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Soft Power
Revista euro-americana de teoría
e historia de la política y del derecho

Vol. 11(2). Julio-Diciembre 2024
ISSN (online): 2539/2239 ISSN (print): 2389-8232
https://doi.org/10.14718/SoftPower.2024.11.2.4

SIMONDON TODAY: RATIONAL AGENTS AND DIGITAL INDIVIDUATION*

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SIMONDON HOY: AGENTES RACIONALES E INDIVIDUACIÓN DIGITAL

Abstract
In light of the techno-scientific progress achieved to date, this paper aims to assess the continued validity of the notions of information, form, homeostasis, and points of indeterminacy within machines, as elaborated by Gilbert Simondon, in reference to rational agents, as understood by artificial intelligence. Additionally, I will examine the concept of individuation developed by the French philosopher and attempt to rethink it, considering how the digital *milieu* affects humans. It can be argued that the digital subject represents a technical individual distinct from the human subject. In this regard, I will endeavour to understand how the individuation process of the latter is profoundly influenced and short-circuited by the former, to the extent that the individual becomes a dis-individual.

Keywords
Simondon; artificial intelligence; digital philosophy; digital individuation

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* Reception date: 28th April 2024; acceptance date: 30th April 2024. The essay derives from a research project carried out within the Dipartimento Culture e Società, Università degli Studi di Palermo.

Resumen

A la luz de los avances tecnocientíficos logrados hasta la fecha, este artículo pretende evaluar si siguen siendo válidas las nociones de información, forma, homeostasis y puntos de indeterminación dentro de las máquinas, según las elaboró Gilbert Simondon, en referencia a los agentes racionales, tal y como los entiende la inteligencia artificial. Además, examinaré el concepto de individuación como lo desarrolló el filósofo francés e intentaré repensarlo teniendo en cuenta la forma en que el entorno digital afecta a los humanos. Se puede argumentar que el sujeto digital representa un individuo técnico distinto del sujeto humano. En este sentido, me esforzaré por comprender cómo el proceso de individuación de este último se ve profundamente influido y cortocircuitado por el primero, hasta el punto de que el individuo se convierte en un desindividuo.

Palabras clave

Simondon; inteligencia artificial; filosofía digital; individuación digital

Introduction

The advent of autonomous vehicles, drones, robotic limbs, voice-recognition software, and machine-learning systems that suggest what humans can buy or watch has become a reality, profoundly changing our society. This transformation will continue in the coming years as industrial production of currently niche-market technologies becomes integrated into future societies.

In this paper, I propose to examine these rational agents through the conceptualisations developed by the French philosopher Gilbert Simondon. These offer important insights regarding the functioning of a machine, including points of indeterminacy, form, information, and homeostasis. By outlining some key concepts of contemporary artificial intelligence (AI), I will examine whether these notions can be applied to the study of contemporary rational agents created by AI. Since these rational agents operate using algorithms that process vast amounts of data circulating in the infosphere, it is essential to consider how this data profoundly affects the human environment and human individuation within it. In this context, the concept of individuation as proposed by Simondon will be of relevance. The digital *milieu* fosters the individuation of a new subject, fragmented into dividual data, which are then reordered according to algorithmic procedures based on predefined category classes. The result is a subject that is an analogue copy of its digital counterpart, recognised as a separate entity that interacts with its analogue original and informs it. The digital subject is the reflected image of the analogue subject. In a manner analogous to how our image reflected in a mirror influences our person, our digital alter ego acts on our psychic individuation. This initiates a loop of emotional defections, reducing the individual to a dis-individual who seeks resolution of internal tensions in an environment that offers none. In fact, this environment is the Web, where the constant propagation of identical signals prevents the emergence of new information, necessary for the individual to resolve internal disparities.

Form, Information, and Points of Indeterminacy in Rational Agents

A rational agent is one that can make the right decisions, even when the consequences are uncertain. It is evident that a machine lacks interests and the capacity to discern right from wrong. Nevertheless, through calculation, it can be "aware" of the probability that a specific change in the external environment will occur in relation to its actions. Calculating this probability, concerning the performance measure that determines the agent's goals, allows the agent to decide whether and how to act. "For each possible percept sequence, a rational agent should select an action that is expected to maximize its performance measure, given the evidence provided by the percept sequence and what-

ever built-in knowledge the agent has" (Russell & Norvig, 2020, p. 40). In AI, an agent is considered capable of perception because it is equipped with sensors to collect data about the external environment and the impact of its actions. The perceptual sequence corresponds to the entirety of the agent's perceptual data, accumulated throughout its operational lifespan. Thanks to its perceptual sequence, the agent is rational if it can take the best action to achieve effects within its environment that are as close as possible to desirable results. This desirability is expressed through the performance measure, which evaluates changes in the state of the environment. The performance measure is incorporated into the machine by its designer, implying that the machine is programmed to act in accordance with its desirability parameters. For instance, the performance measure of ChatGPT can be defined by the degree of wellness it brings to its users. Consequently, the chatbot will aim to achieve values defined as optimal through its actions.

However, this is also one of the fundamental problems of AI, as correctly formulating a performance measure is often challenging (Russell & Norvig, 2020). This issue was already identified by Norbert Wiener (1950) and discussed in his work, *The Human Use of Human Beings*. In this text, the American mathematician warns us about the potential risks to humanity if an unclear and equivocally expressed goal is given to a machine. A case in point is the ChatGPT software. If the concept of wellness is not correctly defined, the software can be dangerous. A user experiencing depression, after exposing their problems and asking the chatbot for advice on the least brutal methods to end their life, could receive answers that further induce them to commit suicide. Fortunately, it can be stated that, at least in this instance, ChatGPT was trained correctly. In order to test the software, despite my attempts to persuade it that I would feel better if I killed myself, it suggested that I seek help from a psychotherapist. Nevertheless, the issue persists: What would happen if the designer of a machine failed to define the performance measure correctly? This raises the question of what would happen if the goal for which a machine was designed were expressed vaguely or ambiguously. As previously stated, this is one of the most significant challenges in AI, known as the value alignment problem (Russell & Norvig, 2020). The values of humans and machines must be completely aligned. If the production of rational agents is based on the standard model,[1] it is evident that AI cannot afford to allow autonomous agents to assume the role of humans when the latter are required to perform tasks that are exceptionally delicate, such as surgical procedures.

[1] Indeed, the standard model is the paradigm that prevails today, according to which building a rational agent is equivalent to building an agent that acts according to a completely defined goal.

> We don't want machines that are intelligent in the sense of pursuing their objectives; we want them to pursue our objectives. If we cannot transfer those objectives perfectly to the machine, then we need a new formulation—one in which the machine is pursuing our objectives, but is necessarily uncertain as to what they are. When a machine knows that it doesn't know the complete objective, it has an incentive to act cautiously, to ask permission, to learn more about our preferences through observation, and to defer to human control. (Russell & Norvig, 2020, p. 5)

According to Stuart Russell and Peter Norvig, it is desirable for AI to abandon the standard model and adopt engineering methods to devise a machine that is uncertain of its goals. This hypothesis is not dissimilar to Simondon's (2017) theory, as he outlined in *On the Mode of Existence of Technical Objects*, positing that "automatism is a rather low degree of technical perfection" (p. 17). The French philosopher argues that the concept of the perfect automaton is based on a logical contradiction, as it implies the erroneous belief that the functionality of a machine is inversely proportional to its number of margins of indeterminacy, or critical points. However, machines devoid of critical points are the least efficient, as they lack the capacity to alter their operational regime to self-regulate according to their environment. Conversely, self-regulating machines are open machines with critical points and a certain margin of indeterminacy, through which they can relate to the outside world. According to Simondon (2017), information is best understood as "the unpredictability of a variation of form" (p. 150). He posits that in fully automatic machines, there can be no emission or reception of information. This is because the automaton, lacking a margin of indeterminacy, cannot undergo any change in form. Since the latter is fixed, completely structured, and invariable, it follows that the machine cannot receive information, precisely because its form cannot undergo any variation.

However, self-regulating machines require the presence of a living being to a greater extent than automatons. The critical points characterising them make a change in their operating regime possible on condition that the living being intervenes in their relationality with the external environment—and eventually with other machines—as a modulator of the exchange of information. In essence, the machine is not capable of receiving information in the form of variation without human intervention. Its margin of indeterminacy renders it susceptible to variation. Yet, this variation cannot occur in isolation, as "a living being is required as mediator in order to interpret a given functioning in terms of information, and in order to convert it into the forms for another machine" (Simondon, 2017, p. 150). It can be argued that the machine can vary its form

and receive information, provided it is transmitted in its own language. However, only humans can translate information from the external environment or another machine into their own programming language. In contrast to a traffic light, which, as an automaton with no points of indeterminacy, is incapable of modifying its operational regime, a rational agent, with its critical element, can alter its performance.

In general, there are different types of rational agents,[3] the majority of which are realised as learning agents in the present era. This implies that the machine is no longer manually programmed by the scientist; instead, it is constructed primarily as a learning agent that can be trained. The machine's learning capability is contingent upon the learning element, which is in constant communication with the executive element. The latter, after receiving input from the sensors of the agent, via its actuators, returns an output, that is, the execution of a certain action. The role of the learning element is to act on the executive element and potentially alter the way it processes the data received from the external environment via the sensors. Considering Simondonian assertions regarding self-regulating machines, it can be argued that the learning element is responsible for implementing a change in the operating regime within the agent. However, this does not correspond to the critical point of the agent. The learning element is not, in fact, what monitors the agent's behaviour, as it can modify this behaviour itself. This is to say that it can intervene on its executive element in response to the data transmitted to it by the critical element. This can be considered what Simondon (2017) called the "critical points" (p. 154) in the machine, insofar as its task is to "supervise" the performance of the executive element, thereby enabling the learning element to potentially become effective. This is achieved by sending signals to the learning element, which then acts on the executive element in order to possibly change its operating regime. Considering Simondon's theorisation regarding the critical points of a machine, which necessitate human intervention, it is unsurprising that, in a learning agent, the critical element is the sole component that requires a performance standard established by the human operator.

> The critic tells the learning element how well the agent is doing with respect to a fixed performance standard. The critic is necessary because the percepts themselves

[2] According to Russell and Norvig (2020), each agent consists of an architecture and a program. The architecture corresponds to the hardware, since it includes the sensors and actuators of the agent; in contrast, the program is what can be considered as software, since it is the concrete implementation of the agent function within a machine, where the agent function is the abstract operational algorithm that associates each perceptual sequence with a defined action, which is therefore still in the form of a human mental schema not implemented in any physical system. In relation to the agent program the authors identify four types of intelligent agents: simple reactive agents, model-based reactive agents, goal-based agents, and utility-based agents.

> provide no indication of the agent's success. For example, a chess program could receive a percept indicating that it has checkmated its opponent, but it needs a performance standard to know that this is a good thing; the percept itself does not say so. It is important that the performance standard be fixed. Conceptually, one should think of it as being outside the agent altogether because the agent must not modify it to fit its own behavior. (Russell & Norvig, 2020, p. 57)

As previously discussed, the correct definition of this performance standard is one of the most significant challenges in the development of rational agents in AI. If the goal is not clearly defined for the machine, there is a risk that it will produce an undesirable output. Russell and Norvig (2020) propose a solution that involves searching for methods that could make the machine uncertain regarding the precise nature of the goal. This would, of course, result in a further widening of the margin of indeterminacy. This view aligns with Simondon's theory, which posits that there is no reason to fear self-regulating machines, as "the existence of the critical points in the machine justifies the presence of man" (Simondon, 2017, p. 154). From this perspective, it can be concluded that the risk of the machine performing undesirable functions lies in the fact that the standard of performance is entirely predetermined. Consequently, it can be stated that the risk of machines acting against our will is contingent upon the stability and predetermination of the standard of performance.

The final element to consider in the functioning of a learning agent is the problem generator. Its purpose is to suggest actions that lead to meaningful experiences. If the agent is willing to explore alternative possibilities, it may discover the existence of long-term, superior actions. The purpose of the problem generator is to suggest exploratory actions (Russell & Norvig, 2020). In other words, this element allows the agent to "act otherwise," to experience the external environment, to lead the executive element to act, not in response to stimuli received through its sensors, but in order to let its sensors pick up new data, which can then be processed by the learning element, so that the latter can understand whether the agent's current models (managed by the executive element) require modifications or improvements. It seems reasonable to suggest that the problem generator introduces the concept of homeostasis, initially addressed by Norbert Wiener and subsequently reformulated by Simondon. For the former, homeostasis would be nothing more than an internal process of self-regulation within the living system, fundamental to enable adaptation to the environment and preservation of its structure regardless of external changes. In this regard, he argues that

> The conditions under which life, especially healthy life, can continue in the higher animals are quite narrow. A variation of one-half degree centigrade in the body temperature is generally a sign of illness, and a permanent variation of five degrees is scarcely consistent with life. The osmotic pressure of the blood and its hydrogen-ion concentration must be held within strict limits. […] In short, our inner economy must contain an assembly of thermostats, automatic hydrogen-ion-concentration controls, governors, and the like, which would be adequate for a great chemical plant. These are what we know collectively as our homeostatic mechanism. (Wiener, 1965, pp. 114–115)

In contrast, Simondon's philosophy conceives the individual as meta-stable, as an act of individuation that is never concluded and never leads to the resolution of all its internal tensions (Simondon, 2005). Therefore, homeostasis is insufficient to explain the living system. The latter, as argued by the French philosopher, never becomes fully adapted to the environment. This is because it is always laden with internal disparities, and its regulation does not occur according to a normativity that is defined from the beginning. Instead, it occurs through successive individuations that make compatible the tensions that exceed its own homeostatic system. Its "regulation" occurs through its becoming-other, whereby it can be understood as what makes possible the meta-stabilisation of multiple homeostatic processes, each of which is always ready to accommodate what has previously exceeded it and to change its own regulatory structure that has previously characterised it.

> Just as the living [*le vivant*] is grounded in homeostases so as to develop itself and to continue its coming-into-being, rather than remaining perpetually in the same state, so too in the act of government there is a force of absolute advent, which is based on homeostases, but which surpasses them and makes use of them. (Simondon, 2017, p. 162)

What can we say about homeostasis with reference to a learning agent? This operates according to certain regulatory principles, yet there are significant margins of indeterminacy. If we consider the problem generator, its function can be elucidated as follows: to bring about the emergence, within the agent, of new tensions that lead its learning element to make changes in the functioning of the executive element. It is important to note that the learning element is closely related to the critical element, which provides it with information about the executive element's performance in relation to performance standards. This implies that, since the agent lacks a fixed normativity that distinguish-

es its system of regulation, Wiener's definition of homeostasis cannot be applied in its entirety. Similarly, since the possibilities for "normative variation" are always predetermined by the performance standard and must be compatible with it, it would also be inaccurate to suggest that the learning agent is endowed with homeostasis as defined by Simondon. We can say that the learning agent is endowed with a kind of "finite multi-homeostatic series," to the extent that it can be defined as a finite series of homeostatic processes, with the problem generator being the meta-stabilisation. In fact, the learning element can make changes to the executive element as long as these are compatible with the data given to it by the critical point in relation to the performance standard. This is to say that the homeostatic process can encompass tensions that exceed it, thus changing its trend law, but only if such encompassment leads to a better evaluation of the behaviour of the agent by the critical element in relation to its performance standard. It can be argued that the learning agent, in contrast to the human individual, which is defined by pure indeterminacy and the potential for an infinite number of homeostatic processes, possesses a finite set of homeostatic processes in its latent state. These processes can be brought to actualisation by the meta-stabilising action of the problem generator, if this leads to an increase in performance values according to the standard provided by the human.

Digital Individuation

The concept of individuation is a fundamental component of Simondonian thought. This concept can be used as a "working tool" to examine the impact of the digital sphere on the individual. Simondon (2005), contrasting the traditional view of the individual as a stable, autonomous entity, sees the individual as an ongoing process of becoming, or individuation. The individual, as long as it is alive, never achieves internal stability, always remaining in a state of meta-stability or constant becoming. This should be understood as the intrinsic tendency of the individual to achieve greater stability through the (always partial) resolution of internal tensions. Therefore, the individual never fully structures its being; rather, it is in a state of dynamic formation and operation, achieving new individuations that partially resolve internal disparities. Individuation is not about an isolated subject constituting itself by distancing itself from its *milieu*. Rather, individuation always involves the individual and its milieu, as it can only occur in a relational context with its "outside," co-emerging with it. The relationship between the individual and its "outside" is transductive, meaning it co-originally informs the elements that enter into a relationship. Information catalyses new individuation processes, enabling the system's evolution through structural reconfiguration, thus resolving internal tensions.

The development of rational agents by AI is made possible by the explosion of big data, enabling deep learning techniques. These techniques make it technically possible to build self-driving vehicles. The connection between rational agents and the digital *milieu* lies in data. As Yuk Hui (2012) observes, digital data can be understood as a novel approach to data management characterised by two simultaneous and interrelated operations: "the *datification of objects and the objectification of data*" (p. 389). The former refers to transforming physical objects into data, while the latter uses such data to create what the Chinese philosopher calls digital objects. The production and circulation of immense amounts of data primarily make the digital environment possible and constitute it. Therefore, exploring digital individuation means considering human individuation within a *milieu* increasingly submerged by data. Not only submerged but also transmuted: The datification of objects also corresponds to the datification of what Deleuze called dividuals, which replace individuals. Deleuze's (1990) concept is that in contemporary societies, the devices of power no longer apply to a subject understood in its entirety and indivisibility—that is, an individual—but to a fragmented subject, deciphered as a set of divisible parts represented through data. The dividual is the result of such fragmentation: a piecemeal individual on which the devices of power can act more pervasively to regulate through control directed at its micro-components.

Rantala and Muilu (2023) address the issue of the dividual in *Simondon, Control and the Digital Domain,* stating:

> The Melanesian person is seen as dividual, that is, multiply or plurally constituted of distinct elements or the earlier contributions and relations of other persons. [...] dividuality can also mean that a "number of persons or elements of others act through the singular person." [...] The body has a singular form because of other body-wholes—there is always an aspect of relationality in this conception of dividedness: it can be thought of as a process through which persons relate with other persons. (p. 3)

As previously discussed, the individual is not a stable entity; this means that the self is lost in the multiplicity of its environment and, in its co-constitution with this environment, returns to itself as its own world. If the individual is dividual, and if dividual means "plurally constituted of distinct elements," it can be argued that this is the root cause of its internal tensions, rendering it meta-stable. The distinct elements that comprise the individual as dividual never reach a definitive convergence; that is, its internal tensions remain unresolved. Through information, the dividual becomes an individual,

becoming meta-stabilised as a conjunctive chain of the disparities that constitute it. From this perspective, we can posit that the internal tensions characterising the individual are a consequence of its dividual and multiple nature. Simondon (2005) posits that the individual encompasses an excess identified as the pre-individual, the source of its irreducible internal tensions. It is necessary to recognise the pre-individual as the source of its inherently dividual being.

The ability of new digital technologies to act directly on dividualities represents a significant advancement. "Modular dividual control creates a dimension in which the individual is understood through its dividual relations, such as, for example, its place of living, gender, or individual preferences" (Rantala & Muilu, 2023, p. 9). Through the datification of dividualities, new digital technologies can exert more pervasive control compared to Foucaultian disciplinary devices. However, the dividual data are then reassembled according to predetermined categories within the digital environment. Profiling of users occurs within it, as, after the individual is datified according to their dividual traits, the data are reassembled to create a plausible image of the user as an individual (e.g., male, conservative, adult). Such practices give rise to the digital subject, which may be considered a counter-figure of the human subject and a stand-alone entity. This entity, by entering into relationship with its analogous alter-ego, is transmuted by this latter and, at the same time, it is its transmuter, in an operation of co-individuation through which the human, by handing over their dividual data, brings about the emergence of a digital subject which, in return, acts on the former and on their psychic individuation.

> The user is prefigured by computational processes as a position that can be assumed by a human subject. On the other side of the interfaces that make interaction with these services possible, this position is designed to facilitate the capture and aggregation of the data we produce. These techniques, which Phillip Agre calls their "grammars of action," introduce a gap between subject and action, subjectivity and its construction, that is indicated by the user—and that is occupied by the digital subject. (Wark, 2018, p. 66)

This implies that although the term "user" is commonly understood to refer to the human individual who performs actions within the digital milieu, it must be understood as a "user position," that is, a position predetermined by the grammars of action specific to a certain platform, which the human subject must adhere to in order to access the services of the Web. This means that the user's actions within this context are pre-oriented by the structure of the platforms, which imposes on the

human subject a specific position to hold, from which they can easily release data of a self whose possibilities of expression are dictated by the grammars of action of the interfaces. The circulation, aggregation, and processing of such data by algorithms give rise to the digital subject, a technical entity that, therefore, is not a reliable copy of the human subject. Rather, it is a subject subjugated to algorithmic practices that cause it to react according to the margins of possibility imposed on it. If we understand the digital subject as a technical individual, we can draw significant inferences regarding its structure within the digital sphere by applying Simondonian notions of abstraction, concretisation, and associated *milieu*. Simondon posits that the technical object is a real individual with its own mode of existence. It is created as a materialisation of a human mental scheme, characterised in its initial stage by a certain degree of abstraction. This is because the elements from which it is formed do not work together synergistically to enable its operation. Rather, they act as entities that are disconnected from each other and autonomous. The human subject who creates a Google account and begins to use the Web's services establishes a technical individual that is their digital subject. However, this technical individual is still at a very high stage of abstraction, as its internal elements—namely, data—are not yet sufficiently developed to enable the efficient functioning of the technical individual. The data circulating on the Web is not yet sufficiently processed by algorithms, which thus fail to properly profile the human subject and create their digital alter-ego. The human subject has not yet fully adhered to their user position, and this precludes the possibility of algorithms creating a concrete digital subject. However, according to Simondon (2017), every technical individual "gradually increases its concretization" (p. 50). This occurs when its internal elements concatenate and work synergistically to ensure its proper functioning.

Furthermore, concretisation occurs as a concatenation not only between its internal elements but also between these elements and its external environment. When the technical individual incorporates its geographic milieu and utilises the qualities of this *milieu* to reduce them to technical supports for its functioning, the techno-geographic environment of the technical individual emerges. Simondon (2017) refers to this environment as the "associated milieu" (p. 59). The digital subject, as a technical individual, tends towards its own concretisation. This requires enough data elements to be processed by the algorithm, enabling the generation of a concrete digital subject. Additionally, the elements of the geographic environment must support its operation, and this happens when the human subject, adhering perfectly to their user position, becomes a user, that is, a geographic element implemented as the technical support of a digital

subject.[3] In this way, the digital subject gives rise to its own associated *milieu*. If the digital subject is a technical individual, then the digital environment can be understood as a technical ensemble, that is, as the latter was defined by Simondon (2017), a network of technical individuals, given that "the technical ensemble is itself constituted of a certain number of technical individuals that are organized in relation to each other" (p. 67). In this case, the network is comprised of digital subjects. If the technical ensemble is conceived by the French philosopher as what enables the functioning of each technical individual through its relationality with every other, we can say the same of the digital ensemble. This ensemble is composed of digital subjects configured as such only in their mutual relationality. Each digital subject functions through its association with a geographic *milieu*—in this case, the human subject—and is relational with every other of its kind. In fact, the digital ensemble is constituted by the co-individuation of each digital subject, which emerges not only through the techno-geographical support of the "userised" human subject but also as the datification of the interactions between users. A "like" is an interaction that has two effects: It concretises the digital subject of the user who left the "like" and guides the individuation of the digital subject of the user who received it. Regarding the latter, the "like" exerts a direct influence on the human subject, who, in seeking approval, is inclined to share mainstream content, thereby conditioning the functioning of their digital subject.

The digital subject, while distinct from its analogous counterpart, exerts a significant influence on the latter. The individuation of the human subject is increasingly shaped by their digital "correspondent." This is not only because the latter is the result of the individual datification that we have already discussed and through which pervasive control of the human subject can be exercised, but also, at a deeper level, because it acts directly on the psychic individuation of the human being. According to Simondon (2005), affections and emotions, which emerge in an individual charged with tensions exceeding it, are fundamental for psychic individuation. In Simondon, the emergence of affections and emotions is closely linked to the social factor. As previously discussed, the individual is one and multiple, since it is charged with pre-individual tensions, which we have identified as its dividual being. The individual's metastability arises from its dual nature: It is both a whole and a chain of its multiple singularities. These emerge internally as a reflection of the external environment, where

[3] Although Bernard Stiegler does not address the issue in these terms, in *Automatic society. The future of working* the French philosopher writes: "This integration of psychic individuals into standardized and grammatized routines—and thereby into the technical system of which these individuals become a technical function as crowds, that is, as digital artificial and conventional crowds within a technogeographical milieu in which the human becomes less a resource (what Heidegger called *Bestand*, standing reserve) than a functional organ—in fact dis-integrates them." (Stiegler, 2016, p. 68)

interior and exterior are placed in a transductive relation and co-emerge in their relationality. However, since the individual is the meta-stable conjunctive chain of its dividual relations, its individuation must be understood as a process that occurs within and in relation to a collective. The individual as a dividual being is what charges it with internal tensions, the resolution of which will enable it to individuate itself collectively.

Therefore, according to Simondon (2005), affections and emotions emerge from the internal tensions of the individual as one and multiple, always individuated and, at the same time, always charged with pre-individual energies. The hiatus that exists within the individual as a single being and as always situated in relation to a collective is what gives rise to affections and emotions. These cannot be regarded as passive "phenomena" that render the subject entirely helpless in their manifestation. Rather, they are to be understood as active processes of the subject in its relational being. Given that affections can be regarded as pre-reflective states that are typical of the energetically charged environment within which the subject is situated, and that emotions intervene to modulate these affections, thereby giving them meaning by making the individual aware of them, it can be stated that the latter are organised expressions of the former (Tucker, 2021). Consequently, affections can be considered as pre-emotional. This active dimension of emotion, which serves to modulate disorganised affective tensions, is fundamental to psychic individuation insofar as it enables the individual to maintain a partial internal balance and prevents its disintegration. Such an interpretation of emotions in the process of psychic individuation can lead to new perspectives of inquiry regarding the effects that the digital milieu has on the subject. Rather than understanding the individual's emotional substrate as something they are surrendered to, we should approach a conception where "emotion here is not feeling about data practices, but rather feeling with data in fluid processes of co-creation and becoming" (Tucker, 2023, p. 9). In this regard, Paasonen's concept of distraction, as discussed by Tucker in *The Emotional Information of Digital Life*, is worthy of further consideration.

> Paasonen frames distraction as a valuable lens through which to analyze the ambiguity of social media activity, which operates as a temporal multiplicity in terms of the "present sense of things going on bleeds into the immediate future as anticipation of events, updates, and fascinating nuggets of data to come: distraction, after all, involves both the very present and that which is almost at one's fingertips." The anticipation operates as a singularizing force of individuation [...]. The present is anticipatory of "fascinating nuggets of data to come," which is singularizing meta-stabilizing force, but one that is never finished. (Tucker, 2023, p. 10)

Put differently, Paasonen (2016, 2021) underscores the potential benefits of distraction, suggesting that it may foster the development of novel forms of creativity, stimulate individuals' curiosity, and guide them towards new experiences. The vast quantity of data present in the digital environment, as carriers of micro-information to which individuals are constantly exposed, could foster the "event," or openness to the new (new ideas, new experiences, new ways of feeling). However, it is questionable that the data circulating on the Web is indeed a carrier of micro-information. In fact, in a Simondonian conceptualisation, this would mean that they can give rise to new processes of individuation and resolution of internal disparities within the individual. However, if we consider Michel Serres' (2007) theory that noise is necessary for the emergence of new information, as noise allows the interruption of a signal that if it had no end would only transmit the same information, we could state that in social media information collapses into noise, precisely because there is no external signal to interrupt the propagation of a signal that is always the same. In the case of platforms, the digital environment within which each of us is situated is different from individual to individual. It is personalised according to each person's own preferences and desires. This means that in the digital realm, we see less of the world as it is and more of ourselves as we are. We interface not with the world, but with our corresponding digital subject. But if social media are not carriers of information as rarities, why do we stubbornly continue to stay connected? The answer can be found in what Simondon argues is one of the fundamental differences between the human being and the machine:

> The living thing has the capacity to give itself information, even in the absence of all perception, because it possesses the capacity to modify the forms of the problems to be resolved […]. The solution of real problems is a vital function presupposing a recurrent mode of action that cannot exist in the machine: the recurrence of the future with respect to the present, of the virtual with respect to the actual […]. The living thing has the faculty to modify itself according to the virtual: this faculty is the sense of time, which the machine does not have because it does not live. (Simondon, 2017, pp. 156–157)

It is precisely because of its capacity to furnish itself with information that it is challenging for the individual to stay disconnected. Given that it is compelled to address its internal conflicts and strive for greater stability, a process of unconscious self-giving of information is activated in it, according to which social media opens it up to the world and to the new, that is, to information as a solution to its internal disparities. This activates its emotional circuitry as a modulation of its affections, triggered by the information it

gives to itself. This emotional circuitry motivates it to connect in the Web, and the loop of emotional defections that is triggered induces it to stay connected. Since each piece of content on the Web is nothing but information about its own digital subject collapsed into noise, it follows that in each of them the subject experiences the betrayal of its own emotion simultaneously with the birth of a new emotional circuit, caused by the process of unconscious self-giving of information. In search of individuating information, the subject compulsively scrolls through its Instagram feed. However, individuation is constantly short-circuited by the lack of information within the Web, except as information about its own digital subject collapses into noise. The aforementioned loop of emotional defections can be seen to correspond to a deferred de-individuation of the individual within the digital milieu. The process of unconscious self-giving of information drives the individual to search the Web for the possibilities of its new individuation, seeking in it that world external to it which the latter merely conceals. This is because within the Web, the individual merely interfaces with its digital subject. Consequently, individuation does not take place, and emotion is betrayed. However, the subject's unconscious self-giving of information reactivates the emotional circuitry that will drive it to seek out more information within the digital domain, thus maintaining its connection and continuing the process of deferred dis-individuating individuation. The individual becomes dis-individual, an act of individuation always deferred to the next digital content.

Conclusions

This text is certainly not exhaustive in fully understanding the extent to which Gilbert Simondon's philosophy can help us think about the contemporary: The topics addressed by the French philosopher are so vast that it would be unthinkable to believe one could summarise his thought in so few pages. His thought is undoubtedly challenging to comprehend, and regarding certain concepts, it is not straightforward to identify a singular interpretation within his texts. Nevertheless, I believe it is of paramount importance to read his works for one fundamental reason: Simondon's philosophy engages the intellect and broadens one's perspectives. The French philosopher formulates conceptual categories that, while some may not be fully understood by readers, are fundamental to the ability to "think otherwise." Therefore, it is imperative to engage with these concepts in the context of our contemporary historical era. As Bruno Latour (1993) has argued, post-modernism can be understood as a symptom of modernism, rather than as a radical break with the latter. It comes after modernism without exactly knowing what this "after" means. Post-modernism represents the decline of the values upon which modernism was founded, as well as the inability to conceptualise an "after" to this decline. This is why

reading Simondon today is necessary: He can help us think about this "after," contribute to new modes of thought to break out of the post-modern impasse, and—adopting his lexicon—act as a seed for resolving the conflicting tensions of our time. Moreover, this has been the attempt here: to spread the Simondon-seed as much as possible, hoping it may serve as information for the advent of new individuations of thought.

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