

CAPITALISM'S HOLOCAUST OF ANIMALS

*A Non-Marxist Critique of Capital,
Philosophy and Patriarchy*

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Formalism of materialist reason

Materiality of formalism

Marx's study of the species being of humanity institutes itself as a science that deals with value production and the relation of value to material reality. This is obviously a metaphysical question, but the suggested approach is scientific. Therefore, the science to be established in line with Marx's precept ought to operate with "philosophical material" but in a non-philosophical way. Laruelle has furnished a rich conceptual apparatus (at once lexicological and methodological) to make this type of science possible. The post-philosophical or non-philosophical Marxian approach I suggest here consists in the complete formalisation of the question and the language to pursue this science. This kind of approach should treat the material at hand—the conceptual material originating in philosophy—as material and as matter, if you will, along the vector "from the concrete to the abstract" (Saussure, 1959: 51). A similar trajectory is undertaken in Marx's *Capital* in which an exact understanding of "the concrete," the description of empirical data and the explication of its patterns, leads to discoveries about the laws that govern the exchange of goods or the market more generally and, ultimately, to the abstractions of "commodity"

and “value.” The examination and problematisation of the relation between the material and the abstract, between use value and exchange value, nonetheless requires the mobilisation of “philosophical material.”

The problem of the tautology of value reproducing value, the detachment of the automaton of the market from physical reality, is a metaphysical question, and as such it should be radicalised—treated as material or real or, if you will, as a real abstraction, following Marx’s model as further developed by Sohn-Rethel (1978). Instead of discounting metaphysics, one could formalise the language of inquiry while abandoning the principle of philosophical circularity or self-sufficiency. Formalisation does not necessarily imply computing or a closed automaton. Just like structuralism and Marxism, the prospective formal languages of post-philosophy, relying on the methodological model provided by Laruelle’s non-philosophy, allow for poesy while being scientifically rigorous. This is due to the fact that they permit and acknowledge the remainder that escapes signification.

Having commenced with the concrete, computer languages go from the abstract to the concrete but also from the complex to the simple: this is a form of signification, and its erroneous fetishisation as a product of mathematics leads to a strange mystification of its operation—it is perceived as the product of “pure rationality.” “Pure rationality” is a philosophical fetish par excellence for two reasons: first, a physiologically determined cognitive and psychical reality is transformed into a self-sufficient transcendental quasi-“entity,” an ontologised agency pursuing a goal moved by the *causa finalis* of its own self-realisation in the form of an intelligent and rational universe, whereby an equation between what is real and what is true is established; second, a method of enquiry is ontologised and transformed into a substance (one that is superior to all substances), and thus the boundary that separated but also connected theology and philosophy is reestablished and reaffirmed. The reign of pure reason is structurally identical to the reign of the monotheistic god. Computer science is neither reducible to mathematical reason, nor is the

latter reducible to the philosophical understanding of reason as pure and as an eschatological goal. Computer science and the tasks of automated signification are both linked to and determined by the physical support that conditions them as the constitutive limit or the real. Phonology is determined, delineated, limited, and scaffolded by physical phonetic possibilities just as much as computing is by its physical support. The division of the two categories and the dyad they establish is radical in and for the domain of transcendence (for thought), but this does not mean that their realities are unattached. Looking at the hybrid they establish in realist (or materialist) terms, the automaton is in the last instance determined by the syntactic possibilities of the real or the physical that executes the data processing. Deleuze and Guattari rightly pointed out that “abstract machines” are in fact material or that materiality itself is the precondition and the reality of signifying automata:

The abstract machine in itself is destratified, deterritorialized; it has no form of its own and much less substance, and it makes no distinction within itself between content and expression, even though outside itself it presides over that distinction and distributes it in strata, domains, territories. An abstract machine in itself is not physical or corporeal, any more than it is semiotic; it is diagrammatic (it knows nothing of the distinction between the artificial and the natural either). It operates by matter, not by substance; by function, not by form. Substances and forms are of expression “or” content. But functions are not yet “semiotically” formed, and matters are not yet “physically” formed. The abstract machine is pure Matter-Function—a diagram independent of the forms and substances, expressions and contents it will distribute. (Deleuze and Guattari, 1987: 141)

Natural languages and other “real abstractions” (Sohn-Rethel), such as the value exchange system of money and commodity or the exchange of women (patriarchy), but also computer languages, are rooted in the real or the “physical” (Marx). Yet again, they constitute a radical dyad insofar as they

are not amphibologically substituted or dialectically unified in a mutual way. In terms of structuralist linguistics, the automaton and the real relate to one another as the signifier to a signifier, whereby the one (signifier) represents outsideness and the real to the other. The automaton is never independent from and transcendent to materiality, since it is essentially materiality itself; consequently, it precedes “forms and substances”—it is “pure Matter-Function.”

The automaton or pure form of language is not a form of pure reason and is in fact not a form of reason at all—it is as “absurd,” or as arbitrary and contingent, as any language (in the structuralist sense): mathematical procedures are hardly present; it operates with four simple forms of calculation to signify everything. The mathematisation of data processing accelerates signification, which, in itself, remains as primitive what we find in natural languages and the other forms of finite automata of real abstraction (and some of its forms have been mentioned above): in computing, signification moves by very simple steps, step by step only very fast, to paraphrase Peter Dunn (Abelson and Sussman, 1996). It is indeed pure form, but the form is a mere convention that arises from the conditioning necessity of the material and is bound by its limitations, e.g., the physical properties of processors. In other words, the pure form in the case of the formalism of automated signification is not an image of “the truth of being” or a “reflection of the real” (in the form of a philosophical truth of it) but very much the result of syntactic possibilities conditioned by the physical reality or the materiality of the machine.

Technology as language

Language is technology, and technology is *techné*, not *philosophia*: *techné* exacts operations over and through the physical, not in order to “transcend it” but rather to use it in ways that help weighed-down animals, including human animals, in the physical reality they inhabit. Acceleration or flight

is not concerned with transcending the physical but rather with its greater fullness and the exhaustion of materiality through expression. The signifying chain without agency—like any signifying automaton—is indifferent to goals like “the rule of reason” and “transcendence of physicality,” including the philosophico-theological hierarchies they may establish. The motivation or the agency that propels signification and accelerates movement through physical space, or through physicality *tout court*, comes from the physical itself or rather the real of the “human-in-human” (Laruelle, 1995). The latter is the term Laruelle and non-philosophers use to refer to human identity in the last instance or to its status and state of the real—it is an instance that precedes yet prefigures language insofar as its identity in the last instance is determined as “human” (Laruelle, 1995). The non-philosophical concept of the human, however, has nothing to do with the humanist notion and project of the human as inherently philosophical. It is closer to the post-humanist idea or Marx’s idea of the human as a social and physical being, an animal of pronounced and determinate sociality—the species being of humanity.

The agency of *techné* is therefore the non-human or the radical hybrid of physicality and of the automaton (of signification) moved by the needs of its species being. The agency of philosophy dreams of a fully autonomous signifying circuit or full automation or, in other words, absolute automation as transcending the real and the physical, a philosophical fetish.

The machine tends toward autonomy and wants to think like philosophy does by making a success of its tour de force; it pushes autonomy as far away as possible and stumbles on the machine’s agent manufacturer, but gets nearer to non-philosophy in so far as it has a presupposed. The idealistic argument according to which machines can build other machines does not, despite appearances, forget that a first constructor, an anthropomorphic inventor of the first machine, is necessary, but it can always hope to reduce this inventor in turn to a component inseparable from a continuous “man-

machine system,” obviously at the risk of inciting protests from the rival party of Consciousness. (Laruelle, 2013b)

Non-philosophy proposes a concept of the non-human as the radical human, an idea close or supplementable to Marx's notion of the species being of humanity, which treats the automaton of signification as a reality distinct from that of the subject and the self and as one which determines “techno-logical” reason.

It is necessary to distinguish between an absolute commencement (thus relative-absolute) of the man-machine circuit that disappears in the system. And a radical commencement, a first techno-logy or a non-technology, a human subject in-the-last-identity but existing in accordance with variables that are technical discoveries: therefore, a human subjectivity but co-determined by the forms and the style of various technologies. This argument is apparently too simple and formal, but here there is also an antithetic of technology between those who want a first anthropological commencement of the tool circuit, a human agent, and those who, like Leibniz, infinitely prolong the circuit up to a God-machine or a universe-machine. Non-philosophy resolves this antithetic between the constructor man of consciousness and the machine of machines, by suggesting that its sense is purely apparent, indeed hallucinatory, and by relating it unilaterally to Man-without-machine, who determines a machine-thought qua clone of the techno-logical blending. This is to say that the hypotheses on the machine's exact origin and power remain those of the metaphysical order, and thus their solution is not within our scope. (Laruelle, 2013b)

Let us take a moment to explain the concept of “the clone” Laruelle refers to here, as well as that of the identity in the last instance, since their meanings are inherently linked. It is most clearly described and explained—or rather its use is best demonstrated—in *Introduction to Non-Marxism* (2014). The

concept of cloning is inherently linked to the practice of “description”: having admitted the constitutive foreclosure of the real, the thinking subject—or in Laruellian terms, “thought”—seeks to “describe” the real or the “syntax of the real” (Laruelle, 2014: 109). Procedurally, the following would be an operation of cloning according to Laruelle: by way of recourse to “transcendental material,” or concepts as signifiers (meaning: parts of language rather than a doctrine) taken from the disassembled *chôra* of philosophical systems, thought mimics the real, which already has a certain “structure,” as Wittgenstein would put it in his *Tractatus Logico-Philosophicus* (2.033, 2.15, 3.3442, ff). Laruelle does not refer to the notion of structure, nor does he explain more specifically the concept of the “syntax of the real.” Yet again, we can safely claim that the notion of “syntax” can refer only to a structure of signification, which implies that the events of the real, the occurrences of materiality, or the processes taking place in constitutive exteriority possess a “structure” that can be signified. It is cloned as syntax similar to the way a sign produces a syntax in natural languages and is inherently endowed with rules of structuralisation. The identity in the last instance is a “radical concept”—rid of auto-referential layers of philosophy—that is affected by “immanence” (Laruelle, 2013b: 25, 26, 25, 30, ff) or is determined by the effects of the real, and it is in fact a clone and the minimal transcendental form of determination in the last instance. In short, identity in the last instance is still a concept and thus of the transcendental realm, but it is also a “clone” of a real, regardless of whether of an entity or a process of real abstraction or simply of the real (normally determined in the last instance by the physical). In Laruelle’s *Theory of Identities* ([1992], 2016), we find out that identity in the last instance is indeed a clone: albeit of a greater transcendental complexity, it nonetheless departs from or is often reducible to a “clone” (the “clone” refers more to the procedure and posture of thought, whereas “identity in the last instance” is the outcome): it consists of transcendental material, of “theorico-technico-experimental ingredients” constituting the “real object” of inquiry,

which is no different from the real (Laruelle, 1995: 92–93). Both the real and the real object of study contain “the same representations” but are of different status (and not merely epistemologically)—one is transcendental and the other is immanent (Laruelle, 1995: 93). For this reason, it is acceptable, as it often happens, that determination in the last instance, identity in the last instance, and the clone are terms used interchangeably. Let us note that the real (the immanent) and the real object (the transcendental) share “the same representation,” which resembles Wittgenstein’s thesis about the real and “the image of the real” (*das Bild*) sharing the same structure or rather his thesis that the image must be an image of the real’s structure (this is explained in more detail and referenced below).

Computing, signification, and the philosophical questions of “intelligence” and “consciousness”

Nowadays, we speak of learning machines and of artificial intelligence, and everyone finds a way of participating in these discussions: scientists, politicians, philosophers, and the media. The question of intelligence has not only been treated by philosophy (and usually this has been done in the guise of discussions on “consciousness”) but also by cognitive science, including psychology, neurology, and biology. Obviously, this is a complex question we cannot provide an exhaustive response here. However, we can move the discussion forward less ambitiously by revisiting Alan Turing’s definition of computing as the single defining task of computers:

The class of problems capable of solution by the machine [the ACE] can be defined fairly specifically. They are [a subset of] those problems which can be solved by human clerical labor, working to fixed rules, and without understanding. (Turing, 1986: 38–39)

By “understanding,” he refers not only to what philosophers would call “consciousness” and self-reflexivity but also to understanding the rules of logical reasoning. There are no syllogisms, no logical operations, unless they are submitted in the form of algorithmic inputs executed as clerical tasks. Turing’s machine can learn indefinitely, but the definition in the last instance of the acquired knowledge will still be “computing without understanding.” In their book *Computation and Its Limits*, Cockshott, Mackenzie, and Michaelson explain:

Mechanical procedures, also known as *algorithms* or *effective procedures*, consist of sets of rules that return definitive results after a finite number of applications [...] Many mathematicians concentrated on trying to find rules to underpin “procedures,” without reference to the “mechanical” application. In contrast, the British mathematician Alan Turing took the “mechanical” aspect as his primary focus, and elaborated the foundational idea of what are now called *Turing Machines* (TMs). (Cockshott et al., 2015: 68)

Whereas philosophers invest expectations of transcending nature through pure reason, of transcending the messiness of the flesh through the purity of intelligence (insofar as the latter is conceived as an entity with no human agency or as a quasi-agency with the status of an absolute), those involved in computer science have less pretentious views of their projects and the nature of their limits (or their limitlessness, for that matter).

Computer science and theory teach us that computing has very little to do with the science of logic, if anything at all, and that it only makes use of fairly rudimentary mathematical operations (Abelson and Sussman, 1996: Chapter 1). Computing is about inventing new languages of transmitting or mediating data, whereas the transmission of data, or simply communication, serves a social function. Thus, the processing of data, similar to the processing by natural languages of phonetic signs structured morphologically and

syntactically, serves to exchange signs mediating knowledge, which has originated in some form of *experience*. The choice of signs as well as the syntax is arbitrary in natural languages and in the other forms of signifying automata. Yet digital automata are far more accurate and faster than natural ones—including those of social relations, such as capital and patriarchy as value exchange systems—thanks to the algorithms of mathematical knowledge and computing aided by calculus.

As already noted, mathematical operations are always reduced to the most rudimentary ones, i.e., addition, subtraction, multiplication, and division. As Saussure would say, the trajectory of computing goes from the concrete to the abstract and back to the concrete: all complex operations must be transformed into the simplest ones as conditioned by that physical instance, the processor. This is the case because computing is the *techné* of coding or cloning the real—being as successful in “describing” the real as an effect of a certain syntax as possible—rather than a form of consciousness or, for that matter, intelligence.

What intelligence or consciousness consists in, on the other hand, is still the subject of study in cognitive science. When posing the question of consciousness and self-reflexivity, both the sciences and philosophy contain a remainder that escapes knowledge and explanation, and furthermore, in its identity in the last instance, it is metaphysical. The questions of metaphysics shared by cognitive science, technology, and philosophy should be addressed at their radical core—that of metaphysics-without-philosophy or philosophy rid of “the principle of sufficiency.” What is consciousness and to what extent is it constitutive of selfhood? What is selfhood, and can there be knowledge or intelligence without a sense of self, without the structure of selfhood or subjectivity and without an agency? In addition, are agency and selfhood to be equated? However, before addressing some of these questions, let us return to the practice of science and its language or procedures of signification. As already argued and partly elaborated, they consist of

proceedings of ever-greater formalisation and ever-greater abstraction that have departed from the concrete or the material in a vaulted trajectory of abstraction aiming to return to the concrete by way of providing a structural explanation of it.

Feelings are irrelevant when it comes to the machine's understanding in the way Turing raised the point. If we imagine biological supplements enabling feelings or sensations in an AI automaton, they do not guarantee in any way that "understanding" will be enacted, mathematical and logical reasoning will be employed, or other forms of understanding will occur that involve the meta-positioning of thought, self-reflection, or the usage of syllogisms that involves no "statistical use" (as per the Bayesian method). Intentionality may be enabled by biological supplementation, but this alone cannot provide any guarantee that the automaton will enact understanding beyond mere computing. Perhaps we must address the question of subjectivity or, rather, selfhood and agency.

Formal language is the foundation of computerised signifying automata. Consciousness, selfhood, and awareness, on the other hand, seem to be inextricably linked with innovation or invention. Invention and innovation can be reduced to the procedure of formalisation, even though they are materially conditioned by it. However, the identity in the last instance (of invention) is determined by the transcendental-material reality of selfhood. We can also call it a subjectivity or an agency, but not a subject, which is a notion we understand in line with the structuralist tradition. Both of the former are terms determined in the last instance by the real of the non-human and its radical hybridity. Radical subjectivity is required to produce innovation: to be moved by a desire to explain outsideness, to not only understand the workings and the invisible laws of realities but also to control them and make use of them. Such motivation is non-human, animal-like but also techno-logical (in the sense of *techné*), and its identity in the last instance is radically metaphysical. To understand, control, acquire a sense of home, to surpass the anxiety coming

from the *unheimlich* of the real and the outside is to domesticate reality, to produce a tool and give birth to the idea of *techné*, to address the alienation produced by way of sociality and technology: all of this is in its last instance metaphysical.

It is safe to call it philosophical too but without the principle of philosophical sufficiency—thus, non-philosophical. Philosophy is a discipline dedicated to the metaphysical questions adjacent to the sciences, the arts, and the other forms of human practice. However, unlike the other forms of human practice, unlike science for example, it is dedicated not only to resolving metaphysical questions but also to creating a form of universe that will not suffer from any inconsistencies. The world and the real will make perfect sense, they will be reduced to sense, and thus the original radical anxiety of metaphysical nature will be eradicated. The grounding decision on the real and the equation between the real and thought, whereby the former submits to the latter, is the defining characteristic of philosophy, as Laruelle argues (Laruelle, 1989: 231).

Non-philosophy as well as the sciences and the arts permit the presence of metaphysics and its constant challenge by way of subjectivising it rather than “transcending it.” By subjectivising, I do not mean individualising but rather appropriating for the species being of humanity. Metaphysics is thus the prime mover of all exploration, at once scientific, artistic, and philosophical. Philosophy is different from the arts and science due to its “decisionism” (on what is real in itself and for us), which dilutes the dyad or rather undermines it by aiming at reducing it to some sense. The real, however, is fundamentally different from sense because it is the object of thought’s unilaterally making sense. This is something acknowledged by science and serves as the condition of its grounding posture of thought. Having determined the motivation as metaphysical, let us return to the practice of science, namely the formalisation of language.

Formalism and the possibility of formalising the non-philosophical treatment of metaphysics

By their very nature, metaphysical questions are universal. Universalism is proffered to science by way of its metaphysical kernel. Similarly, metaphysics in its radical form is what provides the universalist basis for non-philosophy or for the project of the scientific practice of philosophy (rid of the principle of sufficiency). Radical metaphysics assumes there is a diversity of cultural or historical forms of subjectivisation (not individualisation), and these forms are thus endowed with their own identity in the last instance. Nonetheless, the metaphysical backdrop conditions the different forms of subjectivisation. Just as science is able to communicate with some form of universal language or aim at greater universality due to the formalism of language and enabled by the metaphysical prime mover, non-philosophy or philosophical science can move beyond the “principle of sufficiency” (Laruelle, 1989: 17).

Thus, universalism is the indispensable condition of science and the scientific practice of philosophy due to the presence of radical metaphysics or metaphysics-without-philosophy. It is also universal thanks to the cognitive procedure of abstraction and the formalisation of language. Different histories, different societies, and political-economic frameworks produce a different culture of scientific practice and different declinations of the formal. This dialectic of the universal and the local, the abstract (in the sense of formal) and the particular, is homologous to the dialectic of synchrony and diachrony in structuralism. Thus, universalism does not dispense with historicity (or “cultural context”) but rather presupposes that scientific practice and the formalism of discussion are grounded in history and produce their own specific structures. In order to establish a continuity of conversation, “culturally specific” variations are also subject to formalisation along the trajectory we called, in line with Saussure’s model method, “from the concrete to the

abstract and back to the concrete.” However, instead of the rather vague yet limited concept of “culture,” I am suggesting a historical-materialist condition. Universalism is therefore what establishes an inherent link between radical metaphysics and the procedure of formalism.

From formalism to automatism

Formalism can take the form of algorithms, and algorithms are finite automata in a way or are fractions that can stand alone as finite automata. However, logic is also a formalism, but it cannot be reduced to a finite automaton, and it certainly does not comprise a significant element of computer languages *qua* languages. Basic logical procedures such as syllogisms in computing are reduced to statistical probability rather than the syllogism proper—in spite of emulating the procedure of syllogisms, the conclusion is statistical and is, therefore, not a conclusion or an inference proper (Turing, 1950: 433–460). In computer sciences, the marginal presence of logic and mathematics is a commonplace. Computing is the craft or *techné* of signification, of “cloning the real” into codes or signs, that emulates the physicality of the message and in that way mediates a certain truth or knowledge, but it does not infer, does not resort to logic, and has no interest in metaphysics. It is unable to estimate and compare the environment and its beneficial or harmful effects unless such instruction is generated and is executable based on information input. Plants can think strategically, as a group of researchers from Tübingen University has proven recently (Gruntman et al. 2017). Computers cannot. There is no metaphysical mover, no intentionality, and, ultimately, no material mover such as physicality. There is no *conatus* because the machine is dead. Or, the machine-enabled automaton is highly productive death. In addition, there is neither agency, nor subjectivity, nor subject. Thus, when we speak of machines learning or of their intelligence, we are in fact

resorting to metaphors or folk terminology issuing from the manifest image of anthropocentric reality.

As we already pointed out, in computing, the syllogism is present only as the product of the input, which is in fact a statistical result organised in a language that mimics syllogistic reasoning. In the vocabulary of computer science, these sorts of syllogisms are normally referred to as “statistical syllogisms.” “If A equals B and if B equals C, then A equals C” can be a syntactic structure in a program language, but it is still a form of processing input data, since the procedure of generalisation or inference is not available to it. Generalisation and particularisation are operations of the formalisation of language that rely on categorical thinking or the ability to create categories and produce them as the result of the practice of thinking. Computing is limited to performing or simulating the available formal operations.

Formalism is in fact a creative and dynamic (rather than predictable and static) process that begins with the concrete or the empirical and with acts of descriptiveness, and then it gradually becomes abstract. In short, formalism is generated by practice, which is ensconced in the empirical, and the evidence of this entrenchment becomes ever less evident as the expression attenuates through ever-greater economisation and abstraction as it clones social relations or the ruling relations (“laws” of a phenomenon), i.e., the structures or other forms of “real abstraction” (Sohn-Rethel, 1978: 13–35). Insofar as it creates itself even when formulae are available and insofar as it is empirically determined, it cannot be reduced to a finite signifying chain or an automaton. However, it is easily translatable into one due to its algorithmic and formulaic constitution.

Formalism is required in order for a language and thought to be scientific. Not every formula or formulaic notion is quantifiable or computable. Nonetheless, the processing of relevant data as well as the construction of syntaxes that clone the algorithmic structure of a science is not only possible but also indispensable for greater productivity.

Categories, natural and technical finite automata, and the non-human self

Categorical thinking and postulates are mediated by means of natural language, or they are in fact a medium or message or an instantiation of language. But are they reducible to it, to the *techné* of language? I would argue that the awkward assemblage we call here the non-human is what initiates and executes these mental products. It is precisely the animal or the physical that is the driving force and thus produces the vector of postulating. Postulation is the work of signification, whereas greater formalisation is always physically supported and empirically confirmed. The formalisation of language determined by matter produces ever-greater abstractions that are not only determined in the last instance by materiality but also return to the material as their object of study. They are neither auto-referential in their interest and in their origin, nor do they seek legitimisation for themselves within themselves (as philosophy does, and some forms of mathematics, logic, and other sciences in their aspects of philosophy). Outsideness or reality as the real (i.e., as not yet syntactically organised) is the object of interest.

The automaton of signification in all its forms, ranging from natural languages to the capitalist value exchange system or the patriarchal exchange of women, from spoken languages to digital languages, is put in motion by forms of animality. When we say animality, we are referring to the prelingual instance of radical subjectivity that poses the questions of naive metaphysics, which is the prime mover of all language and knowledge creation, whether scientific or philosophical. We have explained the concept of radical subjectivity, but let us remember that the latter is a form of selfhood with language at its disposal but is still in the last instance determined by the real of the sheer trauma of being human-in-human, of being determined by or as the real. The mediation of the sheer out-there is what moves art, science, and philosophy, and it takes place at the gates of language—it is prelingual, even

though language can be available to it. Therefore, animality and metaphysics are the indispensable element or the fundament of scientific examination and innovation. We have based this claim thus far on Marx, Laruelle, and the structuralists, but we can add to this group some philosophers too, including, and most prominently, Donald Williams and his metaphysics of naturalistic materialism (Williams, 1953). Thus, the agency of artificial intelligence ought to be endowed with these preconditions rather than the ability to “feel” (emotions), which seems to be the fixation of contemporary media and manufacturers.

Let’s “attenuate” further the materiality of our observation and arrive at the indispensable minimum of abstraction—let’s propose the category that subsumes altogether the animality, humanity, and materiality of the self and is moved by naive metaphysics and desires science. The category that abstracts both living and non-living materiality, conscious life and life without self-reflexivity, nature and technological materiality qua real abstraction, is the category of the physical. Therefore, the “will to knowledge” originates in physicality. But if the motor is some “real abstraction” (such as money), it initiates the motor of physical survival and then, by consequence, language. In this sense, physicality could be further radicalised as an instance of the real, and we can claim that an agency, insofar as it is real or endowed with a conatus, is the motor and the medium of the signifying chain. Yet, the real is modus, not substance, and when seeking to identify the identity in the last instance of the motivation toward the explanation of exteriority and its further formalisation, we are looking at physicality.

As we already explained, the identity in the last instance of the non-human is the radical dyad of the automaton and physicality (both natural and artificial); thus, its identity in the last instance is the dyad in question. The dyad, insofar as it is the radical, minimal, and grounding structure of the (non-human) self, is constituted by two elements that relate unilaterally to one another and are never reconciled in a dialectical unity. “Thought,” as Laruelle

says, has a unilateral relation toward the real of the outside world it seeks to explain, whereas the real remains indifferent. But thought is not the same as the signifying automaton because it is the product of the "human-in-human" (Laruelle) operating with transcendental material or of the non-human (as we have called it here).

Therefore, in what produces thought, there is a continuity between the two elements of the dyad, which is not the same as unification or unity through unification. The trajectory of continuity is produced by the effects of the determination in the last instance that takes place on the plane of the real or is materially/physically determined. Thus, the physical or the real determines the motivation for signification, and Laruellian "thought" refers to such a mental process that is in the last instance subject to determination by the real. The non-human as the agency of thought seeks to explain the real or the outside world, and the determination that is material vectorially determines the processes of the automaton, yet the two are never "unified." Just as in structuralist linguistics the two elements are unilaterally related whereby the one represents a constitutive other, and just as their unity consists in a non-unity and contradistinction, the same can be said of the non-human dyad.

This is why the participation of the physical in the actions executed by thought (and primarily through and in the form of the signifying automaton) does not imply the "transcendence" of the primitive dyad and its unification into a higher and purely rational entity. Rationalism is the ontologisation of a cognitive faculty and the reification of abstraction. It is in fact the primitive religious procedure of fetishisation. That is why we are not interested in discussions of rationality or rationalism but rather in formalism, which ensures the rigor of investigation and departs from a stance that is essentially scientific, i.e., indifferent toward what kind of ontology may be produced as a result. In fact, it is indifferent to ontology or to an ontologically determined universe.

As already noted, we understand formalism as a movement of thought following the Saussurean trajectory: from the concrete to the abstract and from the abstract back to the concrete. The models we are considering here are provided by the theories of Ferdinand de Saussure, Karl Marx, Luce Irigaray, and François Laruelle. They serve the accurate and exact description and explanation of a reality at hand, with abstraction as one of the necessary cognitive instruments and not as a goal of existence or a parameter of a self-perfecting existence. The goal is to return to the subject matter of study and explain it in its concreteness.

The products of abstraction, the formulaic language solutions, and the artifacts of encoding explain the relations and operations (of “real abstractions”) by way of “cloning the real,” as Laruelle would say, following “its syntax.” Structures, waves, fluxes, and all possible modulations of the real, acts of “realisation” with an inevitably material aspect, even when they are “real abstractions,” produce something that Laruelle only tentatively calls a “syntax of the real.” It is according to this syntax that thought “clones” the real. It comes down to a very rudimentary description—take, for example, Marx’s lengthy and meticulous descriptions of a particular market only to arrive at the general laws of use and surplus value as the result of that very exhaustive description—which is taken to an ever further formalisation of the discussion. As the result of such a process, a formal language suited for the particular syntax is also created. Of course it is the act of cloning of the real that always forecloses—but only in the last instance—to further transcendence, which, in turn, recreates “the syntax of the real” or rather produces a syntax of it and eventually semantics. The *chôra* of the philosophical material serves as the semantic depository for the new syntax and formal language (Laruelle, 1989: 64–69, 133, ff). Such a use of philosophical “conceptual material” implies a non-philosophical treatment of it, one that is defined by a posture of thought, which submits to the real rather than to itself (i.e., to thought) and its self-referential coherence.

Is metaphysical formalism possible, by what means, and what are its limits?

In the *Tractatus Logico-Philosophicus*, Wittgenstein elaborates the procedure of “representation building,” which is very similar to what Laruelle calls “cloning of the real”: it has to be “linked with reality” (2.1511) and “reach up to it” (2.1511), and, in doing so, it is like a “scale applied to reality,” or in German: *Es ist wie ein Maßstab an die Wirklichkeit angelegt* (2.1512). In Laruellian terms, it “clones the real.” The “picture” or rather “image” (or in German: *das Bild*) that is “linked to reality” is a fact (*Tatsache*), as Wittgenstein says (2.141), but only insofar as it is applied to reality as a “scale,” only insofar as it “reaches up to reality” (2.1511); and in doing so, it has the “form of representation” or the possibility of a “structure” (2.033).

To apply Wittgenstein’s “scale” is to undertake a *descriptiveness* that will lead us to ever more general and ever more abstract notions and ultimately to the creation of categories that enable full formalisation of the discussion. Such a process is sufficiently possible in a universal way for humanity, which enables us to say that universalism is possible without or beyond cultural hegemony. The sign is a code that “clones the real” or generates the identity in the last instance of the object of study, and that is why it is transcendently minimal and fundamentally descriptive (Laruelle, 2014: 179). Identity in the last instance is normally a concept. This concept is in the last instance determined by the real or a particular real. In the study of non-philosophy or the non-philosophical study of philosophical material, we are interested in the identity in the last instance, but due to the fact that it is a clone is why we are also interested in the real out of which it was cloned.

The radical metaphysical concept, one that is not the product of the discipline of thought called philosophy but a direct clone of an experience of exteriority, the horror and wonder of being-in-the-out-there, being-before-the-other, the horror and wonder facing the difference between living and non-living entities, the

horror of the indifference of the non-living other and of the out-there, the horror and wonder before nature as the out-there that is both living and non-living, acting as a living non-entity or the real alive: all of these ideas are direct clones of the experience of the real or of the real insofar as this experience is a non-reflected real. And they all resort to language, but they can dispense with it, too. They precede every utterance yet urge all utterances. They therefore initiate and require signification. The more formal the signification, the more narratively minimal and the more precise the cloning of the experience of the real in the form of metaphysical wonderful horror. The path begins with the concrete, ascends to the highest possible abstraction—and, to arrive there, narration is indispensable—only to reach the most minimal expression that signifies (i.e., mediates) with the highest possible exactness the pure form of the real or the clone.

Let us consider the following model of binary signification proposed by Wittgenstein that condenses some of the most basic laws of logic and operations of thought constitutive of philosophy:

The truth-functions of every number of elementary propositions can be written in a schema of the following kind: $\sim \supset \wedge \vee$

(TTTT) (p, q) Tautology (if p then p, and if q then q) $[p \supset p. q \supset q]$

(FTTT) (p, q) in words: Not both p and q. $[\sim (p. q)]$

(TFTT) (p, q) „ „ If q then p. $[q \supset p]$

(TTFT) (p, q) „ „ If p then q. $[p \supset q]$

(TTTF) (p, q) „ „ p or q. $[p \vee q]$

(FFTT) (p, q) „ „ Not q. $[\sim q]$

(FTFT) (p, q) „ „ Not p. $[\sim p]$

(FTTF) (p, q) „ „ p or q, but not both. $[p. \sim q: \vee: q. \sim p]$

(TFFT) (p, q) „ „ If p, then q; and if q, then p. $[p \equiv q]$

(TFTF) (p, q) „ „ p

(TTFF) (p, q) „ „ q

(FFFT) (p, q) „ „ Neither p nor q. $[\sim p. \sim q \text{ or } p | q]$

(FFTF) (p, q) „ „ p and not q. [p. \sim q]

(FTFF) (p, q) „ „ q and not p. [q. \sim p]

(TFFF) (p, q) „ „ p and q. [p. q]

(FFFF) (p, q) Contradiction (p and not p; and q and not q.) [p. \sim p, q. \sim q]

(Wittgenstein, *Tractatus Logico-Philosophicus*: 5.101)

The entire set of logical operations is reducible to the order of two signs: “T” and “F” (insofar as F equals \sim T). The possible combinations of the two signs in an endless chain do not even involve any algorithm or syllogism; there is no procedure of inference—there is no logic, only statistically possible correct and incorrect or true and false statements. They are either true or false depending on how they (unilaterally) relate to the real, depending on whether they constitute a scale (*Maßstab*) or not. What is at stake here is the mere marking of the reality of p and q and their relations by way of “cloning” it into a series of true and false signs. The signs should recreate an image (“*Bild*”) of the reality that is its scale (*Maßstab*) or clone. The signs themselves in their material sequentiality do not represent anything except cloning the physical sequentiality of the real taking place, through simple “yes” and “no” or “true” and “false” (or rather negation of true), whereby the physical reproduction of the real via the workings of the transcendental (i.e., through language) enables the second transcendental—the representation or image (*Bild*) of the structure of the real. The latter is what scientific invention (as well as the commonsensical and any other form of intelligence) requires. Wittgenstein writes:

This connexion of the elements of the picture is called its structure, and the possibility of this structure is called the form of representation of the picture. (2.150)¹

¹Put in context and in the German original: 2.150 Dass sich die Elemente des Bildes in bestimmter Art und Weise zu einander verhalten stellt vor, dass sich die Sachen so zueinander verhalten. Dieser Zusammenhang der Elemente des Bildes heisse seine Struktur und ihre Möglichkeit seine Form der Abbildung.

Further in the text he explains:

The gramophone record, the musical thought, the score, the waves of sound, all stand to one another in that pictorial internal relation, which holds between language and the world. To all of them the logical structure is common. (4014)

That pictorial relation, although preceding language and being external to the world, nonetheless possesses a “logical structure.” The structure possesses a certain logic because it is the *Maßstab* or the clone of the real, but its very possibility is provided by the material practice of signification on the material appearance of the real, by the practice of signalisation of true and false in which, on the other hand, there is no logic:

It is clear that to the complex of the signs “F” and “T” no object (or complex of objects) corresponds; any more than to horizontal and vertical lines or to brackets. There are no “logical objects.” (4.441)²

There are “truth possibilities,” and he proposes their combinations instead of logic in this binary language (Wittgenstein: 4.442). *The signaling of true and false, present and absent, is no different from any other practice of language it seems.* If language mediates not only the real as it appears but the reality of the true and the false, then it constitutes a second language of a doubling or mirroring kind that frames the reality of the cloning of the real (in other words, a cloning to the second power). Such could be the model of the full formalisation of a non-philosophical language applied to the real world in view of explaining its workings or that of radical metaphysics. By way of the radicalisation of the concept and arriving at its identity in the last instance

²4.441 Es ist klar, dass dem Komplex der Zeichen „F“ und „W“ kein Gegenstand (oder Komplex von Gegenständen) entspricht; so wenig, wie den horizontalen und vertikalen Strichen oder den Klammern.—„Logische Gegenstände“ gibt es nicht.

and the real as determination in the last instance, what can be established is a language that signifies the presence or absence of cloning the real in a philosophical or metaphysical account. However, it seems that such a procedure could constitute something more akin to an algorithm serving a function in the language of radical metaphysics rather than a foundation for a language *sui generis*. In this sense, I concur with Anne-Françoise Schmid when she argues that “the integrated objects” of non-philosophically mediated interdisciplinary science are not “the realization of possibilities, but that they first and foremost propose impossibility, for which one has to generate new relations between knowledge. A little like in algebras of extension, where the impossible solution of an equation gives us the rules to construct a new set allowing for the interpretation of the solution in a new way” (Schmid, 2015: 66).

Let's take the question of gender, namely its relation to sexual difference, biology, and sexuality. Is its identity in the last instance determined by the opposition to the concept of sex or by its differentiation from it? Is its determination in the last instance relational? Gender is determined by the material reality of performativity. The performance in question concerns social roles determined by their function of sexuality. The concept of performativity thus describes or clones the reality of such a social function. Reproduction is irrelevant for the identity in the last instance of the concept and the reality it clones. Gender as a role or modality of performativity is in the last instance determined by the reality of socially assigned sexual roles or subject formations. In the same way that society is not a stable and static category but a historical one, gender does move and transform, and there is no certainty of its sense and of its essence. Thus, in the last instance, the determining real of performativity is a stable category, whereas gender formations or subject positions are mutable ones. Socially assigned sexual roles or subject positions oscillate between two relatively stable poles of semantic contents, i.e., masculinity and femininity. Unstable and mutable gender configurations produce a multiplicity out of the given binary. In this sense, performativity produces a multiplicity of structures

stemming from and branching out of the binary of femininity and masculinity. Femininity and masculinity as opposing poles and elements of the constitutive binary are transcendental: they are the concepts and semantics derived from the two reproductively determined types of the species being of humanity. The following diagram (Figure 1) is a summary of the discussion at hand produced by Etienne Brouzes, presented here with his permission:

Gender [Concept] is determined by its identity in the last instance, which is [\langle] performativity [concept/clone]; performativity is determined by [\langle] the real of the social distribution of sexualised subject positions [real/real abstraction]; the distribution of sexual subject positions (or “gendered roles”) is determined by [\langle] the binary structural organisation of femininity and masculinity [real/real abstraction], which, in turn, is determined by [\langle] the reproductive reality of a human society [the real as the physical determination in the last instance]. The procedure of “philosophical impoverishment” (Laruelle) is that of an ever-greater abstraction to arrive at the “concrete” (or in Laruelle’s case, the “real”), and it thus follows the second leg of Saussure’s trajectory. It enables us to

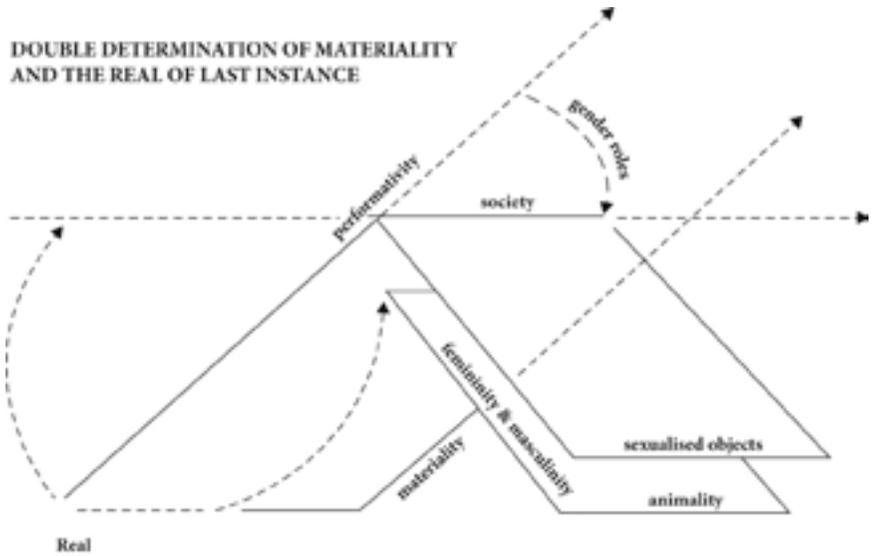


FIGURE 1 *Double determination of materiality and the real of last instance.*

non-philosophically recreate the transcendental minimum of a concept and, beginning with the identity in the last instance while immanently correlating with the determining real, to create a realist account.

Such is the non-philosophical proposal. The Marxian addition to it would be to radicalise the real by arriving at its physical or material cause. One ought to engage in a metaphysical choice in order to decide whether materiality will be the determining last instance, whether it will be the real that directly affects the clone, which could be a real abstraction (such as an aspect of social relations). It is also an ideological choice, not necessarily epistemically indispensable for the realist method but consistent with it. Beginning with the concrete of the basic structure of performativity or the determining binary that branches out into more complicated structures, we can determine the clone of gender: it refers to the possible complexities of the structural branches of subject positions and the declination from the ideal “feminine” and “masculine.”

As Saussure said, the ideal phoneme does not exist in reality, but it is indispensable to explain the real phonemes as declinations from the ideal; so, by homology, the gendered positions and the declinations from the ideal are what we encounter in the concreteness of the social organisation of sexuality. If the species being of humanity dispenses with these roles and projects some post-gender form of social organisation of sexuality and, by consequence, of sexual reproduction, the concept and reality of gender will probably become obsolete. If a reversal of economic logic in patriarchy is possible, these roles will become obsolete along with bourgeois marriage itself, including the parenting that goes hand in hand with it. Gender roles are the effects of the bourgeois structure of society and its organisation of social reproduction. While in the given political-economic order, the marginal formations of gender constitute realities (and the real qua real abstractions) that suffer oppression or exploitation based on their identity in the last instance but determined by the materiality of their material vulnerability. The centrality of the theme of “gender as identity” in left-wing political discourse nowadays serves rather

than undermines the given political-economic order. Conversely, to focus on exploitation, commodification, and reduction to resources for surplus value (or simply value) is to focus on the material reality of the marginal subject positions determined by gender. Such novel repositioning of the gender-related social and political-economic battles could provide a basis for some tangible change in the *status quo*.

Possibilities and limits of non-philosophical formalism

In the *Introduction to Non-Marxism* ([2000] 2016), Laruelle expressly states that the formalism of a “different sort,” one following the model of quantum theory departing from the procedure of subtraction rather than logical formalism, is possible for non-Marxism (180). In this chapter, however, we are interested not only in what formalism can provide for non-Marxism and non-philosophy but instead also the opposite—what non-philosophy (of both Laruelle and Marx) can offer for the expansion of the possibilities of formalism.

Let us attempt to formalise the procedure of “philosophical impoverishment” according to Laruelle that will enable us to arrive at the “transcendental minimum” whose semantic contents can be communicated across the sciences. In fact, such impoverishment will enable what Laruelle calls the scientific approach to philosophy as material of study. Although such procedure has not been elaborated by Marx, his project of establishing a “science” on matters that are usually dealt with philosophically has been executed through an exemplary formalisation of empirical observation, one initially operating with philosophical concepts only to impoverish the latter and arrive at the science of political economy. This kind of science shall, as Marx argues, lead us to the full “realisation of the species being of humanity” or communism, and such a goal is essentially metaphysical.

Communism as the positive transcendence of private property as human self-estrangement, and therefore as the real appropriation of the human essence by and for man; communism therefore as the complete return of man to himself as a social (i.e., human) being—a return accomplished consciously and embracing the entire wealth of previous development [...] Communism is the riddle of history solved, and it knows itself to be this solution. (Marx, 1959: “Private Property and Communism”)

The formula that will enable this is M-C-M with its subsequent “arborescence” into formulae concerning surplus value and the socialist response to it, which is elaborated in the third volume of *Capital*. In addition to the models proffered by Marx’s political economy and Laruelle’s non-philosophy, we can draw on structuralism as the science of accomplished formalism concerning the signification or signs and the “technology of making” sense. The proposed steps in the procedure of impoverishment as conceived by Laruelle can be enriched or supplemented by Marx’s materialism (or “physicalist realism”) without causing any distortion in the initial idea. Also, the concept of the “clone” can be explained through the structuralist notion of sign and the automaton of the signifying chain, which will enable us to circumvent the redundancy of anthropocentric argumentation.

Let us assume there is a string of steps, which establish an adequate formula that ensures stability and the results that can be empirically corroborated. Also, let us examine if such a formula allows the development of an “algorithm”—or whether it is endowed with inherent possibilities to produce predictable and possibly automatable results—that will render radical metaphysics predictable, readable, and communicable to other sciences. Outside the philosophical universe and inside the realm of *techné*, automaticity is not a goal in itself and is not sufficient for scientific exploration but rather ensures exactitude and corroboration from the real as the determining exteriority. It also ensures the increased productivity of scientific investigation and is

one of its unavoidable parts but not its “essence” to which the entire realm of science would be reduced.

One of the themes we seek to apply such an approach with the goal of arriving at the radical immanence that motivates some of the major technological projects is the insidious presence of spontaneous anthropocentrism. An automaton that perpetuates its operation without human intervention, a recreation of human subjectivity without the natural human, a recreation of life itself without life, an existence without vitality or vitalism, the transcendence of the natural as the “inferior form of existence” only to recreate it rationally—all of this sounds like nothing but metaphysics. It not only sounds so, but it is so by definition: it will lead us to desubjectivised Reason as the prime mover of all existence. And, according to such philosophical dreams, this Reason ought to be absolute, and the rationality or scientific reason of a mortal inventor also ought to be surpassed. For what purpose? The purpose obviously transcends the interests of a practical scientific nature. (I am referring to the practice of science and its immanent rules but also to the social function of science consisting in improving the conditions of the species being of humanity.) Again, such a purpose or goal is metaphysical.

If we are to treat it non-philosophically or scientifically, the metaphysical core of some philosophical-scientific projects ought to be radicalised, stripped of philosophy as a self-encircling system, and the posture of thought ought to step outside the realm defined by philosophical sufficiency. The bare and naive clone of metaphysical experience ought to be treated non-philosophically, which will enable us to arrive at its determination in the last instance. By doing so, we should be able to attempt a reconceptualisation of the syntax of the clones in correlation with the real (of that experience), rather than resorting to the self-referential laws of a philosophical doctrine. The new set of radical concepts cloned from the real of metaphysical experience will be tested against practice, and the measurement of practice will be formalised. Formalisation does not necessarily imply automation. Laruelle seems to rely on a similar assumption when he writes:

Even qua automatism, the One is perceptible only through these effects of discourse or its practice, not in itself, since it's not a thing or intellectual intuition. Michel Henry couldn't keep himself from giving it an identifiable content in transcendence. But this isn't algorithmic automatism, which is integrally visible and given in a finitary and quasi-geometrical way. Scientific automatism is that of transcendence, but it's not philosophical; it thus supposes a metalanguage and is undoubtedly the complex form of the scientific relation to the real. (Laruelle, 2013b)

A formulaic syntax or formalisation of the language of radical metaphysics, or of the science that clones the real of metaphysical experience, would ensure a relatively universal and relatively stable character of certain procedures that yield results communicable to other sciences. "Identity in the last instance—Clone—Real (Real abstraction/> Real physical): Transcendental" is a simple string of conceptual radicalisation following Laruelle's prescripts (supplemented by Marxian "physicality" or "materiality"), thus enabling us to arrive at the determination in the last instance of a *philosopheme*. This string is a rudimentary formulaic expression that seeks to communicate identity in the last instance determined by the real (which, in turn, is determined by the physical) in order to measure the level of philosophical declination from a non-philosophical cloning. Whether or not a proper "algorithmisation" of this kind is possible (or needed) remains to be seen and demonstrated.

There is, however, content that escapes formalism (and most certainly computability): in the last instance, the real escapes full signification. Radical metaphysics (let's reiterate) deals with the real of experience, and in that experience the real plays an active role while language is germinal, in an initial stage of alienation from the real. One can only clone the effects that betray a certain syntax, but the rest remains enmeshed with the real, and poetic and philosophical language becomes unavoidable. This remainder is incomputable and probably escapes formulaic expression, too. Thus, not only philosophy,

but also non-philosophy, Marxian science, and structuralism as well need to allow the limitations of formalisation by affirming the mentioned fact and the reservoir of narration it enables.

Subjectivity, whose phenomenal appearing in-One is the fabric of the subject effect, is included in this philosophy-form in particular. This fully excludes that the determined effects, which are of philosophical extraction, can be produced by an automatic system, at least provided that philosophy's transcendental mechanism can itself escape from this automatism and this reduction to a simple mechanism. It's transcendence in general that excludes philosophy's reduction to an algorithm. Now, one can obviously pose the problem of the possible degree of automation of transcendence, which is philosophy's transcendental nerve. But to the extent that it continues on (albeit transformed) in the subject, philosophy limits the chances of automaticity and formalism. (Laruelle, 2013b)

The fantasy of covering the entire realm of reality with knowledge and that "true" knowledge would be the full penetration of the real, grasping and submitting the latter to its authority to the extent that the real becomes nothing but an image of knowledge and is fully transposed onto the plane of transcendence, and is, as we know, a philosophical tendency. The notion of the "principle of sufficient philosophy" (or PSP) proposed by Laruelle refers precisely to such a category of ambition in the endeavors of explaining reality that surrounds us and constitutes us, too.

It remains unclear to what extent the formalisation of the scientific language of philosophy is possible and to what degree its automation would be necessary. Philosophical systems do function as automata that produce predictable results according to a certain "statistical logic." What we are seeking, however, is the formalisation of categories that transcend the unchecked anthropomorphic spontaneity of classical oppositions (e.g., nature and technology, body and mind). We propose the distinction—although not necessarily the opposition—

of the physical and the automaton (and both can be categories of either “natural” viz. organic origin or synthetically produced viz. technologically enabled) as sufficiently formal to enable a productive dialogue with other sciences and contribute effectively to the political discussions of post-humanism. Those categories are universal yet can and should be applied locally and in specific areas of study. The procedures of this type of universalism can be far more politically productive in explaining cultural specificities and also in giving voice to particularities, thereby avoiding any hegemony.

We find a model of such a concept and method in Sylvia Wynter’s analysis of “classarchy,” which is not merely a metaphor but rather a formal category that can be used for cross-cultural analysis, thereby enabling a form of universalism that is profoundly sensitive to cultural specificities. This is a category that cuts across “culturalities” along a certain vector of universality. In fact, it serves as an explanatory instrument that gives an account of “cultural” differences as a relation to the universal category of classarchy. Classarchy is a middle-class model of humanity that can have either its liberal humanist definition or its Marxist-Leninist one: either way, man-as-father “provides the organising principle” of a cultural order and acts as the general equivalent of identity. Social roles and their localisms are variations of the same principle. All variations of this model are underpinned by capital as the “General Equivalent Signifier of Identity and Status.” The fact that its origin lies in Western metaphysics does not make it less universal, because capital or “non-landed property” as “the Place of the Phallus-the-Symbolic-Penis” or “the General Equivalent of Capital Man-as-Father” guarantees its universal applicability (under the condition of a globalised world) (Wynter, 1982: 3).

The categories of the automaton as something that is not reducible to machines and that cuts across worlds human and non-human, animal and machinic, along with that of physicality as the determination in the last instance of the real and of its transcendental rendition (the material), are subjected to non-philosophical radicalisation in order to arrive at their pure form, which is

transferable and applicable to different objects of analysis, one that can find its formulaic expression. Non-philosophical radicalisation consists in the above-presented procedure of arriving at a transcendental minimum representing determination in the last instance. Radical concepts are identity in the last instance, which is a certain transcendental that has been “cloned” from the real (Laruelle, 2014: 51). A concept is never immanence, but it can be “affected by immanence” (Laruelle). We call these kinds of concepts “radical concepts.” Furthermore, these concepts can be subjected to formalisation and assume formulaic expression.

