Heidegger and Lukács: Thinking the Techno-human

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Abstract

Stephen Hawking, arguably the greatest scientist of all times, predicted philosophy to be dead very soon and that philosophy's failure to keep up with the dramatic advances in science is the reason for its impending death. Martin Heidegger, one of the notable philosophers of the twentieth-century, concurs that philosophy is dead. Unlike Hawking, he believes that the 'end' is not the point at which anything ceases to exist or becomes obsolete but rather the place where all of philosophy's history is collected in its fullest potential. At the beginning of the twenty-first century, what conclusion are we meant to draw from the juxtaposition of these two observations? The issue of technology and modern science that has emerged as a major theme in philosophical thought throughout the latter half of the twentieth century – especially in the wake of Heidegger's ground breaking essay "The Question Concerning Technology" – lies at the heart of these two remarks. His essay was one of the first serious attempts to critically scrutinise the nature and scope of what we have come to understand as modern technology. The instrument form of rationality or reason, which is generally seen as a result of modern technology, is seriously affecting the diverse range of human practices and, consequently, experience. It is literally unleashing deep socio-cultural and ecological problems at all levels as a consequence of such thinking, according to the post-Heidegger discourse on technology. It has become increasingly difficult to make sense of the peculiar evolution of the philosophical fixation with *de-anthropomorphization*. This study critically reads Heidegger's writings on technology in order to place the question of the commodity-form at the centre of technological discussions, building on Georg Lukács's historical analysis of the commodity-form in his incisive and wonderfully analytical essay "Reification and the Consciousness of the Proletariat." Additionally, the objective is to refute the current celebratory language surrounding technology and the idea that technology is the answer to every modern socio-political and economic issue.

During the Google Zeitgeist conference in England in May 2011, Stephen Hawking[*], forecasts the future of philosophy in twenty-first century in the following words. He says:

> Traditionally these are questions for philosophy [...How can understand the world in which we find ourselves? What is the nature of reality? Where did it all come from? Did the universe need a creator?], but philosophy is dead. Philosophy has not kept up with modern developments in science, particularly physics. Scientists have become the bearers of the torch of discovery in our quest for knowledge. (Harman 13)

The most renowned theoretical physicist of our age has declared philosophy to be dead very soon. And the reason for this inevitable death is philosophy's lack or inability to keep abreast of the radical developments in science, and according to Hawking, particularly in physics. Hawking, in the above, seems to be implying that the question of being-qua-being, to use Aristotle's terminology, will be answered by our revered natural scientists only. Science and its methods have finally attained the status of being the absolute benchmark, standard and horizon for all kind of human enquiry in diverse fields.

We should juxtapose this prognosis with another one by one of the most well-known philosophers of the twentieth-century, and possibly, for some, "the secret King of thought," Martin Heidegger. In his essay "The End of Philosophy and the Task of thinking," Heidegger also declares philosophy to be dead. For him, unlike Hawking, the end should not be thought of in terms of cessation or obsolescence of something, rather the 'end' means "...that place in which the whole of philosophy's history is gathered in its uttermost possibility" (312). In other words, end refers to culmination or completion of the most fundamental possibility. As philosophy, for Heidegger, is metaphysics pure and simple, so the end of philosophy basically means the end of metaphysical way of thinking. And this metaphysical form of thinking, Heidegger further says, could be seen at work quite explicitly in modern technology and science. Like Hawking, he also says that the sciences are "...taking over as their own task what philosophy in the course of its history tried to present in certain places..."

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[*] Here we must remember that Hawking is alternatively abled and uses advanced technologies as his prosthetics to do work. The question, in his case, also is: Is technology a mere instrument only or something fundamentally constitutive of his thinking?

(314). And the science which will dominate the domain of sciences in the future will be, he says, Cybernetics. What is interesting in Heidegger's case is that, for him, the growth of modern science in terms of highly specialised and independent disciplines should be seen primarily as the manifestation of philosophy in the truest sense. As a result, the dissolution of philosophy, as predicted by Hawking, is "in truth is precisely its completion" (313). This is so because it was philosophy only in that golden age of Greeks which played a decisive role in the very emergence of science in the first place. Even the rise of modern science can be partly ascribed to modern philosophy which began with Rene Descartes. This is so because, for Heidegger, "the greatness and superiority of natural science during the sixteenth and seventeenth centuries rests in the fact that all scientists were philosophers" (188). Most of them were polymaths, mastering and working in diverse disciplines.

The question now is: what are we supposed to infer if we juxtapose these two observations at the start of the twenty-first century? At the centre of these two observations lies the problematic of technology and modern science which has become one of the central motifs of philosophical reflection during the second half of the twentieth-century, particularly after Heidegger's seminal essay "The Question Concerning Technology". The technological changes unleashed by the quantum revolution of the 1920s and 30s in the sciences have been so momentous and radical that the whole texture of everyday life has undergone a fundamental change with the proliferation of gadgets at our disposal all the time. At the same time, the quantum revolution has also compelled us to fundamentally rethink our cherished notions about reality, the human self, the environment and their mutual relationship.

Heidegger's essay was one of the first serious attempts to critically scrutinise the nature and scope of what we have come to understand as modern technology. He brought the problematic of technology explicitly into the open and problematised it quite thoroughly. He ends that essay by saying that there is no outside from which it is possible to think technology. If there is any way out, it is from the inside only; it is by confronting the danger unleashed by technology head on. The more intensely we will be able to think the contemporary reign of the technological, the more it will become possible for us to overcome the danger. Following Heidegger's creative intervention on the theme of technology and its implications for contemporary life via his famous essay, it has almost become customary to begin all critical engagement with technology via Heidegger. The post-Heidegger discourse on technology has laid great emphasis on how

the instrumental form of rationality or reason, which is generally seen as a consequence of modern technology, is seriously affecting the diverse range of human practices, and thereby experience, and is literally unleashing deep socio-cultural and ecological problems at all levels as consequence of such thinking. Throughout the whole spectrum of responses that have come up in recent decades which deal the question of technology, one can see that the attempt has been to acknowledge the technical constitution of all life, human or otherwise. Critical thinkers have mobilised facts and empirical data from a variety of disciplines to argue that the human and the technological are constitutive of each other. This trend is defined, to use Arthur Bradley's title of the book, as "Originary Technicity". Bernard Stiegler, the French philosopher of *technics***, is one of the most widely known scholars working in this tradition of thinking *technics*. All memory, for Stiegler, takes the form of technics if it has to exist beyond the temporality of the human. He goes onto say that: "technics is the pursuit of life by means other than life". Bradley categorises Stiegler's work as "the most uncompromising expression of originary technicity... where any attempt to oppose *techne* to some nominally non-technical idea or entity is ruled out from the very beginning of his work as the sheerest metaphysics" (141-142).

The attempt throughout this line of thinking (that is, everyone who is concerned with 'originary technicity') is to overcome anthropomorphism***. This philosophical obsession to *de-anthropomorphize* has been a very strange development of which it is very difficult to make sense of. This is primarily because the human beings seem to be the only species, with the help of the advancements in science and technology, and through the emergence of disciplines like genetic engineering, biogenetics and artificial intelligence etc. (all of this has become possible mainly through the physical and intellectual labour of human beings themselves). Not only have these advancements, on the one hand, allowed them to penetrate deep into the quantum level of reality, human body and mind, thereby throwing new light on the age-old problems of human self, consciousness and its emergence, but, on the other, have also given the chance to acknowledge the constitutive centrality of the techno-materiality of the human being to the point where s/he is eagerly ready dislocate itself from the throne of being an undisputed master of the universe. In other words,

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** We should distinguish between the words technology and technics. Technics refers to technical materiality of all life and human praxis, while technology is a historically specific form of a very particular form of technics that has become prevalent and defining in modern times.

*** The problem of anthropomorphism has recently got translated in the problematic of the Anthropocene.

we could say that the human has finally become capable of reflecting on its own technical dimension. This self-created ability, or rather possibility, to dislocate itself actually proves the greatness of anthropomorphism How could we fathom this philosophico-critical tendency towards de-anthropomorphize? Should it be seen as a sign of political impotence whereby we are unable to think the constitutivity of the technological and the human politically and economically? That is to say, since there are no emancipatory political imaginaries which is guiding our thinking at this historical conjuncture, we are trapped in a kind of vacuum where the only possible socio-political project of human emancipation seems to be the overcoming of anthropomorphism. I mean this attempt to dislocate the centrality of human, though psychologically liberating, is far from emancipatory; rather it leads to nihilism of all varieties.

Building on Georg Lukács's historical analysis of the commodity-form in his perceptive and brilliantly insightful essay "Reification and the Consciousness of the Proletariat," this paper undertakes a critical reading of Heidegger's writings on technology in order to put the question of the commodity-form at the centre of debates regarding technology. The two essays apparently seem to be poles apart. Whereas Heidegger, in his writings, deals with the metaphysical underpinnings of modern science, the question concerning technology (via instrumentality and causality), and its essential character as 'enframing,' Lukács tackles the problematic of modern consciousness and its reified structure, particularly with reference to the consciousness of the proletariat. Heidegger never mentions words like 'consciousness,' 'commodity-form' or the 'proletariat,' and Lukács rarely refers to the words 'technology,' 'causality' or 'enframing'. But, the subtext of both the essays is concerned with the delineation of the *historically specific* constitutive structures of modern forms of consciousness and its attendant flaws. Both the authors refer to mathematics and the mathematical character of modern physics. Lukács firmly believes that the "structure of commodity-relations [is capable of] yielding a model of all the objective forms of bourgeois society together with all the subjective forms corresponding to them" (83). When Heidegger says that "enframing" should neither be grasped *exclusively* as a human doing and nor "beyond all human doing," he is also alluding to those fundamental *socio-structural* and *transindividual forms* which actually pre-determine the relationship between the objective forms of social life and the subjective consciousness of it.

Heidegger's stated aim in the essay "The Question Concerning Technology" is to make way for developing a 'free relationship' to technology.

"The relationship," he further says, "will be free only if it [the relationship] opens our human existence to the essence of technology" (3). This will in turn enable us to understand the technological "within its own bounds" (4). The following paper builds the argument that our relationship to technology could only be 'free' if we seriously take into consideration the pervasiveness of the commodity-form/commodity-structure as the most fundamental determining factor in shaping contemporary modes of thought and patterns of subjective consciousness. Heidegger's passionately honest endeavor to think the question concerning technology as "enframing" remains substantially incomplete and one-sided because of his inability to concretely situate "enframing" as a historically determined *mode of revealing* taking shape at a particular point in history through a complex configuration of scientific advancements and technological inventions embedded in a *historically specific* process of real/concrete abstraction and the capitalist mode of socio-economic organisation. He seems to fail to grasp the logic of really occurring real-abstraction and its concrete effects on human praxis and thinking. This inability possibly stems from the idealist character of his philosophy despite being allegedly grounded and situated in the phenomenologically *concrete*. Furthermore, the attempt is to challenge, firstly the currently dominant celebratory discourse around technology, and secondly, to present technology as the solution to all the contemporary socio-political and economic problems. Modern technology can be seen as the fetishisation of the scientific method in the service of Capital.

Technology and modern physics: Rationalization, Quantification and the question of Reification (the distortion of Causality)

Modern technology is generally seen as an application of modern physics. Heidegger, however, though very rightly, takes the opposite stand when he writes that "modern physics, as experimental, is dependent upon technical apparatus and upon progress in the building of technical apparatus," rather than the other way around (14). He further adds that there is certainly a relationship between technology and physics but the decisive issue is to grasp "that in which this relationship is grounded" (14). Unfortunately, Heidegger never explicitly undertakes any detailed analysis of this '*that*'.

For Heidegger, modern technology needs to be grasped as a historically specific mode of revealing, and as a result, it directly concerns "the realm where revealing and unconcealment take place, where *aletheia*, truth, happens" (13). Here we must remember that the word technology comes from

the Greek word *technikon* which actually "belongs to techne" (12). And techne, for the Greek, "belongs to bringing-forth, to poiesis; it is something poetic". In addition to the skills and activities of the craftsman, the word 'techne' was also used for the arts of the mind and the fine arts. Consequently, we could say that *techne*, and through it technology, is not about manipulating, manufacturing and using of means or the materials; it is directly related to revealing, to bringing-forth. Technology brings-forth some entity into existence.

Now, the bringing-forth that "holds sway throughout modern technology does not unfold into a bring-forth in the sense of *poiesis*" (14). It is rather "a challenging-forth," or a "setting-upon" (16). This is to say, the mode of revealing that reigns in modern technology does not have the character of *poiesis*; it rather unfolds in an aggressive stance towards nature in the sense that nature stands challenged. Nature is challenged to satisfy unreasonably excessive demands to supply everything, from energy to raw materials of all kinds. It [nature] is aggressively summoned to provide all these things endlessly. Heidegger acknowledges the fact that nature has always been the bedrock on which the lives of human beings have depended for their basic socio-biological nourishment since ages. In a way, human beings have always been dependent on nature, and have been using and manipulating it to sustain themselves. However, the scenario is entirely altered when it comes to the reign modern technology. Modern technology is a "setting-upon that challenges forth the energies of nature," and this "setting-upon" is an "expediting" (15). The word 'expedite' is very significant. It means to speed up, to accelerate and quicken. In other words, we could say that modern technology challenges-forth nature via a setting-upon which accelerates and disturbs the rhythms of 'nature' itself. Nature no longer is given the time to reproduce itself through its own 'natural' cycle of reproduction. It is always rather forced to yield more and more in a less and less time. The aim of this setting-upon is "maximum yield at the minimum expense" (15). Nature is never comprehended as a dynamic process in motion and becoming. It becomes an infinite storehouse of raw materials and energy. The moment we start thinking on the lines whereby modern technology is seen as a mode of revealing, and as a result, it directly concerns the question of truth, we are on the way to a fundamental rethinking of our relationship to modern technology and its historically essential character as "enframing".

The question of Reification has been largely ignored in contemporary debates regarding the question concerning technology. Every attempt to think modern technology is marred by thoroughgoing misconceptions

and unfortunate misunderstandings on the part of both the defenders and the critics of technology. Nowhere could we see the attempt to grasp the question in a historically concrete manner by aligning it with the positivistic and exact character of modern natural sciences, and simultaneously situating this alignment in the history of capitalism, in particular the nefariously ubiquitous logic of the commodity-form. Evacuating the question out of this broader context, it is rather dealt with in an abstract manner. It is essentially because of the logic of the commodity-form only that social relations and processes take on the fantasmatic character of, to use Marx's words, "phantom [or spectral] objectivity" existing independently and above the participating human beings, and inconspicuously determining the co-ordinates of their subjective consciousness (experience, perceptions and conceptions) of their own objective social practices. In line with this, we could say modern science should be seen as a specific kind of social practice contributing to a generalised set of knowledge production practices which are geared towards particular ends, thereby giving concrete shape to what Lukás has defined as the "reified structure of consciousness" (111). The 'reified structure' becomes the natural form of consciousness actualising itself in the domain of the mental and the intellectual. The pattern of thinking exhibited within this basic structure becomes the criteria to fathom all thinking.

The challenge is to deconstruct the dominance of this 'reified structure of consciousness' via making explicit the pattern of thinking or mode of thought exhibited within this structure and trace the socio-historical reasons because of which it was able to take centre-stage and became the standard for all forms of thinking. For Heidegger, the answer is to be found in the metaphysical way of thinking which has laid the foundations for our modern age. According to him, it is "metaphysics [which] grounds an age, [and] in that through a specific interpretation of what is and through a specific comprehension of truth it gives to that age the basis upon which it is essentially formed" (115). Heidegger's attempt, via a laborious digging out of the etymologies throughout his writings on technology, is basically to dissect this metaphysical way of thinking which holds sway in the contemporary times. Moreover, he sees modern science as the completion of a long tradition of metaphysical thinking which, according to Heidegger, began with the Greeks itself.

In his essay, he writes it will be a great misunderstanding on our part if we see modern technology as something 'neutral'. And this certainly is the case in the everyday world around us. We see or experience technology as something literally innocuous and thoroughly neutral in every respect.

Heidegger advises us not to stick to this commonsensical definition if we really want to open ourselves to the essence of modern technology. In addition to this, another thing which we need to do, according to Heidegger, is to overcome the dominant instrumental and anthropological definitions of technology whereby technology is seen, firstly as a means to an end, and secondly, as a particular kind of human activity like any other. Nobody can deny this obvious fact that modern technology, like all other technologies which the humans have been using, is indeed a means to an end. And it is a human activity in the sense that human beings do use technologies and employ them to facilitate themselves in the execution and completion of all kinds of activities. These definitions are not wrong. Heidegger in fact argues that the 'instrumental/anthropological' definitions of technology are "so uncannily correct" that the "[condition] every attempt to bring man into the right relation to technology" which is to say that these definitions never enable to grasp the essence of modern technology per se (5). It remains an enigma for us, and like all mysteries, simultaneously attracts and repels us.

At the same time, Heidegger cautions us to overcome the general perception that the essence of modern technology is something technological; for technology's essence, he says, is "by no means anything technological" (4). To stand in close proximity to the essence of technology, it is important for us to grasp the essence of two related notions of 'instrumentality' and 'causality,' and to thoroughly decipher the form of causality which has become dominant in modern times and the reason for its dominance.

The abstract character of human practice, realised perfectly via the repetitive and mechanical character of human action in assembly-line production, makes all human praxis to unfold in an abstract way. And because concrete human activity has become abstract, uniform and monotonous, it becomes possible to compare, and thereby measure it as a consequence of which it gets converted into labour. Furthermore, concrete human activity takes on the character of labour primarily because the activity is geared towards the production of commodities, that is, exchanges values over which the immediate producer has no control whatsoever of any kind, and which can be bought and sold in the market without taking into consideration the qualitative aspect of each single commodity. And from then onwards, it becomes possible to see all concrete human activity as an expression of labour. As Lukács writes, technology is a mode of revealing.

> ...scientific experiment is contemplation at its purest. The experimenter creates an artificial, abstract milieu in order to be able to

observe undisturbed the untrammeled workings of the laws under examination, eliminating all irrational factors both of the subject and the object. He strives as far as possible to reduce the material substratum of his observation to the purely rational 'product', to the 'intelligible matter' of mathematics'. (132)

Man becomes the subject of capital, ordained to exist and act in order to facilitate the reproduction of the logic of capital.

Enframing and Totality: the question of the Commodity-form

Finally, the essence of modern technology, for Heidegger, is "enframing". Enframing, as Heidegger remarks in his essay, is neither human doing nor beyond all human doing. In other words, we could say that 'enframing' is something like an 'invisible transindividual structural matrix' which not only frames the unfolding of 'nature,' 'man,' and their mutual relationship, but concretely determines the co-ordinates of that very frame which structures a whole range of prospective possibilities available for human beings to live, conduct, organise, articulate, imagine and comport themselves. In other words, we could say that their concrete praxis and objectively articulated life and comportment is *historically determined*. Heidegger writes:

> Enframing means that way of revealing which holds sway in the essence of modern technology and which is itself nothing technological. On the other hand, all those things that are so familiar to us and are standard parts of an assembly, such a rods, pistons, and chassis, belong to the technological. The assembly itself, however, together with the aforementioned stockparts, fall within the sphere of technological activity; and this activity always merely respond to the challenge of enframing, but it never comprises enframing itself or brings it about. (20)

Enframing, to be very precise, frames the relationship between man and man, man with his own self, and man and nature.

Conclusion

The Heideggerian meditation on the question concerning technology remains idealistic in the sense that it suspends the potential of *praxis* to critically shape the contemporary reign of the technological. In fact, Heidegger, in his essay *The Turning*, says that the only possible way out for

Dasein is to wait because "[the essence of Dasein] is to be the one who waits" (42). And secondly, it is very difficult to know in advance "when and how" that turning will take shape. Though Heidegger says that *Being* is historical, yet he nowhere refers to any concrete socio-historical contradictions, whether ontological or ontic, which determine or give form to Being at any point of time in history and the posing of the question of Being. And when it comes to modern technology, he writes: As a form of truth technology is grounded in the history of metaphysics, which is itself a distinctive and up to now the only perceptible history of Being.

We could see that, for Heidegger, the question concerning technology and its history is basically the question concerning our metaphysical way of thinking which goes right back to the Greeks. Such broad historical sweep, for me, is incomprehensible. Even when he talks about enframing, he is basically referring to what Georg Lukacs describes as "the reified structure of consciousness" (Lukács 99). Heidegger never explores the mutual reciprocal relationship between technology and the commodity form, primarily because the commodity form is becoming "the universal structuring principle" of modern social life (Lukács 85).

Heidegger says that "enframing" is a "gathering together". We could say that enframing becomes a kind of structuring of the totality of the space where man also unfolds in its historical character. Enframing opens up a particular "structure of consciousness" for man. In this case, enframing is the commodity-form. The commodity form is so real, deep and fundamental that it not only structures the "forms of objectivity" but determines the very co-ordinates of the thinking subject who is to respond this objectivity. As a result, all science and technology take a very peculiar shape in the shadow of capital.

The commodification of all life and the pervasive tendency to objectify through calculation and quantification everything from human beings to nature itself, and the desire to manage everything as a resource or reserve for some future use is clearly visible to everybody. But the fundamental question seems to be not how science and technology are projecting everything in their own image via the application of their skewed methodologies, rather it is the commodity-form which reproduces everything in its own image of profit maximisation.

There is no doubt about it that there are some significant insights in Heidegger's writings on technology but there is a lot of, as Esther Leslie avers, "bucolic-romantic gobbledygook," of which we need to be absolutely crit-

ical. To sum up the task ahead of all us is to think the question concerning technology with reference to the question concerning capital and the commodity-form which sustains and structure it from the inside. And this should be done in the shadow of question concerning human emancipation. Because all thinking begins with human beings at the centre, not as the master, but as a shepherd of Being. And the shepherd can't run away from responsibility, rather the human being becomes the shepherd only when he accepts this burn of responsibility in spite of the fact that he consciously knows this truth that he is not absolutely responsible. So, instead of accelerating the process of de-anthropomorphizing, we should focus on how capitalist mode of socio-economic organisation fosters an objective valorisation of a very specific form of individuality. And this valorisation is concretely historical, rooted a very definite historical process of real abstraction underpinned by commodity form. This means that enframing is something that happens as a result of human doing (It is extremely significant to note here that Heidegger never elaborates the historical character and shape of 'human doing'), but it is something which transcends its own specificity at the same time by achieving relative independence from human doing.

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