

A CRITIQUE OF MARTIN HEIDEGGER'S THOUGHT ON TECHNOLOGY

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Absract

This paper undertakes a critique of Martin Heidegger's thought on technology. His contributions to the discourse on technology began as a question in the work titled *Question Concerning Technology*. At the heart of the work is the question of what technology is? Heidegger distinguishes between the common understandings of technology as instrument and the essence of technology. In the light of his critique of technology, he observes that the essence of technology is not technological; which implies that technology is not about technological gadgets, devices, procedures, processes and operation. Heidegger contends that technology represents a distinctive mode of revealing truth (*aletheia*) and shaping human existence characterized the phenomenon of enframing (*Ge-stell*) wherein everything is reduced to standing-reserve (*Bestand*) for human exploitation, manipulation and optimization. In this sense, technology leads to objectification, desecration, demystification of reality- every aspect of reality is subjected to optimum violent investigation, manipulation and optimization. While Heidegger's analysis offers valuable insights into the ontological scopes of technology, it has been subject to critique on several fronts. However, Heidegger's work cannot be ignored in any significant discourse on the relationship between the human person and technology. First, this paper identifies some flaws in Heidegger's critique, and secondly it insists that, despite his flaws, Heidegger's proposal against the threat of modern technology remains overwhelming. Thus, adopting analytic method of philosophical investigation, this paper argues that Heidegger remains the most critical thinker on the subject matter, and if his recommendations are strictly applied, the threat of modern technology will be surmounted and it would save humanity from the imminent peril signaled by the relationship between human beings and technological development.

Keywords: Technology, humanity, objectification, revealing, enframing

Introduction

The question concerning technology lies at the heart of human existence. As such it must take a dominant discourse in philosophy today. Although many philosophers and authors over time have questioned the domineering nature of technology and the consequences of its products, Heidegger remains the most remarkable thinker who extended this question to the essence of technology (Inkman 4). Heidegger's philosophy centers on *Being*. His contribution to philosophy is to recover the actual meaning of *Being* that other philosophers had forgotten (Heidegger 1962:1). For him, *Being* expresses itself anew at different times. He approaches this problem of *Being* in three stages; the first stage is *Dasein* breakdown; the second stage is art and truth as a path to *Being*; the final stage is *being* as a process that is expressed as *ereignis* (eyes of the mind) and *Gelassenheit* (surrender). Science and technology falls within the second stage of Heidegger's outlook on *Being* (Alawa; 66).

The treatise which Heidegger dedicated to the subject matter of technology was his lecture titled: *The Question Concerning Technology*, which offers thoughtful clarifications and insights into the nature of technology and its consequences for human existence. Originally published in German in 1954 but translated into English in 1977, Heidegger sets out to raise questions about technology thus: "We shall be questioning concerning technology, and in so doing we should like to prepare a free relationship to it. The relationship will be free if it opens our human existence to the essence, we shall be able to experience the 'technological' within its own bounds" (3-4). From the foregoing, the primary concern of Heidegger is how the human person can have a free relationship with technology and not condemn technology (Godzinski; 1).

This paper therefore analyzes Martin Heidegger's thought on technology as found in his work, *The Question Concerning Technology and other Essays* (1977) taking into cognizance its strengths,

limitations and relevance in contemporary society. His philosophy does not only inspire to truth or knowledge; it also and even more aspired to wisdom, to acquiring a specific fundamental attitude towards technology. In the end, we shall try to advance the view that an appropriate attitude towards technology is of urgent importance today.

Heidegger's Philosophy of Technology

The term "technology" stems from the Greek *techne*, which means "skill," "art," and "craft," a mode of doing or making. *Techne* in the original Greek usage refers to both the skill or power of doing/making as well as that which is performed, produced, or fabricated – in other words, *techne* as designating both art and artifice. From this perspective, *techne* (art/artifice) is opposed to *physis* (nature), most fundamentally in terms of causality. On the one hand, the organic forms of nature are self-developing in the sense that they exhibit the principle of change within themselves. On the other hand, *techne* implies mediation by an external agent (Reason) to an object in order to bring about change in it, which means that the principle of change is here foreign to the object (Nadal quoted in Kanu, Ejikeme & Chike; 54). This perspective is our common understanding of technology. Investigations and discussions of technology have, according to Heidegger, solicited one basic response which has two components. This is the contemporary definition of technology which he refers to as the instrumental-anthropological definition (*Question Concerning Technology*; 5). The first component is that technology is human activity and the second concerns instrumentality and means to ends relations.

One says: Technology is a means to an end. The other says: Technology is a human activity. The two definitions of technology belong together. For, to posit ends and procure and utilize the means to them is a human activity. The manufacture and utilization of equipment, tools, and machines, the manufactured and used things themselves, and the needs and ends that they serve, all belong to what technology is. The whole complex of these contrivances is technology (288).

Thus, Martin Heidegger had two main philosophical fascinations: the distinction between Being and beings, and the nature of Truth. He has in fact been described as the philosopher of being with his *Magnus opus – Being and Time*. Heidegger understands the question concerning technology as fundamentally connected to the question of being. This explains why the question of being was treated before the idea of technology in his work. Technology, according to Heidegger, points to something indispensable in our ontological make-up, that is, our way of being-in-the-world. What compelled him to write on technology lies in his observation that "everywhere, man remains unfree and chained to technology" (*Question Concerning Technology*; 287); a situation in which the more technology advances itself the more it "threatens to slip from human control" (289). This has undesirably affected the ordering of the world- in fact, disordering the world. As a result, a questioning of technology became necessary and urgent for Heidegger as modern technology has brought and continues to bring with it a novel mode of ordering in the world, which he saw as fouling man's authentic logic of being, thus, indicating a certain crisis at bay in European industrial modernity. In responding to this catastrophe, Heidegger came up with the work on *The Question Concerning Technology*. However, we can grasp the purpose of Heidegger's philosophy of technology from the very opening remarks of *The Question Concerning Technology* which reads:

In what follows we shall be questioning concerning technology. Questioning builds a way. We would be advised, therefore, above all to pay heed to the way, and not to fix our attention on isolated sentences and topics. The way is a way of thinking. All ways of thinking, more or less perceptibly, lead through language in a manner that is extraordinary. We shall be questioning concerning technology, and in so doing we should like to prepare a free

relationship to it. The relationship will be free if it opens our human existence to the essence of technology (3).

The above undoubtedly confirms that Heidegger desires to construct a sort of technological insight with his works on technology. He calls his mission, “a questioning which builds a way” (3). The way can be likened to Heideggerian concept of truth (*aletheia* translated as unconcealment, unclosedness or disclosure). Thus, in order to accomplish his mission, he problematizes the essence of modern technology. Heidegger draws our attention to his project with the paradoxical statement, “the essence of technology is by no means anything technological” (4). By this thoughtful declaration, he shows that he is not so much interested in the technological devices but in the ontology of technology. Technology for him is a mode of revelation of being within the present age.

Heidegger strongly opposes the view that technology is “a means to an end” or “a human activity”. For him, the definitions are correct but not true because they do not go deep enough to address the question of the essence of technology. Undeniably, Heidegger notes that technological objects are means *for* and not *to* ends, and are built and operated by human beings, but the essence of technology is something else entirely. Just as the essence of a tree is not itself a tree, Heidegger points out that, the essence of technology is not anything technological (4). What, then, is technology, if it is neither a means to an end nor a human activity? Heidegger goes outside the conversational understanding of technology as availing means for an end, of man’s transactions with nature, i.e. the merely instrumental and anthropological definition of technology. He expands the concept of technology to encompass *poiesis* (poetry) and *episteme* (knowledge or science), Greek words that belong to the domain of revealing (*aletheia*) and, hence, have something to do with engendering/begetting and truth (Nadal quoted in Kanu, Ejikeme & Chike; 55). In doing so, Heidegger moves beyond the preliminary connotation of *techne* as making. He holds this position because, first, *techne* is related to *poiesis* because before it is a making, it is a bringing-forth. *Poiesis*, the Greek word from which we get the word poetry, names that which brings something forth into presence, or that which renders the potentiality of the not-yet into categorical actuality. Hence, any activity or action which is the cause of a thing in the sense of bringing something into presence belongs to *poiesis*. Second, *techne-as-poiesis* is linked to *episteme* (knowledge/science) not only because every rational design is enabled by certain knowledge, but also because what is brought-forth, what is disclosed, is a truth (55). Thus, stitching together *techne*, *poiesis*, and *episteme*, that is to say, linking the power of making (*techne*) as predominantly a mode of bringing-forth (*poiesis*), in which what is revealed is truth (*episteme*), Heidegger takes us away from the conservative and instrumentalist definition of technology as “a means to an end” toward an idea of technology as “a way of revealing.”

Technology as a ‘Revealing’

For Heidegger, “Technology is therefore no mere means. Technology is a way of revealing. If we give heed to this, then another whole realm for the essence of technology will open itself up to us. It is the realm of revealing, i.e., truth” (*Question Concerning Technology* 12). “Revealing” is one of the terms developed by Heidegger in order to make it possible to think what according to him, is not thought anymore. In his translation of the Greek word *Aletheuein*, which means “to discover,” to uncover what was covered over. Related to this verb is the independent noun *aletheia*, which is usually translated as “truth,” though Heidegger insists that a more adequate translation would be “un-concealment.”

But how can technology be “a way of revealing”? For Heidegger, ‘reality’ is not something absolute that human beings can ever know once and for all; it is relative in the most literal sense of the word – it exists only in relations. Reality “in itself,” therefore is inaccessible for human beings. As soon as we perceive or try to understand it, it is not “in itself” anymore, but ‘reality for us’ This means that everything we perceive or think or interact with “emerges out of concealment into unconcealment” in Heidegger’s words (*Question Concerning Technology* 13). By entering into a particular relation with reality, reality is ‘revealed’ in a specific way. And this is where technology comes in since “Technology is a mode of

revealing. Technology comes to presence in the realm where revealing and unconcealment take place, where *aletheia*, truth, happens” (13).

Modern Technology as Challenging-forth

Having established the fact that technology is a mode of revealing, Heidegger argues that both ancient and modern technologies are ways of revealing. However, while the ancient Greeks experienced the ‘making’ of something as ‘helping something to come into being,’ modern technology is rather a ‘forcing into being’:

And yet the revealing that holds sway throughout modern technology does not unfold into a bringing-forth in the sense of poiesis. The revealing that rules in modern technology is a challenging (Herausfordern), which puts to nature the unreasonable demand that it supplies energy that can be extracted and stored as such” (*Question Concerning Technology*; 14).

Andrew Mitchell explains that modern technology as challenging-forth leads to technological homogenization that diminishes the gap between subject and object; and transforms everything into an orderable and deliverable standing reserve, the human being included (Mitchell; 125). In sum, to challenge-forth means to reveal whatever there is as a variety of resources (standing-reserve), to be effectively organized and used (Cerbone; 142). Hence, the revealing that reigns in Modern technology, unlike that of pre-modern technology, is violent, artificial and rape-like.

Ge-stell (Enframing) as the Essence of Modern Technology

Heidegger begins his discussion by making a distinction between technology and the essence of technology using a tree analogy. For him, one has to understand the essence of technology from the way it is, through a free relationship with it. In his words: “when we can respond to this essence, we shall be able to experience the technological within its own bounds” (2-4). In the tree analogy, Heidegger declares that,

When we are seeking the essence of tree, we have to become aware that, that which pervades every tree, as tree, is not itself a tree that can be encountered among all the other trees. Likewise, the essence of technology is by no means anything technological. Thus we shall never experience our relationship to the essence of technology so long as we merely conceive and push forward the technological, put up with it, or evade it. Everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it (4).

If we follow the Heideggerian reformulation of technology as a mode of revealing (*aletheia*), technology, in its essence, can be said to be *poetic* because it is a bringing-forth, whose causality, like poetry, “let (s) what is not yet present (to) arrive into presencing,” into the order of the presence or the real (*Question Concerning Technology* 293). This is what constitutes the original essential meaning of technology. Now, in its modality as revealing, the essence of technology is what Heidegger calls “enframing” – *Ge-stell*. But, what is important is that the fundamental specificity of technology in Heidegger – a mode of revealing as enframing which pulls together techne, poiesis, and episteme – is nothing technological, it does not belong to the domain of the machine or the mechanical. Rather, “enframing” names the fundamental ontological process of ‘revealing’. Hence, “to enframe” refers to the process of “opening up” as a “gathering together of that setting-upon that sets-up man, that challenges him forth, to reveal to himself the real” (*Question Concerning Technology* 302). Enframing is not a tool or an apparatus, but the very condition of possibility for the truth of the real to be revealed, poetically, to man. This is the crucial point in Heidegger’s argument.

The Supreme Danger of Enframing

The lacuna Heidegger identifies with modern technology is that it is a threat to man. Man, apart from being a resource is likewise enslaved to technology (322). Again, Heidegger elucidated quite a lot about the nature of being and the supreme threat posed by the essence of technology as *enframing*. This *enframing* is being as it is revealed in this age, or as it is destined, and this sheds light on the supreme danger of the *enframing*. The danger is that being itself might be entirely closed off from humanity, and that it may only be revealed in the form of the *enframing* (Taylor 48). This entrapping disguises itself, in that it develops into the setting in order of everything that presences as standing-reserve (Heidegger, *Turning* 37-38).

Godzinski presented the lacuna by stating that, “Heidegger maintains a double movement of concealment within the overall movement of *enframing*” (Godzinski; 5).. The *enframing* conceals its true nature as being, by revealing itself as that which orders the standing reserve. It also conceals its nature as the ordering of the standing reserve by revealing itself as technology, that is as the instrument and tool of humanity (Taylor 50). Heidegger explains that the supreme danger is the concealing and disguising of being in the form of the dual concealment of the *enframing*. The *enframing* only reveals itself as *instrumentum*, the tool for humanity’s mastery over the earth. But in truth, it is the coming to presence of man that is now being ordered forth to lend a hand to the coming to presence of technology (Turning; 37). It seems that humanity is utterly lost deceived by the very forces they believe themselves to control. What is most dangerous is that the danger does not show itself as danger. Heidegger posits: “The rule of Enframing threatens man with the possibility that it could be denied to him to enter into a more original revealing and hence to experience the call of a more primal truth” (*Question Concerning Technology* 28).

The Saving Power of Technology

Heidegger strikes a note of technological optimism when he laconically invokes the words of Holderlin, “But where danger is, grows the saving power” (28). The saving power is not so much technology or bringing up technological solution to the problems of technology. Far from that, the saving power lies in considering deeply the essence of technology since in the essence roots and thrives the saving power. It is when we open ourselves to the essence of technology that we find ourselves taken unexpectedly into a freeing claim (26).

Developing a free relationship to technology does not suggest detaching ourselves from technology; rather it is leading a lifestyle that is not pervasively dominated by technology (Cerbone 153). It is about change in the mindset or approach to reality, not in technological devices. In his address, *Gelassenseit* translated as *Discourse on Thinking*, Heidegger describes the free relationship with technology as follows:

We can use technical devices, and yet with proper use also keep ourselves so free of them, that we may let go off them any time. We can use technical devices as they ought to be used, and also let them alone as something which does not affect our inner and real core. We can affirm the unavoidable use of technical devices, and also deny them the right to dominate us, and so to warp, confuse, and lay waste our nature (54).

The saving power can be described as Heidegger’s technological reformation which can be subdivided into two recommendations; *releasement* towards things and openness to mystery. *Releasement* towards things is that comportment toward technology which expresses “yes” and at the same time “no”; while openness to mystery is comportment which enables us to keep open to the meaning hidden in technology (54-55). Heidegger recaptures the complementarity between *releasement* towards things and openness to mystery as follows: *Releasement* toward things and openness to the mystery belong together. They grant us the possibility of dwelling in the world in a totally different way. They promise us a new ground and foundation upon which we can stand and endure in the world of technology without being imperiled by it (55).

Beyond Heidegger's View

Martin Heidegger is regarded as one of the most divisive philosopher of the twentieth century. For many, he is seen to be the most original and important thinker of his epoch. While some scholars describe him as a "prophet," others spurn him as an obscurantist and a charlatan. Some others still see his reprehensible affiliation with the Nazis as a reason to ignore or reject his thinking altogether. These notwithstanding, Heidegger's remarkable influence on contemporary philosophy and his unique insight into the place of technology in modern life make him a thinker worthy of careful study. His work on technology is exhilarating and the single most influential position in the field (Scharff and Dusek 247). He is among the first to raise technology to a central concern of philosophy and to see it as a genuine ontological issue (Ihde; 282).

As a prophet, Heidegger observed truly that because of man's arrogance, nature is on the verge of fighting back. His understanding of technology as revealing rather than an instrument for exploitation is very instructive. Man thinks he knows how nature works and tends to hasten its processes. He demands too much from it and in turn disrupts its natural flow. Nature is beyond our control. Its truth is beyond our grips. And if we ever try to dominate it, nature will surely revolt against us in a very humbling manner. The present experience as regards climate change affirms the perspective of Heidegger that nature would soon revolt against us in a humbling manner.

Herbert Marcuse, a prominent member of the Frankfurt School, offered a critical analysis of Heidegger's notion of technology as a mode of revealing or "enframing" (*Ge-stell*), which Heidegger sees as a danger to human existence and authenticity. Marcuse, however, criticized Heidegger for what he saw as a romanticization of pre-technological modes of existence and his characterization of technology as an external force that dominates humanity. Marcuse argues that Heidegger fails to recognize the deeply entrenched relationship between technology and modern capitalism. He is of the view that technology is not merely a neutral instrument but is shaped by the capitalist mode of production, serving the interests of domination and exploitation. Marcuse also argued that Heidegger's emphasis on authenticity and the danger of technological domination overlooked the potential for liberation through technological progress and social transformation. He suggests that technology, if liberated from its capitalist constraints and reimagined in a more democratic and humane society, could contribute to human emancipation rather than alienation (xv-xvi).

Hannah Arendt, a political theorist and philosopher, offered her critique of Heidegger's perspective on technology, particularly in her work "*The Human Condition*." She criticizes Heidegger's notion of technology as a mode of revealing (*Ge-stell*) for reducing the world to mere resources to be manipulated and controlled. She argues that this instrumentalization of the world leads to the loss of the richness and plurality of human experience. Arendt also shares Heidegger's concern about the alienating effects of modern technology on human existence. However, she diverges from Heidegger by emphasizing that the problem is not merely technological but stems from a broader crisis of modernity, including the rise of bureaucracy, consumerism, and mass society. She criticizes Heidegger for neglecting the political dimension of human existence and focusing solely on the ontological implications of technology. Thus, she emphasizes the importance of the public realm (the space of political action and interaction among free citizens) for the preservation of human freedom and dignity (248-256).

In a related development, Jurgen Habermas, a leading figure in critical theory, criticized Heidegger's philosophy of technology for its lack of social and historical context. He argued that Heidegger's analysis neglected the role of communicative action, social institutions, and democratic governance in shaping technological development and its impact on society (294). Habermas equally sees Heidegger's critique of modernity as incomplete and one-sided. He emphasizes the emancipatory potential of modernity, particularly in its commitment to reason, democracy and human rights. He argues that critical theory

should engage with and build upon the achievements of modernity rather than retreat into nostalgic or romantic critiques of technology and progress (315).

Andrew Feinberg seeks to reinterpret Heidegger's philosophy of technology in a way that incorporates insights from critical theory and acknowledges the social and historical dimensions of technological development. He argues that Heidegger's analysis, while valuable, is limited by its focus on ontology and its neglect of the social, political, and cultural factors that shape technological practices and their impact on human life. He emphasizes the importance of democratizing technology and making it responsive to the needs and values of diverse social groups. He argues that technology is not inherently deterministic but is shaped by human choices and social relations. Therefore, he calls for a more democratic and participatory approach to technological design and implementation that empowers users and promotes social justice (184).

From the foregoing, the criticisms against Heidegger's philosophy of technology can be summed up thus:

Lack of practical guidance and concrete solutions: Heidegger's philosophy of technology is often criticized for its abstract and theoretical nature, which may limit its practical applicability. While Heidegger offers a profound diagnosis of the existential implications of technology, critics argue that he provides few concrete solutions or practical strategies for addressing its challenges. His emphasis is on ontology and phenomenology.

Anthropocentrism and Humanism: Heidegger's emphasis on the ontological implications of technology often sidelines its human consequences. Heidegger neglects the social, political and ethical dimensions of technological development.

Essentialism and Technological determinism: Heidegger's portrayal of technology as a monolithic force that enframes human existence has been criticized for its essentialist tendencies. Critics argue that Heidegger overlooks the plurality of technological forms and their diverse impacts on society. Moreover, his deterministic view of technology as an inevitable destiny neglects the role of human agency and social structures in shaping technological outcomes.

Cultural and Historical Context: Critics argue that Heidegger's philosophy of technology reflects the cultural and historical context of early to mid- century Europe, characterized by rapid industrialization, totalitarianism and existential crisis. Critics argue that his analysis may be outdated and insufficiently engaged with the complexities of contemporary digital technologies, artificial intelligence, biotechnology and other emerging forms of technology.

Conclusion

In the foregoing, attempts have been made to explicate on a discourse on Heidegger's critique of the essence of technology. At the heart of the work: *Question Concerning Technology* is the question of what is technology? Heidegger distinguished between the common understandings of technology as instrument and the essence of technology. We observe that the essence of technology is not technological. This implies that technology is not about technological gadgets, devices, procedures, processes and operation. To unlock Heidegger's critique of technology is *Ge-stell*, the essence of technology. Heidegger contends that technology represents a distinctive mode of revealing truth (*aletheia*) and shaping human existence characterized the phenomenon of enframing (*Ge-stell*) wherein everything is reduced to standing-reserve (*Bestand*) for human exploitation, manipulation and optimization. However, Heidegger's work cannot be ignored in any significant discourse on the relationship between the human person and technology. No matter how abstract his thoughts might be considered to be, this paper concludes that Heidegger remains the most critical thinker on the subject matter, and if his recommendations are strictly applied, the danger of modern technology will be

surmounted and it would save humanity from the impending danger signaling in the relationship between human beings and technological development.

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