THE DIGITAL, A CONTINENT? ANARCHIC CITIZENSHIP WITHIN THE OBJECT-SPACE OF CUNNING REASON VERA BÜHLMANN

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VERA BÜHLMANN is a Swiss writer, and since 2016 professor for architecture theory at the Vienna University of Technology TU where she directs the Research Unit Architecture Theory and Philosophy of Technics ATTP at the Faculty for Architecture and Spatial Planning. Together with Ludger Hovestadt she co-directs the laboratory for applied virtuality at ETH Zurich, and is co-editor of the Applied Virtuality Book Series (Birkhäuser, since 2012). She studied English Language and Literature, Philosophy, and Media Science at the Swiss Universities in Zurich and Basel, from where she obtained her Master (2002) and her PHD (2009). At the core of her research is the interest in a notion of literacy and semiotics that extends to computation, coding, and information, as much as to language and mathematics. Her most recent publication is *Mathematics and Information in the Philosophy of Michel Serres* (Bloomsbury, London 2019 (forthcoming)).

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“What any country expects first from migrants, namely that they learn to speak and write the language of their guest country, this we should perhaps also accept as being expected, in analogue fashion, from all of us, with regard to that digital continent to which we find ourselves, whether we want to or not, forced to immigrate.”¹ I want to depart from this formulation, which, in my opinion, is as unsettling as it is timely, and unpack a particular implication that presents the question of nativity within a new light: What is so peculiar of this novel Continent, the Digital, if it can be called so, is foremost perhaps that no one is native to this strange, insubstantial kind of quasi-territory.

So, what kind of a mother-tongue might be at stake here? What kind of language is there to be learnt? We cannot approach this question by asking about regulations regarding something like an Immigration Status—because, *whom* should we be asking for this? Who, indeed, might be in a position to give us paternal protection with regard to the developments underway? Picking up a term that has recently been introduced by Homi K. Bhaba, Judith Butler, and others, I want to approach the issue by asking about the peculiar kind of citizenship that pertains to the locus in question *as the subjects of a Spectral Sovereignty*.² In my approach, the citizenship at stake is that of a *civic* citizenship—citizenship which obliges everyone who is to be a political subject to compulsory schooling. Let’s remember where this comes from: Civic modern nation states grant rights to its citizens insofar as they subject to a manner of service to the public, accept their duties in order to be granted rights—and among those duties is the famous *Dare to know!* Have the courage to use your own understanding (*Sapere aude*). This entails that

1 <https://www.architektur-aktuell.at/termine/veranstaltungen-vortraege/towards-a-quantum-literacy-vortraege-und-seminar-an-der-tu-wien>

2 This term, spectral sovereignty, has been introduced by Homi K. Bhaba in order to address issues of collective identity in relation to vernacular cosmopolitanism and cosmopolitan memory, and picked up by Judith Butler and others in relation to an increasing tendency of suspending the rule of law out, with regard to issues of globalization that need to bridge concerns for International Law (whose subjects are Nation States, not individual persons) and National Laws. Cf. Paulo Lemos Horta and Kwame Anthony Appiah, *Cosmopolitanisms* (New York: New York University Press, 2017); as well as Judith Butler, *Precarious Life: the Powers of Mourning and Violence*, (New York: Verso, 2004).

citizens must affirm to be educated, and this puts ‘education’ in an odd middle-ground between ‘emancipation’ and ‘oppression’—as becomes strikingly clear, in its conflictual setup, if we listen to Kant’s formulation: “Enlightenment is man’s emergence from his self-imposed nonage,” as he put it. “Nonage is the inability to use one’s own understanding without another’s guidance.” And a bit later he continues:

Laziness and cowardice are the reasons why such a large part of mankind gladly remain minors all their lives, long after nature has freed them from external guidance. They are the reasons why it is so easy for others to set themselves up as guardians. It is so comfortable to be a minor. If I have a book that thinks for me, a pastor who acts as my conscience, a physician who prescribes my diet, and so on—then I have no need to exert myself. I have no need to think, if only I can pay; others will take care of that disagreeable business for me.³

I want to think, in short, about the relevance and actuality of this famous motto for our own time. I want to think of the language spoken in the Digital Continent as the language of coding, and I want to address this language, as I hope to explain a little with regard to why, as the language of a *Quantum Literacy*.⁴

But first, and in terms of spatial metaphors, how *can* it possibly be adequate to speak of a ‘Continent’ with regard to the Digital at all? Isn’t this allusion rather misleading, as a continent promises stability and static reference, in the midst of waters, sure, but still as the very opposite to the fluidity of the seas? Doesn’t this digital world feel much more like something that *driples in* and *swells*, like a threatening rising flood of pre-emptive inklings, inklings that reach us from a strange, a total amount of what is considered possible? Are we not drowning

3 Immanuel Kant, *What is Enlightenment*, 1784. Here following the translation by Mary C. Smith (<http://www.columbia.edu/acis/ets/CCREAD/etscc/kant.html#noter>). In the original German version the passage reads: “Aufklärung ist der Ausgang des Menschen aus seiner selbst verschuldeten Unmündigkeit. Unmündigkeit ist das Unvermögen, sich seines Verstandes ohne Leitung eines anderen zu bedienen. Selbstverschuldet ist diese Unmündigkeit, wenn die Ursache derselben nicht am Mangel des Verstandes, sondern der Entschließung und des Mutes liegt, sich seiner ohne Leitung eines anderen zu bedienen. *Sapere aude!* Habe Mut dich deines eigenen Verstandes zu bedienen! ist also der Wahlspruch der Aufklärung. Faulheit und Feigheit sind die Ursachen, warum ein so großer Teil der Menschen, nachdem sie die Natur längst von fremder Leitung frei gesprochen (*naturaliter maiorennnes*), dennoch gerne zeitlebens unmündig bleiben; und warum es Anderen so leicht wird, sich zu deren Vormündern aufzuwerfen. Es ist so bequem, unmündig zu sein. Habe ich ein Buch, das für mich Verstand hat, einen Seelsorger, der für mich Gewissen hat, einen Arzt, der für mich die Diät beurteilt, u.s.w., so brauche ich mich ja nicht selbst zu bemühen. Ich habe nicht nötig zu denken, wenn ich nur bezahlen kann; andere werden das verdrießliche Geschäft schon für mich übernehmen.” Immanuel Kant: *Beantwortung der Frage: Was ist Aufklärung?* In: *Berlinische Monatsschrift* 4 (1784), 481–494.

4 Cf. Vera Bühlmann, Felicity Colman, Iris van der Tuin, ‘Introduction to New Materialist Genealogies. New Materialisms, Novel Mentalities, Quantum Literacy’ in *The Minnesota Review: New Materialist Genealogies*, Volume 2017, Number 88, 2017.

in contingency, and *therefore* forced to affirm the status of a nomadic subject? Isn't the digital *percolating* from a kind of future that already seems to inhabit the here, now, a future that keeps informing us about ever more possibilities whenever we try to decide, to delimit, to make a decision, to reason critically?

If we can be Civic Citizens of this Digital Continent, then there must be a lawfulness to it. And indeed, how could there *not* be one, since everything digital is engendered by calculation, by mathematics, by algebra? And yet, this lawfulness at stake seems to be precisely what is swelling with an abundant plenty of instructions and decrees, it presents itself—indeed like mathematics does—as *the corpus* of a *cornucopia*. And it is a *frightening* horn of plenty. One that, rather than being generous and helpful whenever we feel prepared for it, presents itself obtrusively, even oppressively, as we often feel. It tends to *erode and take away* our confidence in reason, critical judgement, and responsible self-determinacy. The most outrageous aspect of it is perhaps that the *erosion* it triggers is not a consequence of this lawfulness's principle unpredictability and irrationality, but quite the opposite! The erosion is driven by this lawfulness *because it is* so very rational and predictable—indeed *super-rational*, since *computational*, and functioning best if left to *automatic* self-organization.

The more we try to reason the status of lawfulness in computation, the more we fuel its abundant 'gifts'.

THE GREAT GREEK RUSE

Are we then, indeed, captured within a *vicious circularity* that is—as Martin Heidegger tried to explain to us⁵—the very ground (reason) of the Modern age's *essential* character, that of post-metaphysical science with its striving for innovation in research? The notion of the *vicious circle in reasoning* was given the general sense of 'a situation in which action and reaction intensify one another', according to the etymological dictionary. Any kind of critical agency that is caught up within such a space of vicious circularity would inevitably be a dangerous agency, a corrupting one, a pretentious one, even one that, demonically, *mocks* any idea of equilibrium—from which moral notions of justness, righteousness, balanced valency and so on surely are being derived. For Heidegger, modern science is *exact* science that installs the conditions of measuring according to its essential value, that of *exactitude*. And just because of this, Heidegger maintained, it is also a science which does not truly *think*. By this science, reasoning is driven to greater and greater speed. It is hasting towards its own corruption.

5 Martin Heidegger, "The Age of World Picture," *The Question Concerning Technology and Other Essays*, translated by William Lovitt (New York: Harper and Row, 1977), 115–54.

And indeed, how else to understand the status of Law, not mathematical now but Common or Civic Law⁶, when every plane we manage to expose as integrative, when every explanation that accommodates a variety of circumstances within one *plane of reference*, immediately produces novel circumstances that don't fit, and that are not yet accounted for by this explanation? How to *break out of* this intensification of action and reaction, how to lead, as Hannah Arendt famously put it, an active and free life?

My aim is to propose a different approach to circularity. If we want to think of the language spoken in the Digital Continent as the 'language' of 'coding', we cannot maintain a clear distinction between numbers and linguistic signs. What information technology confronts us with is exactly such a confusion: we are dealing with 'information' as a mathematical quantity (Shannon and Weaver), but it is a quantity notion that introduces a notion of 'order' that is, nevertheless, to be considered also as a *qualitative* order.⁷ This is why I want to address this 'language' of 'coding' as the language of a *Quantum Literacy*.

In short: I want to propose thereby a different approach to thinking about circularity. But not by discrediting the important distinction Heidegger foregrounded, namely the one between rigour and exactitude, between rational reasoning and geometrical measuring. Where Heidegger opted for subjecting the former (rigour) to the latter (measurement), in a cascade that is headed by History, with its essential witnessing and testimonial mode that he calls *caring*, a quantum literacy approach, in relation to digital citizenship, sets the modes of historical accounts relative to a respective 'modelling' space within which the passing of time can be witnessed. For now, let's switch back to our context of this language at stake (that spoken in the digital continent), and formulate suggestively: If Heidegger attributes the circle the scope of an axiomatized space of time, then I want to speak of a circularity that attributes the circle a 'civic' scope in a space of discretion ('politeness', manners and forms of conduct) and cunning. We can think of such a space as that of the rotational scope of a circle based on *algebraic* geometry, that is within a geometric space that needs to take into account both the bracketing discreteness of

6 It is important for following the discussions of "Civic Citizenship" in this paper to be informed about the philosophical underpinnings of the two dominant traditions in thinking about the status of law, that of Common Law (uncodified, largely followed by the Anglo-American World) and that of Civic Law (codified, prevalent in European Countries as well as in Russia and most Asian and African countries). For a short overview cf. the article provided by the Robbins Collection, School of Law, University of California at Berkeley: <https://www.law.berkeley.edu/library/robbins/CommonLawCivilLawTraditions.html>; Cf. also Joseph Dainow, 'The Civil Law and the Common Law: Some Points of Comparison', *The American Journal of Comparative Law*, 15, 3 (1966), 419–35 <<https://doi.org/10.2307/838275>>

7 I refer thereby to Leon Brillouin's landmark text *Science and Information Theory*, (New York: Dover, 2013 [1956]). Cf. Vera Bühlmann, 'Negentropy', in *Posthuman Glossary*, ed. by Rosi Braidotti and Maria Hlavajova, Theory (London: Bloomsbury Academic, 2018), 273–77

code as well as the continuity of consequentiality: the mechanical scope of an encompassing line that is 'restless' between the points it connects.⁸

I must expect that this is diametrically at odds with Heideggerian philosophy. But it seems that an encounter can take place, that there is a crossroad in the very space where Heidegger faces what I consider to be his core dilemma: Thought, principled by reason, tends to accelerate to light speed. Reasonable thinking thus appears bound to culminate in totalitarian, apocalyptic, or eschatological modes of discourse.⁹ His own commitment then to the modern legacy of Critical Reason is a *reverted* one—he asks to counter-weight this trend towards acceleration by finding a non-mathematical kind of thinking in *Art*, as an *anti-dope* to the viciously circular consequentiality that mathematics, in his understanding, inevitably installs and by which it is bound to render Reason bankrupt.

To think of the scope of a circle as the scope of a restless, encompassing line that takes into account discretion just as much as continuity is inspired by Michel Serres who, in his book *Les Origines de la Géométrie* (1989) calls the Principle of Reason "*The Great Greek Ruse*." I cite:

Hierarchy remains inside reason, but since height, power or king are no longer spoken of, it becomes transparent inside reason, so invisible that no one has seen it, that no one thwarts this intelligent Greek ruse.¹⁰

While for Heidegger, mathematics is *the source of the vicious circle's viciousness*, Serres looks at mathematics as someone who knows it well, not as Sovereign Principality but as the very condition of possibility for clarifying ideas by active, leaping and daring, thought. We can now look at what to Heidegger is *the World-as-Picture* from the point of view of *Reason as a Ruse* as an *Architectonic Model of the World*. What we gain thereby is something like an architectural approach to Heidegger's concern with the 'Geviert'. A model so understood (as an architectonic model) is to be accommodated not within the space of mimetical representation and mathematical demonstration, but within the abundant space of mechanical reason and civic cunning.

So how does it work, this ruse? Serres writes:

As soon as hierarchy is translated as reference one can finally prove as reason and show as theoretical vision to every reasonable animal that it is reasonable to transfer the autonomy that they owe to the hazards of their existence to the element of reference, like the world to its earth or to its sun, like a variety

8 Michel Serres' discussion of the Gnomon, the Sun Clock, as an observatory, elaborates on the kind of space I am thinking of here. Cf. especially Michel Serres, "Gnomon" in: *A History of Scientific Thought: Elements of a History of Science*, Blackwell 1992, 73–123.

9 Cf. the study by Wolfgang M. Schröder, *Politik Des Schonens: Heideggers Geviert-Konzept, Politisch Ausgelegt*, Phainomena, 13 (Tübingen: Attempto, 2004).

10 Michel Serres, *Geometry: The Third Book of Foundations*, trans. by Randolph Burks (London: Bloomsbury Academic, 2017), position 1905.

of homogeneous space to its pole or any site in a system to its legislative centre. So, we naturalize the one who holds power, ineradicable from his place like the earth or the sun, unavoidable because without roots and endlessly stable.¹¹

Let us pause and ask: *where* is the stance, from which Serres can be talking like this? In a Civic Space, we said. But is he himself speaking as a juridical persona, a defender or a prosecutor, or a judge even, when he—with a strange sense of admiration and respect—speaks of *the Greek Ruse*? Serres concludes the cited passage with the words: “better yet we theorize him [the one who holds power].”¹²

Now, how can this be an option—isn’t this what Heidegger is warning us against? Theorizing theoretical depictions leads to further acceleration of reasoning, and reasonable, ‘thinking’.

But does it really?

The kind of theorizing that *algebraic geometry* proclaims is one that does not acknowledge the eradication of roots claimed by the centrality of Principled Reason. It is a *projective* geometry whose every metrics is rooted in a plane of reference. The Romantic intuition, that reason is rooted in—even actively roots!—tragedy, may well be true and adequate. But the *conditions of possibility* of reasoning as a praxis, method, and technique, consist in *mechanisms*, the Algebraic Geometer insists—those mathematical procedures where *cause equals to effects* (Newton, 3rd Law of Motion), or at least *where effects correspond to causes*, as Galileo had it when he said that nature was written in the characters of mathematics.¹³

Through involving many planes of reference within one algebraic scope, mechanical usage of metrics has never been, strictly speaking, *reasonable*! How did we forget about this? How did it happen that the unbound, free—Serres speaks of *anarchic*—reason¹⁴ of the artistic mechanic came to stand for its very opposite, namely strict determination and foreclosure of events?

11 Ibid., position 1907.

12 Ibid., position 1910.

13 For Galileo, it was mathematics rather than Scholastic logics that affords a philosophy of Nature: “Philosophy is written in that great book which ever lies before our eyes — I mean the universe — but we cannot understand it if we do not first learn the language and grasp the symbols, in which it is written. This book is written in the mathematical language, and the symbols are triangles, circles and other geometrical figures, without whose help it is impossible to comprehend a single word of it; without which one wanders in vain through a dark labyrinth.” Galileo Galilei, *The Assayer* (1623), as translated by Thomas Salusbury (1661), 178, as quoted in Edwin A. Burt, *The Metaphysical Foundations of Modern Science* (Mineola, NY: Dover Publications, 2003 [1925]), 75.

14 Michel Serres, *Geometry*, position 1866. Serres writes: “The beginning expressed by the term ‘archaism’ is found again in the command of the word ‘hierarchy’. Can, conversely and in general, an anarchical system be conceived, without reference or border, deprived of privileged place or referential, and yet rational? Yes, assuredly: it suffices to trace back to the multiple variations of beginning in Anaximander’s indefinite. Things begin when the arche precisely goes absent, and command appears when they claim to begin.”

Let's again hear Serres:

Legendary, the cleverness, the shrewdness of the Greeks impelled them to invent a ruse of reason, the ruse-mathematics. They give us systems and schemas to see that are so distinguished from each other that, taking their word for it, we align them along a linear evolution, whether interrupted or continuous.¹⁵

In his book *The Origins of Geometry* Serres explains how the postulation of Reason as a Principle was to *conceal* that all metrics is indeed *rooted* in planes of reference¹⁶ that are, in fact, 'templums'—in the architectonic language, *Projective Dispositional Plans*, empty but planned and disposed for something indefinite to happen.¹⁷ There may well be a kinship between Reason and Tragedy, but there is also one between Mechanics and Comedy. Again Serres:

Aristophanes or some other stage director must be bursting with laughter in their graves from seeing us trying to understand [a linear evolution of math]! They take a bowl and a jar out from of their horn of plenty, let us see then, like poor farmers, pots, then they put these objects back into the horn, and lastly suddenly take the same ones out again so that, from our place, we see a column and a sphere.¹⁸

Let's state our point clearly, for this is a serious issue: Reason, to Serres, is the *Great Greek Ruse* in that it sets mechanics equal to mathematical demonstration—without problematizing the manner in which such

¹⁵ Ibid., position 1937.

¹⁶ Ibid., position 1939.

¹⁷ In his book on Leibniz, Serres addresses the generalization of such plans as 'un géométral'. Cf. Michel Serres, *Le système de Leibniz et ses modèles mathématiques* (Paris: Presses Universitaires de France, 2015 [1968]). In the Introduction entitled 'Scénographie, Ichnographie', Serres writes with regard to "un embarras qui subsiste" in Leibniz, namely that it appears impossible to embrace Leibniz's overall organization as a system, and still understand it consistently and exhaustively in systematic terms—there remains an obscurity. But this, for Serres, needs no excuse but is, quite inversely, the crucial point with regard to his appreciation of Leibniz as a systematical thinker. As Serres puts it: "le sentiment confus d'une ordonnance potentielle qui se laisse toujours entrevoir et qui sans cesse se refuse, l'idée vague d'une cohérence perçue mille fois en vue cavalière et qui dérobe son géométral, la sensation de progresser dans un labyrinthe dont il tiendrait le fil sans en avoir la carte. Perspectives offertes, points de vue multipliés, possibilités infiniment itérées: il ne paraît jamais qu'on puisse parvenir aux limites exhaustives d'un plan synoptique, étalé, complet, actuel." Kindle edition, position 163.

¹⁸ Michel Serres, *Geometry*, position 1976. Serres writes for example: "The distinction of the homogenous and the heterogenous, of the continuous and the discontinuous, dominate the descriptions of space and time in Mircea Eliade for example. Profane, space is isotropic; sacred, it isn't, he says. In addition, profane time flows continuously, but sacred time presents ruptures. As a result geometry, cut off from sacralization, posits an undifferentiated space. But this isn't tenable, for there are as many scientific spaces as you please, orientable or not, centred, or metric, chaotic or regular, only some of which are homogenous. To say the converse amounts to underestimating geometry, to forcing it into impoverished reductions. Thus formal thought knows the spaces said to be mythic or cultural."

‘equivalence’ is being ‘positioned’.¹⁹ He calls this a ruse because it thereby *conceals* that what every metrics is producing (as the very condition through which it affords metricity) is *projection*—an *architectonic transformative projection* that comes together with a *procedure* of how projections can be produced.

The question we want to take from this is: having recognized, with Serres, this Great Greek Ruse, how *not* to become misologists? How to hold on to reason in a manner that does not subject it to a definite central and transparent position of power, as Reason’s Principle? Serres asks: “Is reason defined by indifference toward all difference?” And puts it even more drastically: “Reason demands that there be no reason.”²⁰ We must make defined space to ceaselessly refer to the indefinite, he holds and suggests that we should call universe “that which holds by this principle without principality.”²¹ With such a way to think of the circular, let us now come back to the issue of a ‘Digital Continent’. The proposal I would like us to consider is to think of the Digital Continent in just this manner: as a Universe which *holds by this very principle without principality*.

THE MECHANIC’S ANARCHIC CUNNING

What I want to suggest, with raising the idea of a *quantum literacy* of a Digital Citizen in relation to the Mechanic’s Anarchic Cunning, is to take from quantum science especially this one aspect: namely that ‘form’, in the domain of probabilistic amplitudes and their propagation, needs to be considered in the terms of *technical spectra* (each rendering regularity in terms of frequencies, due to the particle-wave character of each quantum). I want to suggest, hence, that it is a spectral kind of agency that is attributable to the Cunning Reason of the Mechanic as a Digital Citizen. It is a kind of projective spectrality that is perfectly reasonable, it is just *not principled*. It is anarchic. It is—so to speak—Reason *trespassing* the Reign of a Definite Rule of a Centre that puts itself up as Principle. The point thereby is that Mechanics as an Art can pick up its

19 In fact, Plato addresses this very point where he seeks to establish a difference between opinion and truth: there is an interesting, but seldom attended to, discussion about what Plato calls ‘mobile’ or ‘run-away’ statues (called ‘daedalus’, in the manner of the mythic persona’s (Daedalus) mechanic art), as opposed to statements of knowledge to which he also refers to as ‘statues’, but statues that must be ‘owned’, statues that are in someone’s ‘possession’. Cf. Amélie Frost Benedikt, ‘Runaway Statues: Platonic Lessons on the Limits of an Analogy’, presented at the Twentieth World Congress of Philosophy, in Boston, Massachusetts from August 10–15, 1998, published online at *Paideia, Ancient Philosophy Archive*, Boston University: <https://www.bu.edu/wcp/Papers/Anci/AnciBene.htm>.

20 Michel Serres, *Geometry*., position 2078.

21 *Ibid.*, position 2080.

ancient legacy that related it to a humanist ethics that does not accept fate without standing up against it, and challenging it.²² What do I mean thereby?

From a logical point of view, something is either at rest, or it is moving, but not both at the same time. Exactly this famous statement by Aristotle does not hold for the mechanic: how to describe for example, logically, a rotating spinning top which is at once at rest (its centre) while moving (its periphery)? Mechanics is an art and not a logical discipline in that it introduces a certain scope of deliberation which is objective, independent of a Cogito's belief or interpretation. The mechanic's descriptions are *mathematical*, but not logical. *Mechanical knowledge* is objective and ambiguous, undecided. There belongs a peculiar kind of agency and activity to the knowledge in which the mechanic is proficient that is not a subjective will or an arbitrary intention.

To make a long story very short: Both logical inference as well as mechanical constructions crucially depend upon geometry. The former depends on the axiomatic set up of theoretical geometry in the manner of Euclid. With the latter the relation is not so straightforward. The whole point of logics, we can say, is to yield *definitions*—to treat things within the scope of their finitude and delimitations. Thereby, axiomatic deduction follows one principle above all others: It shall not be possible to derive *contradictory statements from the same set of axioms*. The middle ground of an undecided, restless third state is what logical rigour seeks to exclude. Until the modern era, people thought of mechanics as an art, and as an ethics—indeed, as the twin other to logics, aligned with sophistication rather than truth immediately—because in mechanics too, one is concerned with treating things in their finitude, that is without need for belief of any sort that could not be objectively tested. This is why I suggest to address the space of cunning reasoning as an object-space, the space of objects among objects. Because at the same time, every mechanical construction lives exactly *from* such a third, middle, milieu, where opposites co-exist undecidedly. This is what makes mechanics architectonic. One could even say that the art

22 The Greek noun “Mechane” or “Mechanema” meant “cunning” as well as “means to an end, a supportive device”, and often appears in classical texts in relation to situations of distress, accounts of emergencies, and how to get out of them. Cf. replace with: Wolfgang König, ed., *Propyläen-Technikgeschichte*, vol. 1 (Berlin: Propyläen-Verl, 2000), 181ff.: a short note perhaps at this occasion also with regard to the notion of cunning in Hegel: whereas Serres is interested in exactly this link between mathematics and cunning, Hegel's interest appears to have been in severing this link, and in contrasting cunning as the mark of phenomenological reason as against merely mechanical, deterministic and automatic rationality. Such an attempted “hygienic separation” remains untenable for Serres, in antiquity (cf. footnote 14) and also today—this is the crucial message when he addresses the origins of geometry in the plural.

of mechanics is to *modulate* and *articulate* this transitory milieu of indefinite decidedness.²³

The question remains, however: *Where*, in what kind of space is the Cunning Reasoning of the Mechanic to be situated? We can think of this space as an architectonic space that consists of projective transformations. The ruse of which Serres speaks is that of concealing that “The Greek’s production is projection. And the optimization of a projecting site: the fly-over from on high or from outside the world.”²⁴ The anarchic reasoning of the mechanic is like Atlas, whose power results from a projective point of reference, daringly placed in an outside.

Citizens of the Digital, as Public Personas, are Social Servants too, but in that they are not Heroes of Alternative Identities, or of Minority Cultures. They are Atlases. All of them. The space of Cunning Reason is the space indexed by all those projective points of reference, *out there*. We can think of it as the immanence of a space of translation, of encryption and deciphering.

Let me try to explain.

HORS-LÀ

In his book *Atlas* (1994), Serres is very fond of citing a short story by Guy de Maupassant entitled *Le Horla* (1886). Maupassant therein invents a character called Horla, which the protagonist in his short story keeps encountering in a peculiar kind of shadow. Horla is a phantom that is transparent (passive, lets shine through) but not without an irreducible lucidity of its own. It sits in front of the mirror and catches the images the mirror is about to reflect, before the mirror can actually do so. Serres writes about this peculiar character:

What a strange shadow: it is and is not, present and absent, here and elsewhere, the middle which ought to be excluded but cannot, hence contradictory. This is why he [Maupassant] calls him Horla.²⁵

Horla is, to Michel Serres, the fictitious character of a quantum-physical kind of spectrality that actively sums up all projections that could possibly be reflected, in a manner of summation whose total is indefinite and, not despite but because of that, determinable. To Serres, this story is a *realist* story—even though its main character is entirely invented. It is a realist story because it allows us to address philosophically the

23 Cf. a very interesting article on the notion of “stasis” in rhetorics: Otto Alvin Loeb Dieter, ‘Stasis’, *Speech Monographs*, 17.4 (1950), 345–69 <<https://doi.org/10.1080/03637755009375016>>

24 Michel Serres, *Geometry*, position 1945.

25 My own translation based on the German version by Michael Bischof: Michel Serres, *Atlas*, trans. by Michael Bischoff (Berlin: Merve, 2005), 59.

particular kind of ‘spectrality’ at work in communication media: The space of Horla allows us to address the rendering of appearances that technical spectra afford (in all quantum physics-based science like chemistry or electro engineering).²⁶

Now, within epistemological registers, the predominant question with regard to quantum physics is that of location, and the point of view of the observer. This famously poses a dilemma, puts reason in crisis. But remembering the algebraic legacy of the Mechanic’s Cunning, with regard to circularity (circuitry, indeed), at once relaxes the situation *and* poses novel challenges: We can no longer think of objective reasoning as having an absolute reference. The space where Cunning Reason is localizable is a space of communication that is not, strictly speaking, logical, but also rhetorical and poetic as well: The mechanic has always known how to bring opposites into balanceable constellations by inventing a third, a mediate space to think in, a statuary structure that doesn’t properly ‘add up’ to a consistent, non-contradictory domain—the space of Cunning Reason is an *architectonic*, and an *inventive* locus. The space of Horla helps us with addressing the active role of measurement in those spectra, i.e. their active rendering of appearances in a manner that is, even though it has *trespassed the domain of Reason’s Principle*, not a single bit less objectively reasonable.

The space of Horla is the space where phenomena are rendered apparent that are *engendered by mediation*, by resorting to a middle ground *that from a logical point of view ought to, but cannot be excluded*. Of just such strange ‘nature’ is the quasi-physical domain that communication channels have been establishing for real, and for nearly a century now. How is it that this still sounds so spooky, so ghostly and untrustworthy to our ears?²⁷

Technically speaking, the channels of electronic information/communication technology are literally technical spectra: They render apparent a certain generic order which can be observed only before a ‘plentiful background’ of noise (entropy), rather than one of an empty tabula rasa. Serres illustrates this idea of a plentiful background with the colour spectrum, where white light stands for such a ‘plenty’ because it expresses any colour at all, and this in a material, physical manner: ‘white light’ is, ultimately, radiating nuclear activity of quantum-physical mass. Within such ‘materiality’, channels are established for ‘surfing’ on top of the singled-out frequencies, but nevertheless amidst

26 Cf. for an elaboration of this argument: Vera Bühlmann, ‘Generic Mediality, Post-Alphabetical?’, in *Philosophy after Nature*, ed. by Rosi Braidotti (Lanham: Rowman & Littlefield, 2017), 31–54.

27 Cf. for an elaborate discussion of this strange situation Wendy Hui Kyong Chun, *Programmed Visions: Software and Memory, Software Studies* (Cambridge, MA: MIT Press, 2011).

the massive agitation of what is, technically, called Brownian motion. The vicarious space of spectra is not empty in the sense of 'lack' as a substantive, but in that of 'lacking' as a kind of *frequentative preposition*: the zero-neutrality of white light *lacks* in that it *leaks*, and in the same sense as technical spectra *lack* in that they *leak*.

What if we thought of the digital as a percolating universe, an active container, a container that leaks reason, reason that accumulates into continental plates, here and there, always with its reference to the principle without principality, *hors là*. Out there, here. Speculative, but *anarchic* and *civic* rather than *utopic* and *innocent*. Might this perhaps be what it means to be Quantum Literate, as Citizens of Digital Continentality?