Bernanos, Heidegger and the Redemption of Technology

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Abstract: *For Bernanos, the civilization of technology is symptomatic of a deliberate enslavement of man to the "collective owners of machines". A comparison can be made with Heidegger's analysis of the essence of technology as Enframing (Gestell), the mode according to which the real is revealed as a standing-reserve (Bestand). Like Bernanos, Heidegger points out the danger of a civilization where man cannot conceive of himself without this mode of revealing which becomes indispensable and invisible. Although the two men take a different approach, we will show that, for Heidegger and, more surprisingly for Bernanos, the civilization of technology can be saved if it recognizes the danger it faces (that of an exclusive mode of revealing) and if it rediscovers that technology takes part in an exercise of much greater scope, that of poetic art.*

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Bernanos' thinking on technology, as set out in *La liberté pour quoi faire?*[1] is original and provocative. It is provocative in that it paints a damning portrait of our "civilization of technology"; it is original in that it allows us to avoid three pitfalls, three prevailing fallacies of our time:

- An unconditional demonization of technology: technology and machines are bad in themselves; they only benefit man's selfish comfort at the expense of creation.
- A settlement for the objective neutrality: technology is neutral, amoral, neither good nor bad. It can be used for good or evil; it must simply be accompanied by ethical discernment (for example, a bioethics council) so as not to endanger humanity.
- A passive fatalism: technical progress is inevitable; we can only observe it by criticizing it. Besides, it is already a good thing to be aware of its danger.

In this respect, Bernanos' thinking is similar to that of Heidegger:[2] "so long as we represent technology as an instrument, we remain held fast in the will to master it. We press on past the essence of technology." (Heidegger, p. 32). If Heidegger sees a door to redemption in the danger itself, Bernanos seems at first sight to see no possible positive outcome for a civilization of technology. However, we want to show that Bernanos offers us a possible way out even for a man enslaved by the civilization of machines: by putting technology back in its rightful place as an exercise in contemplation and as a branch of poetic art.

For Bernanos, a civilization of technology runs the dangerous risk of enslaving humanity. What is at stake is the freedom of the individual. This freedom is threatened not by the machines themselves, but by what Bernanos calls the "collective owner of the machines" (Bernanos, 1953). Bernanos repeats several times that it is not the machines themselves that threaten our freedom: "I have no desire to return to the candle" (p. 113), "it is not about annihilating the machines" (p. 114), "it is not about destroying the machines" (p. 127). "I do not want to send the machines to Nuremberg" (p. 160). Indeed, the risk of "the enslavement of humanity" is posed as a risk of enslavement "not precisely to the machines [...] but to the collective owner of the machines". This is the answer to the first pitfall: the danger, strictly speaking, does not lie in the machines themselves. To illustrate the absurdity of the

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[1] Bernanos, G. (1953). *La Liberté, pour quoi faire?* Gallimard

[2] Heidegger, M., & Lovitt, W. (2013)

matter, Bernanos evokes the idea of a robot on wheels that would lead the troops by the hand. The place of servitude is not the machine as such, but their enjoyment by *communities*. "The advent of machines has broken the balance" between the individual and the collective.

For Bernanos, the most prominent example of this rupture is the atomic bomb. The leap is not only quantitative between the gun and the bomb (i.e., more people are killed with a bomb than with a gun) but above all qualitative: something else is done, men are disposed of differently. "The State had the guns, but it was not free to dispose of the men. The situation will be different when it controls, for example, the manufacture of atomic bombs capable of literally wiping a rebellious city off the face of the earth" (p. 35). The *possibility of extermination* is not a mere threat because it would make possible a perversion of the state. The possibility already perverts the state in that it creates an imbalance that profoundly transforms the concept of the *state* without anyone realizing it. We have here an answer to the second stumbling block: technology is not neutral, because the capacity (for example, of the bomb) can already transform the nature of the collectivity (for example, the State).

It could be argued, however, that this transformation of the state is already out of date, because despite the state's capacity for extermination, individual power has gained enormously in recent decades thanks to new developments in electronics, computers and the Internet. Through the very development of technology, the State has lost its hold in favor of individual enjoyment, greater freedom of action and expression. But, for Bernanos, the State as a machine-owning collective is merely imitating another machine-owning collective that precedes it: *speculation*.

> "Science has provided the machines, speculation has prostituted them, and it demands more and more from science for the needs of an enterprise which it wishes to extend over the whole earth. [...] Universal speculation immediately saw in machines the instrument of its power." (p. 161)

Speculation, which has "found itself in the situation of an armed man facing an unarmed troop", finds in machines the instrument of its power: greater profitability, greater efficiency. This can be seen particularly clearly with the connection of computerized tools. Bernanos would probably tell us that the energy and freedom of each Internet user is like an intravenous connection to the thirsty vampire of speculation. High-frequency algorithmic *trading* is also a typical example of enslavement for contemporary man. It is impossible today to *understand* how speculative decisions are made by machines when they compute outcomes in milliseconds.

Whether it is the State or speculation, Bernanos wants to show, through the concept of the *collective owner of machines*, the immense danger (which has already become a reality) that humanity is running, that of losing its freedom: "The question is not to return to the heathen, but to defend the individual against a power that is a thousand times more effective and more crushing than any of those once held by the most famous tyrants" (p. 113). By exposing the state of enslavement of humanity in a civilization of technology, Bernanos wants to show the urgency of "raising man up, that is to say, of restoring to him [...] faith in the freedom of his spirit", in the face of the crushing power of the collective owner of machines.

What Bernanos tells us about the civilization of technology is very reminiscent of Heidegger's essay, "The Question of Technology" (Heidegger & Lovitt, 2013). Since Bernanos' analysis is directed towards the question of freedom, he focuses on the notion of "ownership" of machines to show how the various forms of collectivity thus enslave individual freedoms. Heidegger's approach is fundamentally philosophical – even metaphysical – since it is the essence of technology that he seeks to define. For Heidegger, the essence of technology is shown in what he calls *Enframing* (*Gestell*), "the mode according to which the real is revealed as a *standing-reserve* (*Bestand*)", that is to say as containing a certain quantity of potentially exploitable energy. On this point, we can already see that Bernanos agrees with him completely, when he says that science "only wants to divert to its own profit the greatest possible part of the colossal energy resources of the universe" (p. 278). We can also compare Heidegger's "standing-reserve" (*Bestand*) with Bernanos's "profit" or "speculation" (as a collective owner of machines). In both cases, what is at stake in technology is the appropriation of a certain quantity of resources (in the broadest sense) and, in both cases, this leads man to an immense danger.

But for the novelist and the philosopher, the danger is not exactly the same. For Bernanos, as we have seen, it is above all freedom that is at stake; for Heidegger, it is the disappearance of the very

possibility of another mode of revealing (or revealing) reality. In the revealing, the Greek notion of *poeisis* (bringing-forth) is founded. To limit this "bringing-forth" to the revealing of the real as a standing-reserve, as a potential subject of speculation, "blocks every view into the coming-to-pass of revealing," according to Heidegger:

> "Thus the challenging Enframing not only conceals a former way of revealing, bringing-forth, but it conceals revealing itself and with it That wherein unconcealment, i.e., truth, comes to pass." (p. 27)

Thus, when I commit a tree as a standing-reserve, when I ask it to give me its material identity - weight, position, speed, composition and, above all, energy potential - I think I am asking it for what it *is*, nothing more and nothing less. Each element of physical or chemical reality gives me an aspect of the tree and thus allows me to exhaust it. Once cut into small wood chips, I can freely transform this energy reserve according to the needs of the market: chipboard, thermal energy, etc. In this way, not only have I exhausted the tree, but I have also been able to substitute the thing into something else of greater value (at least, for me at a given moment). The revealing does not appear as such, since it is above all a matter of "regulating and securing the standing-reserve" (p. 27). Turning a tree into firewood is no more a revealing than depositing cash in the bank. Yet there is indeed a revealing, not in the transformation of the tree, but in its demand to show itself as a calculable and predictable complex of energy. But this mode of revealing tends to hide the revealing as such. Bernanos evokes this blindness in his own way. For him, modern mechanics cannot be taken as a setting external to man to which the latter must be able to adapt. "The snail is in its shell, but the shell is also the snail" (p. 239) Bernanos tells us. The shell is the civilization of machines, but it is also the mode of revealing proper to this civilization. Man is inside and cannot conceive of himself without this mode of revealing which becomes indispensable and invisible.

If the Bernanosian issue is that of *freedom*, the Heideggerian issue is that of our relationship to *truth*. Heidegger tells us that "Enframing blocks the shining-forth and holding-sway of truth" (p. 28). According to Heidegger, freedom and truth are in fact inseparable: "It is to the happening of revealing, i.e., of truth, that freedom stands in the closest and most intimate kinship." (p. 25) It is our freedom that is exercised in this act of revealing. It is thus completely freely that we commit ourselves to the civilization of technology and, with the same total freedom, that we renounce the possibility of another mode of revealing and, by the same token, of a part of our freedom. This self-denying freedom is also Bernanos's response to the third stumbling block: "The mechanization of the world responds to a wish of modern man, a secret, unavowable wish, a wish for resignation, for renunciation" (p. 239). While expressed in different ways, the danger according to Bernanos and the danger according to Heidegger can ultimately be brought together in the question of freedom.

Bernanos' bleak portrait of our civilization naturally leads us to seek a positive outcome. Following Bernanos, can we, with Heidegger, look for the growth of "that which saves" (p. 28) in danger? Heidegger will find his answer in the very essence of technology as that which "needs and uses man so that he may share in revealing" (p. 32). He thus describes the ambiguity of the essence of technology:

> "On the one hand, Enframing challenges forth into the frenziedness of ordering that blocks every view into the coming-to-pass of revealing and so radically endangers the relation to the essence of truth.
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> On the other hand, Enframing comes to pass for its part in the granting that lets man endure – as yet unexperienced, but perhaps more experienced in the future – that he may be the one who is needed and used for the safekeeping of the coming to presence of truth. Thus does the arising of the saving power appear." (p. 33)

This "frenziedness of ordering" presented by Heidegger is, in Bernanos, the "ever-increasing tension of a life whose normal activity is multiplied tenfold, centupled by the use of mechanics" (p. 278) and whose outcome will be a humanity that will end up 'by being crushed' (p. 278). But there is another "side" to Heidegger that does not seem to exist, at first glance, in the reputed pessimism of Bernanos: the free exercise of a man who remains a watchman of the truth. There is, in the essence of modern technology, a form of free and gratuitous contemplation. But it can only be seen if we become aware of the mode of revealing that we operate in it (i.e., revealing the real as a standing-reserve). Now, as

we said earlier, this mode of revealing is pernicious in that it hides the very act of revealing. Modern technology hides the revealing that it does. Insofar as it hides, there lies danger, insofar as it reveals, there lies what saves. For modern technology reveals. The tree does have a certain heating potential, not another. In this sense, it places – indeed, subsumes– man in a certain relationship with the truth. Now, while it remains very limited (and dangerous), a revealing, a *poiesis*, does take place here. And in this revealing, freedom is exercised, since, as we said above, "it is to the happening of revealing, i.e., of truth, that freedom stands in the closest and most intimate kinship" (p. 25). The essence of technology thus contains, hidden, this liberating act of revealing. It is in this sense that we can speak of a form of free and gratuitous contemplation.

Is this a proposal in contradiction with Bernanos' essay? Not if we look for the hidden essence of technology, as Heidegger does. Bernanos tells us: "Alas, one can imagine – it doesn't cost anything – pro-father governments, princes who were friends of science (as so many others were once friends of letters and the arts), encouraging engineers to build machinery. Machinery would thus have remained a means, not an end; it would not have disrupted human life, confiscated almost all human energy, it would have facilitated and even embellished life, without usurping the other arts, for it would itself have been an art" (p. 161). This movement of abstraction with regard to technology, extremely brief in Bernanos (limited to these few lines in the essay) and expressed in the form of a thought experiment, is the one that Heidegger tries to operate throughout his essay. Bernanos' "alas" expresses the regret of a civilization of technology incapable of seeing its own mode of revealing: this is the place of danger. But the impossible dream of a machine-art or a contemplated technology comes from the fact that in the essence of technology lies an act of revealing: it is the place of what saves.

There is a second way of redemption for technology, closely linked to the first: poetic art. For Bernanos, the *homo faber* is frustrated if his art remains limited to technology:

> "Man is *faber* via his hands; He dreams of having four, eight, sixteen, as many hands as he can count, and he multiplies them by machines. [...] Oh, certainly, it cannot be denied that there is a part of the mind that is given to the hands [...] and the difficulties do not come from that mind. But there is that other part which is always unsatisfied, more or less frankly opposed to the hands, and which is really like another man in man." (p. 231)

Paradoxically, the key to another redemption for the civilization of technology is this "other part which is always unsatisfied", because it is this other face of the *tékhnê* that Heidegger presents to us:

> "There was a time when it was not technology alone that bore the name *technê*. Once that revealing that brings forth truth into the splendor of radiant appearing also was called *technê*. Once there was a time when the bringing-forth of the true into the beautiful was called *technê*. And the *poiêsis* of the fine arts also was called *technê*. (…) It was finally that revealing which holds complete sway in all the fine arts, in poetry, and in everything poetical that obtained *poiêsis* as its proper name." (p. 34)

Technology, far from being foreign to or opposed to poetry, is intimately linked to it in its very essence. In its original meaning, it encompasses pro-duction(bringing forth) in a much broader sense than the contemporary understanding of the term suggests. Technology - in the sense that we attribute to it today - is part of *tékhnê* if we allow it to be "that revealing that brings forth truth into the splendor of radiant appearing", and it is inseparable from that other part, that "other part which is always unsatisfied" which puts him in "anguish" and makes him "raise his hands in the air" (Bernanos, p. 231), the part which is called to a revealing of the True in the Beautiful: poetic art.

The civilization of technology can be saved if (1) it recognizes the danger it faces, that of an exclusive mode of revealing, and if (2) it rediscovers that technology takes part in an exercise of much greater scope, that of poetic art. In other words, it is in the (re)discovery of what is *beautiful* and *true in the* essence of technology that its future towards a good or an evil(of great magnitude)is played out, fora civilization that has expressly adopted it with a view to doing good. Technology can be saved, if it is seen as a call to contemplation and as a branch of poetic art. Bernanos does not evoke it in this way, since he wants to take a shortcut toward the greatest contemplative poets, those that he calls"our friends the saints".

Let's end with three examples of situations in which technology emerges from itself to show itself as a work of art or as a revealing of reality:

The first example is that of the construction of machines and technology that enable us to access the immensely large and the immensely distant, such as the new and ever more powerful telescopes that

are constantly being sent into orbit around the Earth. The glory of nations or the pride of man may be invoked in these designs, but that part of nature which is *unveiled* as a standing-reserve can never, for the most part, be *used* as a standing-reserve. The stars that give off incredible amounts of energy thousands of light years away can be studied from all angles, but this energy is inaccessible to us. There is therefore necessarily a form of free contemplation, and therefore free, in the work of the astrophysicist, which is transmitted in the manufacture of technical means of observation of the universe.

In the second case, nature, summoned "to present itself as a calculable complex of the effects of forces" (p. 26) refuses to comply: it returns an incomplete answer. Consider an experimental machine set up to reveal the reality of a subatomic particle *as a standing-reserve*. Such a machine, Bohr tells us, cannot give us all the information we expect about a particle as one interacts with the other. In quantum physics, one cannot fundamentally separate the experimental apparatus (the *machine*) from the particle (*nature*). Whereas classical mechanics leads us to consider the apparatus as a secondary medium for knowing the particle, quantum mechanics forces us to reconsider the observer and the apparatus as being related and connected to the observed object. Because nature refuses to give us the answer to the question asked–even if simple as, for example, 'what is your speed and energy?' – we could say that it is no longer 'Enframeable' in Heidegger's sense. From then on, our attempt at revealing (in the mode of technology) fails, and it is at this moment, and only at this moment, that the physicist realizes that he is in a mode of revealing. We can try the following analogy. A one-euro coin is used on a daily basis without its owner asking himself any question about what this coin is, where it comes from, what gives it its value, etc. But if a shopkeeper were to refuse it one day, then what was already there but hidden before would become clear to the owner: this coin is worth one euro, it can be exchanged in any country of the EU, it is a coin issued by the ECB, etc.

The third example is that of an engineer, designer of electronic circuits for computers, who chooses to design his circuit in an elegant way even though this component will most likely remain hidden forever inside the device, for the user as well as for the technicians who will work on it. There is no advantage in terms of quality of operation, ease of assembly, etc. Similarly, a software developer can, for one and the same functional behavior, choose to either carelessly write poor code or to carefully write the most elegant algorithm. In the same vein, one can imagine a mathematician who has discovered the proof of a new theorem, but nevertheless decides to work on a simpler, more elegant proof because he has the intuition that such a proof exists. These engineers and this mathematician are humble "princes, friends of science" who make technology and mechanics an art.

REFERENCES

Bernanos, G. (1953). *La Liberté, pour quoi faire?* Gallimard.

Bohr, N. (1935). Can quantum-mechanical description of physical reality be considered complete? *Physical Review*, *48*(8), 696–702. https://doi.org/10.1103/physrev.48.696

Heidegger, M., &Lovitt, W. (2013). *The question concerning technology, and other essays*. HarperCollins Publishers.

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