

INTRODUCTION— SYMBOLIZING EXISTENCE VERA BÜHLMANN, LUDGER HOVESTADT

“The most revolutionary event in human history, and perhaps in the history of hominids, was less, I believe, the accession to the abstract or to generality in and through language, than an uprooting from the whole of the relations that we maintain in the family, the group, etc., and which concern only us and them, leading to an accord, perhaps unclear, but sudden and specific, to something external to this whole. Before this event, there was only a network of relationships into which we were plunged without appeal. And, suddenly, a thing, something appeared, outside of the network. The messages exchanged no longer said: I, you, he, we, etc., but *this, here*. Ecce. *Here* is the thing itself.”¹

“Can one conceive of an object outside of the relationships of forces?”²

I INFORMATION AND OBJECT: A PUZZLE

When one listens to the talk today about the role of “information,” in its broadest sense,³ there is a particular idea that appears to underlie the expectations of laypeople just as much as the many differently specialized experts: the intuition that “information” is a kind of “elementary patch”—not really an element and not really a particle either, more like a mixture of both, pieces of an enormous puzzle perhaps—patches that one can expect to fit together neatly and smoothly and with no need to apply force, if only enough care is invested in figuring out how the patches must be arranged so as to continue and complement each other. These patches of information are to show the

1 Michel Serres, *The Birth of Physics* (Manchester UK: Clinamen Press, 2001 [1977]): 132.

2 Ibid., 133.

3 Cf. for example James Gleick, *The Information: A History, a Theory, a Flood* (New York: Vintage, 2012).

way things fall into place “just as they ought to,” naturally. Associations that go together with this intuition include that information, as is often said, bears the unique quality that it is “recordable” “immediately”. The journalist doesn’t tell a story when she reports news, the laboratory scientist is not a dramatist, and neither is the empirically working field researcher nor the carefully working historian. This is because, so understood, there is an objectivity to information that originates in its quantitative aspects. In this way, information is often associated with something like the very “stuff” of what can be known, the pure content of what is known, as well as of what is not yet known.

We cannot deny that this particular idea of information is accompanied by a certain sense of unease, of embarrassment even, that goes together with a sense of sudden and surprising vulnerability. For haven’t we already seen decades of critical discourse demystifying exactly this very idea? Haven’t we all learned that journalists never just record, but inevitably also introduce a certain bias (choice of theme, location, decision to give the floor, et cetera), haven’t we come to accept that science in the laboratory is science in action,⁴ that the historian cannot help but make the absence of verifiable data, of which he cannot even know that it is absent, a relevant factor in his accounts, and so on? Haven’t we absorbed the fact that power and knowledge go together, that science involves, just like culture at large, and economy, and theology, issues that are ultimately and irreducibly *political* issues? And doesn’t this urge us to foreground an interest in subjectivity, and not to go along with this idea, that all the incrementally small patches of what can be known, delivered and stored as information, will eventually link up to display a full picture of all affairs insofar as they exist objectively? Our intent is far from either ridiculing, or otherwise stigmatizing, this familiar, as well as doubtlessly naive, idea of information as patches of a puzzle. We actually think this idea is quite admirable for the very sense of vulnerability it transmits to everyone who in principle praises its simplicity, its abstractness, and desires the sobriety that goes with a pursuit of intellection worked out in the face of a socially shared inclination to consent to something that is “merely an intuition”. It is this sense of vulnerability we want to bring to the fore by putting this idea of patches of information into focus, and it is in the zone of its imposed need for diligence and care that we want to see how well it lends itself to actually clarifying what is the concern of this book—*Symbolizing Existence*.

II DOPING AND DATA—MYTHOLOGY OF THE GIVEN

With this third volume of the *metalithicum* series, we again want to select one particular concept from the torrid wasteland of purely

4 Bruno Latour, *Science in Action: How to Follow Scientists and Engineers Through Society* (Cambridge MA: Harvard University Press, 1987).

technical language, and consider its larger philosophical implications: electro-chemical doping in semi-conductor technology. The word “doping” derives from Latin *dotare*, for to endow, or to bestow. How to think of this strange practice, which is the giving of dispositions that condition what will be recorded as data? If we think of information as data that can be recorded, then doping introduces something like the reversibility of the happenings that can be so recorded.

This focus both continues and differentiates the first and the second of the metalithicum colloquies, both of which also focused on semiconductor technology and its role in how we can think about materiality and meaningfulness in the age of electricity. The first one, *Printed Physics*, took as its starting point that materials can have their physical characteristics formally analyzed, technologically constructed and (bio-)chemically synthesized on a symbolic level, and—hence the wording of the title—that doped materials can be produced industrially, using printing technologies. Doped materials can be manufactured using a process that bears striking similarities to the printing technologies we are familiar with from the past. The manufacture of digital processors and memory chips for example is in fact reminiscent of lithography, copper etching, and the chemical printing of photographs, and thus continues a line of earlier forms of analogue relief printing methods. In the case of printable solar cells, it can be said that instead of ink on paper, ions are literally being “imprinted” on silicon. Yet there is one important difference, which becomes apparent in the respective notions of “imprinting” and “doping”. Unlike any other print product, the manufacturing of doped materials in printed physics relies less on a referential expertise about how to record the physical characteristics of materials, that would permit us to duplicate and perfect or purify them and their constellations. With printed physics, we are maximizing generic polyvalency, physical indeterminateness.

Pursuant to the first colloquy, the second one was called “domesticating symbols,” and it focused not on the conditions of production, but on how to think of the electro-chemical “substrates” on which today’s data-processing-machines operate. Information-technological media and apparatus no longer operate primarily on the substrate of physical forces and their mechanical principles. Rather, their effectiveness is deployed on a quasi-immaterial bed made of probabilistic signal horizons of symbolic codings, through which the erstwhile physical substrate is now formally getting rendered, as a given substrate (“data”) in the sense of “informational constellation”. In this regard, it is important to stress that information technology today is no longer simply confined to elaborately controlling and investigating processes that may already be accessed through a mechanical apparatus. Indeed, we maintained that a movement is underway towards learning how to grant the quantum-energetic constitution of our world its own right, and form of address, amidst its dynamical constraints. This form of right and this form of address ought

to take into account that for the first time, photovoltaics succeeds in harvesting energy, as electricity, *straight* from sunlight, and, to boot, completely without recourse to any of the ever-dwindling tangible energy resources that planet Earth (still) holds in store. *Domesticating Symbols* implicitly tries to consider a notion of capital that is not wrested from accumulation and the centralizing control of equilibria and controlled balances, but one that views capital, ultimately, as an abundantly streaming source, the sun, which due to the original blankness of its value (solar radiation as white light) is, per se, namely without a symmetry-breaking play through obstacles that reflect light, entirely bare of value. Domestication, then, would not be “appropriation” and “purification”, but the anonymous collectivization of “sourcing” and “doping”.

While *Printed Physics* focused on how semi-conductor technology changes the conditions of manufacturing, by maximizing generic polyvalency and physical indeterminism, and while *Domesticating Symbols* focused on an alphabetization of nature in its probabilistic givenness, *Symbolizing Existence* foregrounds a perspective regarding how we deal with data in a rational way. To put it somewhat drastically, it looks out for how one might think about the axiomatization of what we suggest to call “existential contingency.” We want to foreground that from the point of view of quantum physics (which is mandatory for addressing electronics), we are ill advised if we assume a symmetry between technographic “reading” and “writing” practices. This indeed distinguishes digital code and its electro-magnetic, physical substrate, from manners of coding with respect to classical (Newtonian) physics of forces: for the Newtonian physicist, in her paradigm of temporal reversibility, “reading” is the playing of recorded data while “writing” is the recording of data that can be “read” (played). For her, the two are strictly symmetrical (this is what grants the reversibility of time). But this is not so for the quantum physicist, who is concerned with energy rather than forces, on a macroscale (heat, thermodynamics) and on a microscale (information, molecular biology, communication). For her, there is only the symmetry of a translation between “reading” and “writing,” with which comes a certain irreversibility as to how the two are brought to relate. For the quantum physicist, code can be of diverse “character” (the probabilistic alphabets). The manufacturing of doped materials in printed physics relies on a kind of “literacy” in “articulating” the “characteristics” proper to code (the characters encrypted in probabilistic alphabets): for any signal to be recorded, a channel must first be established that can filter a coherent message against a background noise. To consider a veritable alphabeticity of nature is not merely a metaphorical manner of speaking: what is needed to dope materials is a certain rationality of characteristics, such that the characters are transformable into each other. We are used to referring this transformability to a calculus, to numbers and signifiers. But what is at stake is the symbolicity of both, a literacy

and a calculus. We suggest to address the literacy through so-called probabilistic alphabets, the alphabets of code (ciphers) that render a certain number of possibilities finite and countable, and that are constitutive for probabilistics (and that distinguish it from stochastics). This is for writing. For reading, we suggest, it is the calculus that ought to be seen as encrypted, and the reader is to specify the characters from a without to the characteristics of the signifiers in whose terms what she reads has been written. This “without” is what we suggest to call “existential contingency”. Such an encrypted calculus is also at the core of every technological communication channel: it defines the “entropy,” the background noise against which the message and its transmission is being profiled and foregrounded.⁵ These alphabets are literally stocks of contingency, resources of existentiality. It is the quanta of this stock, as the elementarized blankness of entropic (polyvalent, indetermined) existentiality, elements of the probabilistic alphabets, that is the concern of the articles collected in *Symbolizing Existence*.

How are we to grasp the philosophical implications of this gesture? The path we chose in the 2011 conference “Symbolizing Existence,” which this book documents but also builds on (by including articles that were not part of the conference 5 years ago), was to dare considering a philosophical notion of existence—pure contingency—but without linking existence to any notion of a neutral individual, without even linking it to a form of subjectivity. Our challenge then was how one might speak of a pureness of the contingent, meaning its entropicness (against the negentropicness of organized orders). We were seeking a notion of purity bare of reference to a certain something that, supposedly capable of entirely resting in itself, could be the addressee of such “purity.” If there were such an addressee, then existential contingency would merely be an attribute, something that happens to it and tears it apart from a genuine existence resting entirely within itself. When putting together this collection of articles, this was still our concern: What can we possibly make of *pure* contingency, how can we give priority to a notion of the possible, without attaching it to something like an abstract point, or a supposedly concrete being of a particular magnitude, or, more critically, a given case of such magnitude—however singular and incomparable this point, this magnitude, this case might be conceived?

To consider such a notion of existence—and this is how we can only now, five years after the conference, return to these questions—entails questioning the moral and/or ethical investment of the very notion “existence”. To consider its pure contingency means to consider that existence is not

5 Cf. Vera Bühlmann, “Generic Mediality: Post-Alphabetical?” forthcoming 2016 in the proceedings to the joint annual conference of the Society for European Philosophy and the Forum for European Philosophy, September 3-5 2014 at Utrecht University, with the annual theme: *Philosophy after Nature* (<http://philosophyafternature.org>), edited by Rosi Braidotti and Rick Dolphijn.

an intuitive, immediate referent for a notion of justice, that it is not a guarantor for a kind of equivalence. Existence as pure contingency means that existence is not gratuitous after all—it entails to deal with the important findings of Leon Brillouin⁶ and others, that information not only maintains relations to entropy but also to negative entropy, that it has its price, that “[we] cannot get anything for nothing, not even an observation”, as Dennis Gabor famously maintained,⁷ and hence the impossibility, in principle, of a perfect experiment—whether that experiment be carried out by a human or an artificial, non-anthropocentric kind of agency. Existence as pure contingency would once again have to be conceived of in terms of a “first philosophy,” reconciled with the enlightenment tradition of relating politics and economy. Existence as pure contingency would have to be conceived of as the indefinite equality pole underneath economical and political dealings, an asymmetric “equilibri-ality” (rather than an equilibrium) because it doesn’t rest in communication; communication is where it struggles for balance. Existence, as pure contingency, pertains to the “order-ability” incorporated in generalizations. Existence as pure contingency, hence, must be addressed through orders of objectivity derived from generalizations of particular cases. Thus, existence as pure contingency must be addressed in terms of “objects”, not those of “subjects”. Yet as opposed to its Cartesian conception, “the object” in its existential contingency must be considered as the totality of all possible inclinations in the path which a particular case (the subjectivity determined by such objectivity) might take during the time of its actual duration. In other words, the notion of the object needs to be reconciled with both the first and the second law of thermodynamics, that is, with *reversible* (negentropic) as well as with *irreversible* (entropic) time. Quantum Physics, its electric energy and the semiconductor technology it has brought us, permits the relation of each to the other without subjecting one to the other: an object, existing in its pure contingency, at once has a singular duration (negentropy) and is of all time (entropy). In other words, if contingency can exist “purely,” then an object never can. For its particular existence is an articulation of both, contingency and necessity, entropy and negentropy.

When we now come back to the particular vulnerability zone of the idea with which we started, that information is something like elementary patches of a puzzle, we no longer need to feel embarrassed about the naivety of the idea. It all depends on how we think about “the puzzle”—there is indeed something to be learnt from Sisyphus, the classic existentialist figure in literature. We want to bring it on stage in this introduction before going on to present the contents of this book. In Michel Serres reconsideration of the classic figure of Sisyphus, we can get a glimpse of how to use

6 Leon Brillouin, *Science and Information Theory* (New York: Academic Press, 1956).

7 Dennis Gabor, *MIT Lectures*, 1951 cited in Léon Brillouin, *Science and Information Theory*, Dover, New York 2013 [1956], here referred to in the kindle edition, position 3805.

prisms to decipher the spectrality of all this “stuff” that is being recorded, an ever increasing flood of information about which we may often feel inclined to complain. We don’t expect that all of these past and future lines of thought in relation to Sisyphus have been entirely clear during our confrontation with them here. But we certainly hope to have raised curiosity for some of its aspects, and it is in this sense that before moving on to Sisyphus and to introducing the different articles collected in this book, we would like to give a more extensive excerpt from one of the key texts that has inspired us to begin speaking of *Symbolizing Existence*:

“All I know, but of this I am certain, is that they are all structured around the information-background-noise couple, the change-program couple or the entropy-negentropy couple. And this holds true whether I describe the system in terms of chemistry, physics, thermodynamics, or information theory, and whether I situate myself as the final receptor of an integrated apparatus. By reversing the ambiguity function, things naturally converge. Either I am submerged in signal exchanges or I observe the global set of exchanges. But from now on I understand and can explain what happens when the observer changes his point of view, when the subject becomes object, and the obstacle becomes a piece of information, or when introspection veers off into experience, and psychology flows into physics. Inversely, when the object becomes subject, it temporarily increases its autonomy. [...] The realms of the subjective and of the objective are no longer at odds. The observer as object, the subject as the observed, are affected by a division more stable and potent than their antique separation: they are both order and disorder. From this moment on I do not need to know who or what the first dispatcher is: whatever it is, it is an island in an ocean of noise, just like me, no matter where I am. It is the genetic information, the molecules or crystals of the world, the interior as one used to say, or the exterior – none of this is important any longer. A macro-molecule, or any given crystallized solid, or the system of the world, or ultimately what I call “me”—we are all in the same boat. All dispatchers and all receivers are structured similarly. It is no longer incomprehensible that the world is comprehensible. The real produces the conditions and the means for its self-knowledge. The “rational” is a tiny island of reality, a rare summit, exceptional, as miraculous as the complex system that produces it, by a slow conquest of the surf’s randomness along the coast. All knowledge is bordered by that about which we have no information.”⁸

8 Michel Serres, “The Origin of Language: Biology, Information Theory, & Thermodynamics” in Josue V. Harari & David F. Bell, eds., *Hermes: Literature, Science, Philosophy* (Baltimore: the Johns Hopkins University Press, 1982): 71-83, here 82/83.

III SISYPHUS. HIS PRISMATIC COMMUNICATION AND HIS DEALINGS WITH WHAT IS PUZZLING

“From the darkness of times, out of the hollows of the underworld, from an abyss of pain, a report recurs that some thing keeps returning here—and all we do is talk about the man who keeps taking it away from there, we Narcisses,” Michel Serres exclaims.⁹ All existentialist praise of Sisyphus has neglected, he maintains, that there can be no reckoning about Sisyphus without his host; and his host, so Serres tells us, is the stone. It is the object that determines Sisyphus as a subject. Sisyphus is not the modern hero, a hero whitewashed, and emancipated, from power and ambition. He is not the hero who, stripped from the burden of ever effecting anything at all, exists face-to-face with pure necessity and can therefore guard, in the manner of a bureaucrat, a notion of righteousness that rests in the sheer repetition of routine. The myth’s character does not become a modern hero because he has been punished and corrected by the Gods for the cunning, ruse and mischief, with which Sisyphus had challenged them in ever new attempts to reconcile transcendence and immanence; he is not a post-Christian crucified, without resurrection, he is not a modern savior.¹⁰ To Serres, Sisyphus is the personification of someone who values the object as the reception of news, neither good nor corrupt, simply as the appearance of something extrinsic to the heretofore manifest wholeness of the web of relations. Sisyphus plays a central role in Serres’ novel humanism, because he renders novelty communicable. This communication is the contribution of the excluded third to the bipolar idea of communication between sender and receiver, between origin and destination, between source and reception.

Sisyphus crosses, always anew, their impossible falling-together in an identity. As a parasite depending on the stone as his host, Sisyphus is the instructed rather than the excluded third. He is instructed by the thalweg of the stone that comes to rest after falling down again every morning at a novel point. After being sentenced by the Gods, Sisyphus is not any less mischievous or cunning. But he invests his ambition and powers in localizing the new location, and in making the path communicable that has led him to do so. The messages exchanged in Sisyphus’ communication of news extrapolate speculatively indexes from the object, markings of a *this*, a *here*. These messages dope the manifestly existing web or relations with novel conduct-ability. His role is not the

9 Du fond des âges, du creux des enfers, d’un abîme de douleur, le récit répète qu’une chose revient là et nous ne parlons que de celui qui l’évacue, narcisses.” Michel Serres, *Statues* (Paris: Flammarion, 1987): 302.

10 Cf. Anton Schütz, “Sisyphos und das Problem”, in Galf-Peter Callies, Andreas Fischer-Lescano, Dan Wielsch and Peer Zumbansen, eds., *Soziologische Jurisprudenz: Festschrift für Gunther Teubner zum 65. Geburtstag* (Berlin: De Gruyter, 2009): 165-178.

impossible task to evacuate, to save the stone as object. He is not a hero fulfilling his mission, he is a scientist concerned with semiconduction. He is concerned with exposing objectivity symbolically, from within the entropic play of forces.

Serres also calls the symbolic function the “ambiguity function,” because it “mobilizes information and produces background noise”.¹¹ Serres captures the symbolical exposition of objectivity as a function, and hence hands such symbolical exposition over to a notion of system; but it is a notion of system that is interlocked, a system where levels have to be integrated by protocols, rules that have neither origin nor reference outside of the consistency they need to contract. Every “next level in the interlocking series receives, manipulates, and generally integrates the information-background noise couple that was given off at the preceding level.”¹² By tracing the thalweg of his object, Sisyphus the scientist casts off from the particular level he is submerged in when he localizes the positions where his stone has previously come to rest. His struggle is not that of carrying weight indifferently, every day until the end of times. His struggle is to learn to cope with the amount of ambiguity that keeps growing from day to day, as he looks anew for his object. Sisyphus is a hero, perhaps, but not because he fulfills what he is meant to do—whether by a logic of the negative or the positive. Rather he is a hero because he endows the gates that interlock the levels of the symbolic function with keys that fit. The keys are not for unlocking sight upon a secret that was hidden within, but for granting access and passage to the novelty of the day; so that it can circulate also within the heretofore manifest web of relations, into which every day inevitably introduces additional noise, but which every day also endows with a certain excess in polyvalency. To Serres, the symbolic function performed by Sisyphus adds meaning and presents obstacles: he adds meaning *because* he presents obstacles. Sisyphus filters packages of chance, from level to level, from day to day. And thus, because his symbolic function is an ambiguity function, his capacity to hold in restraint grows with the increasing amount of ambiguity, and in parallel to the increasing power he acquires from finding his stone and tracing its thalweg. The scientist of semiconducting acts to lesser and lesser degrees *in extensio*, and to greater and greater degrees *of virtu*.

IV THE CONTENTS OF THIS BOOK

Ludger Hovestadt, an architect and information scientist, invents “*A Scheme for a Fantastic Genealogy of the Articulate*.” Hovestadt maintains that a genealogy, if it is fantastic, is as real as it is made up,

¹¹ Serres, “The Origin of Language,” *ibid.*, 77.

¹² *Ibid.*

and he suggests that we think of genealogy as a confluence of several geneses by considering differently masked infinities. Today, in the era of digital code, we can think of the encryption of numbers as providing such masks. But what would be the body behind such masks? Hovestadt devises the notion of a body of thinking as the very subject of such a fantastic genealogy. Such bodies of thinking are tyrannic if their sovereignty is not shared, if they don’t live amidst populations. For such a notion of a collective body to engage with others of its kind, it is crucial that each instance can come forward with articulations of the worlds in which they live. They can do so on a stage that is algebraic, so Hovestadt maintains, a stage that is political in its algebraic capacity to host the happenings of vulnerable and fragile *love affairs*—that articulate rather than represent tragic or comic plots, lonely odysseys across the seas, or odes to life or death itself. Such stages are capable of displaying action that takes place amidst all the institutional infrastructures, the dependencies, availabilities, reassurances, stabilities, which ultimately collectivize (either as private or public) technical elements of infrastructures like cables, pylons, pumps, pipes, tanks, machines, sensors, displays, actuators. This collectivization is being media-ized and embedded in the schemata of formats like news, photography, telephony, music, cinematography, teaching programs, cleaning programs, foodstuffs, control systems, research programs, production schemes, politics, jurisdiction... schemata, in short, which are precious not despite but because they are lacking, in the sense of a sieve. The observation of such love affairs, hence, present us with things that are open, that unexpectedly burst into being amidst the most ordinary, that surprise in banality and delicacy. Things that are brought about by humor, through know-how, through affection, through concentration. Central to Hovestadt’s article hence is the introduction of exercises for such bodies of thinking, to develop proprioception so that they can learn how to talk in and about the worlds that they shape and in which they evolve.

Michael Harenberg, a composer and media theorist, draws in his article “*Topologies of an Aesthetics of the Virtual in Music*” genealogical maps of what he calls “the mediality” that underlies the aesthetics of musical composition—as an art and as a theory. All the elementarization of music’s key notions are rooted in this mediality, he maintains, in varying ways whose dispositions change with the very nature of this mediality. The genealogy in which Harenberg addresses varying compositional topologies from Wagner and Busoni to the electroacoustic and computer generated spheres of Xenakis and Luigi Nono, among many others, relates them back, iteratively and in a discontinuous manner, to the Pythagorean idea of a universality of proportion and partition. Harenberg discusses the topologies in their intimate entanglement with technics on the one hand, and with ideational notions of cosmic beauty, harmony and spiritedness on the other hand. He thereby depicts,

indexically, a profile that might lend itself to feature also outside the field of music proper, as a kind of diffractive prism, in other fields of the creative expression of knowledge.

Georg Christoph Tholen, a scholar in media and cultural studies, introduces in his article “*Media Metaphorology: Irritations in the Epistemic Field of Media Studies*” a theoretical stance that promises to guard what he calls “the a-teleological openness of digital code” against any particular anthropological, ideological or straightforward technocratic instrumentalization. This stance, Tholen holds, must count as a *principled* stance, and he recognizes the field of digital media studies as an epistemic field only in the commitment to just this role. The mediality induced by digital code, by the computer considered as a universal medium, ranges beyond mechanic and organic models of how to think about the power brought by technology. According to Tholen’s critique, these models all open up particular economies of augmentation only to restrain and control the proliferation of the media induced as-ifs within political frames of compensation, however differently weighted (culturally colored) these frames might be. We need to conceive a non-concept based metaphorology, he maintains, that we are capable of addressing the continuous transmissibility of mediated communication—without forgetting about the unsteady and discrete conditions of mediacy that grant the extent in differentiation and scope of just such transmissibility.

In his article “*From Pebbles to Digital Signs. The Joint Origin of Signs for Numbers and for Script—Their Intercultural Standardization and Their Renewed Conjunction in the Digital Era*,” Gert Schubring, a historian of mathematics and the sciences, gives insights into the historical development of the encoding of information. Encodings began as concrete materializations, he argues, and they were intimately tied to specific social and cultural forms of living. Next to identifying characteristic stages of encodings and patterns of their transformation, from highly differentiated material sign systems to abstract and globally used symbols, Schubring is especially interested in how the two encoding systems—numbers and script, or numeracy and literacy, which developed separately over millennia—were and are related to each other.

In his article “*Foucault, Boole, And Our Deleuzian Century*,” Gordon C.F. Bearn, a philosophy scholar, sets out with celebrating Borges laughter Michel Foucault hears bursting through the former’s famous classificatory order of animals, on which Foucault reports at the beginning of *The Order of Things*, his book devoted to an archaeology of the Human Sciences. The shattering of orders that bursts forth from Borges’ laughter not only prepared Foucault for making an experience of raw, naked being, so Bearn; it can also be epitomized as a welcome greeting to “our Deleuzian Century”—an era in which the experience of difference must no longer count as a formal, logical impossibility. An archaeology of the human sciences is also an archaeology of the formal sciences, Bearn

argues in his reading of Foucault, and as long as we don’t recognize this double articulation, we are captured in what he calls “the algebraic-anthropological sleep.” On his walks through different manners of sleeping algebraico-anthropologically, Bearn follows up on one particular sentence that had taken hold of his mind when reading Foucault: “It was inevitable that a symbolic logic should come into being, with Boole, at precisely that period when languages were becoming philological objects.” It is this bifurcation of thinking about “roots” in devising, on the one hand, a framework of variation (philology), and on the other hand calculi of variation (algebra), that has, over the decades and after the fierce battles of the so-called foundational crisis, lulled us into the said sleep in the first place, so Bearn argues.

In her article “*A Mathematical Drama: Articulating a Thing Entirely in its Own Terms*,” Vera Bühlmann, whose work is in media theory, philosophy and architectural theory, gives a tentative account of a particular drama she has been witnessing ever since she developed an interest in engineering, design, computation and programming: The competing co-existence of two conceptual persona, whom she calls The Generic and The Master, both raising claims as to how the authority of Sovereign Knowledge, of which they both claim to be the true face, ought to be addressed. Hence, Bühlmann’s article dramatizes the role of knowledge in a manner that seeks its politicization. Bühlmann holds that this is a politicization we can find neither in the urbanity of modern and post-modern societies, nor in any nomadic forms of dwelling. It is a politicization, she holds, that is driven by a different kind of economy—one that is abundant and entropic, self-engendering, because its source is of time (rather than in time), and which radiates, in-sinuously and incandescently, in all that is. It is an economy, so Bühlmann, whose principle unity is, paradoxically, one consisting in its own partition-ability (the staggering insight that the universe actually expands). The principle of such unity must come to terms, must contract, two competing forces: life and death, conservation and dissipation, the first law of thermodynamics and the second one. Information, in its quasi-thermodynamic physicality, thwarts and articulates any interplay of these two “forces,” this is the mathematical drama which Buehlmann addresses in her article. Her account of this drama involves discussions of and commentary on contemporary positions in political philosophy (as for example Jacques Rancière and Quentin Meillassoux), which seek ways of coming to terms with the mathematics of chance and the power for prediction proper to its probability calculi.

Gregg Lambert, a philosophy and literature scholar, explores Gilles Deleuze’s presentation of a new materialist method for addressing the formal difference between matter and expression. Deleuze calls this method “the art of cryptography”, and Lambert discusses the relation of this art to Leibniz’ philosophy, from whom Deleuze largely derives

his method. Lambert argues that with this method, Deleuze generalizes what we usually tend to associate with the Baroque: his article “*On the Baroque Line: The Mind-Body Problem’ and the Art of Cryptography*” argues that what we tend to associate with the Baroque as an epochal, historical concepts actually characterizes the operation of processes in general, independent of the historical situations in which these processes might actually happen. In every operation, there are enfoldings and unfoldings of two infinities involved (one of matter and one of expression), which conserve the circulation of a third infinity which Deleuze, in Lambert’s reading, associates to the Leibnizian concept of the monad. David Schildberger, an architect and architectural theorist, opens up in his article “*Nugged Viands*” a view upon our most recent cultural heritage, the modern utopia of living in a lap of luxury, expressed and formalized in an urbanized land- and cityscape relation. Schildberger’s view looks at this utopia as a myth articulated as a machine: a mythic machine dealing with foundations, orders, and architectonics of value, substantialized in matter, energy and information. A mythic machine as an artificial umbilical cord, affording the supply with energy-in-general, energy collected by artificial photosynthesis, a mythic machine as nature in action, learning to care for the birth of life in its most vulnerable stages. Can we conceive of this artificial nature as frameworks for the characterization of a congregation of the civic and the rural, he asks, and suggests to multiply its legends, each as presenting facts, each as function that works, but none of them as exhausting the abounding originality the mythic machine bears in stock. Schildberger hence presents a cataract of thoughts, indexing concepts in a manner that scaffolds them such as to host, in staging, characterizations yet to come. The effectiveness of such scaffolding is proportional, in its capacity to act as such hosts, to how much and how diverse of a castoff “characteristicality” those indexical scaffolds are capable of interiorizing and organizing. Schildberger’s article invests in the daring idea that the affirmation of luxuration, in its full decadence and decoupledness from an original nature, might actually be an eminently political gesture—and, perhaps, the most authentic form of provocation today.

