the singular because universal, but in the pluralist terms of algebraic coding.

*Rationalist Instrumentation,
Architectonic Contemplation*

Before turning with more detail and closer reference to Descartes's method itself, I want to start by questioning how we might think about the aesthetic implications of such a Neo-Cartesian rationalism. For this, I want to turn to Paul Valéry, who never fell short in emphasizing his rejection of theories of the arts that rely upon irrational substances like genius

or inspiration. He also never fell short in acknowledging his great admiration for René Descartes. In a famous text entitled “Introduction to the Method of Leonardo da Vinci,” Valéry probes the Cartesian method by inventing a kind of parallel transport of it such that he can self-instruct himself through it by using it as a guide when seeking to get in touch with the extraordinary “*esprit*” of Leonardo da Vinci—that great Renaissance polymath mind. He begins his text: “There remain of a man those things of which one is set dreaming by his name and by the works which make of his name a mark of admiration, of hate, or of indifference,” and continues: “Remembering that he was a thinker, we are able to discover in his works ideas which really originate in ourselves: we can re-create his thought in the image of our own.”³ Thus, he prepares the reader’s attention for what is to follow. Continuing, he elaborates on how he thinks about such a strange parallelism; he begins with why it would be useful to have a means at work that allows one to re-create another person’s thought in the image of one’s own. He explains:

An ordinary man we represent to ourselves with ease: we can reconstruct his elementary actions

3 Paul Valéry, *Introduction to the method of Leonardo da Vinci*, trans. by Thomas McGreevy, London, John Rodker, 1929, p.31.

and reactions from our own simple experience. We find the same processes in the indifferent acts that constitute the exterior aspect of his life as in our own; we are the connecting link between our acts, as he was between his, and the radius of activity that his existence suggests to us does not extend farther than the radius of our own. But if we allow that this individual excels in some respect we shall have more difficulty in imagining to ourselves the works and the ways of his mind.⁴

The problem is familiar. But how should we respond to it? Here, Valéry introduces a crucial component of such architectonic thought, namely what he calls “imaginative perception.” This means opening the gates to inventive fancy as a constitutive part of a creatively self-instructive method that proceeds by mimesis and is yet creative, because it sets up the architectonics of the site where such mimesis can be conducted “methodically”.

In order not to be confused in our admiration, we shall be forced to stretch our imaginative perception of the quality that dominates in him and of which we no doubt possess only the germ.⁵

Here shines the importance of a demiurgic universalism (literally the universalism of public work, of

4 Ibid.

5 Ibid.

skilled work in the service of a public).⁶ This is just like Plato's rationalism, which crystallizes in the cosmos's workings, as outlined in the *Timaeus* (an early *architectonic* model of the cosmos) because it speaks of the cosmos in terms of its workings and construction rather than, like Hesiod, in terms of cosmogonic genealogies of myth. Its rationalism consists of setting up a possible correspondence model between the intelligible and the sensible. Also, Descartes's rationalism starts from fabulating how a correspondence between the sensible and the intelligible could be established. In Descartes, this is the model of the world as a plenum with cracks that are always immediately being filled up with light⁷—a mechanical model, whereby the question of the true nature of light is being bracketed out, and which is the core of his book *The World, A Treatise on Light*.⁸ We will return to this later; first, let's

6 Greek *dēmiourgos*, literally “public or skilled worker, worker for the people,” from *dēmos* “common people” + *ergos* “work,” <https://www.etymonline.com/search?q=demiurg> (accessed October 22, 2023).

7 Geoffrey McDonough, “Descartes’ Optics,” in *The Cambridge Descartes Lexicon*, ed. by Larry Nolan, Cambridge, Cambridge University Press, 2015. Here cited from the online version, https://scholar.harvard.edu/files/mcdonough/files/30_descartes_optics_the_cambridge_descartes_lexicon.pdf (accessed February 23, 2022).

8 This is why I call it “mechanical;” as a water mill must be informed by—but ultimately leaves aside—the question of the true nature of water, Descartes brackets out the question of the true nature of light for the descriptions which his rationalism is to facilitate.

remind ourselves briefly of the template of such fabulation, namely Plato's *Timaeus*.

The Platonic demiurge famously engenders a universal soul by an act of what we could perhaps best call metaphysical fabulation, or more precisely, a fabulation of architectonic discreteness. He calls this speculative universal soul the *being of wholeness*. It acts as the knowledge-facilitating medium in Plato's rationalism—the medium or substrate that is to establish a public domain for knowledge. This fabulous substrate, this rationalism imagines, must be distributed equally throughout the entire range of it. For this, the Platonic demiurge takes “the three elements of the same, the other, and the essence”⁹ and mingles them in a cup. Out of it, he creates numeracy. He sets out to partition this into measured blocks of pure ratios, working along the principles of the Pythagorean theory of number through harmonics (circle of fifths). Plato tells us: “When he had mingled them with the essence and out of three made one, he again divided this whole into as many portions as was fitting, each portion being a compound of the same, the other, and the essence.” Plato's demiurge takes all the numbers thus produced; he takes all this partitioned and

9 Plato, *Timeaus*, trans. by Benjamin Howett, The Project Gutenberg EBook of *Timeaus*, released 2008.

formed wholeness, which is now (after the preparations discussed) made up entirely of blocks of ratios, and he “cut it into two strips which were bent into an inner circle and an outer.”¹⁰

Like this, two intertwined circles are created, and we are told they revolve around the same axis. The motion of the outer circle is called the “Same,” and the motion of the inner circle is that of the “Diverse.” To the outer circle belong the intelligible forms, and to the inner belong the sensible and corporeal bodies. But what both circles are made out of, namely the soul of the universe that had been engendered through speculative fabulation, is dispersed throughout all of it; this is the precondition for Plato’s demiurgic rationalism to work—and it is what makes the demiurge’s fabulation *architectonic*: the two circles are of the same universal nature, and yet they are incommensurate. Relating them requires an active proportioning that can only be optimal for particular situations (the power series of 2 and that of 3 are incommensurate; Plato describes this with the Pythagorean notion of the Lambda).¹¹

10 Ibid.

11 I have elaborated on this in “Methods, and the Comma: Mathematics of Human Knowledge,” in Joke Brouwer, Sjoerd van Tuinen (eds.), *Accidental Technologies, Technologies of the Accident* (Rotterdam: V2, 2023), pp.82-117. https://v2.nl/wp-content/uploads/2023/06/pre-view_technological_accidents.pdf (accessed September 22, 2023).

As we well know, everything that might be fabricated in the Platonic oeuvre stands in the service of the dialectic dialogue—and like the Cartesian method of self-instruction, it too is a manner of doing philosophy that aims, before all else, at education and instruction of the self in the service of a truth—that is, in the service of knowledge that is not a good, knowledge as something for which there ought to be no intermediates, no merchants; whether it nevertheless is to be regarded as a kind of property—this is the subject of dispute, especially concerning the communist readings of Plato.¹² But this is not our subject here.

Being informed about the basic strokes drawn in the background of every philosophical rationalism molded according to this template is important because it alone can convey the crucial importance of the Cartesian method as a *universal* method. His project was arguably to offer a universal method that would proceed with qualitative subtlety as the dialectic method does in Platonism. Still, it was not to proceed primarily via words but via mathematical ideation and geometric fabulation. Like this, the Cartesian method sought to proceed without the hierarchical master-pupil relation at work in

12 E.g., Alain Badiou, *Plato's Republic*, trans. Susan Spitzer (New York: Columbia University Press, 2015).

classical dialectics (or the master-slave relation in modern dialectics). Instead, Descartes sought to offer a method for self-instruction that works automatically but requiring the subject's capability to critically, but not entirely detachedly, step beside of itself, that is, through the constitutive employment of instruments of mediacy and through the active self-preparation of acts of mimesis.

The fabrication of such an instrument is at stake with Valéry's interest in *The Method of Leonardo da Vinci*, when he maintains that one can effectively construct such an instrument out of the work of someone whom one admires and wishes to study, such as to "discover in his works ideas which originate in ourselves: we can re-create his thought in the image of our own,"¹³ as he put it. Let us return to it now.

Suppose we admire the work of somebody else, Valéry maintains. In that case, we must at least possess the quality at work in it within ourselves—even if only undeveloped and as a germ. Something can only speak to us if we are already in principle possession of it. Thus far, this would appear to support a non-universalist setup that seeks to keep likeness with likeness, according to a notion of

13 Valéry, 1929, p.31.

order that is not open but conservatively closed. However, let's see how Valéry continues:

But if all the faculties of his mind are widely developed at the same time, or if the results of his activity seem to be considerable in all fields, his character becomes thereby more and more difficult to comprehend in its unity, tends to escape from our efforts to understand it. There are distances from one extremity to another of this intellectual area, such as we have never covered. The continuity of the whole escapes our perception as do formless scraps of space which are divided from each other by objects that we know and which are for us no more than chance intervals; as, at each instant, myriads of facts, over and above the small number established by language, are lost.¹⁴

Instead of disregarding or dwelling on the subjectivist problem of unequally developed intellectual dispositions, Valéry generalizes the problem into one of the scales of nature: “[A]t each instant, myriads of facts, over and above the small number established by language, are lost.”¹⁵ Here, we see his commitment to Cartesian physicalism, which—as we will elaborate later—essentially sought to liberate imagination from psychological theories of faculties purportedly natural specifically to the

14 Ibid.

15 Ibid., p.32.

human soul. Such a physicalism was essential to Descartes insofar as his philosophy was not to compete with theology; it was to complement it within the clear bounds of what regards the world, the domain of life. Valéry continues:

Nevertheless we must go slowly, take time before them and conquer the difficulties that the conjunction of apparently heterogeneous elements lays on our imagination. Every intelligence here gives itself up to inventing a unique order, a single activity, and desires to impose its own image on the system which it imposes on itself—a clear-cut image. With a violence which depends on its range and its lucidity, it finishes by reconquering its own unity, just as by the operation of some mechanism a hypothesis becomes clear and proves itself to be the thing which has made the whole, the central revelation in which all has had to happen, the monstrous intelligence or strange animal which has woven thousands of pure connections between many forms, and of which those puzzling and varied constructions were the creations—instant building its habitation.¹⁶

The mechanist paradigm he adapts lets him speak of instincts generically as one speaks of forces in physics. What appears as a striking hubris of seeking to understand everything through scaling

16 Ibid.

it to proportions of one's own limited dispositions is, in fact, an inversion of direction: acknowledging the greatness of the topic of one's object of admiration is turned into a source for learning to rise to its greatness gradually, step by step. What is more, the method that is at play hereby facilitates the public communication and sharing of what has been wrought through such knowledge-as-self-forming-labor and without claiming any ownership of the gained insight and understanding as a sole truth because it is established *by method*:

The production of the hypothesis is a phenomenon which admits of variations but not of chance. Its value is the value of the logical analysis of which it must be the object. It is the basis of the method with which we are going to occupy ourselves and which we are going to utilize.¹⁷

Consequently, Valéry will state decidedly that even though he says his text is about the method of Leonardo da Vinci, it will not be about the man—but about a miniature model of inference drawn from having sought an intimate encounter with his mind through having engaged with his work; that is, by seeking to find a method that can give unity to the difficulties that the conjunction of apparently

17 Ibid.

heterogeneous elements present in his work lays on one's imagination.

It remains to give a name to this creature of thought in order to set a limit to the elaboration of terms ordinarily too far apart and likely to escape from any attempt to associate them. No name seems to me more suitable than that of Leonardo da Vinci. Whoever imagines a tree to himself must also imagine a sky or a background against which to see it standing. That is logic of a kind that is almost self-evident and almost unrealized. The figure I imagine reduces himself to an inference of this nature. Little of what I say of him must be considered as applicable to the man who has made the name illustrious: I am not following up a coincidence that seems to me impossible to make clear. I am trying to express a point of view with regard to the detail of an intellectual life, to make one suggestion as to the methods which every discovery implies, one chosen amongst the multitude of things that may be imagined, a model, that may well be thought a rough one but in every way preferable to strings of doubtful anecdotes, to commentaries in the catalogues of art collections, to dates—erudition of that sort would only falsify the purely hypothetical aim of this essay.¹⁸

We will not delve into the model of Leonardo da Vinci's method drawn up by Valéry here. Instead,

18 Ibid.

we will pay attention to how the drawing up of such models is, for Valéry, the core skill of the architect: to build with timeless form through mathematical ideation. For this, we need to consider a closer look at the role of *Entwurf* in such ideation.

Massimo Cacciari, the Italian philosopher and former mayor of Venice, has foregrounded the particularly strange act of bracketing time—and keeping it in suspension—that is involved thereby. *Entwurf* is not properly a project, he maintains.¹⁹ As its name suggests, it does not just cast itself ahead and into the future (as does the project)—rather, it casts itself off from something (as its German prefix *Ent-* indicates). It embodies a strange kind of gesturing in abstraction; *Entwurf* embodies the gesture of an act of thinking that *sets itself apart* while at the same time *recollecting itself anew*, being informed by the character of a particular project (from which *Entwurf* is not separable). In light of our context here, I suggest calling such gesturing at work in the act of abstraction, thought-in-act, or *architectonic contemplation*.

Architectonic contemplation is not entirely introverted, like philosophical (or theosophical)

19 Massimo Cacciari, *The Project*, in *The Unpolitical, On the Radical Critique of Political Reason*, trans. by Massimo Verdicchio, New York, Fordham University Press, 2009, pp.122–145.

contemplation tends to be. In *Entwurf*, what is at stake is indeed a strange acting-in-suspended-in-intermediacy: it is all about an introverted kind of exteriorization of ideas through picturing not so much the ideas themselves but an aesthetic reality in which they could have a certain lasting presence, a certain duration.

Entwurf does not have a cause exterior to itself, but there is a metaphysical causality at work in it. It needs a milieu in which the gesturing subject does not dwell and is not at home. In short, *Entwurf* needs an ecstatic site where one is not properly oneself—it depends upon participating in an epiphany, the sudden and remarkable happening of a realization. It is involved with a strange sort of “liberating capture,” Cacciari speaks of such a metaphysically challenged (and challenging) stance, namely to be tensely suspended and kept in *stasis*, struggling to find and maintain a stance vis-a-vis eventuality, as the poignant formula of *feeling the pull of the project's throw*.²⁰ *Entwurf* is about bearing the tension of being pregnant with an idea, a pact with oneself to delay the birth of this idea with the intent to draw stimulation for mathematical ideation from such an act of bearing-with. It is about conceiving *how to work its delivery out* as a world-fitting project.

20 Cacciari, 2009, p.123.

Paradoxically, this involves a certain conspiracy with impotence and death.

Here lies the similarity to Valéry's engagement with the spirit of Leonardo through attending to his work: "Every intelligence here gives itself up to inventing a unique order, a single activity" by searching for a method one has not mastered before "giving oneself up to a system that imposes itself" but which can be found, nevertheless, entirely within one's own "desire to impose its own image on the system which it imposes on itself—a clear-cut image."²¹

*Architectonic Form Originates in Death,
or Eupalinos's Mathematical Ideation*

With another one of Valéry's texts, *Eupalinos or Architecture*, we have a witty and brilliant document that ponders such an idea. To explore architectonic ideation, Valéry draws up a plot involving Socrates and Phaedrus, two well-known figures from the Platonic dialogues. The setup is striking. He has Socrates, master of the dialectic form of verbal dialogue, talk with Phaedrus, the defender of the idea of the soul's immortality and proponent of a distinction between first and second nature. In

21 Valéry, 1929, p.31

Valéry's dramatic piece, they meet each other at a river in the land of the dead. Phaedrus is deemed to have been right in Valéry's reception. He has Socrates say: "This river is the river of Time. It casts only the souls upon this bank, but it carries away everything else without effort."²² But Phaedrus's response strengthens the position Socrates is commonly associated with: "Every instant I imagine that I am going to discern some form, but what I think I have seen never succeeds in awakening the least image in my mind."²³ At this moment, Socrates appears to have been right as well. We are transported to the dramatic site of a contemplation that dwells in doubt, and indeed, we will see shortly that what is at stake in this plot is the question of how a methodical doubt, namely that of how analysis, could possibly be linked up with a situation of standing-besides oneself, with a stance in ecstasy.²⁴ Next, we hear Socrates explaining to Phaedrus how he makes sense of the situation they happen to find themselves in:

That is because you are witnessing the true flow of beings, motionless yourself in death. From this

22 Paul Valéry, "Eupalinos or The Architect," in *Dialogues*, trans. by William McCausland Stewart, New York, Pantheon Books, 1956, pp.65–152, here pp.66–67.

23 Ibid.

24 As Phaedrus recounts the words of Eupalinos. Ibid., pp.86–87.

pure bank, we see all human things and natural forms impelled in accordance with the true speed of their essence. We are like the dreamer, in whose breast, shapes and thoughts being strangely altered by their flight, things and their transformations intermingle and are blent. Here everything is negligible, yet everything counts. Crimes engender immense benefits, and the greatest virtues develop fatal consequences: our judgment settles on nothing, idea becomes sensation before our very eyes, and every man drags after him a chain of monsters inextricably wrought of his acts and the successive forms of his body. I think of the presence and of the habits of mortals in this so fluid stream, and reflect that I was one among them, striving to see all things just as I see them at this very moment. I then placed Wisdom in the eternal station which now is ours. But from here all is unrecognizable. Truth is before us, and we no longer understand anything at all.²⁵

Phaedrus remains in doubt. He remembers, and tells Socrates, how he had once found in Eupalinos, the architect and engineer, a certain “power of Orpheus.”²⁶ The nauseating situation in which they both find themselves (a situation “like that of a dreamer,” in which “everything is negligible, yet everything counts”) can be cleared up through

25 Valéry, 1956, p.67.

26 Ibid., p.70.

this power—and he begins to speak about it as the power of the architect. The architect is supposedly capable of finding a discernment within such a confused presence of truth which involves a peculiar manner of abstracting from all details, such as to keep the memory of a vivid experience effective and alive in what Valéry calls “a mathematical image”²⁷; the power of Orpheus is to ideate mathematically.

What is postulated thereby is the old idea that between the soul and mathematics there is a correspondence—all liveliness may be washed away by the river of time, but if the souls are washed to the shore and can contemplate “the true flow of beings,” this is to be precisely what mathematical ideation is capable of. Socrates is incredulous, even though he knows another power similar in kind. He knows the power of words—and it resides precisely in attending to even the finest details to keep the essence of a thing present. What Phaedrus talks to him about, about this peculiar power of the architect to draw up and realize a mathematical image, sounds bewildering to him: “What enthusiasm of a shade for a phantom!”²⁸ he exclaims amused. “This is because you always wish to draw everything

27 Ibid.

28 Ibid.

out of yourself,”²⁹ Phaedrus replies. The architect’s power to link up analysis with ecstasy by mathematical thinking never aims at fully elucidating and exposing the essence of things—but it does maintain a relation to truth.³⁰ The architect seeks to provide a residence for a truth, such as to grant it a certain duration of being effectively present. His relation to the essence of things is always mediate. But despite the immateriality of mathematical ideation, for the architect, this mediacy is crucially constituted by the body. The idea Valéry develops here conceives the body inversely: the body, usually praised, though not perhaps in Platonist philosophy but certainly in philosophies of empiricism, phenomenology and aesthetics for granting a certain immediacy to experience, is precious here for the architect *because* it grants a mediacy. This mediacy relies upon a *via negativa* to one’s own body; indeed, the body becomes an “admirable instrument”³¹—and through that, a site of ecstasy. What a marvelous substance we are made of, Phaedrus

29 Ibid., p.79.

30 The architect’s relation to truth appears in the first part of Valéry’s text to be quite different from that of words, of which the philosopher is in command, yet this contrast transforms later on in the text. For reasons of length, I will not elaborate on the full scope of Valéry’s argument in this discussion here.

31 Ibid., p.90.

recounts the words of Eupalinos.³² Furthermore, we learn through this substance that we participate in what we see and touch: We are stones, we are trees, and we “exchange contacts and breaths with the matter that englobes” us.³³ Bodies are a site of ecstasy to the architect because the soul and nature interpenetrate in our bodies. This interpenetration is what is capable of hosting a speculative site that stands beside oneself:

Bodies touch, they are touched; they have and lift weight; they move, and carry their virtues and vices about; and when they fall into a reverie or into indefinite sleep, they reproduce the nature of waters, they turn into sand and clouds,... on other occasions they store up thunderbolts and hurl them abroad.³⁴

Such standing beside oneself is not a question of either or. Rather there is a graduality to it, and this is crucial. Training to connect with the capacity of the body to facilitate such gradual ecstasy, “[I]t is necessary to abstract oneself from the spells of life and from immediate enjoyment, even if for this purpose we must make a stern effort against ourselves.”³⁵ To make a stern effort against oneself

32 Valéry, 1956.

33 Ibid.

34 Ibid.

35 Ibid., pp.85–86.

means apportioning one's attentions. It is about arranging problems in various speculative orders, for "[T]here is a commerce between your acts and your latest observations."³⁶ This commerce allows to endow experiences with a lasting presence in architectonic form that originates in ultimate impotence, in death.³⁷ The architect's act of conception involves the body in this way—the body, if it conspires with the (immortal) soul, can recall the soul back to reality “as the anchor calls back the ship.”³⁸ Let's cite the passage in full which elaborates on this mystic instrumentality of the body:

But I ... say in the full light, I repeat to myself with every dawn: “O body of mine, that recallest to me at every moment this tempering of my tendencies, this equilibrium of thy organs, these true proportions of thy part, which make thee to be and to establish thyself ever anew in the very heart of moving things; keep watch over my work; teach me secretly the demand of nature, and impart to me that great art, with which though art endowed even as by it thou art made, of surviving the seasons, and of saving thee from the incidents of change. Grant me to find in thy alliance the feeling of what is true; temper, strengthen, and confirm my thoughts. Perishable as thou art, though art

36 Ibid., p.86.

37 Ibid., p.89.

38 Ibid., p.91.

far less so than my dreams. Though endurest a little longer than a fancy; though payest for my acts, and dost expiate my errors. Instrument though, of life, though art for each one of us the sole being which can be compared with the universe. The entire sphere always has thee for a centre. O mutual object of the attention of all the starry heavens! Thou art indeed the measure of the world, of which my soul presents me with the shell alone. She knows it to be without depths, and knows it to so little purpose that she sometimes would class it among her dreams; she doubts the sun ... Doting on her ephemeral fabrications, she thinks herself capable of an infinity of fabrications, she thinks herself capable of an infinity of different realities; she imagines that other worlds exist, but thou recallest her to thyself, as the anchor calls back the ship ...³⁹

Soul and body form an alliance in architectonic conception. When asked if this power involves conception, Eupalinos responds “Yes and no. Yes as a dream. No, as a science ... It is not in my power to link up, as I ought, an analysis with an ecstasy.”⁴⁰ Conception here is, quite bodily, an act where the powers of abstraction and imagination are being summoned “from the great desire” and “naively formed of the extreme expectation of my soul” —

39 Ibid., pp.91–92.

40 Ibid., p.87.

only to then “interrupt the very birth of Ideas,” through apportioning attention, arranging a problem in another order, and again, another order. Yet despite this violent effort to go against one’s immediate inclination (namely to dwell or realize an idea right away), the act of conception cannot be willed. It is an erotic act. Even though entirely within one’s head, it is of bodily intensity, experience, gesture. Valéry describes it thus:

When it makes its presence known, dear Phaedrus, I am already as different from myself as a tightened string differs from itself when loose and sinuous. I am quite other than what I am. All is clear and seems easy. Then my schemes follow their own course and are preserved in a light that is mine. I feel my need of beauty, proportionate to my unknown resources, engendering of itself alone forms that give it satisfaction. I desire with my whole being ... the powers assemble. The powers of the soul, as you know, come strangely up out of the nights ... By force of illusion they advance to the very borders of the real. I summon them, I adjure them by my silence ... Here they come, charged with clarity and with error. The true, the false shine equally in their eyes, on their diadems. They crush me with their gifts, they besiege me with their wings ... Phaedrus, here lies the peril. It is the most difficult thing in the world.⁴¹

41 Ibid., p.88.

We can see now how mathematical images are thought by Valéry to be composed—by a kind of natural, physical communication: These “mysterious and overbountiful favors,” he says, “I must arrest them, O Phaedrus, and they must await my signal.”⁴² Having obtained them by interruption of his life, he still forces himself “to divide the indivisible and to temper and interrupt the very birth of Ideas.”⁴³ What this yields is freedom, he says.⁴⁴ Freedom to do *Entwurf*. Body and mind, this “finite and this infinite which we bring with us, each in accordance with his nature, must now unite in a well-ordered structure.”⁴⁵ And if they work in concert, if they “interchange fitness and grace, beauty and lastingness, if they barter movements for lines and numbers for thoughts, they will then have discovered their true relationship, their act. ... Stones and forces, outlines and masses, lights and shadows, artificial groupings, the illusions of perspective and the realities of gravity, all these are the object of their commerce.”⁴⁶ *Entwurf* is about drawing up “the profile of this commerce” such that it captures in its externalization of such interiority—the interiority

42 Valéry, 1956.

43 Ibid., p.88.

44 Ibid.

45 Ibid., p.86.

46 Ibid., p.91.

built up by linking analysis with ecstasy, without being able to say how—the richness of the architectonic act of contemplation as “incorruptible wealth,” as the edification of a mathematical image.

With this, we have a context now to turn to René Descartes, to approach his text “Discourse on Method” from the angle of the *Entwurf*. Descartes, too was, essentially concerned with a method that could establish a mediate relation between knowledge and the world.

René Descartes’s Entwurf of the Method

Descartes’s text on method was published in 2013 for the first time in its original context in a German translation in an edition published and introduced by Christian Wohlers under the title *Entwurf der Methode*.⁴⁷ This founding text of modern rationalism is presented with its complements by three so-called probes (*Essais*) that demonstrate what this proposed universal method can accomplish (how it can guide reason in the pursuit of scientific truth). The three *probes* (essays) were on *dioptra*, *meteora*, and *geometry*. The field of *dioptra* concerns sight *rendered* relative to optical instruments. That of *me-*

47 René Descartes, *Entwurf der Methode, mit der Dioptrik, den Meteoren und der Geometrie*, trans. Christian Wohlers, Hamburg, Felix Meiner, 2013.

teora involves singular and unsteady weather phenomena like lightning or rainbows, earthquakes or meteorites. And geometry, well, geometry was usually *more geometrico*, a method thought to work deductively, by proceeding from Euclidean axioms; however, this is not so in Descartes, where geometry is, instead, treated algebraically. It acts as a field of science wherein “there are truths to be found,” as well as the source of provision for deductive methods. It has often been highlighted that Descartes introduced an analytic employment of geometry, but its algebraic constitution (codification) has seldom been accentuated. Yet, it is crucial to see how his method follows and directs the codification of statements in all three domains here, which act as exemplary probes to illustrate the workings of his universal method. In all three fields which Descartes chose, we are confronted with what could be called edifices of codification concerning the natural laws at work within those fields. What is more, all three fields articulate and organize, explicitly so, the treatment of light. This would perhaps not appear so significant, if Descartes had not called the book, of which this was to be a miniature version in disguise, *The World* by the subtitle of *A Treatise on Light*.

... and the Ethics of its Discourse (an Impredicative Method that has “Nothing” to Teach)

I will try to demonstrate a reading of Descartes that understands the proposed method as one of self-instruction in the service of intellectual craftsmanship.⁴⁸ It is a method that takes no object exterior to itself. Rather, the path it paths leads circularly back to the agency that makes use of it. It is a method that would not do its job if it were not used in a self-referential and self-informing manner. This expresses Descartes’s concern with academic approaches to pedagogy that rely on faculty psychology⁴⁹ and that “understand[s] the imagination as an empty vessel to be filled.”⁵⁰ Cartesian imagination is not an empty vessel, it is a plenum from which the right conduct of one’s reason knows how to subtract what must be omitted—not by taboo, but by submission to the law at work in nature as a political withholding power. The fact that both texts, the “Discourse on Methods” as well as *The World*, are written in the tone and form of an autobiographical fable, then,

48 Cf. James Griffith, *Fable, Method, and Imagination in Descartes*, London, Palgrave Macmillan, 2018.

49 *The Great French Encyclopedia*, by d’Alembert and Diderot, famously organized all its entries according to such three faculties of the human mind, namely *memoire* (memory), *raison* (reason), *imagination* (imagination).

50 Griffith, 2018, p.137.

wants less to emphasize the subjective bias inherent to all methodical reason, than to facilitate a methodical manner of setting free the capacity to imagine—so that it can move and quicken thought not by fancy, but objectively and reasonably so. In his recent book *Fable, Method, and Imagination in Descartes*, James Griffith elaborates: “[T]he imagination necessarily remains, to some degree, distinct from the mind, which is why fables, histories, dialogs, and so on can have the effect of deforming and reforming the mind at all.”⁵¹ Griffith rightly argues that an analytical method is preferable to Descartes over synthetical methods because the latter requires that those who practice synthetic forms of reasoning can only come to a true conclusion if “they are already in possession of the substance of the conclusion.”⁵² Descartes needs to maintain that there be a universal architectonics, to set the imagination free from 1) its heavy footed and immobile clumsiness (that comes from thought being naturally flooded of plenty of imagination, with no training in distinguishing between clarity and obscurity, and hence in keeping flashes of imagination at bay, while submitting—to—concentrating, partitioning attention to—others) and 2) from any

51 Ibid., p.147.

52 Ibid., p.125.

one particular notion of psychology that was to be legitimated in applying its dogma indisputably.⁵³ The power or the force of the imagination is to imagine the limits of the imagination, Griffith argues. For Descartes, the imagination imagines the imaginable in imagining the unimaginable.⁵⁴

Is this not a reasoning that proceeds *subtractively* and *via negativa* quite similarly to the one associated with the gesture of *Entwurf*, which we saw with Massimo Cacciari? How would Cartesian rationalism present itself if we considered his architectonics universal and committed to just such a gesture of *Entwurf*—as feeling the pull of its [project's] throw? The pursuit of its method in the sciences would manifest in great variety of manners, and multifarious ways—it would be capable of *rendering* demonstrations of the world in disjunctive regularities, that nevertheless are to be respected as being of one (universal) kind. Griffith elaborates that the imagination is the driving force for both fable and light, which allows for experience and comprehension. “The experience of light, the motion that generates and maintains motion in the

53 This very conflict with respect to a perfect regularity that would set a soul in motion, hence a notion of measurable beauty, is elaborated in Paul Valéry, *Dance and the Soul*; although Valéry makes no relation to Descartes.

54 Griffith, 2018, p.145.

world, is interpretable, and so the world itself is interpretable” because the imagination supposes the order of the world, of the body, to operate with a machine-like regularity. It is a regularity that the imagination “perceives” via fabulation through the sensory organs: “The fable is the inaugurating, regulated and regulating, motion of the mind that would imagine the world to have regularity,”⁵⁵ and fabulation depends upon architectonic ideation, capable of imagining what Valéry calls *mathematical pictures*. Descartes’s book *The World* takes the form of a fable, but it needs to be regarded as a fable of objective and natural imagination because the way it is scripted and contemplated is mediated by the algebraic renderings of analytical geometry. There is a method to such fabulation, yet the fable is a rhetorical form. It has morals, it is biased and inclined in one direction or another. What Descartes develops, hence, is a strange thing: It is an impredicative method, the method of a kind of quantitative contemplation. To our ears today this sounds like a contradiction in terms, but this is—if we read Descartes as living up to what the architectonic gesture of *Entwurf* entails—precisely what makes him such an architectonic thinker. The nature at stake with such a method is that it is capable of

55 Ibid.

transcribing, of converting, *light into imagination and imagination into light* without ever hoping to terminally settle the methodic equation for good; doing the algebra in such a convertive equation (between light and imagination) articulates the terms in a codified manner: In Descartes's case, it is the co-habitation of the differently fashioned truths, each of universality but also inevitably subject to dogma in science. What the universal method facilitates is a practical dogmatics whose conflicting aspiration depends upon being sustained by an intellectual kind of craftsmanship. Could it be that Descartes's rationalism was in the service of how moral grounds can be respected and treated with the greatest possible adequacy, rather than establishing a program of normative clarification? Could it be that his rationalism can show us a way of respecting, in science too, the inevitably moral grounds—whereby a *practical* (not a theoretical) dogmatics can help proceed with the greatest possible adequacy for making cases out of singular events?

At the risk of overstretching this point perhaps: Descartes seems to have been thinking of his method in terms of algebra, as a kind of physico-mathematical “communication.” His *mathesis* involved an explicit awareness of code's role in lan-

guage and mathematics. His “rationalism” seems to have not yet broken with the ancient tradition that relates mathematics to learning; the Greek *mathēma* equates to “that which is learnt.”⁵⁶ What he “finds” in the sources from Antiquity, which he names for his *universal method* (especially Pappos and Diophant), requires acts of deciphering, as he writes, it “cannot simply be read in the works of the mathematicians of antiquity.”⁵⁷ It appears to have been through the *codification* of meaning, by placing meaning as the algebraic X in the place of the unknown variable, that we have to think of the mechanist and instrumental manner of reasoning in which his method began to propagate. Instruments, then, are not to replace the role of perception; they are to augment perception and to establish a publicness for knowledge so edified.⁵⁸ Descartes himself thought that the mathematicians in the past “must have made a kind of pact” to keep their true methods from their readers and the world posterior to them.⁵⁹ Mathematics, for

56 From *manthanein* “to learn.”

57 Christian Wohler, “Einleitung,” in *René Descartes. Entwurf der Methode: Mit der Dioptrik, den Meteoren und der Geometrie*, Hamburg, Felix Meiner, 2013, kindle edition.

58 This also resonates with the reading which Simone Weil gives of Descartes, in her thesis “Science and Perception in Descartes,” in *Formative Writings*, London, Routledge, 2009.

59 Wohler, 2013, p.ix.

Descartes, involved an intellectual inwardness or relation to meaning, like dialectics does. His critique against the said “pact” of the mathematicians prior to his own time perhaps targets the occultist or hermetic gesture of building secret societies, based on politically motivated and instituted “rites” of initiation.

Descartes, then, would appear like the propagator of an “open” science. This is the line this chapter wants to incite. If this were so, how would Descartes have conceived of this “openness”? As a political terrain, I will argue.

Omitting La vraie nature de la lumière from Any Description: Fabulating the Plenum Spatium for an Open World

The argument I wish to pursue in the following is that Descartes was indeed committed to such a notion of openness. I propose that he was thinking of the encrypted content, which his universal method is to range over, through the framing of a codified exegesis, as a form of juridical dogmatics with respect to the natural laws at work in physics. In his algebraic method, what is spelled out within the reservations kept by brackets is meaning fashioned by dogma; meaning accommodated in “settled opinion, a principle held as being firmly

established.”⁶⁰ What I wish to consider is that, and how, Descartes was proposing an architectonics of the world in the light of the laws of nature—laws which are to contract the pursuit of science as a geo-philosophical practice; science set apart (separated) from the culturally specific enactment of theological, religious, or political codes.

In the sixth chapter of *The Treatise on Light*, he asks his readers to imagine a new world “very easy to know, but nevertheless similar to our” consisting of an indefinite space filled everywhere with “real, perfectly solid” matter, divisible “into as many parts and shapes as we can imagine.”⁶¹ Of this world he postulates that “from the first instant of creation”—God “causes some [parts] to start moving in one direction and others in another, some faster and others slower” and that subsequently “He causes them to continue moving thereafter in accordance with the ordinary laws of nature.”⁶² This world model for Descartes is imaginary, a physics common to all things and all beings, for which there exists divine law (universal nature) and ordinary laws of nature (locally diverse, geographic conditions of natural law). Descartes is very conscious about the model

60 From Latin *dogma* “philosophical tenet,” from Greek *dogma* for “opinion, tenet,” literally “that which one thinks is true.”

61 McDonough, 2015, p.1.

62 Ibid.

character of his approach: he wants to begin with a description of light, he says, but he also tells us that he will omit something from this description: namely the “true nature [*vray quelle est sa nature*] of light.”⁶³ The omission of saying anything about the true nature of light is why Descartes speaks of a natural geometry, in distinction to reasoning helped by mechanical instruments. The “nature” that geometry measures is the “nature of light,” which can never be fully adequately described. Descriptions achieved using geometry always tell us about the world’s order—and not a supposed order of universal nature itself.

The new world Descartes is inviting his readers to imagine is a *plenum*, a notion Descartes takes from Aristotle for whom it meant a *plenum spatium*—a space exhaustingly filled with things. For Aristotle, it contrasted the notion of a vacuum, an empty and centrally coordinated space, in which all things are thought to find a place. In the tradition of philosophy, this pair of notions stands for the problem of action, of the origin of movement. It is, arguably, this problem that Descartes wants to treat physically, with his mechanistic rationalism that was to be independent of any particular psychology (theory of the principal seat of animation, namely

63 Griffith, 2018, p.138.

the soul). Descartes wins such independence by liberating imagination from the accounts of it in faculty psychology. He treats the imagination like he treats the “true nature of light;” he does not seek to explain them, instead, he treats them cryptically and starts with their objective givenness. The abstract model of his plenum-vacuum distinction is considered an algebraic model that consolidates the polarizing role of the vacuum (when admitted to play a role in science). For theological sensibilities admitting the vacuum is scandalous because it admits to the possibility of God’s rule being absent. But, in conflict with this, algebra—the core of modern metrical methods, introduced the symbolization of the zero as a placeholder for precisely this. The employment of the symbol zero in modern mathematics almost inevitably raised associations to the theological problem of the vacuum. Descartes admitted to the algebraic employment of the zero, but only virtually so by saying that “God caused some [parts] to start moving in one direction and others in another, some faster and others slower,” he introduced “cracks” into the indefinite space of the plenum. We should think of this imaginary world (the plenum) such that light, in its material *Stofflichkeit* (physics of light), keeps ceaselessly filling up these cracks, he tells us, such that there

never is *actual* empty space. Such cyclical dynamics is well known from mechanical instruments, for the construction of the location for an algebraic point zero—a virtual fulcrum—is also decisive. With his mechanistic worldview, Descartes invented an architectonics of the world that can maintain that the true nature of the world is rule based (light, God's causation), but also rule generating (imagination constrained by optical devices, generating local geographies of “ordinary” laws).

The world Descartes is describing begins with light being there. It does not need any explanations as to where from or how; but it also does not prevent theological speculations with respect to this. It abstains from wanting to say anything about creation. Descartes's natural philosophy breaks with the assumption that it should or could give comprehensive and exhaustive accounts of what is. Its accounts are based on regularity and relative precision—and hence reasonable and mechanically reproducible accounts. This world still finds comfort within a cosmos of universal law and nature, but knowledge that belongs to it must be knowledge dwelling in an element of doubt. *Method*, then, becomes something which allows one *to keep with doubt*, a state of mind that can bear with always being of a split mind.

Method does not *lead* us anywhere that could already be located on a map. And yet it delivers the one who follows it somewhere—into exposure of a self to openness.

*Coda. Diachronicity, Politics and
Architectonic Constitutions*

Descartes's universal method has nothing in particular to teach, I argued; now we can better see why: because it allows to build the self of such self-instructive and autobiographical fabulation, in building the self that proceeds by it *subtractively* and *discretely*, on the grounds of architectonic ideation.

In what came to be the founding document of Bauhaus, Walter Gropius wrote, "The idea of today's world is already clearly in sight, yet its Gestalt is still unclear and confused."⁶⁴ The "old and dualist world picture, the self—counter to the All (universe)—is fading," he continues. In its stead, the idea of today's world bears "the thought of a novel world unity within itself," in which "all oppositional tension is in absolute balance." Gropius spoke about "a dawning understanding of unity of all things and appearances." He thought this unity could lend "a common and profound *worth* to work

64 Walter Gropius, *Idee und Aufbau des Staatlichen Bauhauses*, Munich, Bauhausverlag, 1923; here my own translation.

[Arbeit]”—work which would manifest our universal innermost being. Bauhaus was inspired to think that the meaning of this work thereby becomes self-referential, as self and All (universe) no longer form a dualism. Both are supposed to crystallize in “work” and manifest in what “work” can produce. One hundred years later, this Bauhaus vision is painfully present in the now current discussion on the “post-political” condition.⁶⁵

The notion of public space has always sought to address what is indispensable, indisposable, and at the same time, from an economic standpoint, unsalvageable. Indeed, the room for the stranger turns a village into a city. It is also through such hospitality that the notion of the public can never rid itself from its ties to the sacred. Today, this latter aspect is not properly named, and arguably presents itself hidden in the themes of safety and pollution.⁶⁶ The current lines of interest in spatial culture discourses consume themselves in asking how public space could be thought of relationally, and this without it dissolving into urban space or lived space—that is, space conditioned by economy and particularist interest; space as itself but as a

65 E.g., Chantal Mouffe, *On the Political*, Abingdon, Routledge, 2005.

66 Mary Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*, New York, Routledge, 1966.

product, one commodity to be socially produced along with all other commodities. The Bauhaus vision, viewed in today's light, confronts us with a connection to vanity inherent in its aspired universalism. If today there is a project underway to found a New European Bauhaus, we must ask ourselves with the following in mind: What does it mean to be European? Is the New European Bauhaus speaking about a "citizenship of the universe," understood as an a-territorial kind of citizenship? If so, how can the complete de-politicization implicit in this formulation be prevented?

Cartesian rationalism is European in the sense that it is coined by a cultural set-up that affirms its struggle to keep with differences, a culture that lives from giving authority to inventive but reasonable systematics over any one particular and local tradition and custom.

European culture in this sense is a culture that admits to the necessity of change, without trivializing the metaphysical implications of this issue. The initiative of building a New European Bauhaus is so timely today because like in Descartes's own time, we are challenged with a similar set-up that needs to affirm its own struggle to keep with difference to cultivate diversity. Here lies the crux: it cannot be about a universal citizenship; it is about a universal

culture. How and what kind of “culture” can “grow” from the pursuit of rationalism in and along an impredicative universal method? It is here that we can truly see the importance of such a rationalism: Because the explication of the *Entwurf* of method *contracts* responsibility without legitimizing its own validity. It makes subjects properly *nameable* (proper names, “proper” relative to contracted objectivity), and it makes objects *addressable* (somewhere within the spectrum between global and local, singularly relative to the contracted (named) subjectivity). In that sense, the rationalism of a universal method *constitutes* a publicness of space that is a-territorial, but geo-philosophical. Common sense may well be what is given to start from,⁶⁷ but it is not per se in any proportion to a particular nature of the human, or psychology of faculties. For Descartes, common sense is *therefore* given in the terms of a *physics*—a physics of light where-with a plentiful imagination, that dwells in an element of doubt, is capable of learning imagining the edification of reasonable intellection. This is what the world is all about, for the geo-philosophy of a Cartesian rationalism. The subtractive education at

67 As Descartes begins his “Discourse on Method,” some translations work with “good sense” and others with “common sense;” the French original is “bon sens,” the German translation is usually “gesunder Menschenverstand.”

stake with Descartes's universal method is self-instructive education that serves the rendering of all the diverse dogma of "common sense" back to a comprehensive dogmatics of universal culture—a dogmatics that lives in *practice*, not in theory. The equality at stake with Cartesian discourse-as-*Entwurf* needs to be actively sought for each situation where ordinariness gets into trouble. The equality at stake can never be settled; a sense of equality can never be assured of itself—it must be actively and delicately maintained. We can see now how the importance of natural laws for Cartesian philosophy is perhaps precisely to *unsettle* any notion of justice or equality that would claim for itself to dwell in an element of righteousness. In this role, natural law can be an analytical "foundation" for civic law.

But where, then, does the generic cogito of such a rationalism "dwell"? To imagine this, in a way that were adequate—proportionate, in the sense of co-efficient with—the effective abstractions at work in our science and technology today, as did Plato with the *Timeaus*, as did Descartes with his imaginary world as a *Plenum* with cracks. Our time too needs to fabulate architectonic tales in a metaphysical gesture. Mathematics thereby is not our enemy; it is our unobtrusive guide. Elias Zafiris, a mathematician and theoretical physicist,

has recently written on the importance of what he calls “an involution for architects”—a turning outside-in, an inverse movement to that of evolution. What he has in mind thereby is a re-gaining of self-consciousness that leads out of the currently submissive and self-destructive relation architecture maintains with technology. This relation is arguably due to a separation between the liberal arts and the polytechnical disciplines (and their respective mentalities), instituted throughout the 18th century.

Contrary to what this division suggested, mathematical thinking works in both. Zafiris tells us how we can think of this: “The two most predominant characteristics of mathematical thinking is abstraction and diachronic validity,” he emphasizes. “By the former we understand a process of percolation, which allows the filtering out of all irrelevant details pertaining to a particular problem, so that the invariants are eventually revealed. It is precisely the latter that enunciate the diachronic validity of mathematical thinking.”⁶⁸

With this peculiar relation that only mathematics can maintain to time, the New European Bauhaus can counter the direction its former version

68 Elias Zafiris, *Mathematical Thinking: An Involution for Architects*, Vienna, TU Academic Press, 2024 (Forthcoming).

ended up taking, namely, to fill up the world with goods and commodities drawn from inside (the self) out, delivered into the world. The New European Bauhaus would be about the interiorization of All into the selves—to bring about and care again for something indisposable, unsalvageable but also indispensable, thereby reinventing architectonic constitutions for a politics of universal culture.

