The London Journal of Critical Thought
Volume 1, Issue 1 (June 2016)

Peer Review: This article was peer-reviewed internally by a member of the editorial collective and by an external reviewer.

Open Access: The *London Journal of Critical Thought* is an Open Access journal. For more information, see www.londoncritical.org/journal.

Introduction: Noology and Technics

Benoît Dillet and Anaïs Nony

Noology is the technical life of ideology. It works at the formal and technical production of knowledge, rather than focusing on the content displayed by a specific system of thought. There are two reasons why the notion of noology must play a role in today's critical and political debates. First, the concept of ideology has lost its relevance since its everyday meaning is far removed from the original meaning Karl Marx gave it; today ideology mainly means "political doctrine," right-wing, left-wing, or the entire spectrum of shades between the two. Expressions such as "an ideology" or "ideologies" are used in critical analysis, while for Marx "ideology" has always come without any pronoun. Ideology now presents itself as an "inversion of causalities producing illusions."[1] The second reason has to do with the changes in the modes of production since the 1970s, and the rise of the post-Fordist economy, or "neoliberalism." Since the 1970s, the end of ideologies has been proclaimed (epitomised by Daniel Bell). Given this context, noology critique demonstrates that the work of ideology in today's economy plays out at an infrastructural level, in social organs that materially institutionalise thought and ideas, and not simply at the level of the immaterial culture of political parties and discourses (superstructure).

The historical context of the creation of the term is crucial to map out how noology re-evaluates the work of ideology critique today. The word "ideology" has a long history representative of conflicts of ideas: it was first coined by Destutt de Tracy in 1796 to designate a new science (science of ideas) for new pedagogical institutions, but the meaning was inverted in Marx's early writings. Marx borrowed Napoleon's own "becoming-pejorative" of the term when Napoleon

---

[1] Bernard Stiegler, *La Pharmacologie du Front National* (Paris: Flammarion, 2013), 183.

accused the Ideologues of elitism.[2] Given the vacillations and the ambivalence of the signification of this word, Deleuze and Guattari decided to discard the term and use a new one: noology. Although Immanuel Kant and other Enlightenment philosophers used the term "noology," it is Karl Mannheim in *Ideology and Utopia* (1936) who employed it in relation to "ideology." Mannheim used the term noology, after Kant, to distinguish between two conceptions of ideology: the first one, the most common, is the *psychological* or *particular conception* that looks at the content of the ideologies, while the *noological* or *total conception* is interested in the form.[3] Therefore when Deleuze and Guattari introduced their own notion of "noology," they had inadvertently drawn from Mannheim's original definition of noology.[4] They proposed this notion to rethink ideology critique after the mutilation of the concept of ideology, but also to overcome the impasses of a critique that had run out of steam in the face of new political and economical challenges.

Specifically, for Deleuze and Guattari, noology examines the problem of ideology by bypassing the frontiers of political parties and dogmatism, to diagnose knowledge and thought in contemporary society. Their definition of noology is the study of images of thought and their historicity.[5] As we discuss in this introduction, the singularity of "noology critique" resides in its attempt to tackle the political and economic situation that shapes the condition of knowledge formation. Such critique calls for an approach that is receptive to the myriad of distributed networks that structure our daily life: here it becomes less about the movement of thought and more about an understanding of the forces that ground its possibility. Thinking always takes place within a model of thought, and this model of thought is co-produced in an associated milieu in which technical objects and vital agents interact. In such a context, and given the ongoing technological changes now shaping our environment, technical objects provide

---

[2] Pierre Macherey, *Études de Philosophie "Francaise": De Sieyès à Barni* (Paris: Publications de la Sorbonne, 2013), 63-109.

[3] Karl Mannheim, *Ideology and Utopia* (London: Routledge, 1936), 57-62.

[4] Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 376, 499-500.

[5] *Ibid*.

more than ever the conditions for the emergence of operations of thought. These objects are co-imbricated, giving form to a distributed framework within which new forms and expressions of thought arise, thus working as an a priori condition for accessing thought-contents. A noology critique therefore asks: in which material and infrastructural assemblage does thought operate?

Although noology critique depends heavily on the theoretical background launched by ideology, it calls for the re-evaluation of concepts newly challenged by the development of digital technologies and the emergence of the Big Data industry. When referring to the digital economy, journalists and academics alike are too quick at thinking the "immateriality" of the economy. On the contrary, noology critique attempts to rethink a materialist critique of the digital economy, tracing the material processes at play (noology) and exposing the empty promises of neoliberal capitalism (ideology). In a world in which a primary economic horizon is the expansion of commercial strategies onto social governance, a noology critique has become necessary to map out the newly engendered operations that structure knowledge production.

Digital and Behavioural Economy

Based on digital computing technology, the digital economy sees the development of networking organization (e-business and e-commerce) and communication infrastructures (such as new media). Companies such as Uber, eBay, and Airbnb have developed "consumer-to-consumer e-commerce,"[6] using predatory practices that operate at the border of legality/illegality, constantly challenging this limit. What is now called the "uberisation" of the economy is an attempt to grasp these newly engendered transformations that are taking place where mass, material, and transports are replaced by instant global movements. Such a shift towards virtual and weightless transactions has left the door open to the recent explosion of the "sharing/trading" economy. Other online companies such as Amazon, Pandora, and Netflix have created "business-to-consumer e-commerce" and

---

[6] Carin Holroyd and Kenneth Coates, *The Global Digital Economy: A Comparative Policy Analysis* (New York: Cambria Press, 2015).

developed platforms that give recommendations by calculating the correlation of similar behaviours. In doing so, this correlation assists the consumer in making her choice by telling what people like her have previously enjoyed. Marketing strategies trap users by applying self-filtering features to predetermine their selections, leading to the emergence of what Nicholas Negroponte calls the "Daily Me," that is media output customized for individual tastes.[7]

The sealing of taste that discriminates information is deployed within the realm of digital economy and infiltrates all domains of communication, allowing for the development of self-selected threads that confine users to access matching datasets. The selection of information operates according to digital parameters that segregate users into consumerist groups whose opinions and tastes are run by mathematical formulas. In this context, the digital economy gives shape to an ideology of big data that accumulates information to better restrain the user's profiled behaviour. The latter performs according to its digital double, whose shadow precedes and sometime replaces its own. While certain scholars may have argued for the internet as the locus of democracy, political theorist Jodi Dean points to the neoliberal modes of operation at play in the digital realm. She calls "communicative capitalism" an example of such exacerbation via the Web of psychotic politics that has transformed collective actions into self-expression. Dean tackles the strange convergence of democracy and capitalism in the networked media and entertainment industries, revealing the commodification of expression as a major component of today's globalised neoliberalism.[8]

---

[7] Nicholas Negroponte, *Being Digital* (New York: Alfred A. Knopf. 1995).

[8] In her work, Jodi Dean, following Slavoj Žižek, upgrades the Lacanian-Marxist definition of ideology critique to offer the concept of "communicative capitalism" that addresses the new ideological formation which merges politics into economy in the digital age. See Jodi Dean, *Blog Theory* (Cambridge: Polity Press, 2010) and Jodi Dean, *Democracy and Other Neoliberal Fantasies: Communicative Capitalism and Left Politics* (Durham: Duke University Press, 2009). Both authors seem to remain at the level of belief that doubles the action performed, while ideology is precisely the environment in which beliefs, desires and dreams are controlled within a technological dispositif. Thoughts are technically conditioned, and ideology critique starts with narrating and dreaming…

Data-mining is a tool employed to foster the realm of preconceived behaviours. Such operations are based on the predictive analysis of data for the assessment of an oriented future, which generates information that inherently depends upon probabilistic analysis. Computational and networked digital media have given rise to a behavioural economy made of signals that seeks the production of particular forms of subjectivity. At stake in such a context is the translation of social and cultural practices into mechanically and programmatically generated behaviour. Such programmability is a response to and a product of the continuing change in relations between objects and subjects that is brought about by computing as a neoliberal form of governmentality. For Wendy Chun, the programmability of social behaviour resuscitates dreams of sovereign power and depends upon the incorporation of "historical programming hierarchies within the machine." [9] In this context, computers structure individuals' behaviour to be determined by the fulfilment of certain desires that imperceptibly and yet materially support a larger system, thus becoming the most powerful tool of neoliberal management.

The media technics of data-mining applies a prospective model to dig out specific information and instrumentalises time through the development of probabilities. In their respective works on the preemptive power of new media technology, Brian Massumi and Mark Hansen respectively point to the temporal instrumentalisation of time in today's algorithmic modes of data surveillance and pre-crime policy. Working on post-9/11 American foreign policy and its logic of imminent threat, Massumi points out the effective rather than causal operative logic of preemption where the virtual power of futurity is employed to quasi-causally affect the present. [10] For Hansen, the "premediation" of future events prior to their occurrence—as exemplified in *Minority Report*—operates at the level of ideology. To him, it is urgent to distinguish between "the future-implicating causal efficacy of the real *and* the premediation of how that efficacy might

---

[9] Wendy Chun, *Programmed Vision: Software and Memory* (Cambridge: MIT Press, 2011), 34.

[10] Brian Massumi, "Potential Politics and the Primacy of Preemption," *Theory & Event* 10, (2007): para 23,
http://muse.jhu.edu/journals/theory_and_event/v010/10.2massumi.html

produce the future."[11] The latter is a representation that is designed to immunise the possibility of the improbable. In this case, both the logic of preemptive power and premeditation are deployed as ontological problems: problems that question how to relate to what has not yet emerged in the present and which nevertheless constitute a future threat.

For Antoinette Rouvroy, such techniques of "prediction" aim to remove uncertainty, doubt, and hesitation by analysing large datasets. Rouvroy understands this change toward prediction as a "passage from the deductive logic to a purely inductive logic."[12] Rouvroy develops the notion of "algorithmic governmentality" to update Michel Foucault's concept of governmentality in the age of digital media. The aim of the Big Data ideology, she explains, is to remove uncertainty but also "recalcitrance."[13] Individuals, by becoming dividuals, are also becoming "quantified sel[ves]": since all their data are considered potentially useful, everything should be recorded and kept for future potential uses.[14] The promise of the Big Data ideology is therefore a "passion for the real": we can finally know the distances we walk, the calories we eat, the hours we sleep without any interference and friction. We have a direct access to new functionalities: what seemed previously incalculable is now beeing calculated for us, only at the cost of our voluntary donation of data, a new kind of voluntary servitude. What was incalculable, improbable and often abstract, such as desires and dreams, is now calculated and processed by these online services using sophisticated algorithms. In algorithmic governmentality, our expectations take into account the results from these online services about our possible future experiences (the colour of the food from that restaurant, the music from bands playing at that gig, etc.).

---

[11] Mark B. N. Hansen, "Our Predictive Condition; Or, Prediction in the Wild," in *The Nonhuman Turn*, ed. Richard Grusin (Minneapolis: University of Minnesota Press, 2015), 132.

[12] Antoinette Rouvroy and Bernard Stiegler, "Le Régime de Vérité Numérique: De la Gouvernementalité Algorithmique à un Nouvel État de Droit," *Socio* 4 (2015): §11.

[13] *Ibid.*, §15, §17-18, §72-73.

[14] *Ibid.*, §14.

In her critique of the Big Data ideology, Rouvroy at times remains at the level of ideology (understood as discourse or message), and she narrates the promises of algorithmic governmentality instead of following the technical life of ideology and tracking down its inscription in the very machines and infrastructure of governmentality. It is surely because it is fun and more efficient to use algorithms to navigate oneself in the city rather than to use a paper map, but such promises are not independent from their material production and organisation (through advertisements, the consumption of lifestyles, the aestheticisation of life, etc.). The critique of algorithmic governmentality focuses on the implementation and adoption of these services in everyday habits: it is our very faculties of understanding and interpretation that are being altered. In the process of "data-mining," there is an attempt to reduce persons and identity to data and therefore flows that are more easily transferable and comparable "in the search for the absolute objectivity."[15] Because of the promises that these new online services, made by companies such as Google, Apple, Facebook, Amazon, there is a fetishisation of data and therefore of the real, together with a relegation of friction and "noise" that slows down the process.

Zones of Nonknowledge and the Noology Critique to Come

The pervasive aspect of digital tools such as project-planning methods and data-mining technologies, calls for an attention to "opaque zones of nonknowledge".[16] Such zones have a material construction that operates as part of an ecology of media forms that are crucial for understanding the role digital technologies play in shaping new dynamics of power and control. The infiltration of automatically run devices that have the capacity to operate outside the realm of human sensory-motor capacity can not only change the dynamics of human behaviour, but also operates as a "submedial" level to compromise the possibility of thought.[17] In 2008, the former editor-in-chief of the

---

[15] *Ibid.*, §6.

[16] Matthew Fuller and Andrew Goffey, *Evil Media* (Cambridge, MA: MIT Press, 2012), 4.

[17] By submedial, we refer to the work of Boris Groys who thoughtfully underscored the infrastructural level at which new media technologies operate. To him, "media ontology

Wired magazine Chris Anderson claimed that the emergence of Big Data has led to the obsolescence of theories and critiques, that by amassing large dataset machines we would be able to find correlations, thus hijacking the need for intellectual labour.[18] While such a claim operates at the level of a premeditative ideology, it questions the obsolescence of theoretical thinking that comes with the introduction of prospective data-mining and predictive analysis. However, what is intrinsically new in today's algorithmic mode of knowledge transaction is, as Katherine Hayles points out, "the extent to which the built environment instantiates nonconscious cognition."[19] The exponential effects of devices on human systems is explained by the a general trend that sees communication flow more and more "among intelligent devices, and relatively less among devices and humans."[20]

The call to the return of the "real" as well as the obsolescence of theory and complexity are hardly new, yet with the deluge of services using algorithms in the digital economy, ideology has become even harder to discern, and therefore to be subject to critique. We are not calling for the return to a time before Big Data and these online services, one would be naïve to think that such a return is possible; however the point is to diagnose these systems and prescribe practices of how to live with them. It is not a matter of opposing them but of composing with them. Building on our earlier points about Anderson's end-of-theory thesis and the increasing place algorithmic services take in our lives, we can now argue for the necessity of a noology critique to come. Noology critique does not adopt a position of exteriority or one of truth, but it is an immanent critique of the wiring of thought in society. "Critique" here is not a negative evaluation of noology, but an evaluation and an examination of the production of knowledge in the

---

seeks to know what is hiding behind medial signs—precisely in cases where these signs, much like their sign carriers, are not 'natural' but 'artificial'." Boris Groys, *Under Suspicion: A Phenomenology of Media*, trans. Carsten Strahausen (New York: Columbia University Press, 2000), 12.

[18] Chris Anderson, "The End of Theory: The Data Deluge Makes the Scientific Method Obsolete," *Wired*, June 23, 2008, available: <http://archive.wired.com/science/discoveries/magazine/16-07/pb_theory>

[19] Katherine Hayles, "Cognition Everywhere: The Rise of the Cognitive Nonconscious and the Cost of Consciousness," *New Literary History* 45 (2014): 221.

[20] *Ibid*.

digital age. It is true that we live in a post-ideological world, or at least this expression "post-ideological" explains that it has become harder to notice ideology, since it has re-materialised, it is everywhere and therefore for some it appears as nowhere. But ideology understood as noology is not false belief, like religion for instance, but the technical infrastructures that very much forbid us to think and to believe.

Noology is the ideology that has become integrated into the flat ontology of capitalism. The advantage of considering ideology from the perspective of noology is to overcome the confusion between thought-contents (beliefs, language, discourse) and thought-forms (institutions, technical devices, infrastructure).[21] It allows us to flatten ideology and to develop a new critique and a new negativity at the level of the flat ontology of capitalism. The government by things of both humans and non-humans leads to a situation where discourse is discredited, and ideology no longer exists. Ideology has become neutralised by the permanent innovation that short-circuits all social organisations. The only discourses possible are those produced by the human-technical object transductive relations. This government by norms (what Foucault called the "society of norms") and by things neutralises critique since they pretend to be accurate and exact. The example of algorithms is only the last avatar of this mechanism at work in post-ideological or noological societies: depoliticising societies.[22] In the *Ideologiekritik* tradition (Feuerbach, Marx, Engels, Lukács, and the early Frankfurt School), the task of philosophy was to overcome metaphysical or idealist strands to ground a materialist philosophy; the famous opposition between ideology/science. What is new, however, is the re-materialisation of society and everyday practices since the 1970s. Noology critique, therefore, does not pose a materialism against an idealism but a materialism against a materialism, a kind of "materialist auto-affection".

---

[21] For a more detailed analysis of the implications of this distinction, see Benoît Dillet, "Deleuze's Transformation of the Ideology Critique Project: Noology Critique" in *Deleuze and the Passions*, ed. Ceciel Meiborg and Sjoerd van Tuinen (New York: Punctum Books, 2016).

[22] Bernard Stiegler comments on this last point in his recent book by referring to the sociologist Laurent Thévenot. See Bernard Stiegler, *La Société Automatique* (Paris: Fayard, 2015), 185.

Noology critique attempts to map out the wiring of thought in society to avoid passively "adapting" to operations of thought that are ideologically produced. One should make the distinction for instance between real inventions and possibilities and mere marketing. One can find in Simondon an early discussion and critique of marketing in his concept of "functional integration." [23] What is crucial about Simondon's discussion of functional integration is that he did not succumb to the false promises that companies propagated when selling their new products. Marketing strategies attempt to naturalise the technical object and create conditions for the "adoption" of the technical object. Marketing is the practice of weaving ideology technically; it creates the noological fabric of our lives. Digital studies is an incredibly fast growing interdisciplinary research field; however the novelty and newness about this field of inquiry is either assumed, fetishised or denounced. The articles here attempt to contribute to this body of literature by discussing a topic that is often forgotten in this field: the question of ideology.

The following articles are taken from presentations given at the 2015 London Conference in Critical Thought (hosted by the Anthropology department at UCL). These are only a selection of a larger set of discussions that took place on the themes of noology and technics. During the panels, the participants reflected on the notions of "noology" and "nootechnics" (or techniques of thought) as a way to think critically about our modes of thinking in the digital economy. These presentations and articles were conceived as the result of a first set of discussions among the members of the Noötechnics collective. *Noötechnics* is an international collective founded in 2012 whose goal is to organize events and publication projects that foster debates concerning the socio-political effects of digital technology.

Paolo Vignola presents a symptomatology of digital nihilism, and takes Anderson's emblematic statements from his 2008 *Wired* article as a symptom rather than a cause of our present condition. Vignola diagnoses the recent writings on accelerationism and their interpretation of Deleuze and Guattari as a symptom of a collective disease. To the lack of the collective dimension, the accelerationists develop a new narrative for the Left. By following Franco "Bifo"

---

[23] Stiegler, *La Société Automatique*, 151-7.

Berardi, Vignola questions the decay of the techno-social body that accompanies the intensification of capitalist technological innovation. Accelerationists not only do not take into account the 'reactive forces' at work in algorithmic governmentality, but also the reterritorialising powers intrinsic to life. In reading Nietzsche through Deleuze, Stiegler and Rouvroy, Vignola defines digital nihilism as the data-based *immentisation* of ascetic ideals, in which every kind of critical narrative is erased. Accelerationism is too quick in its project of inventing a new future and does not take into account the organological project of studying the transductive relations between individual, technical and social organs.

Leading on from these first reflections about speed and cognition, Sara Baranzoni in her article questions the aesthetic and an-aesthetic defunctionalisation and re-functionalisation operated by new technologies today. She argues that Big data and automatised computation force us to think again the old (Kantian) issue of the condition of possibility of perception and sensibility. She develops a powerful update to the classic application of ideology critique to the aesthetic field and aesthetic attitude. To her, Stiegler's reading of Kant's notion of schematism as "monstruous schematism" is an indispensable conceptual tool to understand what happens to our sensibility and perception in 24/7 capitalism. Baranzoni extends and updates Stiegler's remarks about the proletarianisation of sensibility in his *Symbolic Misery* series. Technology redefines and re-organises human capacities since digital objects and environments function to map some basic sensibilities to convey desires, decisions and behaviours, but at the risk of 'shutting down' the process of subjective individuation and the development of the faculties of reasoning.

After speed and aesthetics, Alexander Wilson also discusses the noology of Big Data from the point of view of the energy that needs to be mobilised to store data, but also to run the correlations in extremely large data sets. Big Data is the horizon of knowledge as an exhaustion of the process of discretisation. According to Wilson, the question of knowledge needs to be posed in relation to thermodynamics: "knowledge and technology are bound to the question of hot and cold". Wilson discusses the role of cognition and perception in discerning the thermodynamic thresholds. Processes of discretisation which abstract forms into discrete units — these discrete

units are either literal, or analogic or digital — in order to use them in larger systems, are fundamentally entropic, leading to global warming. Wilson's problem is therefore to think negentropy thermodynamically in information systems as an extension to the organism's abilities to discern differences in the age of the Anthropocene.