

# Transformations

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## 2009 Issue No. 17 — Bernard Stiegler and the Question of Technics

### Stiegler and Marx for a Question Concerning Technology

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In his collection of essays titled *The Information Bomb*, Paul Virilio describes a panoptic society where modern science, now turned techno-science, ultimately serves to reduce humans to raw materials. In this vision of society, globalization is strictly equated with a globalized gaze of a single eye (specifically of the U.S.A.), DNA research implies cloning and eugenicism, and technological development necessarily culminates in the “accident” of a nuclear apocalypse. Although this view of an enframing technology is not foreign to those acquainted with Heidegger’s writings on technology, Virilio’s insight lies in his engagement with the recent developments of the 21<sup>st</sup> century. The aim here is not to point to Paul Virilio as the singular brilliant skeptic who unceasingly cautions against the techno-military power complex, but to point out the continuation of a dominant discourse of negative teleology in understanding technology in academic discourses as well as cultural representations. On the opposite end of the spectrum, we observe a celebratory discourse of the emergence of the “post-human” and “cyborg,” or of the deterritorialized cyber culture that defies centralized power. Except for a few materialist analyses (such as those of Donna Haraway), the rhetoric of technophilia remains an empty abstraction that fails to question the material relationship to the world that constitutes “human” as such. This paper posits an alternative to the two manifestations of neo-liberal ideology, that of technophilia and technophobia, through a reading of Bertrand Stiegler in a Marxist framework.

In his untranslated works dealing specifically with contemporary politics, Stiegler engages in a dialogue with a variety of thinkers, all of whom have analyzed different aspects of social structure: Michel Foucault, Herbert Marcuse, Gilles Deleuze, Max Weber and Karl Marx. Among these theorists who have contributed to Stiegler’s thought, it is Marx and Marxist theory that at once has a shared conceptual framework of disindividuation and assigns a centrality to technology in understanding the human experience. Stiegler acknowledges that what he terms as disindividuation, after Simondon, refers to the concept of alienation in Marxist thinking (*Mécreance* 59). His main criticism that signals a departure from Marx takes issue with Marx’s inability to think about technology as anything other than means (*Mécreance* 58). Yet he also points out the necessity to reinterpret Marx’s thoughts on machines in order to establish the fact that mechanization *follows* the process of exteriorization (*Économie* 54).

Despite a certain validity of Stiegler’s criticism of Marx, it is possible to reinterpret Marx as having formulated the constitution of human technologically and as having understood the process of exteriorization as the primary aspect of human essence. In this sense, the dominant Heideggerian negative teleology can be countered with a renewed Marxist thinking that emphasizes the material production of the world. In order to posit ways of reinventing our relationship to the world, one needs to think of technology as *pharmakon*, a term that Stiegler borrows from Jacques Derrida. The concept of *pharmakon* proposes an understanding of technology as being simultaneously poison and remedy, rather than positing it as a form of enframing that reduces humans to raw material. As Stiegler demonstrates in the first volume of *Prendre Soins*, the

exteriorization of knowledge in the machinery (of warfare, of apparatus) serves to render the individual as an exploitable life source, in Marx's words as *work-force* and in Stiegler's brilliant play on words as *mineur* (both a miner and minor) (228). In this sense, technology is bio-power as Virilio's account clearly demonstrates, yet at the same time, by the logic of *pharmakon*, it is the location of a possible source of resistance that will remedy social ills.

The negotiable and undetermined nature of the technical object is crucial in how Stiegler frames the question of technics within the logic of *pharmakon*. In *Technics and Time, 1: The Fault of Epimetheus*, Stiegler proclaims

The technical object lays down the law that is its own, it affirms an auto-nomy with regard to which, in the industrial age, the other layers of society must regulate themselves, with an actual possibility of negotiation. The indetermination of uses may well leave open possibilities for adjustments to the 'system of objects,' but at the bottom the object bestows the horizon of all possibilities, essentially preceding the fixation of uses. (73)

There are several important claims at stake in this statement that leads us to the heart of Stiegler's analysis. Firstly, the technical assemblage, at any moment in the history of its development, creates and limits the field of possibilities available to the social field. However, this does not imply that the way the system of objects operates in society necessarily exhausts all of possibilities of its uses. This is crucial for the development of Stiegler's argument, since his conceptualization of the technical system enables an understanding of a dynamic relationship between technology and culture in which the cultural system negotiates, adjusts, and regulates itself in accordance with the technical development. The practice of politics as a negotiation between cultural and technical systems is located in this *milieu* formed by "supports of production" rather than the "means of production" (*Mécreance* 58).

An investigation of social development in correspondence with technical development finds its strongest articulation in Marx's concept of the mode of production. What is at stake in the concept of mode of production is an understanding of the historical relationship of human to this *milieu*. The technical object is the horizon of possibility - but only within a given historical moment. As opposed to bourgeois political economy, Marx's historical method allows a conception of the successive modes of production within their particularity, not as manifestations of universal laws. Hence the contradictory nature of capitalism, both as possibility and limit, can be assessed through Marx's historical method.

In his criticism of the Luddites, Marx asserts the need to "distinguish between machinery and its employment by capital" so that the attacks against machinery can be transferred from the "material instruments of production to the form of society which utilizes those instruments" (*Capital* 555). Only within this historical mode of production is the worker reduced to an automaton that becomes the servant to the machine. Insofar as bourgeois thinking is haunted by the mystification that makes everything a universal attribute, "any other utilization of machinery than the capitalist one is to [the bourgeois economist] impossible" (*Capital* 569). Hence, in one of the rare moments where he projects a vision of communist society, Marx speculates that "the machines will not cease to be agencies of social production" (*Grundrisse* 833). In fact when Stiegler opts for cooperation rather than collectivization in response to the resurgent socialist politics of authors like André Gorz and Antonio Negri, he poses the task of politics as inventing "a new type of capitalism" (*Économie* 128). In fact it could be argued that this new type of capitalism, born out of the contradictions of existing capitalism, is essentially what Marx terms "communism." Yet Marx's analysis of human's historical relationship to technology in and of itself is insufficient in explaining how the employment of machinery by capital does not exhaust the possibilities of radically different social relationships to technology. In order to counter Stiegler's criticism that Marx could not think of machinery other than simply as means, it is necessary to elaborate a non-determinist and non-essential Marxist conceptualization of the meaning of human.

In his critique of Adam Smith's ahistorical conception of capital, Marx asserts that he renders capitalism a "new home for a thing as old as the human race" (*Grundrisse* 257). For Marx, this "thing" is the process of objectification that produces and reproduces every limb and organ of the human being. Marx conceives of the human as a "tool-making animal" (*Capital* 286), as a species creating the world through acting upon nature and hence making it an extended inorganic body (*Grundrisse* 492). Thus, human nature is outside of itself since the universality of species-life manifests itself through rendering the whole of nature as its inorganic body - both as an object of knowledge and as a means of life (*Economic* 327). Although the mode in which human existence manifests itself is the result of a particular and historical way of utilizing tools, ontologically Marx posits objectification and exteriorization as what defines us as humans.

The gift of Prometheus that makes up for the fault of Epimetheus is precisely this gift of exteriorization, or, putting humans outside of themselves (Stiegler, *Technics* 193). In contrast to the discourse of the fall of mankind, whereby civilization is viewed as either denaturalized or inauthentic, Stiegler situates the aporia at the origin. In Stiegler's account of our prosthetic nature, "Interiority is nothing outside of its exteriorization" (*Technics* 152). In other words, prosthesis is the nonliving that constitutes the living (*Technics* 50). No longer conceived as a mere instrument or extension, the concept of prosthesis denies an originary human nature (or interiority) prior to its contamination by technology. Moreover, prosthesis is no longer the origin of inequality as in Rousseau's myth of the robust man of nature but it is the very condition of human existence itself (*Technics* 115).

Stiegler invokes the work of anthropologist Leroi-Gourhan; "human invents himself in the technical by inventing the tool by becoming exteriorized techno-logically" (*Technics* 141). This "invention" of the human does not solely define the aporitic origin but also the process of becoming, whereby at every moment in history humans reinvent themselves via the technical and social object. The coupling of human with matter defines the relationship between the *who* and the *what*, as the "twin faces of the same phenomenon" (*Technics* 178) as Stiegler explains. Marx articulates this understanding of the necessarily objectified existence of the human

Not only do the objective conditions change in the act of reproduction, e.g. the village becomes a town, the wilderness a cleaned field etc., but the producers change, too, in that they bring out new qualities in themselves, develop themselves in production, transform themselves, develop new powers and ideas, new modes of discourse, new needs and new language. (*Grundrisse* 494)

Throughout his work, Marx puts great emphasis on this dynamic relationship that creates history as such whereby just as society produces the human *as* human, it is simultaneously produced *by* her. In other words, just as Stiegler asks, "is it not that *logos* and *techné* are modalities of the same being-outside-oneself?" (*Technics* 193), Marx also posits the mode of production as different manifestations of the technological and social essence of human. In this sense, Stiegler's criticism of Marx as weak in assessing the role of technology in the life of the psyche seems unjust since Marx clearly sees the direct link between the material existence of humans in their technical milieu and the formation of subjectivity through the development of new ideas, needs, discourse and language (*Mécreance* 51).

While championing neo-liberal economic restructuring, Margaret Thatcher claimed that there is "no such thing as society, only individual men and women" in an attempt to revive the age-old myth of the autonomous individual. Society is not an abstraction over the individual, but rather the individual is a social being that produces and is produced by it (Marx, *Economic* 349). If it is the ensemble of social relations and not an abstraction inherent in each single individual that defines human essence (as Marx argues in the *Theses on Feuerbach*) then there can be no human essence outside the material social relations that are defined by the horizon of the system of objects. Existence is a social activity whereby humans realize themselves in the active production of the world and hence of themselves. *Techné* and *logos* are in this sense the modalities of the same

condition of existence, as “man reproduces himself not only intellectually, in his consciousness, but actively and actually, and he can therefore, contemplate himself in a world he himself has created” (Marx, *Economic* 329).

If indeed human essence is nothing outside of the historical, technological and social exteriorization, and if the whole of nature is the extended inorganic human body that separates it from other animals, than a humanist reading of Marx is essentially flawed. Marx does not suppose a universal essence of human beings. On the contrary, he presents humans in a dynamic relation *between* their milieu, understood in its symbolic and material senses, both producing and being produced by it. Moreover, any sort of determinist reading of Marx, which has characterized the dogmatic varieties of Marxism, also fails to understand this mutually reciprocal relationship. Once the human is understood as a social producer, then Stiegler’s claim that “technical evolution results from a coupling of human and matter” can be situated within an unorthodox Marxist framework (*Technics* 46).

Insofar as organicity is inseparable from inorganicity, “it is organized inorganic matter that transforms itself in time as living matter transforms itself in its interaction with the milieu,” and culture “becomes the interface which the human *qua* living matter enters into relation with milieu” (Stiegler, *Technics* 49). In this sense, the evolution of the technical object is not only liberated from the so-called genius of human invention but is also seen as altering the milieu. However, for Marx and Stiegler the horizon of the technical system is not exhausted within the way it is used at a particular moment of its evolution. It is the objectified human, or the “social individual,” that produces the milieu with the technical object. The argument that Stiegler borrows from Simondon, that the individuation (and psyche) as social processes, further bolsters this claim. In other words, for Marx, human (organic) and matter (inorganic) couple in the activity of production that constitutes human as prosthetic. The question then becomes one of assessing the conditions in which the technical system has come to be seen as the monstrous machine that dominates the human species. Stiegler identifies the question of politics with that of aesthetics in the first volume of *De la misère symbolique* (17). It follows that the question of politics is necessarily tied to the negotiation between cultural and technical systems.

From Shelley’s *Frankenstein* to *Terminator*, neither cultural imagination nor philosophy is exempt from the overburdening fear of technology. The fallacious resolution between the workers and masters achieved through overthrow of machinery, memorably portrayed in Fritz Lang’s *Metropolis*, is perhaps the accidental prototype of the whole sci-fi genre. On the other side of the coin is the negation of human *qua* nature (with all the connotations of weakness and femininity) in preference of technological progress that finds its strongest articulation in the manifestoes of Filippo Tomaso Marinetti. If the aesthetic responses such as these are indicative of a malicious relationship to the technical system, then we must proceed with the following questions: How and at what point was the imagination of technology reduced to a binary opposition between the *who* and the *what*? How did thinking about technology miss the default relation between the human and the technical system? Walter Benjamin articulated the most dramatic answer in response to Marinetti’s aestheticization and glorification of war, by warning on the eve of WWII that “The destructiveness of war furnishes proof that the society has not been mature enough to incorporate technology as its organ, that technology has not been sufficiently developed to cope with the elemental forces of society” (242).

As an immediate consequence to the development of cultural and technical systems in the modern period, humans are situated in an antagonistic relation to the machine. This antagonistic position of the human, as the subject, with respect to the objective world has been termed alienation. The condition of modern alienation is born precisely at the moment of discrepancy between the cultural and technical systems. In Stiegler’s account the failure of the cultural system to incorporate the new dynamic of technical objects engenders a certain disharmony. Marx argues that the human “has a double existence, both subjectively as himself, and objectively in these natural nonorganic conditions of his existence” (*Grundrisse* 491). The subjective and objective

existences that constitute the human appear to divorce, as it were, making the experience of alienation a distinctive modern malady. It is for this reason Stiegler notes that Marx never suggested the proletariat was exclusively the working class, rather the working class was the first to become proletarianized (*Économie* 59). Following Simondon, Stiegler situates this dislocation at the critical moment of the Industrial Revolution

The industrial process of concretisation as the realisation of technical becoming, results, for the proletarian, in his losing his individuation in the 19th century, the former technical individual, the tool bearer, was the worker, but then he becomes the servant of the machine, the new technical individual [...] This brings on a conflict between culture, which is neguentropic reality of psychic and collective individuation, and technics, which is however the condition of this individuation. (“Nanomutations”)

One of the central themes found in Marx's writings has indeed been the problem of alienation, or in Stiegler's framework, the loss of individuation. Central to Marx's arguments concerning alienation is the dismissal of universal claims of bourgeois political economy in order to posit capitalism as a mode of production in its own historicity. The capitalist mode of production is one in which the labor potential of the worker is objectified as the alien power of the *animated monster* - the machinery (and in general, the system of objects) as “dead labor” transformed into the value-creating force for the capitalist.

The distinction between dead and living labor is central to Marx's concept of alienation. Dead labor is the objectified labor power that exists in space as machinery. Conversely, living labor is the non-objectified labor capacity of the individual; or, labor as subjectivity (*Grundrisse* 272). Labor, science, and knowledge congealed (and concealed) in the machine confront the worker in the factory as a hostile force, alienating the proletarian from the “general intellect” (*Grundrisse* 706). Precisely because technology is exploited dead labor, it is not value-free but indeed embedded in the biopolitics and power relationships of the social system in which it is produced. Initial Luddite reactions against machines in the factory reflect this immediate hostile relation between the proletariat and monstrous machinery.

However, in Marx's account, the proletariat learns to direct its discontent against the social structures that institute the relations of production. The same cannot be said of the mystified bourgeois economists for whom “the necessity of the objectification of the powers of social labor appears to them as inseparable from the necessity of their alienation vis-à-vis living labor” (*Grundrisse* 832). The same criticism can be directed at Heidegger, for whom alienation also takes a central part, mostly as the condition of human existence. In this sense, Heidegger cannot foresee the possibility of resolving “the conflict between man and nature, and between man and man, the true resolution of the conflict between existence and being, between self-objectification and self-affirmation, between freedom and necessity, between individual and species” (Marx, *Economic* 348). Heidegger's emphasis on enframing is crucial to his understanding of technology. His criticism is based on an attack against the western metaphysical tradition of *logos*, and *techné* as an integral part of it, where enframing functions to create the illusion whereby “it seems as though man everywhere and always encounters only himself” (27).

In other words, the subject (or the *who* for Stiegler) retains the master position regarding the objective world. Despite this insight Heidegger still recuperates this metaphysical thinking by claiming that modern technology is a challenging-forth, or an ordering that “threatens man with the possibility that it could be denied to him to enter into a more original revealing and hence experience the call of a more primal truth” (28). In other words, the subject is enframed within an inauthentic, unoriginal structure of ordering. Thus, contrary to Heidegger's romantic mystification of an originary truth, there is in fact no originary human. Moreover, what would be the political consequences of an account in which even when humans contradict the unfolding of unconcealment, they are still responding to its call (19)? This argument runs counter to a

relationship between the organic and the inorganic that is dynamic precisely because it is mediated by human activity. Instead, it is merely an echo of the discourse of “the fall of mankind” that Stiegler traces in the history of Western philosophy.

Heidegger’s argument suffers from an essentially reactionary blindness to the constitutive objectification that cannot be conflated with historical alienation. The concrete material production of knowledge and technology is disregarded within a view of history where the essence of technology manifests itself as enframing. A vision of Greek antiquity is cast as the historical past when *techné* was not yet contaminated by modern rationality. History is not conceived as an active production of social change by an objectified and technologically contaminated social individual. Destining ensures that “history is neither simply the object of written chronicle nor simply the fulfillment of human activity” (Heidegger 24). Stiegler reads Heidegger as having failed to see the instrument as “what truly sets in play the temporality of being, what regarding access to the past and, therefore, to the future, is constituted through the instrument techno-logically, what through it constitutes the historical as such” (*Technics* 245). Despite Heidegger’s best intentions, insofar as the essence of modern technology is a mystery, it remains a demonic force of denaturalization and dehumanization where humans will eventually be reduced to a “standing-reserve” (Heidegger 18).

Heidegger’s claim that “the destining of revealing is as such, in every one of its modes, and therefore necessarily, danger” (26) is echoed in Virilio’s assumption of the “integral-accident” of technological development (*Information* 82). Needless to say, the warnings against ordering nature (The Rhine as a power plant) or rendering human material as a standing-reserve (humans as bio-experimental subjects) both have urgent import. The current state of ecology and warfare makes it plain that the depletion of the earth’s resources is leading the world toward catastrophe. As both Stiegler and Marx argue, technology is not neutral. It manifests itself as a destructive force. Yet the question remains whether this process is inevitable or irreversible. Heidegger attributes a saving-power to *poiesis*, another form of revealing (34), as though these forms of revealing ever operated in isolation from each other. In contrast, Virilio perceives the co-origination of media and aesthetic forms with the technologies of warfare, leaving us with a bleak view of our accident-prone future.

Yet a blind celebration of the potential emancipatory powers of technology is equally unacceptable in light of the persistent inequalities and power structures that define global capitalism. In *A Brief History of Neoliberalism*, David Harvey cautions against these either innocently utopian or deliberately obfuscating views on technology and free information as concealing the coercive processes that concentrate wealth and power in the hands of the few (68). I would like to take it a step further and argue that neoliberalism feeds on the aforementioned disharmony of culture and technics, the birth of which Stiegler locates in the Industrial Revolution. Mystifying the essence of technology or presenting it as a value-free potential to overcome social inequalities are two sides of the same process, both of which perpetuate existing power relations. Culture remains unable to incorporate the dynamics of the technical object. Additionally, insofar as humanity is unable to view the material production of the world as constitutive there can be no alternative to the course that history has taken thus far.

As Stiegler suggests, the paradox of contemporary technics as *pharmakon* is such that “it reveals itself at one and the same time as human power (*puissance*) and as the power of the self-destruction of humanity” (*Technics* 85). Marx offers the strongest alternative to this self-destructive course by pointing out the distinction between the objectification of the human that creates the world and its history on one hand, versus the process of historical alienation on the other. Alienation can be overcome, dead matter need not dominate the living. Conflict between nature and humanity, between existence and being, between self-objectification and self-affirmation, and between the individual and the species can all be resolved. The use of technology is not exhausted in the way it is presently fixed in society.

The capitalist mode of production is one technical system among many whose expansion is

conditioned by the disharmony between the cultural and technical systems. Heidegger's claims that human activity can never directly counter the danger instigated by modern technology and that human reflection can only ponder the saving-power of a higher order are both misleading. We can now clearly observe the spontaneous creation of new technologies and a subversion of the ways in which technologies of power operate. These countless instances where students, activists, and ordinary people develop, use, and share technologies demonstrate how public resistance can become a progressive social force. Once science and technology are reappropriated to function in the consciousness of all who produce them, then an imagination of the social, political, and aesthetical possibilities of relating to technology will flourish.

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## Works Cited

- Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction." *Illuminations*. Hannah Arendt [ed.]. New York: Schocken Books, 1968.
- Harvey, David. *A Brief History of Neoliberalism*. New York: Oxford UP, 2007.
- Heidegger, Martin. "The Question Concerning Technology." *The Question Concerning Technology and Other Essays*. New York: Harper and Row, 1977.
- Marx, Karl. "Economic and Philosophical Manuscripts." *Early Writings*. Lucio Colletti [ed.]. Harmondsworth: Penguin Books, 1975.
- . "Theses on Feuerbach." *Early Writings*. Lucio Colletti [ed.]. Harmondsworth: Penguin Books, 1975.
- . *Capital*. Trans. Ben Fowkes. New York: Vintage Books, 1977.
- . *Grundrisse: Foundations of the Critique of Political Economy*. New York: Penguin Books, 1993.
- Stiegler, Bernard. *De la misère symbolique: 1. L'époque hyperindustrielle*. Paris: Galilée, 2004.
- . *Économie de l'hypermateriel et psychopouvoir: Entretiens avec Philippe Petit et Vincent Bontems*. Paris: Mille et une nuits, 2008. ---. *Mécréance et Discrédit 3. L'esprit perdu du capitalisme*. Paris: Galilée, 2006.
- . "Nanomutations, hypomnemata and grammatisation." <<http://www.arsindustrialis.org/?q=node/2937>>
- . *Prendre Soins 1. De la Jeunesse et des Générations*. Paris: Flammarion, 2008.
- . *Technics and Time 1: The Fault of Epimetheus*. California: Stanford UP, 1998.
- Virilio, Paul. *The Information Bomb*. New York: Verso, 2000.

