

Levi R. Bryant's Universe Perfused with Machines

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Abstract

The paper is a critical review of Levi R. Bryant's books *Onto-Cartography: An Ontology of Machines and Media* (2014) and *The Democracy of Objects* (2011) from the perspective of semiotics. It contrasts Charles S. Peirce's notions of semiosis and the agency of the sign with Bryant's speculative realism, according to which the universe of things as well as the biosphere of living beings are universes of machines. It also draws parallels between Saussure's 1916 postulate of semiology as a new science of the meaning of cultural objects and Bryant's postulate of a new science of the universe of things under the name of mechanology.

Keywords: *machine, mechanology, speculative realism, semiotics, semiology, semiosis, sign, object, teleosemiotics, tool*

What is the difference between a refrigerator and a work of art? The question sounds like the introduction to a what-is-the-difference type of joke at the end of which we are induced to discover surprising common grounds between seemingly incompatible notions. What is the difference between a civil servant and wood?—Wood works.

The common ground that Levi R. Bryant induces his readers to discover between a refrigerator and a work of art, in his *Onto-Cartography* (2014, p. 18), leaves unprepared readers likewise surprised when they find out that “both are machines”. Bryant's flat ontology could not be “flatter”. Not only are refrigerators and works of art machines, but so are “trees, living planets, and copper atoms” (ibid.). When Bryant speaks of a world thus perfused with machines, he obviously refers to devices to which he does not attribute any of the negative connotations with which the word *machine* has been charged in the course of its history. By a machine, Bryant does not mean a ‘stratagem’, a ‘deceptive device’, let alone an ‘instrument of oppression’ of its users. Bryant's universe is perfused with machines in a very different sense.

The material and nonmaterial entities, which Bryant had called “objects” in his

previous book, *The Democracy of Objects* (2011), have been redubbed “machines” in his book of 2014. “‘Entity’, ‘object’, ‘existent’, ‘substance’, ‘body’, and ‘thing’, are all synonyms of ‘machine’”, declares Bryant now (2014, p. 15). The foundations of such premises are, of course, in Bryant’s speculative realism, the metaphysical turn in the philosophy of the speculative realists, and in Bryant’s “flat ontology”. All these deserve a much thorough examination than can be given here. Nevertheless, a first look at Bryant’s universe of machines may be ventured.

In 1906, Charles S. Peirce (who is not among the authors quoted by Bryant) declared that “the entire universe—not merely the universe of existents [...] is perfused with signs, if it is not composed exclusively of signs” (1906, p. 394). A century later, Bryant declares that this very universe is perfused with machines and is ultimately a machine itself. “‘Machine’ is thus our name for any entity, material or immaterial, corporeal or incorporeal, that exists”, concludes Bryant.

Bryant’s claim is that his encompassing concept of machine finds support in the definitions given by the *Oxford English Dictionary* (OED) for the noun “machine” (2014, p. 15). However, a closer look at what the OED says about the diverse meanings of the word since the mid-16th century reveals that this claim is rather far-fetched, if not deliberately bent towards Bryant’s own semantics. It is true that the OED, in the first of its eleven definitions of the word, speaks of the machine in the rather broad sense of “a material or immaterial structure, esp. the fabric of the world or of the universe; a construction or edifice”. However, it also adds that this meaning is “now rare”, and it does not state that a machine, in this sense, is “a *body* regarded as functioning as an independent *body*” (sic! [italics added]), as Bryant quotes it (p. 15). *Recte*, the first of the eleven OED definitions speaks of a “*structure* regarded as functioning as an independent body, without mechanical involvement” [italics added].

Furthermore, the references quoted by the OED to document the meaning of “machine” since 1545 are far from giving evidence to the argument that the universe is perfused with machines because “being has never consisted of anything but machines”, as Bryant puts it (ibid.). Instead, the early 16th century usages of the word only illustrate the ancient, medieval, and Renaissance ideas of the cosmic universe as a “great machine” constructed by God, as Camões puts it in his *Lusiads* (X, pp. 75-91). Other usages of the word, also attested by the OED, which subsume certain ‘devices’, ‘constructs’, or ‘artifices’ under the name of “machine”, are clearly metonymically derived from the more general idea of the universe as a cosmic machine.—Of course, the lack of lexicographic evidence in support of the encompassing sense that Bryant now gives to the word *machine* does not forbid his redefinition of the concept for the benefit of future generations.

Bryant postulates a new research field under the name of *mechanology*, while admitting that this new field, as he conceives it, does not yet exist since we are “not even certain of what different genera and species” machines really consist (ibid.). “Not unlike zoology and botany”, this new mechanology should “investigate the essential features of different types of machines” (2014, p. 17). His vision of a new science under the new

name of mechanology at the beginning of the 21st century is clearly reminiscent of the vision of another science for the future, whose announcement we find at the beginning of the 20th century in the writings of Ferdinand de Saussure. In 1916, it was the founder of 20th century structuralist semiotics, who pleaded for a new science under the name of *semiology* whose purpose it should be to study “the life of signs within society”. Like Bryant in 2014, Saussure acknowledged in 1916 that the new science, whose “right to existence” he postulated, did “not yet exist” (1916, p. 16). Semiology or semiotics became a leading intellectual paradigm of the humanities of the 20th century, as we know. Is mechanology destined to become the posthuman or even nonhuman semiology of the 21st century?

Bryant’s new field of research in machines under the name of mechanology begins with the study of machines as they are familiar to us in daily life. The author attributes to these machines of the past three characteristics, all of which he considers outdated in light of his new and all-encompassing mechanology (2014, pp. 15-25).

The first is rigidity: “A rigid machine is a machine composed of fixed material parts, characterized by routinized functioning, and is incapable of learning, growth, and development” (p. 16). However, when it comes to exemplifying this class of machines, Bryant already goes far beyond the kind of machines that we believe to know. His examples of rigid machines do not only include “automobiles, primitive computers, cell phones, and lamps but also rocks, dead planets and comets, atomic particles, and so on” (ibid.).

The second characteristic of machines, as we have known them for centuries, is that they are designed. We have always known that machines, such as automobiles, computers, cell phones, lamps, and Dutch windmills, are designed. “The term ‘machine’ leads us to think of that person, rational being, or people that designed and fabricated the machine. We encounter a Dutch windmill and are led to think of those who conceived and built the windmill” (pp. 17-18). Bryant, by contrast, reveals that it is an anthropocentric bias to believe that such machines are designed according to the plans of a human designer. When we believe that they are designed by human agents, “we forget both the time of production and engagement with the materials of the world” (p. 19). Instead, if we consider the role of temporality and materiality in their production, we have to admit that the designers have nonhuman collaborators with whom they need to negotiate in the design and production processes: “The production of any artifact is much closer to a negotiation than the simple imposition of a form upon a passive matter. And as is the case with all negotiations, the final outcome or product of the negotiation cannot be said to be the result of a pre-existent and well-defined plan,” concludes Bryant (p. 19).

The third traditional characterization of a machine that Bryant finds outdated is that they should have an *intrinsic purpose*. “We say that the purpose of the electric knife is to cut turkey or bread and that the power shaver is used to shave whiskers” (p. 23), concedes Bryant in a paraphrase of the traditional view of what machines are made for. However, he refuses to acknowledge that these purposes are intrinsic, but when it comes to justifying

why it should be wrong to treat certain purposes “as if they were intrinsic features of the machine”, Bryant is first begging the question. In his rhetoric, he does not shy away from drawing on the strategy of the *petitio principii*, when formulating his argument, namely: “If it is true that all entities, things, or objects are machines, then it is clearly not the case that machines have an intrinsic purpose” (ibid.).

Nevertheless, Bryant also offers some substantial arguments to justify that a ballpoint pen or a capybara are machines without any intrinsic purpose. One is that all machines are *pluripotent* in the sense that they *can take on* many different uses (pp. 23-24). According to Bryant, the rodents of the species capybara are machines without “an *intrinsic* purpose that lies *beyond* themselves such as serving as food for crocodiles and leopards or breaking down plant life through digesting it for the sake of creating fertile soil for other plants. Capybaras can *be put* to these uses by other machines such as crocodiles, leopards, and plants, but these uses are not a part of their being as machines” (p. 23).

Another reason adduced by Bryant against the assumption that machines should have an inherent purpose is that they have more than one purpose, if any. Although designed and produced for the purpose of handwriting, a ballpoint pen does not *have* this purpose intrinsically. To serve the purpose of a writing instrument is not the ontological reason for its being, argues Bryant. A ballpoint pen does not *have* this purpose; it can only be “put to the use” of it.

It can only be observed in passing that Bryant’s latter reason against the argument that objects of practical utility might indeed have inherent purposes may suffer precisely from that anthropocentric bias without which Bryant wants to justify his flat ontology of objects, alias machines. For, when Bryant says that a ballpoint pen can only be “put to the use” of its purpose, he does suggest that only an external human agent, extrinsic to this technical device, makes this “machine” a tool to write with.

What is missing at this point is a dialogue with those who, in a teleosemiotic framework, defend the idea that cultural objects of practical use do indeed have an inherent purpose, i.e., a dialogue with those who have proposed a teleological theory of cultural objects based on evolutionary principles (Dretske, Papineau, Neander, and Millikan in particular). The teleosemiotic argument in favor of the assumption that objects of practical use do have inherent purposes is that their purpose lies in their being useful and thus to survive in a market of competing products (for details see Nöth, 2009).

After having identified so many criteria as *not* applying to machines in the new all-encompassing sense, Bryant still needs to be heard as to the positive distinctive characteristics that he attributes to machines in the new extended sense. The essence of Bryant’s reasons for calling the manifold entities inhabiting his cosmic and cultural universes “machines” is that they all evince some agency, whether human or nonhuman. Bryant hesitates and even refuses to call the inhabitants of our universe “objects” because he needs to avoid the anthropocentric and human connotations with which this term is burdened in its opposition to the term “subject”. Objects, or as Bryant prefers to call them, machines, are agents, better collaborators or co-agents, whether human or nonhuman, in

ever-ongoing processes of becoming. The reasons why Bryant calls objects machines boil down to two: “First, the concept of machine admirably captures the essence of entities as beings that function or operate. To be is to do, to operate, to act. Second, where ‘object’ evokes connotations of a being opposed to or posited by a subject, ‘machine’ avoids these associations, allowing us to step outside a four hundred year old philosophical obsession with interrogating the relationship between subjects and objects” (p. 15).

When Bryant uses the verb “operate”, an erudite synonym of the verb “work”, to describe the agency of machines, his choice of words is quite in line with our everyday language usage, which has always attributed the capacity to work to both human and nonhuman agents. Not only public servants, but also wood and other “machines” work or do not work, as we say. However, when we say that wood or machines work, our anthropocentric culture makes us believe that we are speaking “merely” metaphorically since in fact, only humans and perhaps ants are working beings, whereas wood and machines are not. Bryant, by contrast, would object and argue that machines work *literally*.

In their collaboration with humans, machines *act* with a nonhuman agency, which they exhibit to a certain degree independently of the control of their human operators, and in some sense, they themselves control their operators. In a line of argument adopted from the philosopher of technology Lewis Mumford, Bryant argues that machines, due to their own technical exigencies “issue certain imperatives on their designer that run away from the[ir] intentions [... so that] the machine itself ends up contributing to the design not intended by the designer” (2014, p. 19). In fact, “matter imposes imperatives on designers at all levels” (*ibid.*), but what is true of matter is equally true of tools, machines, and our environment in general: tools and machines “impose their techniques upon us [... and] issue certain problems as imperatives to be solved” (p. 20). They are “nonhuman actants [... with] a strange autonomy and vitality” of their own, says Steven Shaviro in his *Universe of Things* (2011, p. 3).

At this point, it is impossible to ignore any longer the affinities, without neglecting the differences, between Bryant’s mechanical and Charles S. Peirce’s semiotic universes. Not only is Peirce’s universe as perfused with signs as Bryant’s is with machines but the inhabitants of the two universes are similarly active. For Bryant, the agency of the machines that inhabit his mechanical universe is an ontological one. The being of his machines is of the nature of a doing, operating, or acting, as seen above. The agents of Peirce’s universe are engaged in acts of semiosis, “the action, or influence, which is, or involves, a cooperation of three subjects, such as a sign, its object, and its interpretant”, by which he means “the action of almost any kind of sign” (Peirce, 1907, p. 411).

Bryant makes skeptical remarks about the analytical potential of semiotics in the study of reality. However, his knowledge of semiotics is restricted to the structuralist version of it, which he criticizes for believing that the world is “structured by language and culture, that the diacritical differences introduced by signs carve up the world, and that change [can be] effected by debunking these signifying assemblages” (p. 4). This is not what Peirce

means by semiosis and the agency of the sign.

Bryant is convinced that the objects of the universe which he describes as machines act imperatively and that their agency is one that “insists” (ibid.). Peirce postulates a similar insistence of the objects of reality. The so-called dynamical or real object insists on signs and cognition since it “is the Reality which by some means contrives to determine the Sign to its Representation” (1906, CP Vol. 4, p. 536), or, as he puts it in his letter to Lady Welby of 1906, “The dynamical object [...] means something forced upon the mind in perception” (SS, p. 197).

In which other senses the signs that inhabit Peirce’s semiotic universe are agents and in which sense Bryant’s mechanology does or does not take semiotic machines into consideration are topics that can only be examined in a broader framework (Nöth, 2002, 2009, 2010a, 2010b, 2012, 2014). Nevertheless, a last topic at the interface between semiotics and mechanology needs to be addressed in conclusion, the topic of the instrumentality of signs.

In a series of papers published since 2009, Nöth (2009, 2010a, 2010b, 2012, 2014) has addressed the question of the instrumentality of the sign in light of Peirce’s theory of the agency of the sign. The argument of these papers was that signs are in some respects not instruments, although in other respects they are. For example, signs cannot be the instruments of our thoughts since our thoughts are signs themselves. Nor are signs instruments in the sense of tools that act on their environment by efficient or mechanical causality since the agency of signs works on a different principle of causality.

Bryant, by contrast, gives evidence of the “tool-being” (as Harman 2002 put it) of signs in a very different sense. In his mechanical universe, signs are *incorporeal machines* (Bryant, 2014, p. 26), not in the sense of the Aristotelian efficient or mechanical causality by which machines are usually said to operate but in the quite different sense, of a final causality, which is quite in accordance with the one by which signs operate according to Peirce’s theory of semiosis. In the rather unusual sense of tool-being that Bryant attributes to his incorporeal machines, signs are certainly tools, even according to Peircean premises. If we disregard the somewhat pathetic references to eternity, the following characteristics that Bryant attributes to *incorporeal machines* and their modes of embodiment in signs (Nöth & Santaella, 2011) are most certainly characteristics which Peirce, too, in his own semiotic contexts, attributes to signs, in particular to symbols:

Incorporeal machines [...] are defined by iterability, potential eternity, and the capacity to manifest themselves in a variety of different spatial and temporal locations at once while retaining their identity. Recipes, scores of music, numbers, equations, scientific and philosophical theories, cultural identities, novels, and so on, are all examples of incorporeal machines. [...] All incorporeal machines require a corporeal body in order to exist in the world. Numbers, for example, must occur in brains, computer data banks, graphite, chalk, etc., in order to exist in the world. Why, then, refer to these machines as incorporeal if they always require some sort of corporeal body? The incorporeality of an incorporeal machine consists

not in being an immaterial ghost, but rather in the capacity of these machines to be multiply-instantiated, iterated, or copied while retaining their identity. Multiple copies of *The Waves* can be made, while Woolf's novel remains that same novel. Moreover, it remains that novel regardless of the corporeal body it has. Its corporeal body can be chalk on a board, paper, the thought of a person who has exceptional memory, a computer data bank, etc. The same is true of incorporeal machines such as the number 5 that can be thought and inscribed at various places in the universe, while remaining itself. It is true of cultural identities as well that can be instantiated in a variety of people. Incorporeal machines are incorporeal not by virtue of being immaterial, but by virtue of being iterable while retaining their identity. It is this iterability that imbues them with a potential eternity. So long as the inscription remains or the incorporeal machine is copied or iterated, it continues to exist. (Bryant, 2014, p. 26)

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Errata

[Inna Semetsky, “Edusemiotics: The Tao of Education”, published in the spring 2015 issue (Vol. 1 No. 1) of *Language and Semiotic Studies*, pp.130-143]

On page 131, “Danesi, 2010, p. 7” (line 6) should be “Danesi, 2010, p. vii”; on page 141, “Simons, Olsen & Peters, 2009, p. 8” (bottom line) should be “Simons, Olsen & Peters, 2009, p. viii”.