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ORIGINAL ARTICLE

The Internet as a Heideggerian paradigm of modern technology: an argument against mythinformation

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Abstract
From the perspective of Martin Heidegger's philosophy of technology, the Internet qualifies as a paradigm of modern technology, for it possesses all its essential properties to a very high degree: the setting-upon, the challenging revealing, the revealing of what-is as standing-reserve, and a multiple concealment. This article is dedicated to proving the truth of this statement through an analysis of the way in which the Internet satisfies in an exemplary way these properties of the essence of modern technology. Among the possible corollaries of this analysis, we will focus on showing how it constitutes an argument against mythinformation philosophies such as Sloterdijk's, as we show that the Internet is not governed by an alleged non-dominant, dialogical, and cooperative operativity.

Keywords Internet · Martin Heidegger · Metaphysics · Mythinformation · Philosophy of technology

1 Introduction

The Internet has been the topic of multiple philosophical reflections since its beginning (Aspray and Ceruzzi 2008; Battelle 2005; Carr 2010; Drahos and Braithwaite 2002; Feenberg and Freisen 2012; Floridi 1997; Pariser 2011; Pasquale 2015). Given the fact that Martin Heidegger is one of the main philosophers of technology of the last century, one would expect that the bibliography dedicated to thinking about the Internet from his perspective is abundant. However, it is scarce (Cass 1998; Dreyfus 2009; Gutiérrez 2012; Harmon 2012; Ladly 2007; Mitchell 2015), and it is usually focused in thinking about specific aspects of the Internet. Therefore, there is a gap to fill in the literature: thinking of the Internet in its entirety as an instance of modern technology from a Heideggerian point of view. This is the objective of this paper.

Our thesis, however, is not that the Internet is just any instance of modern technology, but that it is a *paradigmatic* instance. Understanding this term in its Greek etymological meaning and within Aristotelian logic, which is how Heidegger himself would do it, a paradigm is a very clear example of a species that serves as a model. This means that the essential properties of this species are present in the paradigm in a remarkable way. To demonstrate our thesis, we will therefore have to state the essential properties of modern technology and then show their superlative presence on the Internet.

As a starting point, we take for granted that the essential properties of modern technology according to Heidegger are as follows—readers unfamiliar with Heidegger should not worry, because we will explain them later using an accessible language. First, it is a mode of revealing (*Entbergen*) that performs a setting-upon (*Stellen*). Second, it is a challenging (*Herausfordern*) revealing that violently demands the presence of what-is (*Seiende*) without waiting and without uncertainty, which is different from the revealing of traditional technology. Third, the standing-reserve (*Bestand*) is its relative mode of appearing of what-is, which means that what-is appears or presences (*anwesen*) as available reserve to be exploited. And fourth, it produces a multiple concealment (*Verborgenheit*).

It could be argued that this list should also include—possibly even above all—Enframing (*Ge-stell*), since Heidegger himself points out that Enframing is the essence (*Wesen*) of modern technology (GA 7, 24). However, we mean essence in the classic sense of *quidditas*, i.e., the set of properties that make something being what it is, while Heidegger clarifies that, when he states that Enframing is

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the essence of modern technology, the essence should be understood as a mode of revealing that has the character of a destining of Being (*das Ge-stell ist eine geschickhafte Weise des Entbergens*) (GA 7, 30). In Heidegger's metaphysics, Being is temporal, and its temporality is divided into periods that establish the mode in which what-is must appear. In modern times, the dominant mode of revealing is Enframing, and the mode of appearing of what-is is the standing-reserve. Enframing and destining are two key concepts that will appear throughout our speech.

Within the vast amplitude of the Internet, we will refer only to its daily use by most people. Although the Internet has a wide variety of applications, such as scientific, financial, and military, we are not interested in those specialized uses but in the most common ones: search engines (Google, Bing), movie and music streaming services (Netflix, Disney, Spotify, Apple Music), online stores (Amazon, Rakuten, Alibaba), social networks (Facebook, Instagram, Twitter, TikTok), messaging applications (WhatsApp, Messenger), online videogames (*Animal Crossing: New Horizons*, *League of Legends*), etc. To make our exposition clear, we will often mention some of these names.

The value of this work is twofold. First, from a hermeneutical point of view, it proposes an understanding of the Internet as a whole from a Heideggerian approach to guide further research on the parts. Second, it constitutes an argument against *mythinformation*—i.e., those discourses that appraise the Internet as a technology that will improve human life as it overcomes the oppressive subject-object domination scheme of modern metaphysics. Modern metaphysics is a metaphysics of domination, as can be seen in Descartes, who conceives what-is as an object, that is, as something opposite to the subject that can and must be dominated by the latter through science and technology (AT VI, 61). Modern technology, as we are going to see according to Heidegger, moves within the coordinates of this metaphysics. It is therefore a technology of domination.

What supporters of mythinformation hold—and we will argue against—is that the Internet does not operate within the domination scheme of modern technology. On the contrary, they appraise it as *the great equalizer*. Langdon Winner (1989) defines mythinformation as "the almost religious conviction that a widespread adoption of computers and communications systems along with easy access to electronic information will automatically produce a better world for human living" (105). Within this trend of the last decades, we will particularly discuss Sloterdijk's (2017) position. By proving that the Internet is a paradigmatic modern technology, we will show why mythinformation claims such as Sloterdijk's are false: the Internet does not overcome the logic of domination of modern technology, but operates within in a paradigmatic way.

One last preliminary note. We will provide references to Heidegger's *Gesamtausgabe* as "(GA)," which is the scholarly way of citing him. However, when available, we will use William Lovitt's translation (Heidegger 2013), for it is the canonical text in English.

2 Setting-upon

The usual representation of technology, says Heidegger, is anthropological and instrumental. Thus, technology is seen as a human activity that serves as a means to achieve ends (GA 7, 7). Although this representation is correct, Heidegger claims that it does not reveal the essence of technology, for it remains on the mere surface of what technology is. The essence of technology is to be *a mode of revealing* (*eine Weise des Entbergens*) (GA 7, 14). Technology reveals what-is, and therefore is a form of *truth* (*Wahrheit*), because truth, before correspondence (*adequatio*), is revealing, since there is no correspondence without a previous revealing (GA 14, 86). Applied to the Internet, this means that it is not a mere tool but a way of looking at things. In fact, one of its most salient features is the wide set of things it reveals: movies (Netflix), music (Spotify), social relationships (Facebook), all kinds of material goods (Amazon), etc. In comparison, the hydroelectric plant used by Heidegger as a symbol of modern technology reveals only the river.

Now, modern science and technology do not reveal what-is in its Being, because they do perform a *setting-up* or *setting-upon* (*Stellen*) what-is. Heidegger says on the setting-upon of technology: "The air is now set upon to wield nitrogen, the earth to yield ore, ore to yield uranium, for example; uranium is set upon to yield atomic energy" (GA 7, 16). He also writes on the setting-upon of science: "Science sets upon the real. It orders it into place to the end that at any given time the real will exhibit itself as an interacting network, i.e., in surveyable series of related causes" (GA 7, 50). This setting-upon (*Stellen*) is a setting-upon before (*vor*) a subject that acts as the normative realm of the presencing of what is revealed. It is, therefore, *to represent* (*vor-stellen*) (GA 5, 91). The representing of everything as referred to the subject can be clearly seen in technology. The hydroelectric plant represents the river as an energy source to satisfy human needs. The same can be said of the Internet: it represents everything from an instrumental and anthropocentric point of view.

On the representing of science he adds: "The all-decisive work that such representing performs in every science is that refining (*Bearbeitung*) of the real which first in any way at all expressly works the real out into an objectness through which everything real is recast in advance into a diversity of objects for the entrapping securing" (GA 7, 50). The *objectness* (*Gegenständigkeit*) is the mode of presencing of the

object, which is the way in which what-is appears to the subject in modern metaphysics. Modern metaphysics, as seen clearly in Descartes, turns the human being into *the* subject of all that is, "the relational center of that which is as such" (GA 5, 88), while what-is is interpreted as *object* (*Gegen-stand*)—i.e., what is or stands opposite (*gegen*) to the subject. However, as we have just pointed out, when in front of the subject, the object is configured by the subject, so it does not appear in its Being but as a convenient representation. The Being of what-is is sought and found in its representedness (*Vorgestelltheit*) for the subject (GA 5, 90). The objectness of a science, therefore, is the way of appearing of what-is in that science.

In the hydroelectric plant example, the objectness would be that of physics, which represents the river in terms of pressure, temperature, volume, etc. The Internet belongs to computer science, so its objectness is *information*. Now, information is a term with several possible meanings (Floridi 2009, 2010, 2013). Many of them apply to the Internet, but from the standpoint of computer science, information must be defined as in *The Mathematical Theory of Communication* (MTC) (Shannon and Weaver 1949). Indeed, this is how Heidegger understands information in the 1967 preface to *Pathmarks* (*Wegmarken*) (GA 9, x).

However, information in the MTC sense is not the mode in which what is revealed by the Internet appears to the ordinary subject. Information thus understood lacks semantics (Shannon and Weaver 1949), while for the ordinary subject what is revealed by the Internet appears with semantics. Therefore, it should be noted that MTC information is the objectness with which the Internet operates *internally*. The mode in which what is revealed by the Internet appears to the ordinary subject is the *standing-reserve* (*Bestand*), a concept that refers to a mode of appearing of what-is in which it is revealed as available to be exploited (GA 7, 17). It could be argued that the Internet reveals what-is to the ordinary subject as information in another of the multiple senses of the term, for example, as a communicative expression with an operational and functional nature far from reflection (Ellul 1988). However, from Heidegger's phenomenological point of view, that would not be the mode in which what-is appears on the Internet in an *original* way. The original mode of appearing of what-is on the Internet is the standing-reserve, while appearing as information would be a derivative mode, for it requires a thematization.

As the internal objectness of the Internet, MTC information is special because of its *plasticity* to represent what-is. Its mathematical nature does not mean that it can only convey the mathematical representations of science and technology, but that it is capable of representing everything that can be expressed in a mathematical form. The principle commonly attributed to Galileo that inspires the Modern Age rules here: measure what can be measured and make measurable what cannot (Kleinert 2009). The most noticeable consequence is the steady expansion of what is represented as MTC information. This phenomenon is known as *datification*: our machine civilization tends to represent everything as MTC information, from personal data to the printed works inherited from previous generations through endeavors such as the Library Project, with which Google intends to digitize as many books as possible to turn them into standing-reserve on the Internet. In the words of Luciano Floridi (2013), the *infosphere* is absorbing everything.

In summary, the Internet is a mode of revealing that does not show what-is in its Being, but represents it as information in a mathematical sense, which is a way of representing that stands out for its flexibility. Therefore, the Internet has the first essential property of modern technology: revealing through a setting-upon or representing. Next, we are going to see that the revealing of modern technology, and thus of the Internet, is a challenging, and so it is different from that of traditional technology.

3 Challenging

Technology, beyond its anthropological and instrumental representation, is a mode of revealing (GA 7, 13). Now, there is an important difference between the revealing of traditional technology and that of modern technology. Traditional technology reveals by *bringing forth* or *producing* (*Her-vor-bringen*), which is also the mode in which nature (φύσις) reveals itself. Producing comes from the Latin *pro-ducere*, which means to bring (*ducere*) forward (*pro*). The expression used by Heidegger in German retains this articulation of meanings: *Her-vor-bringen*, "here-forward-bringing." This revealing as producing, proper of traditional technology, has two main differentiating properties with respect to the revealing of modern technology: waiting and uncertainty. On the other hand, the mode of revealing of modern technology is a *challenging* (*Herausfordern*). Heidegger uses the term *Herausfordern*, which means "here-out-demand." *Fordern* is to demand, to claim. However, it is more than that, because it has one of those resonances so typical in Heidegger's philosophizing style: it resonates *fördern*, with dieresis, which means to explode, to extract. Therefore, challenging is *demanding* that what-is appears to be *exploited*, without waiting and without uncertainty: what is revealed must appear according to the entrapping and securing of the calculation.

The difference between traditional and modern technology regarding their modes of revealing can be clearly grasped around the river example. Both the old water mill and the modern hydroelectric plant make us look at the river as an energy source. So far, they coincide. However, the

old water mill implies waiting for the uncertain happening of fast flows, while the modern hydroelectric plant extracts stored energy (GA 7, 15). Modern technology does not accept waiting or uncertainty, because it does not "ask for" anything. On the contrary, it challenges, provokes, extracts with violence, and does whatever it takes to achieve such a dominance, including the destruction of a whole natural landscape, the drowning of towns, and the displacement of human populations.

The revealing of the Internet is a challenging in a paradigmatic degree. A good way to appreciate this is by observing how the revealing of traditional media has evolved from producing to challenging. Let us think of television, the most important media of the last century—histories of the printing press or the radio are similar. In the beginning, television offered a few channels, contents were set by the companies or public authorities that managed them, and a time and a place were imposed on the viewer (Prior 2007). Therefore, television consumption resembled traditional pro-duction or bringing forth: the viewer had to sit in front of a device situated in a specific place, at a specific time, for something to appear. Furthermore, the appearance was not assured, because a simple storm or some breaking news could cancel it. There was some waiting and uncertainty.

However, television evolved, and it did so in a direction that increased the challenging demanded by a spectator challenged to it by the destining of Being. Plenty of channels were added; the remote control became a standard; portable receivers were introduced; then domestic VCR devices, videoclubs, and the most revealing innovation of all: *video on demand* (VOD). In German, its name is *Video auf Anforderung*, an expression that reveals that it is a challenging: *Anforderung* and *Herausfordern* share the root *fordern* (to demand, to claim). Consumption on demand is the norm of our time, and it is because of the holding sway of Enframing (*Ge-stell*) as the destining (*Geschick*) of Being. Videoclubs were very successful from the 1980s until the early 2000s because, unlike television broadcasts, they allowed consumption on demand. Its fall was due to the emergence of a consumption mode in which the challenging is even greater: the Internet.

What is challenged on the Internet can be classified into two categories: what can be transformed into MTC information, and what cannot. For challenging the first, search engines are the main gateway, and among them, Google holds sway—so much, that "to google" is a common verb. Thus, Google's public statement of objectives is enlightening on this issue: "Google's corporate mission is to organize the world's information and make it universally accessible and useful." This organization is the above-explained setting-upon (*Stellen*) performed by science and technology, and the thing upon which is set is not the world's information but *the world as information*, that is, as a representation (*Vorstellung*) through the already explained internal objectness (*Gegenständigkeit*) of MTC information. The setting-upon performed by Google on the setting-upon over a growing extension of the world represented as information enables the challenging in a maximum degree, for the demand is fulfilled in a way that tends to remove any waiting or uncertainty.

As for what cannot be transformed into MTC information, the Internet also reveals it with a paradigmatic degree of challenging. Companies like Amazon are to these physical entities what Google is to information. Their challenging is maximum: they set before (*vor-stellen*) the subject a huge range of commodities represented and classified according to multiple automated and customizable criteria. No traditional retailer offers anything similar. Into the bargain, the product is delivered in the place demanded by the buyer in a minimum amount of time. Additionally, if it can be transformed into information, then a preview is often offered in digital format until delivery, as Amazon usually does with physical books. Again, the demand is fulfilled with minimum waiting and uncertainty.

In summary, the Internet reveals what-is by representing it through the objectness of MTC information with a paradigmatic degree of challenging, which poses a challenge for traditional media and retailers. The revealing performed by the Internet holds sway thanks to the plasticity of the MTC information to represent a growing extension of what-is and to the high challenging it provides. Next, we are going to see the third essential property of modern technology: the standing-reserve as the mode of appearing of what-is.

4 Standing-reserve

Where the challenging revealing of what-is performed by modern technology holds sway, what-is appears as *standing-reserve* (*Bestand*) (GA 7, 17). *Bestand* is also usually translated as supply or stock, in the sense of what is waiting to be exploited. To understand this concept, it is necessary to pay attention to its root in German and its relation to the term used by Heidegger to refer to the object, which is not *Objekt* but *Gegenstand*. Modern metaphysics, remember, interprets what-is as an object (*Gegenstand*), that is, as that which stands (*stehen*) opposite (*gegen*) to the subject. There is opposition, resistance. This resistance is what technology removes, so what-is becomes available to the subject: its mode of appearing is the standing-reserve (*Be-stand*). Heidegger gives the example of the airliner on the runway (GA 7, 17). It can be interpreted as an object, but then it is concealed in what it is—a machine *available* to ensure transportation. However, the turning of the object into standing-reserve does not mean that the subject-object relationship vanishes. Actually, it reaches "its most extreme dominance"

(GA 7, 55). The setting-upon (*Stellen*) of modern science and technology ensures what-is to a maximum degree, and by doing so, it fulfills the modern aspiration to determine what-is from the subject as the relational center.

To appreciate how what is revealed by the Internet appears as standing-reserve, let us see, for example, how the motion picture moved from theaters to the Internet. The motion picture screened in theaters imposed a time, a place, and even a dress code. Television increased availability by bringing the movie to the viewer's own living room. The videotape further increased availability, allowing the subject to even violate its temporal unfolding. Finally, the Internet is the end of the motion picture, and of the artwork in general, as long as it performs its annihilation as a mode of revealing to be reduced to standing-reserve. This is because the artwork, Heidegger claims, to perform its own mode of revealing—which might be essential to guard ourselves against the danger of the holding sway of Enframing (*Ge-stell*) (GA 7, 35)—requires conditions that the modern human being, challenged to challenge, is not willing to accept, as they imply a limitation of control contrary to the current destining of Being.

We would like to mention here a vivid example suggested to us to illustrate how the artwork is turned into standing-reserve by the Internet. In April 2020, two of the world's most important museums—Getty and MET—made many of their masterpieces available within Nintendo's popular videogame *Animal Crossing: New Horizons* (Crow 2020). Cézanne, Monet, and Van Gogh were turned into digital standing-reserve that players could use to decorate the walls of a videogame's virtual world. The low resolution supported by Nintendo's console did not allow to truly appreciate the paintings at all. Yet, this was irrelevant, because they were not meant to be *contemplated*; standing-reserves are meant to be *exploited*. When Heidegger contemplates one of Van Gogh's paintings of peasant boots (GA 5, 18), he finds there important philosophical questions. When the same painting is taken by Nintendo from the place where it can perform its revealing, then it is no longer an artwork but standing-reserve to embellish a videogame.

However, even when the human being submits to the conditions of time, space, and form of the artwork, it is possible that it does not perform its revealing either. The reason is found in a Heideggerian reading of Horkheimer and Adorno's (2002) criticism of the cultural industry: the Hollywood film is always the same to *assure with certainty* to the viewer that what is going to appear is what he or she expects. In the art of our time, the goal is to fulfill the *calculation*—as it happens in modern science and technology, whose success is measured by the fulfillment of the calculation. Here, we must understand calculation, says Heidegger, in an essential sense that goes beyond the mathematical operation: "It means: to reckon with something, i.e., to take it into account; to reckon on something, i.e., to set it up as an object of expectation" (GA 7, 52). When we understand calculation in this sense, then we discover that its fulfillment is the hegemonic goal of all human doing in modernity, including art, which is no longer authentic art, but a product designed to fulfill calculations—of the consumer, of the exhibitor, of the industry, etc. There is no place for the unforeseen in the planned world of the organized humankind to which Heidegger refers in the above-mentioned text of *Pathmarks* (GA 9, x).

In addition to the artwork, the human being is also revealed as standing-reserve by the Internet. When dragged by the destining of Being to the metaphysics of modernity, the human being becomes the subject, but at the same time, we turn ourselves into objects that must be set upon to be secured, governed, and exploited. Thus, it is possible to talk about *human resources* (GA 7, 18). Although Heidegger did not elaborate a political philosophy, the truth is that, as Pöggeler (1974) points out, in his work there is a significant presence of political ideas, and this is one of them. Heidegger observes that in our time human beings have turned themselves into mere supplies (Esquirol 2011, 57).

The appearance of the human being as standing-reserve on the Internet can be grasped in several phenomena. A main one links to the already explained ongoing massive datification: Internet users, thanks to the behavioral trails we leave when navigating, are revealed as MTC information by governments, large digital companies, and data brokers. In recent decades, a profitable industry has emerged around these practices (Hoofnagle 2003; Kuempel 2016; Llorca and Cano 2016; Pasquale 2015; Roderick 2014; Zuboff 2019).

Shoshana Zuboff is one of the world's most renowned scholars on this issue. She claims that we are witnessing the birth of a new kind of capitalism: *surveillance capitalism*. Its typical action pattern can be summarized in four steps (Zuboff 2019, 93–96). First, large Internet companies, such as Google, Facebook, and Microsoft, claim ownership over the behavioral data generated by users when we use their software or even when we simply surf the web or take pictures with *our* smartphones; they keep track of as much of our behavior as possible. Second, they use the most advanced artificial intelligence technologies to process the vast amounts of raw behavioral data extracted from us. Third, the outcome of such processing is *prediction products*; that is, predictions about our future behavior inferred from our past behavior. Fourth, they sell these predictions to advertisers, who are willing to pay for placing their messages when it is more likely that we will buy what they sell. In this way, we are calculated and manipulated, like movies and rivers, to yield a calculated outcome—see, for example, the scandals of Cambridge Analytica (Kanakia, Shenoy, and Shah 2019) and the social engineering experiment carried out in 2014 by Facebook and researchers at Cornell University (Kramer, Guillory, and Hancock 2014).

As we said above, the infosphere tends to absorb everything. Thus, the ultimate consequence is a scenario in which a few large Internet companies and their fellow governments are increasingly shaping our minds, just like the mine's ore or the river's water are shaped to be exploited.

Although its commercial nature is relatively new, the appearing of the human being as MTC information already has some history. Following engineer and philosopher Joseph Weizenbaum (1976), we can point out the years immediately after World War II as a key time period when the growth and complexity of the bureaucracy threatened the United States with collapsing the system and, consequently, mobilizing the people to look for new forms of social organization alternative to the existing centralized control. At that time, as Bustamante (1993) says, computers emerged as an instrument to perform *a revolution without revolution*, that is, a deep transformation of society to prevent the occurrence of genuinely revolutionary changes related to the political and moral orders. Weizenbaum (1976) sums it up as follows: "Yes, the computer did arrive 'just in time'. But in time for what? In time to save—and save very nearly intact, indeed, to entrench and stabilize—social and political structures that otherwise might have been either radically renovated or allowed to totter under the demands that were sure to be made on them. The computer, then, was used to conserve America's social and political institutions. It buttressed them and immunized them, at least temporarily, against enormous pressures for change" (31).

In summary, the Internet reveals what-is as standing-reserve, as is proper of modern technology, according to Heidegger. From the artwork to the human being, everything is calculated and manipulated to yield an outcome. This way of relating to the world is all the more worrying the more our lives move into the online realm.

5 Concealment

The last essential property of modern technology that we consider here, for it is present in the Internet in a paradigmatic way, is the *multiple concealment* (*Verborgenheit*): it conceals its own Being as a mode of revealing, conceals other modes of revealing, conceals other modes of appearing of what-is, conceals the Being of the human being, and conceals the forgotten Being. Due to the limited extension of this work, we will examine with detail only the fourth concealment, about the Being of the human being.

5.1 First concealment

The Internet conceals its own Being as a mode of revealing (GA 7, 28). The common representation of technology proves this statement. As we have already said, this representation is anthropological and instrumental; that is, it conceives technology as an instrument of the human being to display means to reach goals. Such is the common way of representing the Internet. Proof of this is that the reaction of governments and societies to the challenges posed by the Internet—phishing, grooming, sexting, etc.—is to come up with behavioral formulas to incorporate this tool while avoiding the dangers it involves, similarly to how drivers are warned by government advertising campaigns of the dangers of misusing the automobile. This is the common way of thinking about technology: as a human-controlled and neutral instrument regarding moral values, whose only intrinsic value is efficiency, which is of a formal nature and therefore can be used for good and evil purposes (Feenberg 2014). Heidegger does not share such a common vision, but instead goes beyond to reveal technology as a mode of revealing.

5.2 Second concealment

The Internet conceals other modes of revealing (GA 7, 28). Modern technology, says Heidegger, especially hides the mode of revealing of the artwork. We have already seen how the artwork appears on the Internet as mere standing-reserve, therefore incapable of performing its special mode of revealing. The destining (*Geschick*) of Being in our time is Enframing (*Ge-stell*), and the human being cannot avoid this destining. Thus, the human being, challenged to challenge by Enframing, will tend to reject the artwork in its authentic Being, and the artwork will appear as standing-reserve.

5.3 Third concealment

The Internet conceals other modes of appearing of what-is. As the challenging revealing holds sway, the standing-reserve is the holding sway mode of appearing of what-is. For example, Hölderlin's hymn on the Rhine, says Heidegger, could reveal the river differently than the hydroelectric plant does (GA 7, 17). However, poetry, and the arts in general, does not satisfy the control imperative of Enframing. This imperative is imposed on us by the destining of Being, says Heidegger, and we cannot control the Being, because we are always already in the Being.

5.4 Fourth concealment

The Internet conceals the Being of the human being (GA 7, 28). Our Being is hidden from us in an ordinary way due to what Heidegger calls the *fallenness* (*Verfallen*), which is the "structural deformation of the interpretation that the existence makes of itself" (Rodríguez 1987, 91). Therefore, the Internet is not the cause of the concealment of our Being but an enhancer, as is proper of every manifestation of Enframing. Our authentic Being is *to be the place of openness to*

Being (*Dasein*), says Heidegger. However, the Internet, due to its own structure and dynamics, conceals this truth as it fosters in us a mistaken interpretation of our Being made up of multiple deformations. For example, Cass (1998) shows how the Internet facilitates the three conditions of the fallenness: idle talk, curiosity, and ambiguity. To point out a different deformation, we will highlight how the Internet promotes *Being as appearing to others*.

Being as appearing is one of the main senses given by Heidegger to this enigmatic word, and Being-with-Others (*Mitsein*) is part of our ontological–existential structure. What enhances the fallenness is the unbalanced way in which the Internet promotes Being as appearing to others—note that "being with" and "being or appearing to" are different things. The Internet promotes Being as appearing to others mainly in social networks. What Zuboff (2019) says about Facebook applies to all of them: "Facebook's science and design expertise aim for a closed loop that feeds on, reinforces, and amplifies the individual user's inclination toward fusion with the group and the tendency to over-share personal information" (460). The companies behind these platforms are surveillance capitalists, which means that, as we said, they make more profit the more they know about us. Therefore, they use engineering tools such as the "Like" button to keep us connected at all times, sharing as much personal information as possible. That is, they promote Being as appearing to others, an unauthentic way of Being that keeps us stuck in a perpetual emerging adulthood (Lapsley and Woodbury 2015), a period in which the individual is not an individual yet but only a reflection of whatever others think of him or her.

5.5 Fifth concealment

The Internet conceals the forgotten Being. Again, the concealment of Being is not only caused by the Internet; its origin goes back to the dawn of Western metaphysics, according to Heidegger (GA 5, 263). It is paradoxical that the concealment of Being is a need imposed by Being itself: for the revealing of what-is, Being must be concealed. However, although the concealment of Being is unavoidable, technology reinforces it by promoting the attitude of focusing on what-is. This is why Heidegger says that technology is *accomplished metaphysics* (*vollendeten Metaphysik*) (GA 7, 78): because technology is the epitome of the historical attitude of metaphysics of focusing on what-is. The Internet, especially since the introduction of mobile devices that keep us connected at all times, calls for dealing with a growing area of what-is. This area does not correspond any longer only to the "real" world, but now also incorporates the potentially infinite new digital worlds, such as those of social networks (Facebook) and videogames (*Animal Crossing*), which try to catch our attention without a break.

In summary, the Internet can be considered as a paradigmatic instance of modern technology, for it produces the multiple concealment characteristic of the latter, according to Heidegger. The Internet is a mode of revealing but at the same time produces a concealment that keeps us away from a free relationship with what-is. Such a relationship is not possible when we do not even conceive of ourselves in our true Being.

6 Conclusion

The Internet is a Heideggerian paradigm of modern technology because it satisfies in an exemplary way its four essential properties. First, it is a mode of revealing (*Entbergen*) that performs a setting-upon (*Stellen*). We say that its setting-upon is paradigmatic for it is performed over a growing extension of what-is, such as movies (Netflix), music (Spotify), social relationships (Facebook), all kinds of material goods (Amazon), etc. Compare to the Heideggerian example of the hydroelectric plant that only sets upon the river. Second, it is a challenging (*Herausfordern*) revealing that violently demands the presence of what-is (*Seiende*) without waiting and without uncertainty, which is different from the revealing of traditional technology. We say that its challenging is paradigmatic because of the just pointed extension on which it applies, and because the demand is fulfilled in a way that tends to remove any waiting or uncertainty. See, for example, the speed and accuracy of Google's search engine or Amazon's ability to deliver thousands of different commodities in the same day. Third, the standing-reserve (*Bestand*) is its relative mode of appearing of what-is, which means that what-is appears or presences (*anwesen*) as available reserve to be exploited. We say that the standing-reserve is paradigmatic on the Internet, because it is the mode of appearing not only of usual commodities, such as food and clothes, but also of the artwork and the human being. And fourth, it produces a multiple concealment (*Verborgenheit*), among which we highlighted the concealment of our own Being.

As we said at the beginning, the value of this work is twofold. First, it fills a gap in the literature, for it is an attempt at thinking of the Internet in its entirety as an instance of modern technology from a Heideggerian point of view. Second, it constitutes an argument against mythinformation, a popular optimistic philosophical trend defined by Langdon Winner (1989) as follows: "the almost religious conviction that a widespread adoption of computers and communications systems along with easy access to electronic information will automatically produce a better world for human living" (105).

A relevant philosopher of mythinformation today is Peter Sloterdijk (2017). Mythinformation is appreciated within the

distinction he draws between two types of technologies: allotechnologies and homeotechnologies. In *allotechnologies*, "the subject-master enslaved (to the dismay of Heidegger, Frankfortians, and so many others) the slave-object as turned the world into a vast storehouse of standing-reserve" (Martorell 2013, 177). Instead, *homeotechnologies* allegedly work within a non-dominant operativity, different from that of modern technology as defined by Heidegger: "The homeotechnological era would be distinguished by the fact that in it spaces of leeway for errancy become narrower while spaces of leeway for gratification and positive association grow" (Sloterdijk 2017, 146). According to Sloterdijk, the Internet is a homeotechnology. We have called this view into question by showing that what rules on the Internet is the subject-object operativity, the setting-upon that does not allow what-is to reveal itself in its own Being, the challenging revealing that claims violent dominance over everything, the standing-reserve as the mode of appearing of what-is, and the multiple concealment proper of modern technology that conceals even our own true Being. Thus, Sloterdijk's mythinformation—and mythinformation in general—does not meet the facts.

Of course, Sloterdijk is not blind. He is aware that the Internet is indeed governed by the operativity of modern technology. The excuse he provides is that the Internet's liberating potential is being artificially repressed by businessmen and the military, who "are condemned to become intelligent earlier than others... They cannot break free from the relation of raw subject and raw material" (Sloterdijk 2017, 145). This is similar to the traditional Marxist argument that observes in mechanization a liberating potential that is being repressed by capitalism. However, there is a crucial difference between Marx's argument and Sloterdijk's that reveals the weakness of the latter: the liberating potential of mechanization depends on the difficult becoming of a large-scale social revolution, while the liberating potential of the Internet is at the users' fingertips, and yet it is rejected.

The Internet was constituted in its origins according to the *end-to-end design principle* (Van Schewick 2010), which provides a framework capable of establishing horizontal relationships, that is, free of domination—homeotechnological, in Sloterdijk's words. As Frischmann and Selinger (2018) point out: "End-to-end design insulated end-users from market-driven retrictions on access to and use of the infrastructure." However, this potential has not been realized: "In various ways and for various reasons, network owners developed tools and business strategies to circumvent the design principle" (283). The Internet has developed into a centralized structure, similar to that of traditional media such as television, radio, press, and film. Businessmen and the military can be blamed for this drift, as Sloterdijk does, or we can share the responsibility, remembering that there is a core difference between traditional media and the Internet: the former are centralized by their very technical structure, while the latter preserves the decentralizing potential of the end-to-end design principle. If this potential is not realized, it is because people reject it: they could free themselves very easily when compared to the Marxist revolution necessary to attain the liberating potential of mechanization, but they do not want to. As we have discussed elsewhere (Carabantes 2020), today, people have more means than ever to emerge from their Kantian "self-incurred immaturity," but they choose pleasure over virtue.

In sum, we have shown that the Internet operates within the metaphysical domination scheme of modern technology. It is a technology that sets upon what-is, challenges with violence, reveals as standing-reserve, and conceals several important truths. The Internet does it all in a more subtle way than the hydroelectric plant or the atomic bomb, two technologies usually cited by Heidegger to depict modern technology, both having very visible consequences that are easy to be understood by everyone. However, subtlety does not remove domination, but only makes it more insidious and even more effective. Heidegger wrote in *The Turning* (*Die Kehre*): "Where the danger is as the danger, there the saving power is already thriving also" (GA 11, 119). This means that to overcome the danger, it must be revealed as such. Therefore, the more subtle a danger is, the more difficult it is to overcome. Domination of modern technology is subtle on the Internet, and therefore, it is difficult to grasp and to overcome. By characterizing the Internet as a Heideggerian paradigm of modern technology, we hope to have contributed a little to make some of the dangers of the Internet more apparent.

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