Proletarianization of the Mind: A Media Theory of Artificial Intelligence after Simondon and Stiegler

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Abstract: This article draws on Bernard Stiegler and Gilbert Simondon's work to further interrogate the psychic, social, and political problems raised by the development of Artificial Intelligence. Stiegler's political philosophy of time-consciousness reveals three concomitants urgencies: human memory is conditioned by industrial supplements that are increasingly disruptive, capitalism has produced an entropic condition where life on earth is threaten by toxic systems, the deployment of technologies of spirits has striped individuals of their psychic and collective individuation. I read media theory along with Simondon's philosophy to elucidate the question of mediation in today's reticulated AI-driven society.

Keywords: Simondon, Stiegler, artificial intelligence, proletarianization, knowledge, media theory

The late Bernard Stiegler urged us to engage in a critique of contemporary *hypomnesic* objects (namely technical object understood as both a time-based object and a storage medium). For him, the "becoming-industrial of memory"

is inscribed in a history of supplementary technics understood as a storage medium.¹ We live today in a hyperindustrial society, a society that has led to the "proletarianization of the mind" through the exploitation and functionalization of memory. To think in a hyperindustrial society is to renew the question of the relation between technics and knowledge as a political problem.² Building on Marx's critique of consumption, Stiegler reveals the emergence of proletarianization as a process consisting in the industrial organization of the destruction of knowledge.³ Stiegler reads Plato's *Phaedrus*, after Derrida's commentary "Plato's Pharmacy", as the constitutive philosophical moment to open the pharmacological question of technics. Knowledge occurs in what Stiegler calls a "dialogical commerce"⁴, revealing the metaphysical problem of the impossibility to oppose living memory (anamnesis) to the dead memory of the hypomnematon (material support).⁵ Anamnesis (interior recollection) is supported by hypomnesis (exteriorized memory), meaning that the necessary technical supplementation of memory is the condition of retention. The interplay of retention as primary memory (consciousness) and secondary memory (recollection) in Husserl is conditioned by a tertiary memory in Stiegler: an hypomnematon is a technical object in Simondon's language. In other words, as Alexander Wilson brilliantly summarizes: "We are retroactively conditioned by all of our exteriorization."⁶

Stiegler claims that the question of Artificial Intelligence pertains to the domain of "the nervous system's exteriorization".⁷ The psychic individuation of *anamnesis*--which constitutes the life of the mind that is conditioned by *hypomnesis*--is increasingly compromised by the disruptive detouring and deformation of attention. The economy of attention⁸ both highjacks the attentional quality of relation (to ourselves, to each other, to other living beings to include the planet) and constitutes a blockage threatening the possibility of collective individuation.⁹ The reticulated power of automated technologies, meaning their inscription into an ever expanding network of connection, function like a parasite that both annihilates social relation and exploits socio-

¹ Stiegler, *Technics and Time* 2, p. 125.

² Stiegler, For a new critique of political economy, pp.21-25

³ Dillet, "Proletarianization, Deproletarianization, and the Rise of the Amateur", 81.

⁴ Stiegler, For a new critique of political economy, p.41.

⁵ Stiegler *Symbolic Misery 2*, 37-38.

⁶ Wilson, "On Something Like an Operational Virtuality", 5

⁷ Technics and Time 2, 98.

⁸ Citton, *Pour une écologie de l'attention*.

⁹ Stiegler, "Relational Ecology and the Digital *Pharmakon*" *Culture Machine*, 7.

political territories where the diversity of intelligence (noodiversity) can be cultivated.¹⁰ The problem is not that Artificial Intelligence is now "generative", meaning that it can *simulate* the creative life of the mind as when the software ChatGPT produces a poem or that it can *imitate* the linear logic of the mind following a problem-solving computational function.¹¹ What is at stake is that AI is a reticulated program of automated power that increases the disruptive tendencies of existing media-based forms of proletarianization.

This article aims to pick up this foundational hypothesis to further interrogate the psychic, social, and political problems raised by the development of Artificial Intelligence. Building on Stiegler's concerns, I would like to reflect upon a major shift that happened with the development of Artificial Intelligence. AI is the result of computational program development that manufactures the life of the mind according to the automated formalization of memory. This formalization is understood as a "narrowing of the range of thought"¹² produced by technologies that both integrate know-hows and living knowledge, and realize the externalization of the nervous system.¹³ The automatized entropy of knowledge and thought occurs at two different scales of operation. First at an algorithmic level, industrial automata runs beyond and below human perception. According to Mark B. N. Hansen, the impact of media technology in the twenty-first century "affects the materiality of experience at a level more elemental than perception"¹⁴. In other words, the problem of the hyper-synchronization of the time of consciousness produced by the apparatus of the culture industry needs to be reevaluated by the fact: not only "knowledge technologies have become calculation technologies"¹⁵; but that these technologies now perform tasks at an algorithmic level, below the perceptive domain of human perception. The algorithmic scale of AI operations transforms the traditional mode of representation, the craft and know-how, into

¹⁰ Stiegler, NOODIVERSITY, TECHNODIVERSITY: elements of a new economic foundation based on a new foundation for theoretical computer science. Angelaki, 68.

¹¹ I thank the nootechnics collective: Sara Baranzoni, Benoit Dillet, Paolo Vignola and Alexander Wilson for the debates and inspiration during our Albenga Seminar in September 2024. Our conversations gave me the energy to rewrite this article. Special thanks to Benoit Dillet for his generous feedback and correction. If there is any brilliance in this writing, it comes from our collective philia.

¹² Bradley, Critical Essays on Bernard Stiegler, 35.

¹³ Stiegler, *Symbolic Misery 2*, 49.

¹⁴ Hansen, *Feed Forward*, 44.

¹⁵ Stiegler, *Symbolic Misery*, 50-51.

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what Parisi calls a computational architecture of thought.¹⁶ Algorithm's stepby-step procedure for calculation leads the programmable orientation of knowledge that Vilèm Flusser defines as modelling relations to the real.¹⁷ As such, AI-driven technologies are instructional programs designed to produce meaning through "a-significative units", as Antoinette Rouvroy neatly calls them.¹⁸

At a planetary level, computational programs can be inscribed on a global network in real time on the internet. The scale problem of AI is such that nowadays it is us, humans, who are deprived of the capacity to perceive whether a text or an image is AI- or human-generated. More importantly, and while the notion of tertiary retention—which defines the retention of memory into an artificial device such as a notepad or a camera—was mainly understood from the point of view of the human deliberately exteriorizing data via a technical supplement for the purpose of recollection, the digital has produced a new form of tertiary retention where machines exteriorized data for other machines to use. Such a shift forces us to acknowledge that there are at least two types of hypomnematon. One type that is human-generated, as when we write down a note in the form of orthographic writing where both writer and reader are "the bearers of knowledge that they necessarily embody."¹⁹ This type of hypomnematon is the condition of possibility of knowing understood as a process of sedimentation. The other is generated by machines, as when applications collect data that are being analyzed by computers. By recognizing the different functions of these two types of tertiary memory, one can comprehend algorithmic procedures of extraction that strip subjects of their agency. The question of the proletarianization of the mind thus becomes the question of the future of knowledge formation as it depends on the memory that is now being automatically obtained from individuals whose data are being collected before they are recognized as information by individuals. Furthermore, by investigating this newly engendered form of technical memory, one can reassess notions of governance, power dynamics, and intelligence in new ways.

Together, these two scales—the operation of digital technologies outside human sensory-perception, and the extraction of data by machines for

¹⁶ Parisi, Contagious Architecture, 193.

¹⁷ Flusser, Into the Universe of Technical Images, 50

¹⁸ Rouvroy, & Stiegler, "The Digital Regime of Truth: From the Algorithmic Governmentality to a New Rule of Law", 8.

¹⁹ Stiegler, *Symbolic Misery 2*, p. 38.

machines-force us to face a massive transformation in the production of memory. It is in this context that I situate my intervention. AI-powered media technology imposes a relation to information, which I name preemption.²⁰ In the context of digital technology and Artificial Intelligence in particular, technical preemption defines the operation of extraction of data by machines for other machines. The urgency here is the deployment of a close intelligence system that is created outside human interaction, that is outside what Husserl called the "communitization of knowledge".²¹ I argue that political implications of preemptive technologies, namely technologies whose governing power reside in the extraction of data and the production of synthetic data, is grounded in the psychic, collective, and technical milieu in which we evolve. Such dissociated milieu extracts data from a vast number of AI-driven platforms to control and modulate people's behavior, creating disbelief and what Stiegler called, after Paul Valéry, the tendential fall of spiritual value in our societies.²² The aim of Bernard Stiegler's work was the constitution of a new relation between tecknē and epistēmē in a philosophical context in which the project of a political economy was abandoned.²³ This broad claim forms the motivating insight behind this article devoted to the proletarianization of the mind. In today's intellectual climates, it would be no exaggeration to cite AIdriven media systems as a central topic for research. The question, then, becomes how we interrogate our capacity to question the future of intelligence when dealing with digital scales governed by expanding and codified rules. I will argue that anticipating the digital changes to come is crucial if we want to re-inscribe human experience inside knowledge, so the future of social interactions can still hold the promise of an ethics of investment outside of the digital economy and its Big-data ideology.

Media technology and Artificial Intelligence

Communicative devices have become authoritative: emails, tweets, texts, and social media platforms, impose patterns among people. Messages are no longer scarce objects that get lost.²⁴ On the contrary, messages navigate in a stream of continuous signals that has been put in place to create the collapse of

²⁰ Nony, "Anxiety in the Society of Premption ", 103.

²¹ Stiegler, *Technics and Time* 2, p.36.

²² Stiegler, Symbolic Misery, p.4

²³ Stiegler, *La Technique et le temps* 1, p. 15.

²⁴ Here one thinks of Jacques Derrida's reflection in *The Post Card: From Socrates to Freud and Beyond.*

the distinction between social, professional, and leisure time. The never-ending stream of online communication signals a shift in modes of governance where "to communicate, you must" is a neoliberal watchword in today's communicative capitalism.²⁵ "To unplug," "to turn off," "to desynchronize" are now verbs that evoke the goal to rescue time from the abyss of online communication. It is in this context of an never-ending flow of communicative signals that attention is mobilized as an economic category.²⁶ As Jodi Dean suggests, "communication functions symptomatically to produce its own negation."²⁷ The question of communication in the age of AI-driven media technology is the question of making visible a powerless mass, one whose attention bears an economic as opposed to a psychic value. Powerlessness sounds quite counter-intuitive when one thinks of the recent boom of the use of online tools such as Twitter, TikTok, and Instagram for protest gathering and for testifying of atrocities. Yet, as Jodi Dean points out, there is the development of personalized media that foster both exposure and anonymity at the same time. "The indistinguishable mass of the singularly unique" announced by Dean is a symptom of the tendential fall of signification fostered by networked communication.²⁸ The latter is conceived as an ongoing expansion of a total mediality in which the user buys their own circuit of exposure. In this context, there is a double reconfiguration of cognition as both the impoverishment of attention and the mutation of subjectivity.²⁹ While the contents of subjectivity depend more and more on a multitude of machinic systems as Félix Guattari reminds us,30 the development of digital communication devices is drastically changing the entanglement between collective apparatuses and assemblage of enunciation. The multitude of machinic systems and their current informatic machines contribute to the preparation of assemblages of enunciation that are inserting three concomitant pathways of subjective mutations: power, knowledge, and self-reference.³¹

With the emergence of AI-driven media technologies, mediation has become systemic in our increasingly digital world, meaning that mediation is inherently supported by and produced within a system of both automated and reticulated programs. The systemic characteristic of mediation leaves very little

²⁵ Dean, Democracy and Other Neoliberal Fantasies.

²⁶ Terranova, "Attention, Economy and the Brain", 1.

²⁷ Dean, Democracy and Other Neoliberal Fantasies.

²⁸ Dean, *Blog Theory*, 65.

²⁹ Terranova, "Attention, Economy and the Brain", 7.

³⁰ Guattari, Schizoanalytic Cartographies.

³¹ Guattari, Schizoanalytic Cartographies, 2-3.

space for processes of selection that are not preempted by the analogical-digital milieu in which we evolve.³² In other words, what is *new* about our AI-driven reticulated society is not that our world is mediated. What is new is that the systematization of experience and the formalization of memory are performed via a network of interconnected digital objects that are now automated, programmable, and reticulated. Here, digital is not opposed to analog, but is understood as a more systemic phase of discretization. Computers treat time as a series of discrete moments, rather than as a continuous flow. These discrete moments are phases through which operations, such as recursions, are processed. A "system time" in a computer defines the computer's organization. Its main function is to schedule and synchronize operations to be processed according to its notion of the passing of time. However, the larger question of time in relation to the computer is a question of synthesis. An algorithm, as a set of relations embedded in a mathematical formula, projects in time the implication of its operations as a new synthesis of relation.

Because the digital is constantly developing toward greater discretization, it demands the reevaluation of the conceptual tools needed to unpack its aesthetic and historical conditions. In the context of surveillance capitalism³³ and platform capitalism³⁴, this process of discretization has been developed and deployed to produce the proletarianisation of the life of the mind. Stiegler names proletarianisation a triple loss: loss of knowledge, loss of desire, loss of individuation. From *La technique et le temps* (1994, 1996, 2001), *Mécréance et discrédit* (2004, 2006, 2006) and *De la misère symbolique* (2004, 2004), proletarianization is deployed as a critical tool to diagnose the evolution of symptoms of *disorientation, malaise, discredit,* and *disindividuation* within the limits of capitalism. Stiegler questions the process of grammatization, that is the inscription and transformation of knowledge via technical objects, from within the technically determined phases of proletarianisation.³⁵ It presupposes an understanding of grammaticalization as the transformation of a temporal flux into discrete data.

Grammatization refers to major technical revolutions, such as writing, that externalize knowledge onto artificial supports so that it can be reproduced. Such grammaticalization is not a distribution, in the sense that Jacques Rancière refers to the distribution [*partage*] of the sensible. For Rancière this

³² Nony, "Anxiety in the Society of Premption", 108.

³³ Zuboff, *The Age of Surveillance Capitalism*.

³⁴ Srnicek, *Platform capitalism*.

³⁵ Dillet, "Proletarianization, Deproletarianization, and the Rise of the Amateur", 5.

distribution implies an *a priori* existence of a common space that he names the sensible from which distinct and precise divisions take place. The distribution of the sensible is both the sharing of a common experience and a modality of distributing exclusive parts.³⁶ It is this specific distribution of the sensible that gives shape to political experience, that shows who belongs or not to a certain space and time in common. Rancière's question of politics in relation to aesthetics is distinct from the denunciation of a certain aestheticization of the political realm. He urges us to think about the distribution of the sensible as a tool to question who takes part in the making of the common.

The digital phase of grammaticalization has less to do with such *partage*, than with the capture of the sensible and the pre-emption of experience through algorithmic obedience. The digital grammaticalization has to do with the sequentialization of the sensible, its translation into mathematical formulas, and its reproduction as a feedback feature to program experience. Such grammaticalization is the operational foundation of the proletarianization of the mind. For me, Rancière's notion of the taking part [prendre part] needs to be reevaluated from the point of view of operations that preemptively dissect, in the texture of experience, the mere possibility of a common. Pre-emption and extractive tertiary retention, rather than externalization and distribution, allow us to pose the urgent question of the risk of algorithmic control through the narrowing and impoverishment of experience. Understood as a spatio-temporal flux that gives shape to experience, the sensible is more than ever affected by newly engendered systems of pre-emption that track, capture, and dissect data to reproduce certain patterns. Here, the sensible calls for a for a new paradigm in today's computational society. As Sara Baranzoni poignantly argues: "the speed of data and algorithmic correlation has increased the reliance on this possibility of freeing brain-time via the automation of the phases of knowledge, to the point that belief has arisen in the possibility of a new kind of hyperpowerful thought, but one that, operating through automated correlations of digital information, will no longer require the intervention and interpretation of any human actor."³⁷

Fundamental in *aistêsis* is an overtaking of the distinction between subject and object: what matters is the sensation, perception, and the senses through the conjunction of both passive and active modes.³⁸ While I

³⁶ Rancière, Le partage du sensible, 12.

³⁷ Baranzoni, "Aesthesis and Nous: Technological Approaches", 150.

³⁸ See in particular, Merleau-Ponty, *Le visible et l'invisible*; and Didi Huberman, *Ce que nous voyons, ce qui nous regarde*.

acknowledge that Jacques Rancière has been crucial in determining different aesthetic regimes, I am more interested in understanding the sensible as an open potential from within which acts of sensing and being sensed can take place. In this sense, I turn to what Gilbert Simondon calls the pre-individual realm, as a means to understand the ever-expanding field from which both psychic and collective experience can arise. By pre-emption of the sensible, I refer to the process that selects, in the synchronic flow of the sensible, discrete moments that can be extracted and thus reproduced, leading to the proletarianization of the mind. This process, in the age of AI-driven technologies is effectuated through reticulated mediations.

Algorithmic Obedience and the Pre-emption of Knowledge

Both Simondon and Stiegler have foregrounded the centrality of technics in social and political experience.³⁹ For Simondon, humans are mediators of the relation between machines, granting them the necessary independence in order to objectively interrogate the cultural aspect of technicity. Stiegler, for his part, has expanded this definition by treating culture as a political question. For Stiegler, the becoming of an individual is tied to technical artifacts that form the condition of a social milieu. The question of culture thus becomes the question of what is happening in the social realm, where technics play a central role in shaping the relation between individuals. Simondon insists that critical theory has to operate the inclusion of technical reality—or what he prefers to call "technicity"—into culture. In *Du mode d'existence des objets techniques*, Simondon insists that "It is culture that is regulating and that creates the link of circular causality between the rulers and the ruled over," meaning that culture starts and ends with the question of the governed.⁴⁰ For Stiegler, the technical field emerges simultaneously as a solution to a problem and engenders forms of toxicity that require the development of therapeutics in order to address the remedy-poison aspect of technics. In other words, technical life is a dynamic system shaped by contradictory tendencies.

In the context of the proliferation of reticulated artificial intelligence systems, one major challenge is to reevaluate autonomic computing in regard to knowledge production. In Simondon's philosophy, this challenge concerns the knowledge of individuation, which can only be grasped through the ontogenesis of the subject's knowledge. Moreover, the digital plunges us into

³⁹ Bardin, "Philosophy as political technē".

⁴⁰ Simondon, *Du mode d'existence des objets techniques*, 207.

abyssal ontological and epistemological interrogations concerning our relation to the real by preempting the realm of the sensible to further shape and program behavior. In order to address the question of algorhitmic obedience and the preemption of memory today one needs to engage in the work of epistemology in relation to new technics and technology. However, while a lot of attention has been paid to the democratic potential of the Web, especially as the latter adopted peer-to-peer and decentralized modes of operations in the 1990s, these platforms are not neutral: they make the monitoring and preemption of data in time and space possible. Such joyful run-up for the Web is only causing a digital blindness that bears particular consequence for thinking critically about how reticulated systems of AI technologies breed obedience and lead to the proletarianization of the mind as a new form of governance.

A glimpse of this algorithmic obedience can be found in the technicity of the software. Created in 1968 by IBM, software designates a splitting off from hardware and the creation of programs that are commonly understood as tools put in a computer, or other tele-communicative devices, to make it do things. Software is less about the physical components of the device (screen, keyboard, mouse, audio speakers, and printers), and more about that which enables the users to interact with the machine. The network-dependency of today's digital devices reveals the reticulated aspect of humans' relation to technology. In fact, and as Gilbert Simondon points out as early as 1958, what counts is the transfer of energy and information in the object and between the object and its milieu.⁴¹ With the software, the relational dependency to a network-type of milieu questions the scheme of command and auto-regulation from the point of view of the systematic automatization of operations. The proletarianization of the mind is symptomatic of the reticulated society: that is a society that implements the algorithmic obedience of its subject through the modulation of their subjectivity.

The market economy of the reticulated systems of AI depend upon the proliferation of softwares. According to the market strategy of the software industry, apps have become enabling tools to regulate emotion, promote memory, foster attention, and increase imagination. The software, which formerly defined the action of putting something into operation, reminds you when it is time to train, it tracks your effort, and may post your score online so that your social media followers can award you with dopamine. Usually combined with a device that tracks your progress, or your lack of it, the app is designed to stock information about your activity and to draw a profile of your

⁴¹ Simondon, *Du mode d'existence des objets techniques*, 59.

digital self. In this era of wearable technology, employees, students, and CEOs are tracking their health via the algorithmically designed app that tells them when to sleep, when to wake up, when to have a baby, how likely they are going to be to lose weight, and how stress is affecting their sex life. This new regime of calculation that gives access to what used to be incalculable has found a label: the quantified self. The latter is self-monitored and self-sensed by wearable computing technologies, also known as lifelogging. The main function of the quantified self is to analyze the discrete aspects of daily life. Movements in space and time are not only regulated by technologies operating within the social layers of intimacy, health, profession, and leisure—they are now optimized by reticulated hypomnesic objects that weave the threads of multiple experiences into a singular calculable one.

There is a techno-tragic characteristic of the emergence of the quantified self in today's post-industrialized society. The techno-tragic dimension of our computational condition is tied to the way in which the proliferation of digital devices has disempowered both the body and the psyche from anticipating, symbolizing, and inventing another structural milieu. This techno-tragic condition remains central within the widespread proliferation of AI-driven media technologies. According to Stiegler, the machinic turn of sensibility that is, the proletarianization of savoir-faire [skill, expertise] in the industrialized epoch has produced a *catastrophé*. Borrowed from the lexicon of ancient Greek and classical tragedy, the *catastrophé* used to refer to a moment of crisis after which a situation is drastically changed. Known as a reversal of dynamics brought about by the collapse of the hero, such *catastrophé* has found a different meaning in our contemporary era. It no longer serves the function of an outcome nor does it signal the reversal of a situation. The contemporary form of catastrophé is a continuous falling down provoked by a constant state of shock: no figure stands out, no action evolves. Only the dramatic tension of a situation still holds. It is in this context that Stiegler questions the symbolic misery in terms of the fall of aesthetic participation.

The notion of a techno-tragic condition may be an appropriate analysis of both the *catastrophé* of the sensible and the proletarianization of the mind. Taking stock of the fact that art of acting out is embedded in the practice of *teckné*, it becomes urgent to reassess what participation in the common means in the age of AI. Put in another way, the techno-tragic condition interrogates both participation, as a passage from *puissance* to *action*, and the loss of participation as a regression from *action* to *puissance*.⁴² In light of these

⁴² Stiegler, *De la misère symbolique. La* catastrophé *du sensible*, 53.

reflections, one can state that the app, as a commodity, consumes the user with a new type of fantasy: the ability to power. This ability to power, sold by the digital economy of the software industry, has replaced the will to decide and to cultivate one's singularity. Whereas in Emmanuel Levinas' *Totality and Infinity*, the ability to power was suspended by the face of the Other, such encounters have been replaced by the proliferation of iterations of the face: avatars, selfies, emojis, and emoticons are now the helpless characters of our contemporary tragedy.⁴³

Infuriation of digital mediation

The reticulated industry of AI exploits data to turn subjectivity into entropic patterns of massification.⁴⁴ Not only are biometric instruments used to track human behavior, but the data these instruments produce are used to configure behaviors. This power to breed obedience has given media technology a preemptive characteristic, which has prompted new forms of subjectivation. In the context of AI, the body remains the field of invasive operations that extract and exteriorize information. As Bernadette Wegenstein points out: "No thought, cultural production, or human activity can take place without the body as its source."45 Yet, the inscription of experience into knowledge is massively highjacked but the proliferation of entropic and statistical patterns of algorithmic obedience. This disjunction between body and knowledge in today's reticulated society further interrogates the proletarianization of the mind. Indeed, to the extent that information is being captured before individuals, the emergence of AI and Generative AI in particular, attests to the standardisation of reticulated mediation that serves the economy of big data and its computational pre-emptive power.

That a new technicity is nonetheless at stake in reticulated artificial intelligence appears to the extent that mediation and communication emerge as an end, distinct from the traditional representation of technical media. In *Excommunication*, media theorists Alexander Galloway, Eugene Thacker, and McKenzie Wark develop a theory of mediation as excommunication, which they define as an *a priori* of, an excess of, or a withdrawal from communication.⁴⁶ In the co-written introduction "Execrable Media,"

⁴³ Levinas, *Totality and Infinity*, 198.

⁴⁴ Stiegler, *Dans la disuption*, 43.

⁴⁵ Wegenstein, "Body" in *Critical Terms for Media Studies*, 19.

⁴⁶ Galloway, Thacker, & Wark, Excommunication: Three Inquiries in Media and Mediation, 11.

excommunication is presented as having less to do to with the destruction of communication than with its impossibility and its insufficiency. By taking the notions of media and mediation "as *conceptual objects* in their own right," not only does the trio develop a model based on the "fantasy of an absolute end to all communication" but they also attempt to further a theory of mediation understood as that which can ultimately annul any communication, and yet both stands prior to and conditions it.⁴⁷

More precisely in Alexander Galloway's essay "Love of the Middle," three modes of communication are distinguished: the first is the text, represented by Hermes and related to the critical method of analysis named hermeneutic; the second is the image represented by a figure of pure mediation as well, named Iris, a figure that refers to the experience of immanent immediacy that gives shape to phenomenology; the third is the network represented by the Furies and related to the contagious presence of a system. For Galloway, the textual, the visual, and the systemic operate in concert in most of the media artifacts composing the visual and moving image environment.⁴⁸ However, he underscores the current tendency to privilege a systemic model of mediation, that is the network system as a "new master signifier", at the cost of other knowledge pathways such as hermeneutic and phenomenology. Thus, for media theory, the following normative claim begins to emerge: hermeneutic interpretation and immanent iridescence are gradually withering away. Ascending in their place is the infuriation of the distributed systems. In more concrete terms, a tendential fall can be expected in the efficiency of both images and texts, in both poems and problems, and a marked increase in the efficiency of an entirely different mode of mediation, the system, the machine, the network.49

The expected fall in the efficiency of both hermeneutic and phenomenology goes hand in hand with the deployment of a radically different mode of mediation, that of the reticulated society.⁵⁰ In that case, the figure of the Furies is deployed as a theoretical metaphor, first to approach "complex systems like swarms, rhizomes, assemblages, and network" that give rise to new "networked *epistémè*," and then to understand the development of a hegemonic modality of communication.⁵¹ Our relation to the world no longer operates

⁴⁷ Galloway, Thacker, & Wark, Excommunication, 1-24.

⁴⁸ Galloway, Thacker, & Wark, 46.

⁴⁹ Galloway, Thacker, & Wark, 62.

⁵⁰ Stiegler, *Dans la disruption*.

⁵¹ Galloway, Thacker, & Wark, 17, 62.

through Hermes' cryptography, nor through Iris' iridescent prism, but through the Furies' underground network. This network is defined as imposing a new mode of communication. Instead of communication as operating within the object world, Galloway claims that the network gives rise to a mode of communication that operates next to the real. He thus proposes to think of a third mode of mediation, that of the Furies, which disperse a wide system of networks and underground connections.⁵² By operating next to the real, this third mode of communication especially challenges the possibility of accessing the object of mediation. Galloway claims that the world is ruled by large technological systems and that it is within the world's furious "state of agitation and sensuous energy" that mediation has to be examined.⁵³ Thereby, the infurious system directly challenges theory itself by cancelling the contact, rather iridescent or hermeneutical, with the object of mediation.

At the core of *Excommunication*'s second essay "Dark Media," resides a paradoxical encounter with that which is unreachable. To Thacker, dark media refers to a paradoxical movement: a communicational imperative that is expressed as the impossibility of communication; and a paradoxical moment that is defined as "when one communicates with or connects to that which is, by definition, inaccessible."⁵⁴ This paradoxical logic of both movement and moment is what he calls the enigma of mediation.⁵⁵ For Thacker, two layers of media operations run parallel to each other: the first is communication as being *always, already* shaped by excommunication, the second is mediation as being conditioned by dark media. The two relate to one another since dark media are the effects of communication, in the sense that dark media are produced as left overs of what escapes communication. These leftovers are called *behavioral surplus* in the surveillance capitalism: data that escape information are now fed into advanced manufacturing processes of machine intelligence.⁵⁶

If Galloway emphasizes the infurious network as a mode of communication, dark media is understood here as the *paradoxical encounter*-- both a movement and a moment--with that which is unreachable. This paradoxical encounter is the one of an "empty aesthetic form in which the thing-in-itself is at once mediated and not mediated."⁵⁷ More precisely in his

⁵² Galloway, Thacker, & Wark, 59.

⁵³ Galloway, Thacker, & Wark, 60.

⁵⁴ Galloway, Thacker, & Wark, 81.

⁵⁵ Galloway, Thacker, & Wark, 81.

⁵⁶ Zuboff, 8.

⁵⁷ Galloway, Thacker, & Wark, 118.

essay Thacker offers a genealogy of philosophical thinking about objects, distinguishing between the relation of subject and object as found in Kantianism and Husserlian phenomenology, the object to object relation as found in object oriented ontology, and the object and thing relation that has occult qualities such as in dark media. Since dark media defines that which connects with the inaccessible, it has less to do, in principle, with a relation of the subject and object type. By offering the concept of excommunication Galloway, Thacker, and Wark attempted to redefine our human condition as depending upon a communicative modality that escapes communication itself. In interrogating multiple figures of mediation (Hermes, Iris, and the Furies), the trio offered to rethink the making of culture as an artifact that shapes and is being shaped by a *metaxu*, an in-between space, which gives form to the reciprocal and reflexive milieu of mediation. Thus, at the banquet celebrating the concept of excommunication one might find Aphrodite, goddess of sexual media and a love for the middle that gives shape to diversity, or Morpheus who delivers messages through dreams, an example being Socrates' foreknowledge of his death sentence as related by Plato in the Crito.

Proletarianization and reticulated artificial intelligence

In other words, *Excommunication* sparked a debate that is concerned with both ethical and methodological challenges: ethical as it engages within the transformation of subjectivities, and methodological as it questions critical models and tools so as to better address the transformation of mediation within the context of our increasingly reticulated society. What is thus precisely at stake in the question of the proletarianization of the mind is the possibility of singular experience of life is no longer understood as the result of a human mediation. AI-driven media technologies perform task that renew the question of epistemology and agency.⁵⁸ The algorithm of AI systems is thus what defines and frames the ethical and methodological challenge within the context of an extremely complex milieu. Ultimately, what is of immediate concern is the power to automatically discriminate, monitor, select, combine and distribute data sets into programs that breed obedience through mediation. This power is now contained within the realm of reticulated systems of algorithmic obedience. The power to discriminate needs to be examined with regard to the question of subjectivity formation. In this sense, thinking of media and

⁵⁸ Nony, *Performative Images*.

mediation as conceptual objects offers a way to reevaluate the transformative potential of reticulated AI-driven media today.

Within an extremely complex algorithmic system, contrary forces shape the notion of mediation. On the one hand technically inscribed algorithms work as a new system of codes that allows for the production of newly engendered practices of communication. On the other, algorithms create a closed system that only very few can navigate and thus transform. This leads to two major challenges. The first one is the reduction of the potential of the ensemble into efficient mathematical formulas, and the reduction of the milieu of their use into a closed structure. The ensemble and the milieu, because they are the locus where new plans of consistency takes shape, should be protected from a formal logic that has replaced subjectivities by statistical patterns. In other words, AIdriven media are now operating within an ambivalent realm, between the object and the thing, where the subject is no longer a perceptive center but one element among others.

The acceleration of pre-emptive technologies as deployed in reticulated societies, as well as the capacities embedded in the computational algorithms themselves, are changing the principles governing culture. So perhaps, what is needed is to develop a new understanding of cultural mediation. Far from designating either one or more axioms of knowledge or some accessory theoretical tool, culture might need to be reclaimed and thought of as a mediation of technology itself. Not simply the direct embedded milieu of technicity, culture brings values nonetheless concerned with our ability to engage the psychic, social, and political problems raised by the development of Artificial Intelligence. From this point of view, I turn to Simondon's statement that the opposition between culture and technique on the one hand, and human and machine on the other hand, arises out of ignorance.

Culture behaves toward the technical object as man toward a stranger, when he allows himself to be carried away by primitive xenophobia. Misoneism directed against machines is not so much a hatred of novelty as it is a rejection of a strange or foreign reality. However, this strange or foreign being is still human, and a complete culture is one which enables us to discover the foreign or strange as human. Furthermore, the machine is the stranger; it is the stranger inside which something human is locked up, misunderstood, materialized, enslaved, and yet which nevertheless remains human all the same. The most powerful cause of alienation in the contemporary world resides in this misunderstanding of the machine, which is not an alienation caused by the machine, but by the nonknowledge of its nature and its essence, by way of its absence from the

world of significations, and its omission from the table of values and concepts that make up culture. $^{\rm 59}$

Simondon explains that the hatred against the machinic domain comes from a refusal to welcome a foreign reality. Technical objects are mediators between nature and humans. The shift toward a new understanding of the technical objects in Simondon allows us to question the relation between mediation and technique as well as technique and power. This relation is inscribed in a local culture, fostering the milieu in which machines and humans co-evolve. For Simondon, it is the culture that one has received that gives an individual its power to govern others, including machines. Because culture entails values and signification, it translates into abilities to effect mastery. It is precisely this understanding of culture as being massively implemented within and among governed individuals that creates the effect of a feedback loop, shaped by structural processes of command and control. In Simondon's theory of cybernetic, as I have attempted to explain elsewhere, the notion of *feedback* as a cycle in tension not only reconfigures the communicative system of information outside of the sender/receiver paradigm; it grounds a theory of transmission within a continuously evolving structure of exchange.⁶⁰ Not only has technics been at the center of the socio-economic systems that shape the evolution of hominization, but a new consideration of *technicity* understood as savoir-savoir-faire, savoir-vivre, and savoir-être-is now necessary to develop a new critique of political economy that takes into account the drastic and urgent question of the becoming AI-driven dimension of the mediation.

Conclusion

Together, Simondon and Stiegler's philosophies lay out the conceptual ground on which to address the ethical and theoretical challenges that are shaping today's reticulated processes of memory formation, mediation and knowledge production. Stiegler emphasizes that tertiary retention is a condition for the emergence of primary and secondary retention: "Tertiary retention is not a mediation because it does not come after: it is not that which gives a mediated access to the immediate, but that which constitutes its possibility."⁶¹ Understanding tertiary retention as a condition of possibility for accessing the

⁵⁹ Simondon, On the Mode of Existence of Technical Objects, 16.

⁶⁰ Nony, "Technology of Neo-Colonial epistemé, 37

⁶¹ Stiegler, *De la misère symbolique. La* catastrophè *du sensible*, 189.

immediate flow of consciousness is crucial, not to say urgent, when our contemporary forms of tertiary retention are being produced by extractive and computational machines.

While the externalization of memory onto technical supports—such as writing a note—was mainly performed by individuals for their individual uses, the digital introduces a drastic shift in the production and transmission of tertiary retention. Memory is not only externalized onto technical supplement, it is increasingly extracted by external and interconnected devices that run at an infra level, below human's sensory-motor capacity.⁶² Not only do algorithms extract data from us but also they transform this data according to a set of instructions to which we lack any access. Within our reticulated society, memory is not only prosthetic, or exteriorized onto technical objects. Cellphones, tablets, and computers do not simply help us keep track of events that punctuate space and time: they algorithmically pre-empt data from us and store it into "ubiquitous networks and distributed digital storage devices."63 This algorithmic mode of extraction, i.e. data-mining, has created a global network of pre-emptive tertiary retentions that is in constant expansion. Because the production of tertiary retention has become computational, the dynamic system of selection (primary retention) and recollection (secondary retention) is being remodeled. What is new with AI is that media technologies are now equipped with a technological twist that performs tasks on their own.

I have attempted to ask the question of the proletarianization of the mind from the angle of algorithms that track, capture, and stock information at a speed that is superseding the enduring process of *mnesic* trace formation, its sedimentation and evolution over time. In other words, I have tried to show that reticulated Artificial Intelligence has less to do with simulation and imitation than it has to do with proletarianization and pre-emption. The moment of selection that defines primary retention is being overridden by a saturation of recollected information that now defines secondary retention. The overflowing amount of stocked information in pre-emptive tertiary retention destabilizes both processes of selection and recollection, flooding the individual with data that he or she can neither access or process on their own. In other words, the ever-expanding horizon of pre-emptive tertiary retention disarms the

⁶² On passage from prosthetic to aphaeretic memory, see Chapter One "Volume-Image of Video Technology" in Nony, A., *Performative Images: A Philosophy of Video Art Technology in France.* Amsterdam: Amsterdam University Press, 2023, pp. 47-78.

⁶³ Steve Goodman, and Luciana Parisi, "Machines of Memory." *Memory: Histories, Theories, Debates* (2010), 343.

individual by destroying his or her ability to make a decision based on his or her own data bank, i.e. organic memory supported by inorganic organs.

A decisive shift in temporal orientation thus takes place. Whereas memory was an act of commemoration, a means through which one makes sense of the past, reticulated AI systems increase the program-driven quality of daily life. Media no longer run for us, instead they are designed by shareholders and have become thoroughly embedded in our environments, acting at an infrastructural level to shape the very ground of experience. Technological innovation is deeply captured by capital, and our attention (and content production) are central to this capital-maximising imperative. The rise of Big Data reconfigures the selection, recollection, and retention dynamics at the core of human memory. This chapter aimed to tackle the shift that tertiary retention faces in a world where media can no longer be conceptualized as mere prosthesis for expanding cognitive capacities. I ask: What if we read reticulated AI technologies as an ever-expanding network of pre-emptive tertiary retentions? What if we think about hypomnesic objects not as a mere consequence of the finitude of our retentive aptitudes, but as a symptom of a world where the *subject* is more of a *reject*, rather than an agent, of the milieu in which he or she evolves? In questioning the proletarianization of the mind, this article considered AI systems as operating in a proliferating technosphere of pre-emptive memory retentions.

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