
Introduction
Yes, as one of us has questioned, Heidegger is abstruse. However, this essay, written by Heidegger and published back in 1954 is one of his less abstruse pieces in my opinion. Whereas this document provides a 6-page interpretive summary, it assume that you have tried to wade through the author’s arguments on technology, which he presents in less than 19 pages.

The Objective
We are surrounded by man-made contrivances we call technology. Heidegger challenges the reader to examine with him the relationship between humanity and technology, but he is seeking for us a relationship that is free and unchained. He is seeking the essence of the very thing we would typically say is just a means to an end and wholly a human activity. But these definitions are instrumental and anthropological respectively. And as is typical, I think, of Heidegger, he disturbs us with his claim that this essence is nothing technological. Let’s begin wading …

The Questioning
The essence of a thing is what a thing is. And only by knowing what a thing is, in essence, can we be brought into a free relationship with it. Questioning builds a way to this knowing: “For questioning is the piety of thought.” So is technology just a means to an end? How does the technology of the much earlier past compare with modern technology? What if it were not that technology were mere means? How would it stand with the will to master it, as the will to mastery becomes all the more urgent the more technology threatens to slip from human control? These are all questions concerning this essay.

Aristotle’s Causality Revisited
A means to an end implies something is effected and thus attained. Whatever has an effect as its consequence is called a cause. “Wherever ends are pursued and means are employed, wherever instrumentality reins, there reigns causality.”
Revisiting Aristotle on Causality. The Four Causes: (1) Material - Out of what has a thing come?; (2) Formal - What is it (logos)?; (3) Efficient - By means of what is it?; and (4) Final - For the sake of what is it?

But these four cause, according to the author, have nothing to do with bringing about and effecting cause ... that to which something is indebted. Instead, they are just ways of being responsible. So what unites them from the beginning? The source of unity? What does owing and being responsible mean? These terms may bar to ourselves the way to the primal meaning of what is called causality. And so long as that condition persists, we shall fail to see the essence of technology.

The four ways of being responsible bring something into appearance ... set it free and start it on its way, namely, into its complete arrival. [e.g., art, poetry, physics ...]

What has revealing, unconcealment, to do with the essence of technology? Heidegger’s answer: “Everything.” Bringing-forth gathers within itself the four modes of occasioning – causality – and rules them throughout. So technology is a way, a mode, of revealing ... Truth.
Two Modes of Revealing

Heidegger writes that *bringing-forth* ‘comes to pass on insofar as something concealed comes into unconcealment.’ Thus, instead of the craft-item being created by the craftsman, as one would think, it was *revealed* or *unconcealed*. We will challenge this definition of bringing-forth as being quite unsubstantiated, but let’s continue …

So Heidegger asserts that bringing-forth is the mode of revealing that corresponds to ancient craft. Modern technology however, has its own particular mode of revealing, which Heidegger calls *challenging-forth*. Thinking in the mode of challenging-forth is very different from thinking in the mode of bringing-forth: when challenging-forth, on *sets upon* the elements of a situation both in a sense of ordering (i.e., setting a system upon) and in a more rapacious sense (i.e., the wolves set upon the traveler and devoured him). In bringing-forth, human beings were *one* important element among others in the productive process (e.g., as in sculpting); in challenging-forth, humans *control* the productive process. *Efficiency* is an additional important element of thinking in the mode of challenging-forth; the earth, for example, is set upon to yield the maximum amount of ore with the minimum amount of effort. Essentially, challenging-forth changes the way we see the world. For example, to be capable of transforming a forest into packaging material for cheeseburgers, a man must see the forest *not* as a display of the miracle of life, but as raw material, pure and simple.

Objects Seen as Standing-reserve

Such a view of production in the mode of challenging-forth reveals objects that have a status of *standing-reserve*. Objects that have been made standing-reserve have been reduced to *disposability* in two different senses of the word: (1) They are disposable in the technical sense; they are easily ordered and arranged. Trees that once stood chaotically in the forest are now logs that can be easily counted, weighed, piled, and shipped. (2) They are also disposable in the conventional sense; like diapers and cheap razors, they are endlessly replaceable/interchangeable and have little value.

For the most part, challenging things forth into standing-reserve is not a laudable activity, and thus it makes sense to wonder what drives human beings to think in
this way. Heidegger’s answer to this motivational question is unconventional—instead of suggesting that the origins of this motivation are indigenous to human beings, he postulates the existence of a phenomenon that ‘sets upon man to order the real as standing-reserve’. Heidegger calls this mysterious phenomenon **enframing** (Ge-stell in German). *We will challenge this notion of Enframing as well.*

**Who’s in Control?**

Who controls this setting upon? This un-concealment? Not man, according to Heidegger. It is man also who is challenged, in this case to exploit the energies of Nature, in order to reveal the ordering. Man, driving technology forward, takes a part in the ordering as a way of revealing … but the unconcealment itself, within which ordering unfolds, is never human handiwork. *The Hegelian ‘They’?*

‘By opening his eyes and ears, unlocking his heart, giving himself over to mediating, striving, shaping and working, entreating and thanking, He becomes unconcealed [himself] into the modes of revealing.’

‘He approaches Nature as an object of research even until the object disappears into the objectlessness of standing-reserve.’

Modern technology, as an ordering revealing, then is not merely human activity. **Enframing** is the gathering together of that setting-upon which sets upon man, challenging him forth, to reveal the real, in the mode of ordering, as Standing Reserve. Moreover, man, in the technological age, as opposed to earlier times, is strikingly challenged-forth into revealing Nature as a storehouse of Standing Energy Reserve. Enframing demands that Nature be ordered as Standing Reserve.

**The Rise of Physics**

*This is interesting*: The rise of **Physics**, as an exact science, is revealing Nature as a calculable, coherence of forces. Heidegger thinks that this challenging-forth as **theory** came before modern technology [approx. late 18th century] thus ‘proving’ the existence of this mysterious enframing entity. Modern physics [approx. early 17th century] heralded enframing, but a heralding whose origin is still unknown. How Nature reports itself in this way is yet inscrutable, but it does so in some way that is identifiable through calculation and that remains orderable as a **system of information** revealed to man only. *The non-human nature of enframing is curious.*
In terms of the four causes, causality is shrinking into a reporting away from efficient or formal means. The essence of technology lies in enframing, so it must employ exact physical science. But here is the illusion, according to Heidegger:

Modern technology is applied physical science. ‘This illusion can maintain itself only so long as neither the essential origin of modern science nor indeed the essence of modern technology is adequately found out through questioning.’

**Enframing is Nothing Technological**

Enframing is a way of revealing the real as Standing Reserve. This revealing happens neither exclusively in man nor decisively through man. Man stands within the essential realm of enframing: an ordaining of destining, as is every way of revealing. Freedom is the realm of the destining [i.e., the setting apart for a purpose] that at any given time starts revealing upon its way. In Heidegger speak:

‘When we consider the essence of technology, then we experience enframing as a destining of revealing, thus sojourning within the open space of destining.’

**The Danger**

When destining reigns in the mode of Enframing, it is the supreme danger:

- When what is unconcealed no longer concerns man even as an object – he becoming nothing but the orderer of the Standing Reserve –, he himself will have to be taken as Standing Reserve.
- Seeing everything as Standing Reserve is like Religion [i.e., a belief system].
- Man exalts himself as the lord of the Earth and loses his relationship with himself and everything else.
- He doesn't see Enframing speaking to him. Hegelian master-slave arises.

So, enframing, as a destining of revealing, is indeed the essence of technology, but never in the sense of genus or essential. Strikingly, it is technology itself that makes the demand on us to think of essence in a different way. But in what way?

**The Salvation**

According to Heidegger, there are different ‘ordainings of destining’ for human beings. Although the default destining is that of Ge-stell, it is possible to choose
an alternate road. Heidegger thinks that human beings have been granted the special role of ‘Shepherds of Being’—we have been granted the power to reveal the world in certain ways. Trapped within Ge-stell, we tend to reveal things in the mode of challenging-forth, but we can also choose to reveal things in the mode of bringing-forth. Heidegger comments, ‘Placed between these possibilities, man is endangered from out of destining.’ However, by carefully considering the ways of thinking that lie behind technology, we can grasp the ‘saving power’. We can realize that we, the Shepherds of Being, have a choice: we can bring-forth rather than challenge-forth. Thus, once we understand the thinking behind technology, we become free to choose our fate—‘... we are already sojourning in the open space of destining.’ There is an idea of dignity here coursing through this essay.

But how?

‘But how shall we behold the saving power in the essence of technology so long as we do not consider in what sense of “essence” it is that Enframing is actually the essence of technology?’

Conclusion

‘Because the essence of technology is nothing technological, essential reflection upon technology and decisive confrontation with it must happen in a realm that is, on the one hand, akin to the essence of technology and, on the other, fundamentally different from it.

Such a realm is art. But certainly only if reflection on art, for its part, does not shut its eyes to the constellation of truth after which we are questioning.

Thus questioning, we bear witness to the crisis that in our sheer preoccupation with technology we do not yet experience the coming to presence of technology, that in our sheer aesthetic-mindedness we no longer guard and preserve the coming to presence of art. Yet the more questioningly we ponder the essence of technology, the more mysterious the essence of art becomes.

The closer we come to the danger, the more brightly do the ways into the saving power begin to shine and the more questioning we become. For questioning is the piety of thought.’