

REVIEW ESSAY

The Age of Disruption: Technology and Madness in Digital Capitalism, Bernard Stiegler (2019), Polity Press, Cambridge, 380pp., paperback £24.99, ISBN 978-1-5095-2927-8

The uncertainties and complexities of the contemporary world are immense. The Covid-19 pandemic has arisen in a context where climate change, global inequalities, political paralysis, failures of collective agency, and worsening mental health already pose intractable social challenges. So, is there a way forward promising better understanding and a practical route beyond this concatenation of crises and disorders? In *The Age of Disruption* (written before the pandemic), Bernard Stiegler, the prolific French philosopher, argues that there is, but not in any unequivocal or naively optimistic way.

Originally published in French in 2016, and now available in English, this ambitious, but often obscure, book represents one in a very recent series of which *Automatic Society*, 1. *The Future of Work*, and *The Neganthropocene* (Stiegler, 2016, 2018) are key texts. We live, in his view, in an age of disruptive nihilism engendered by computational capitalism. This is based on the destruction of inhibitions that would otherwise aim to ensure the care of humanity through social control over technology. Instead, the emerging psycho-power of digital technologies not only ensnares consumers in the algorithmic governmentalities of corporations, but destroys social solidarities that provide meaning, purpose, and collective energy. This is not an entirely new line of argument, but it is pursued in greater philosophical and theoretical depth than most familiar critiques of contemporary capitalism and artificial intelligence. In the process, important insights into the nature of innovation in the current epoch are elaborated.

To paraphrase the logic of Stiegler's book does not even begin to represent its literary characteristics and tone. These are in turn insightful and confused, incisive and ill-defined, inspiring and frustrating, and both autobiographical and exegetical. This is a work of synthesis, drawing extensively but critically on ancient Greek philosophy, French philosophy and social theory from Descartes to Derrida, German phenomenology and critical theory, and the later Freud. Stiegler's range is extraordinary. Yet the synthesis is conducted through a thicket of concepts which many who are not professional philosophers will find both obscure and hard to pin down (e.g. noesis, exosomatization, pharmakon). Drawing an analogy from jazz, we might say that Stiegler offers an extended solo by the saxophonist John Coltrane, in which complex, discordant, and unfamiliar harmonic progressions are combined with lucidity and joy. Those who like their philosophy or social theory to have similar characteristics to the formal symmetry and counterpoint of J. S. Bach, will not perhaps enjoy the journey through the 312 pages of the main text.

The major substantive questions arising from Stiegler are:

1. Does his extraordinary intellectual synthesis offer new insights or recover older ones?
2. Is the synthesis convincing?
3. What does the book tell us about innovation?

Stiegler's extraordinary synthesis

Stiegler's synthesis goes beyond three previous critiques of capitalism and of rationalization. These are associated with Marx, Horkheimer and Adorno, and Foucault. Marx's political economy focused on proletarianization of producers in terms of exploitation and denial of humanity. This approach neglected culture and failed to anticipate the evolution of the structure of consumer capitalism.

The Frankfurt school, through Horkheimer and Adorno, focused on the seductive and exploitative effect of the culture industries over consumers, influenced in part by Freud. Stiegler moves the analysis beyond these critiques. He emphasizes the innovations of digital capitalism, involving big data and the automatic algorithm. Proletarianization, in this contemporary phase of capitalism is not simply loss of control by producers or consumers. Rather it centres on a more fundamental loss of knowledge. While workers have lost knowledge of the overall productive process, and consumers over alternative ways of living to lifestyles promoted by algorithms, the epoch of digital capitalism devalues scientific and intellectual knowledge as well (p.242). The net effect of generalized proletarianization is to engender demoralization and the infantilization of adults. This in turn increases entropy, meaning loss of energy. This is especially harmful in an era of increasing uncertainty and complexity.

The emphasis here on loss of knowledge and energy links with his critique of Foucault. Instead of the biopower of rationalized discourses of governmentality, Stiegler sees the age of computational capitalism as becoming dominated by psycho-power. This depends on the analysis of probabilities in human behaviour and is exercised through technologies of marketing articulated, in part, through the consultancy industry (p.121). This creates ‘hyper-control’ over consumers through the promotion of mediatized lifestyles. A familiar objection to this kind of thinking is that it assumes consumers are simply ‘cultural dupes’, displaying ‘false consciousness’. In attempting to get around this, Stiegler’s reading of Freud is significant.

When Freud had earlier written of instincts as the basis of the pleasure principle, this implied for many that he emphasized animal drives that collide with social reality. In later work picked up by Stiegler, Freud developed the analysis of drives beyond instinct. His reformulation emphasizes a death drive or drive to destruction. It is this that Stiegler and others like Deleuze have utilized to undergird the analysis of the pathological consequences of disruptive capitalism. The pleasure principle, meanwhile, is associated with energy and creativity, associated with dreams and the imagination. This later Freud encourages a more complex picture of human personalities facing conflicts between life and death.

This use of Freud is a largely original element in Stiegler’s synthesis, providing a way of avoiding either an optimistic or a pessimistic account of the human condition. This combines hope based on creative potential with an underlying sense of tragedy, an unwinnable contest between life and death. The problem of entropy as destruction applies both to the universe and nature, as well as human society, but we somehow live by denying this, in what he calls negentropy. In navigating life and death, hubris is a constant companion. Computational capitalism is beset by hubris, imagining that nature can be controlled by market-driven technology and analysis of Big Data through artificial intelligence. The disinhibitions built into innovation within computational capitalism nonetheless rule out reflexivity and moral responsibility. This part of the argument reaffirms many themes in ancient Greek philosophy, including the need to transform necessity through practical ethics (p.58).

Noesis is a key concept here, which Stiegler circles around but never explicitly defines. Broadly understood as intellect, this represents the discernment of truths that cannot be arrived at simply from experience. This is given a more practical phenomenological emphasis, following Husserl, whereby noesis is an intentional act. Stiegler uses noesis then to extend the viability of positive intentional social action in the face of the nihilism of disruptive capitalism.

Beyond all this there are further historical, anthropological, and sociological dimensions to Stiegler’s synthesis. Much of the philosophical and psychoanalytic work reviewed so far is designed to elaborate an alternative anthropology to the Cartesian rationalism that he identifies at the heart of capitalist modernity. In place of the Anthropocene, which wishes to apply reason to the exploitation of nature, he posits an emerging Neganthropocene (elaborated more directly in Stiegler, 2018).

This alternative anthropology has a long-run historical basis, drawing on the work of palaeoanthropologist Leroi-Gourhan (1993), and historian of technology Bertrand Gille (1986). From the outset, human society has been characterized by exosomatization, i.e. expressing human desires and understanding outside the brain in interaction with others, and with received social traditions.

This occurred in prehistoric human cave paintings, and through the long history of technology, conceived in the broad ancient Greek philosophical sense of *technē*. As announced in Stiegler (1998), this includes art, writing, and machines. These practices are embodied in human memory and through transindividuation (which some would call socialization).

In the final phase of this Anthropocene, according to Stiegler, digital capitalism undermines human desires and projects, simultaneously destroying the legacy of social memory. Transgenerational communication is thereby disrupted, leaving the young increasingly adrift of broader social bonds. The sheer speed of digital algorithmic processes pre-empts reflection and critical debate. Such processes are described using the Greek philosophical term *pharmakon* (p.157) revived by Derrida (1981) in a commentary on Plato. This refers ambivalently to practices that are simultaneously a therapeutic remedy, a poison, and a scapegoat for crises (see also *Ars Industrialis*, n.d.). In a key passage on the toxicity of the digital remedy Stiegler writes, in the *Age of Disruption*, that:

the digital *pharmakon* . . . makes it possible for calculation to destroy the improbable, that is desire, affection, attachment, identification, singularity, individuation, and the feeling of existing . . . which are the conditions of any neganthropy (p.94)

His oppositional Neganthropocene valorizes a sense of madness in social action, as a kind of alternative to the false orderliness of Cartesian rationalized computational capitalism. This orderliness is itself regarded as a pathological rather than transformative kind of madness. We must experience madness to come through it. This is something he tries to demonstrate in his autobiographical experience of imprisonment after an unsuccessful attempt at bank robbery. This involved an intensive process of self-reflection and philosophical enquiry in his prison cell!

Stiegler's neganthropology also has a sociological, as well as ideational and psychological basis. Its sociological reference points include Weber's emphasis on the spirit of capitalism and the rationalization process. It is, however, Durkheim's notion of *anomie* (p.135) (i.e. normlessness) that stalks Stiegler's vision of collapsing social bonds, the generalized consequence of uninhibited digital capitalism. The tragic figure of Florian, a French adolescent who spoke of the death of his own generation's dreams of having ideals, a trade, family, and children, is a haunting riff throughout the book (pp.9, 22, 172–3, 285).

If the challenges of the multi-dimensional crises of digital capitalism are enormous, so too is the breadth of Stiegler's strategy for combating the Anthropocene. Simply grafting ethics onto capitalism won't work under current conditions. The task is rather to rebuild, through analysis and practice, the connections between society and morality through an active citizenship focused on re-education and localized hubs of noesis. While only sketched in this volume, Stiegler's very contemporary revival of the socio-technics of ancient Greece is keenly practical as much as ideational. Its materiality is expressed through a contributory economy of sharing, and a slower speed politics of social care and transgenerational communication. This has been pursued in a practical way through the *Ars Industrialis* movement in France, and in his work for institutional reinvention in Institut de Recherche et d'Innovation at the Centre Georges-Pompidou.

The postscript to *The Age of Disruption*, a reprint of a 2008 debate on Christianity, raises further questions to do with the potential of religion to contribute to the new morality or, as he terms it, trans-valuation. The point of entry to this possibility is via an emphasis on restoring dignity to social arrangements. Dignity is proposed in the main text as equivalent to noesis (p.256). In the debate over Christianity, Stiegler notes that the historical claim of religion to dominate moral concern is dead. What makes Christianity interesting for him is that it is a religion of love, an intergenerational machine of communication, and an institution with extensive caring capacities. The point here is not to embrace 'actually-existing' religions (Christian and beyond) in the construction of the neganthropocene. Given that he regards God as dead in the Nietzschean sense, the problem is how to we return to a sense of the infinite as a guide to life. This issue is not resolved, and may not be resolvable, but Stiegler's comments here are an example of a non-sectarian philosophical approach to the creation of social change.

Is the synthesis convincing?

It would take another book to produce an adequate response. As far as I can tell, Stiegler's theoretical exegeses are plausible, and sometimes very powerful. The historical and sociological parts of the synthesis also work well. As a social theorist, I am nonetheless somewhat sceptical of Grand Theory of any kind. Stiegler's has the merit of avoiding the teleological and evolutionary presuppositions often found in interpretations of long-run social change. Grand Theory does however tend to rely on an over-integrated sense of the human condition and social world. This is encouraged by over-arching anthropological foundations to social analysis built into ontological presuppositions.

There is certainly a sense of over-integration in Stiegler's social theory. The problems this creates include dramatically over-generalized accounts of power and control. Are digital capitalism and artificial intelligence invariably efficacious in successfully overcoming risk and uncertainty and providing seamless system integration? And is their psycho-power really so dominant in channelling attention into consumer capitalism rather than dreams of alternative worlds? Are attempts to regulate markets and algorithmic operations fruitless, or can they not be bearers of moral concern and the educative as well as institutional potential of reform?

One response would be that algorithms fail as much as they succeed at great cost. The project of intelligent machines experiences periodic winters, however much its marketers forecast a perpetual summer of exponential growth (Holton and Boyd, forthcoming). Meanwhile the allegedly hyper-controlling psycho-power of digital marketing has demonstrated its limits in popular responses to the coronavirus pandemic. These are diverse, and include both communitarian and self-interested survivalist movements. But where they are communitarian, the rapid and manifest emergence of social bonds, often pursued digitally, suggests that previous ties may have been latent rather than non-existent or flattened by digital capitalism. Diversity also reflects regional, national, and local cultural differences, which have clearly not become homogenized even if digital capitalism has been profoundly globalized. Much of this is however consistent with Stiegler's argument. So my reservations are more to do with the over-integrated nature of his theoretical edifice, than with many of the substantive layers of his critique of digital capitalism.

The contribution to thinking about innovation

Disruption has recently become an integral part of entrepreneurial and management rhetoric carrying strongly positive normative overtones (Streeck, 2016). This is particularly evident in the digital economy in discourses around Artificial Intelligence (AI). The technological evangelists who look to The Singularity, where digitalized intelligence transcends human intelligence, project a dynamic and omnipotent approach to innovation. For them the current pandemic is simply one more opportunity to disrupt (Thornhill, 2020), in pursuit of greater digitalization, whatever the consequences for employment, inequality, and social cohesion. Stiegler's approach to disruption and innovation, in sharp contrast, regards what he calls the 'trans-humanist' project of AI as delusional madness and radical socio-pathology.

Technological approaches to innovation within market-based economies typically bracket out the social context to change. The familiar assumption is that whatever contributes to economic growth enhances overall welfare. This not only leaves aside questions of income distribution, but far more profound and qualitative aspects of social life, including fairness and justice, health, inter-generational relationships, community, and our relationship with the natural environment. Stiegler's work adds considerably to our existing awareness of these fatal weaknesses in capitalism, economic liberalism, and utilitarianism. He enriches our understandings of the intellectual and psycho-social roots of this neglect, and of its pathological consequences for the Anthropocene.

But he does more than that. He also suggests key elements of a move beyond digital capitalism, drawing on moral philosophy, a sense of hope, and a renewal of human energy. This amounts to a call for social and moral innovation of a radical kind. Wolfgang Streeck (2016) writes of paralysis in collective agency, leaving capitalism as a failing system with multiple disorders and

maladies. Yet it is not clear how it will end, nor through what process a post-capitalist world might emerge. Its fate is indeterminate. We are left with ‘hoping, coping, doping, and shopping’ as interim responses. Bernard Stiegler picks up and magnificently elaborates on the potential of hope. Yet he does this with philosophical subtlety. There are even more challenges for the human condition beyond those posed by digital capitalism.

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