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Frankenstein or Prometheus: An Investigation in Essentialism of Medical Technology*

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Theoretical study

Abstract

The concept that an essence independent of man's volition exists for technology, from the point of view of any thinker, has extensive effects on the whole system of his reflections on technology. Heidegger has been known to grant an independent essence for technology (essentialists). This highlights and complies with some other parts of his thoughts on technology. This belief even extends to the utmost of his philosophy of technology, where he finds the way of release from the Gestell of technology. The current paper tries to extend Heidegger's reasons and evidences on technology to medical technology. Then, it deals with possible criticisms of these reasons and evidences. Finding the foundations of Heidegger's ideas on technology in his first classical work – "Being and Time" – is the purpose of this article.

Keywords: Heidegger, Gestell, Philosophy of technology, Technological revealing, Technology of medicine

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Introduction

The idea that an essence independent of man exists or non-exists for technology complies completely with knowing technology either as a mere neutral and non-oriented instrument or vice versa. Based on this, three perspectives can be distinguished:

1. The common and well-known idea is that technology is an instrument oriented to satisfy man's needs.

Some make use of this instrument for the good, while others use it for evil. In other words, modern technology is like a machine which man has devised for improving his life. If the machine is used for evil intentions, the users have to be rebuked not the technique. Technology is neither good nor bad in its essence, but neutral. It is evident that such an idea is the simplest view on the whatness of technology and its relation with human beings which requires no thought. Most advocates of this belief are scientists sunken in their professional knowledge, negligent users of technology, who are unfamiliar with views on technological instruments and those politicians who are enthralled by

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advancement and development (if not seeking it for power and domination). Thus, this standpoint is the most well-known among all others. In this view, technology is not basically reflected on. It can be predicted that advocates of this view regard technology as lacking an essence independent of human volition.

2. The other view is that although technology is an instrument, it is out of man's control and has dominated man's will. This rebellious instrument has inevitably alienated man from his human essence (alienation). Marx believed that the instrument of production revolutionizes the relations among people and their relation to the universe, but if technology is supervised by the whole society and the things are planned, they no longer become the origin of exploitation and disorder and man will achieve freedom and be freed from alienation from himself. He stated that man, through technology, gives his own pattern to nature, thereby eliminating the distance between himself and nature and overcoming self-alienation. Regarding the five characteristics Jacques Ellul points out in his book "The Technological Society", he seems to be an advocate of this view. These five properties are automatism, self-augmentation, universalism, autonomy, and monism (holism).

Advocates of this view, on the one hand, state that technology is neutral and, on the other hand, talk about man's being in the grip of technology. Therefore, their standpoint is shaky and unsteady.

3. The third group knows technology not as a neutral instrument or even an instrument. They believe in an essence independent of man's volition and identify the relation of man with technology as subordinate to his relation with the essence of technology. In their view, the essence of technology is something other than technological instruments. For this group, the essence of technology is not technological. Heidegger and Borgmann are advocates of this view.

The current study deals with reasons and evidences that Heidegger states to confirm the existence of an independent essence for technology. Then, these reasons and evidences are assessed in respect to medical technology. Finally, the autonomous position of the author on technology is defined. Before going further into the discussion, it should be noted that, as the second group sometimes believes in the views of the first group and sometimes takes the stance of the third group, it was eliminated from the investigation so that the discussion could fit into the dual framework of instrument/essence. That is, negating the instrumentality of technology is the equivalent of confirming the existence of an essence for it and vice versa. By the essence of technology we mean its effectiveness on men's essence (their relationship and relation with the world and others). In other words, if we prove that technology has deeply influenced the essence of man, we confirm that it has true effects and inherently has an essence. Otherwise, we have confirmed the instrumentality of technology.

1. Reasons and evidences

1.1. If we regard technology as an instrument and we accept the prerequisites of technology to all its propositions, we must accept that technology is a way of revealing. This statement shows a kind of familiar Heideggerian reasoning whose formulation is reminiscent of ad absurdum. Since he uses seen and hidden as true and false (Heidegger, 2001, p. 55), and as seen and hidden belong to each other because they are of one thing, we can take the seen (instrument) in every dualism, like instrument/essence, and obtain the hidden (essence) provided that we stick to the nomous of the discussion to the end. This is the known tradition of Heidegger. For example, Heidegger, in the discussion of essential spatiality of Dasein, in "Being and Time", takes the natural attitude toward the place (which is not false, but is the seen) and, while it necessitates the reader to stick to the nomous and the rules for walking, carries him to the unseen (closeness and remoteness) (ibid,

p. 135). However, the most prominent instance of this Heideggerian reasoning can be found in his discussion on the locus of truth in which he takes the statement to reach the interpretation (Auslegung) (Ibid, pp. 217 & 255).

In "The Question Concerning Technology", Heidegger does not consider the instrumental definition of technology as incorrect; "modern technology too is a means to end" (Heidegger, 1977, p. 5). Nevertheless, in his view, "the merely correct is not yet the true" (Ibid, p. 6). Therefore, saying that technology is something instrumental does not provide an answer to the question of whatness of technology. If we were contemporaries of Heidegger and ask him: "what is instrumental itself?" (Ibid, p. 6), we would hear the answer: the truth of instrumental itself is founded on causality.

In the next step, Heidegger counts four ways of being responsible. "The four ways of being responsible bring something into appearance. They let it come forth into presenting … this principal characteristic of being responsible is this something on its way into arrival" (Ibid, p. 9). The domain of presence, is the same as the domain of alātheia. Accordingly, "the possibility of all productive manufacturing lies in revealing" (Ibid, p. 12). In an interpretation, technology is a way of revealing. As we gain knowledge in the light which reveals the world and man in a certain way, and this knowledge determines our relation to the world, we find that technology has an independent essence. If technology has an independent essence, it affects man's essence (man's relation with the world and human beings).

Heidegger's reason is always etymological signs. In this respect, no blaming can be oriented towards Heidegger. One who calls language the house of being in his "A Letter on Humanism" (Heidegger, 2000), definitely sees the words and their etymology and language as the locus in which truth takes place and not as the means to express a preexisting truth. Heidegger's reasoning is known to be determined by Greek language cognates – he recognizes Greece as the site of the rise of Western thinking. Greek words, specifically if their pre-Socratic meanings are considered, are Heidegger's justified evidence and the development of the meaning of the word is the sign of the history of revealing the being.

2.1. As revealing is not in our control, technology which is a way of revealing is not an instrument, the fundamental property of which is being in our control. As technology is not an instrument, it has an essence.

"The revealing that rules in modern technology is a challenging [Herausfordern]" (Heidegger, 1997, p.14). The result of such challenging is that "Everywhere everything is ordered to stand by, to be immediately at hand, indeed to stand there just so that it may be on call for a further ordering. Whatever is ordered about in this way has its own standing" (Ibid, p.17). Heidegger calls it standing reserve (Bestand) (Ibid, p.17). But who accomplishes this challenging setting-upon? Evidently, man; however, that unconcealment through which what we call the real is revealed as standing-reserve is not controlled by man. Human beings are involved with nature in the process of ordering, but that revealing, which ordering is actualized in its frame, is not controlled by man's volition. Human beings respond merely to that revealing which is claimed by. "We now name that challenging claim which gathers man thither to order the self-revealing as standing-reserve 'Ge-stell' [Enframing]" (Ibid, p.19). Gestell is something which calls man for revealing. In a sense, Gestell is destiny. The word Schicksal in German means fate in English and /taghdir/ in Farsi and its verb schicken means providing and destining.

Gestell is fate because it destines and sends man to revealing through being called for. Thus, there is no determinism in fate. However, men are summoned in the frame of a specific revealing, but if that frame is the ambiguous frame of determinism, the human body, which inherently restricts its

interactions, causes determinism.

All in all, revealing, as Gestell, is not controlled by whim and volition, and thus, is not a means in our hands. Technology which is a way of revealing is not in our control either; therefore, it is not a means in our hands, and if it is not a means, it has an essence, an essence independent of our will and volition.

3.1. The basis of technology is non-technological: In a part of his article "The Question Concerning Technology", Heidegger explained what he meant by saying something is technological. Considering his definition of technological reveals what he intends by non-technological. "Those things that are so familiar to us and are standard parts of an assembly, such as rods, pistons, and chassis, belong to the technological. The assembly itself, however, together with the aforementioned stockparts, falls within the sphere of technological activity." (Ibid, pp.20-21).

The emphasis he puts on the non-technological essence of what establishes the bases of technology is achieved by explaining what he means by technological, and consequently, non-technological. If the constitution of technology is not due to its instrumentality, inevitably a non-instrumental essence should be regarded for it; that is, what is not in control of man's will and volition. But what constitutes technology? An idea, attitude, or understanding (better to say, a non-understanding).

A hasty glance at one of Heidegger's first works shows this idea in an ambiguous way. In "Being and Time" (2001a), he introduces the world not as a set of objects but a set of references and signs (pp. 107, 112). One object invites us to self-manipulation of the self, operationally or theoretically, but a reference or sign calls for abandoning the self and moving toward the thing that reference refers to or that sign is representative of. Heidegger, in "Discourse on Thinking" (1966) (Glassenheit) – whose theme has even caused the appreciation of Andrew Feenberg, the critic of Heidegger, in his article "Philosophy of Technology at the Crossroads: Critique of Heidegger and Borgmann" (2014). Feenberg puts forth the concept of "leaving things on their own" which is exactly consistent with the view of the world as a set of signs.

In the beginning of "Being and Time" (2001), when he is interpreting the concept of phenomenology to explain his methodology in the essay, he introduces it by his unique etymologic method: "phenomenon signifies that which shows itself in itself." (p. 51). Things do not show themselves in the way they actually are when manipulated for a reason, but rather when observed and understood for the intention of watching (means /tamasha/ in Pesian, /tamasha/ is rooted in the Arabic word /mashi/ which means walking; /tamasha/ is watching with, watching which is tantamount to being with), they show themselves as they really are. In this sense, they invite the observer to pass across the self and to observe from a perspective which they are the signs for and inherently refer to.

By poiesis, in his article "The Question Concerning Technology", Heidegger intends the same observation accompanied by maintenance and care. He states: "The field that the peasant formerly cultivated and set in order [bestellte] appears differently than it did when to set in order still meant to take care of and to maintain … In the sowing of the grain it places the seed in the keeping of the forces of growth and watches over its increase" (Heidegger, 1997, pp. 14,15). That which constitutes technology is the concept of manipulation rather than idea of understanding and watching. Manipulation is equivalent to Gestell and understanding and watching equal to poiesis. Heidegger explicitly put revealing of Gestell in contrast to revealing of poeisis (bringing forth) (Ibid, p.14). That Heidegger did not discriminate between electricity and atom bombs, agricultural techniques and the Holocaust regarding their extent of being technological indicates that he knew their foundation as the

same and did not believe in instrument and instrumentality (Feenberg, 2014, p. 364).

4.1. Technology transforms our understanding of the "essence": Heidegger states that our current understanding of the essence is the sign of something continuous and persistent. In fact, we have comprehended the "universal" or the "general" as the essence. For instance, the essence of the tree is known to be something that can be conveyed to all kinds of trees such as oaks, spruces, and pines. What is continuous and persistent in all of these trees is their essence or the essence of the tree. Heidegger (like Borgmann) believes that technology fragments and disaggregates identities (Dreyfus and Spinosa, 2014). Therefore, the essence no longer includes continuity and persistency. The essence is fragmented into pieces by technology. This is a great danger, but is in accord with Hölderlin, "… where danger is, grows the saving power also" (as quoted in Heidegger, 1997, p.28). The diversity and multiplicity of the essence – if the things are actually things (Dinge) (gatherer) and gather the fourfold within themselves, and if dasein is actually lightening (Lichtung) and revealer of existence – reveals and uncovers diverse and multiple worlds.

It is evident that that which has the capacity to alter essence and, above that, the hundred-year aged concept of the essence, cannot be a mere neutral means. Therefore, technology is not a means, but has such an established and independent essence from us that it even has the ability to alter our deepest impressions.

5.1. Technology has existential priority to science: One significant theoretical error that makes the meaning of the instrumentality of technology ambiguous is the attitude that technology is the application of sciences, especially exact sciences. Evidently, functionality can include instrumentality. The pragmatic aspect of science is the instrumental aspect of technology through which science is allowed to manipulate the world and such manipulation becomes possible. Therefore, if it is confirmed that technology has priority to science, the pillars of the theory of instrumentality of technology become fragile.

Apparently, Heidegger accepts science's chronological priority (not historical priority; it will be explained that when Heidegger uses the term history, he intends the history of the existence, not the calendrical history, especially if it is specified by the word Geshichte). However, he rigorously believes in the existential priority of technology to science.

It is worth noting that although the emergence of modern technology is known to be later than that of modern science chronologically and there is no doubt in this, some evidences show that this historical segregation cannot be completely trusted. For instance, the modern science of mathematical physics has not been certainly developed in universities. Galileo is indisputably the father of physics mingled with the current mathematics and conducted his research among tools and instruments of sailing and shipbuilding (Davari Ardakani, 2007, p. 62). Even now, no research can be conceived to be conducted without making use of technological instruments which have been devised before that scientific research.

There is no doubt in the existential priority of technology to science. In "The Age of World Picture", Heidegger explains that in order to be the subject (object) of science, the world has to be first uncovered in a way that scientific research, which is mathematical, can be conducted on. Scientific research ideologically is not neutral and prior to its actualization, the world has to be represented in a certain manner (Heidegger, 1950a). He discusses the same subject in "The Question Concerning Technology":

"In enframing, that unconcealment comes to pass in conformity with which the work of modern technology reveals the real as standing-reserve [mathematics] … Modern science's way of representing pursues and

entraps nature as a calculable coherence of forces." (1997, p. 21).

It seems that technology is the ultimate of science. Even if this is true, Heidegger states that this does not negate the priority of technology to science, as Greek thinkers say: "That which is earlier with regard to the arising that holds sway becomes manifest to us men only later. That which is primally early shows itself only ultimately to men" (Ibid, p.22). Frist, thinking comes, and ultimately, action follows.

The priority of technology to science can be regarded as a proof or at least a sign for the existence of an independent essence for technology and against its instrumentality since, as was mentioned, the view that believes science to be prior to technology, actually considers technology as the application of science which means technology is instrumental. Inevitably, the opposite view that regards technology as prior to science negates that technology is a pragmatic science, and therefore, negates the instrumentality of technology, and consequently, accepts the existence of an independent essence other than its application by science for technology. To be non-pragmatic means to be non-instrumental or not to be an instrument in man's hand and control. The latter claim is senseless unless an essence independent of man's volition is presumed for technology.

6.1. That Heidegger avoids presenting local solutions – which include the acceptance of some parts of technology and rejection of some others – can be a sign that he identifies technology as an integrated whole which is the same as conceiving the existence of an essence for technology.

Heidegger obstinately avoided thinking of seemingly compromising and peaceful local solutions. He believed that reconciling technology to man's human identity through some technological practices is vain and the reason for not identifying the essence of technology. Conducting programs of reform is futile. As will be explained, Heidegger sees the remedy in passivity, in the Heideggerian sense of salvation (Glassenheit), instead of active reforms. Even in his last work – an interview with Spiegel in 1967 which he agreed to on the condition that it would be published after his death – he says: "only a god can save us". No one knows if by "God" he meant the personified God in Abrahamic religions and if Heidegger, by this, provided his last answer to those in search of a sentence from him to include him in one of the poles of atheism or faith, or something like Greek goddesses or gods (something sacred) presented in his article "The Thing" (with mortals and the earth and heaven). The evidences are sufficient to imply that expecting a God to manifest himself, which is very similar to expecting the appearance of Nietzsche's superman in "Thus Spoke Zarathustra", indicates that Heidegger is so disheartened by the usefulness of periodical and local solutions, social engineering of such theorists as Popper, that he resorts to heaven and its gifts.

Heidegger did not recognize technology as an integrated whole which calling a part of it causes all other parts to appear. He was definitely in accord with those who manipulate technology to restrict its harm and damage to the human being and the world. This accompaniment, which is simpler than expecting to be saved by God, never occurred since what Heidegger saw as the fundamental of technology was man's unconstrained desire for manipulation. How could another manipulation confine and limit the primary manipulation of technology? This is the same as the fight between kin and tribes for vengeance which no peace is conceived for. For Heidegger, technology had an integrated essence, independent of human beings' manipulations.

However, was the lack of acceptance of logical solutions the same as prescribing surrendering to technology? Never. Heidegger in his article "Glassenheit", or "Discourse on Thinking" (1966), identifies establishing a "free relation" with technology as the remedy for

technology. To understand this "free relation", we have to explain some other points from Heidegger's works which had been written before writing "Glassenheit".

First of all, it should be noted that for Heidegger, understanding and action are not separate. In "Time and Being", understanding is a kind of arising and disclosedness in action (Heidegger, 2001a, pp. 182, 193). Therefore, Heidegger uses the word "verstehen" rather than using the more usual word "begreifen" for understanding. The root of the infinitive "stehen' is "standing" in English and /estsdan/ in Persian, and thus, implies an understanding accompanied with rising and acting. This insight of Heidegger was culminated to its perfection with Gadamer who gave a new sense to Aristotle's practical wisdom (phronesis) and made use of it to remove differentiation between theory and praxis. Secondly, in his article "The Thing", Heidegger introduced a thing by saying: "when things thing they bring together earth and sky, divinities and mortals" (Dreyfus and Spinosa, 2014, p.354). Of course, this view was presented after he, in "The Origin of the Work of Art" (1950b), considered a work of art as the product of interaction and fight between sky and earth (battle in Heidegger's view is the culmination of interaction). In battle, one thing heightens the other to the extent of its respect and taking its essence serious. In battle, the other party or opponent is our rival; that is, we regard him to be at the same level as us. We refuse to battle with an opponent who we do not believe to be at our level because such fighting brings shame and disgrace to us.

Thirdly, as Dreyfus and Spinosa have correctly found, in Heidegger's view, technological instruments thing and continuously has the power of "gathering" the fourfold (Dreyfus and Spinosa, 2014, p.356).

Nevertheless, what is the relation of these three introductory sections with establishing "free relation"? As understanding is the same as action and projection (Heidegger, 2001, p.372), understanding technology is an action proportionate to it. Understanding the essence of technology – that is, understanding Gestell as a way of revealing which is destining – itself is in fact an action which influences the transformation of revealing and fate. If we understand how Gestell destines us to have a specific interaction with the world and human beings, this is an action for overcoming the Gestell of technology and this means establishing a free relationship with it. In respect to technological instruments, Heidegger believes that understanding that they, more than anything else, are things and can thing (that is, gather the fourfold) will cause us to take into consideration that they are constituted by something more supreme (the fourfold) as we let them enter our life (it seems that it is inevitable that we to do this) (Feenberg, 2014). This is the true releasing from the bonds of something and establishing a free relation with it. However, eliminating technological instruments from life, just like their negligent application, is in fact surrendering to technology and its Gestell. What we are to do is to understand, and, consequently, save power and grow "concealedly and quietly" and in its own time (Feenberg, 1977, p.28).

2. Conformity of Heidegger's ideas with medical technology

2.1. Prior to examining this, I should make clear that my intention by medical technology in this essay is both its hardware (medical and pharmacological instruments and devices) and software (specifically knowledge, scientific institutions, and the related institutes) aspects.

If one is still doubtful of the fact that the relation of technology with human beings is that of domination, a reflection on medical technology can eliminate this doubt. The domination of medical technology over human beings is the reflection of technological domination. Today, our lives, even before we come to this world and even

prior to zygote cell production (through parents' genetic examinations), are supervised by medical technology. Medical hardware such as sonography and intrauterine diagnosis methods (such as amniocentesis) controls the fetus' condition.

Medical knowledge also plays its software and logistical role in this supervision and control by providing health standards for the fetus. Medical technology, throughout its life, does not remove its "panoptic eye" (Foucault's term in his book "History of Insanity and the Birth of Clinic") from our life. Sometimes, we are not even abandoned and forgotten after our death; unless the cause of our death is diagnosed through autopsy, we are not allowed to rest in our grave.

If we consider technological medicine and follow its requirements questioningly step by step to its last requisites, we come to the conclusion that medical technology is a way of revealing. "Instruments of what" are "instruments of technological medicine?" Instruments are means to reach a goal. What goal are medical instruments supposed to reach? Undoubtedly, it is to maintain man's health. Is man's health something defined and specified? Evidentially it is, because all medical knowledge taught in universities all over the world try to define health standards.

But, have health standards been fixed during medical history? Did the physicians of ancient Egypt and Babylon, or Iranian sages of hundred years ago, or medicine men of three hundred years ago in the West have the same current interpretations and standards? Definitely not! Take the weight of a human being from the point of view of medicine as an instance. In the past, to be thin was a symptom of the lack of health and connotatively was used in proximity with the concept of death (in Persian the word /lagharmordani/ which means thin to death is used). However, today, obesity is connotes death. This can be merely regarded as an advancement in science that a Popperian interpretation in accordance with the consistent scientific theories can be presented. Nevertheless, sometimes, the differences between the past and present are to an extent that none can be recognized as the precursor or consequent of the other. For instance, today the concept of disease in Galenic or Avicennian medicine is altered so dramatically that it can barely be included in the same field. Trespassing cosmic scales differs greatly from deviation from normal standards (the ranges that more people are in). Today, to be in harmony with the world order which was interpreted as being healthy in ancient medicine has become completely incomprehensible.

It seems as if something other than our desires and volitions determines the goals of medical instruments; something that encourages determining the goals and we, astonished in its encouragement, have impressions. It sometimes unconceals or reveals itself in a way and we, as portrayers, draw this uncovered portion. Medical instrument, as Heidegger explained about all instruments, reveals in this way. We devise and make use of technological instruments of medicine and they exert actions on us, but that shiny light that opens up such a domain and a territory that allows the manifestation of health, disease, and medical instrument is absolutely out of our control.

2. 2. It was argued that medical technology is a way of revealing that, like any other revealing, is out of our control. Of course, instrument has become instrument through its being in man's control. Therefore, what which is not in man's control, like medical technology, is not an instrument and as it is not an instrument, it inevitably has an essence independent of man's control. That challenging which is the characteristic of Gestell or is the same as Gestell of the technology also exists in medical technology. For challenging to be established, first the locus of challenging has to be provided. The locus of challenging for medical technology is the human body. However, prior to this, medical technology has to interpret the human body in a way to become prone to

and receptive to this challenging forth.

Long before the emergence of technology and modern science, Descartes stated the human being's receptivity to be challenged forth in his Cartesian dualism. Heidegger explains: "Descartes distinguishes the 'ego cogito' [thinking I] from the 'res corporea' [physical thing]" (Heidegger, 2001a, p.123). In the next step, extension constitutes the physical thing. The physical body of the human being also becomes an extension in essence which, like any other extension which is commensurable, is the subject of physics and mathematics and of course prone to and receptive of all kinds of lengthening, shortening, and chunking, and to say it briefly in one word, manipulation and challenging forth.

Perhaps if phenomenologists, specifically Gabriel Marcel and Merleau Ponty, and even medicine philosophers, like Svenaus, did not put forth an alternative view, the greatness of the realm in which medical technology constitutes itself would be less evident. Marcel (1965) explains that, if we see the problem from this angle (Cartesian point of view), we will view our body merely as an object, as a mass, a mass of matter which may be from any other person. However, the physical body is not merely a piece of any other matter (this similarity makes the physical body open to interventions of technological medicine); it is a way that each of us is in the world. Our body is something which gives us a position and identity in the world and makes possible our interaction with the world. I and my physical body cannot be known as distinct entities, but I am inherently embodied.

Being a human being essentially means to be embodied. Marcel believes that the body is the container of one's first openness to the world. In phenomenological reflections, the body includes the lived body. The lived body is not just a thing in the world, but is a way through which the world exists for us.

Can Descartes alone change man's attitude and ultimately what Heidegger calls history of being? To answer this question, recourse to what Heidegger states about what Plato proposed regarding the concept of eidos – which Heidegger thinks is one of the main titles of the history of being – is useful; "The fact that the real has been showing itself in the light of ideas ever since the time of Plato, Plato did not bring about. The thinker only responded to what addressed itself to him" (Heidegger, 1977, p.18). We have mentioned that Gestell, in Heidegger's view, is calling or addressing and a way of revealing. Revealing is not in man's control. Considering the body to be challengeable by medical technology is not in man's control either. Therefore, how can medical technology be merely an instrument in man's control which has no independent essence?

3.2. Heidegger calls that non-technological which is the base of technology, an idea which considers the elements in the world as a permanent and stable resource rather than poiesis – that is, observation accompanied with care and maintenance. For instance, he states: "But meanwhile even the cultivation of the field has come under the grip of another kind of setting-in-order, which sets upon [stellt] nature. It sets upon it in the sense of challenging it. Agriculture is now the mechanized food industry" (Heidegger, 1977, p.15).

Medical technology has well understood the concept of "man's body as resource" and organized itself based on it. In medical technology's view, the main dignity of man is his being a servant standing in the doorway of the technological world. The wheel of the technological world is not moved without human resources. The software aspect of medical technology takes these main concepts, that is, health and disease, into consideration.

Software systems of medical technology (health systems) and their institutions (hospitals, research centers, ministries, and etcetera) are all agents for moving the wheels of the technological world. The health system completely takes into consideration this aspect of man as resource in any definition it

presents for health and consequently for disease. Who knows whether a "disabling disease" is the disease which prevents man from being a resource or a working force or not? The health system spends most of its energy for diseases which appear in the average age of man; that is, in ages with the maximum work yield. Losing natural functions is a criterion for diagnosing many psychological diseases (for instance in schizophrenia and depression).

If one uses drugs to forget man's homelessness and statelessness (technology makes everywhere identical so that all the places, and therefore, nowhere is the home of man), he is diseased since drugs do not give man the opportunity to give services to technology. However, if the same man works twenty hours a day to forget himself, he will be an instance of a willful and successful man. Are medical examinations which are conducted in the beginning of the employment – sometimes by using technological instruments – something more than assessing man's ability to move the wheels of the technological world; that is, the ability of being a resource?

Foucault's insights in this respect are very deep and the report he gives from the first general hospital in Paris, which was established in the 16th century by the order of France's monarch, is shocking (Foucault, 1973). Criminals, orphans, lunatics, the poor, and handicapped and incurable patients were all maintained there. What common characteristic would gather such a heterogeneous assembly in one place? To say it in one word, is it not being a resource and a working force? Physicians were definitely present along with agents of force. Then, something happened. It seemed that some intellectuals with the claim of philanthropy separated orphans. Nevertheless, as Dreyfus states, the reason was not philanthropy, but it was the economical revolutions which provided the abundance of job opportunities, and consequently orphans could serve the role of resources and job forces (Dreyfus & Rabinow, 1983).

If becoming a resource was equal to release from the hospital, can it be said that to be hospitalized (which is absolutely related to medical knowledge and that a patient to be hospitalized or not is seemingly something to be discussed scientifically) is related to the lack of man's ability to work? The basis of technology is something non-technological and this is not something other than considering man as resource and working force. This non-technological thing can be found in medical technology more agonizingly than in every other field.

4.2. Medical technology revolutionizes our understanding of the "essence" itself.

In "Being and Time," Heidegger states that if death is real death (not merely turning into a corpse and perishing), it, by confining our existence which is the farthest extent of the boundary, allows us to understand our existence as a whole not as a diverse set of experiences. Understanding our existence as a whole is equivalent to conceiving an essence for the self. By changing the meaning of death from the act of dying (which is phenomenological) to turning into a corpse (which is physiological), medical technology alters our view of essence. Primarily, death has not been a medical issue.

In his "The Canon of Medicine", Avicenna introduces medicine as knowing the science of body states which are affected by health and disease. Health and disease are two opposing sates. But what is the position of death in this relation? It seems as if death had partially been a subject to be investigated in other realms of knowledge such as religion, philosophy, and art. In the "Birth of Clinic", Foucault identifies the narrative that death is the subject of medicine – since it sometimes leads to death – as a modern narrative invented by medical technology (Foucault, 1963).

There is no doubt that physiological explanations of medicine which define death have taken the place of seeing it as religious punishments, art nostalgias, and rational judgments. This in turn has altered our

attitude toward our own essence (Heidegger acknowledged death as the basis to understanding essence). Today, our essence depends on gene sequencing. Genetic engineering is seeking to change our mood and temperament. As was mentioned before, in this great risk – that is, altering our relation with essence – the savior force is also latent. If it is possible to give one sense to diverse essences, the fluid essence which is still essence loosens many philosophical complexities.

Medical technology has existential priority to medicine. That is, prior to technological medicine coming into existence, the world has to be represented in a way that in the twilight of this unveiling, man is revealed as assessable, controllable, and receptive to discipline. This revealing (discovery, unconsealment) has already taken place and a human being with such characteristics has emerged. The transformation of the concept of "disease" is representative of this truth.

In today's medicine whose impudent technological interventions excite physicians and even patients, the concept of serious disease has intertwined with the concept of normal amounts (norms). The word "norm" explains technological medicine in the best way. Technological medicine or medical technology was established on the concept of disease (and defines health as the lack of disease), the concept of disease is also based on norms or normal amounts.

There is no truth in a "norm" except that most people are included in normal ranges. Breaking the norms does not mean concealing a truth among other truths, but behaving and speaking in a way that is different from others. Although breaking the norms is sometimes accompanied by negating the truth, this accompaniment is dispensable, that is, breaking the norms and negating the truth do not essentially co-occur with each other.

The concept of disease in modern medicine (which is fundamentally intertwined with medical technology) is just like the concept of breaking the norms in society. Perhaps hypertension is the most common disease in medicine. Generally, 140 and 90 mm/hg are considered to be normal maximum systolic blood pressure and maximum diastolic blood pressure, respectively. This is mentioned in all medical textbooks with subtle differences. If your blood pressure is lower than 140/90, you are in the range of normal rules and norms, that is, you are not diseased. However, if your blood pressure is higher than these figures, you are considered as diseased and should undergo medical interventions which are sometimes technological (for instance if your hypertension is due to a tumor in the adrenal gland, surgery and the removal of the gland is necessary).

But where have these normal figures come from? Perhaps most people do not know that blood pressure of 150/100 does not cause any decrease in oxygen delivered to the tissues. In other words, in providing oxygen for the tissues, which is the most and main function of the blood (blood has other functions like defending when faced with micro-organisms and automatic cessation of bleedings, but these are its subordinate functions), there is no difference if blood pressure is 150/100 or 120/80. Therefore, hypertension is not the sign of any true disorder in the functions of body organs. Moreover, people have different and diverse psychological structures. Based on psychiatric rules, people can be included either in A or B type groups in terms of their personalities. People who belong to group B are more introvert and when confronted with external events, their blood pressure may increase rather than them having such reactions as anger, grief, crying, laughing, or happiness. This means that if I am supposed to be I, my blood pressure should be more than 140/100. Lowering this figure with the force of medication, diets, and surgeries may change my personality structure.

Therefore, if hypertension is not the sign of any true disorder, why is it bad? And why is it regarded as a disease? The exact reason is

that in more than 80% of cases, hypertension does not cause any disturbing symptom for the individual. True symptoms such as headaches and burns can be completely ignored. However, it has statistically been proven that if hypertension is not treated, people are more prone to heart attacks, strokes, and kidney failure; in one word, they would live shorter lives.

If we take the above description into consideration, it appears that man and his body, like any other thing, should first become the subject of mathematics in the light of a kind of attitude toward the world and human beings, and then, an extensive and enduring science like medicine will become possible.

If the body becomes the subject of mathematics, it can be horribly manipulated because the simplest manipulations are the manipulation of numbers and figures. With respect to the above instance, we have normal figures for blood pressure, a normal figure for life span (shorter life span is the span which most people have more than that), and a statistical figure for investigating human beings' life span. Viewing the world as mathematics made the technological manipulation of human beings possible.

Hume said that causality in medicine is not the constant conjunctions of events. A large number of smoking cases do not lead to lung cancers and smoking cannot be identified as the cause of a large number of lung cancers. However, it can be said that smoking is the cause of lung cancer. Here, causality does not mean constant conjunction of events, but their statistical accompaniment with each other. In more than 90% of lung cancers, there is the history of smoking. This means that if some people smoke, a large number of such people develop lung cancer. The question is that "based on which permission, does medicine regard human beings as the same?" Man is always either this or that and never like this or that. Such an attitude only becomes possible thanks to the revealing of the Gestell, the revealing which regards all as the same; this as that and that as this. It is due to excess of seeing similarity and forgetting essential differences between human beings that normal numbers define our state of being. The Gestell of technology, like what happens in prisons, assigns numbers and figures to human beings.

It is true that the assumption of unity of nature is the assumption which makes science possible, but this assumption, firstly, makes nothing possible except the same technological science, and, secondly, perhaps conceiving such unity is possible for any other being, but it definitely cannot be conceived for human beings.

Such questions as "Is it possible to have a nomological human science in spite of the uniqueness of each person?" should be passionately discussed in medicine whose subject, like other human sciences, is the human being.

Is barometer (as one of the simplest medical technological instruments) merely a neutral meter for measuring blood pressure which existed before (existential perviousness)? Or does it exist because technology allowed the devising of such an instrument possible in terms of both its hardware and specified normal numbers for health and disease of human beings in terms of its software (medical knowledge prior to technological revealing)? Can this instrument determine and specify hypertension? Technological medical instruments provide more precise normal numbers and states day by day. Therefore, an increasing number of people are placed outside the limits of these numbers, figures, and states and the number of diseases and patients increases daily.

Perhaps the reason for narrowing down health limits and the consequent increase in the number of diseases and patients is the fact that, previously, some diseases were not diagnosed, and thus, some people regarded themselves as healthy, but were patients. Nevertheless, it is worth noting that the truth of the disease is the feeling of illness; disease is dis–ease which means lack of ease and

comfort. Today, individuals' feelings of illness or lack of illness is deemphasized in the concept of disease. Disease conceptualizes and specifies itself based on its own rules because in this field, like any other field of technology and science, the subject (human being), his demands, and feelings are completely eliminated. If technology of communication was previously connected to man's needs and problems, today, it takes its questions from the context of its advancement.

However, the theory of illness – that is, lack of a good feeling –is still one of the main discussed theories in the philosophy of medicine. As always, Heidegger has the deepest insights on the subject of disease. From 1959 to 1969, he held conferences in Medard Boss's house in Zollikon for physicians and psychiatrists. In these conferences, disease was regarded as the state in which one is not in tune with the world. The word used for being tuned was the German word stimmung which refers to tuning one musical instrument to the other. This Heidegger's view is like the view of Galenic's harmony of the healthy human being with the cosmic order. The truth of health is the feeling of being in harmony with the world even when one is close to dying – whatever the technological instruments indicate. Primarily, death has nothing to do with the feelings of health and disease. Death is in time and has no time. Death arrives and it has nothing to do with whether we regard ourselves as healthy or ill. Heidegger, in his conferences in Zollikon, introduced disease with the indicative term *not-being-at-home* (nicht-zuhause-sein) – which he had also previously employed in "Being and Time". It is technological medicine which is oriented towards death. As previously noted, Foucault was the pioneer in revealing the fictional narration of birth → disease → death.

Nonetheless, technological instruments of medicine and the absolute of medical technology are undoubtedly telling narratives of the diseases. They do not merely diagnose and treat diseases. Disease, in its modern meaning – which is oriented toward death and has nothing to do with illness, not being in harmony with and attuned to cosmic system, and etc. – is fostered in the bed of medical technology. How can such technology with these functions be a mere means? And as it is not a means, how can it have an essence independent of man's volition?

5.2. Heidegger's evasion from giving local and periodical solutions for the problem of technology is evidence that he believed technology to be an integrated and inseparable whole. Any local solution is formed by accepting some parts of something and eliminating the other parts so that it presupposes its being non-integrated and separable. If a thing is such that man inevitably has to accept or eliminate it as a whole, man is not allowed to manipulate it. In Heidegger's view, technology does not allow man to manipulate it to satisfy his intentions. This means that technology is not an instrument in man's hand and, as an integrated whole, needs man's absolute acceptance or elimination. Heidegger believed that all technological devices can be allowed to enter life without necessarily man's submission to technology. This is establishing a free relation with technology which includes being freed from and winning technology. Nevertheless, the lack of understanding of technology as a way of revealing characterized by Gestell and conceiving it as instrumental equals the absolute acceptance of technology and submission to it.

However, with respect to medicine, periodical and local solutions have been increasingly presented for a long time. These solutions are generally categorized under the term "complementary medicine" or "alternative medicine". Homeopathy, energy therapy, hypnosis, and acupuncture are a few among a long list. Most of such treatments have only had a few successes in treating problems, which modern medicine

itself has confessed to be ineffective in treating. None of these local solutions have a well-established metaphysics and their theoretical foundations are nothing more than messy views on the human body and soul, and the world. Worse than that, these solutions primarily do not treat diseases, but opportunistically point out their success in treating chronic diseases in the treatment of which modern medicine has weaknesses. In this way, any success, even very subtle, seems great when it is compared with modern medicine's failure to treat them. Nonetheless, these local solutions are not so effective.

The Heideggerian solution of establishing a free relation with technology, which is based on an integrated technology (and also medical technology) with an essence, also seems dominant here. The remedy is not to manipulate some parts of medicine, but to understand medical practice as a whole which has an essence. Some philosophers of medicine, most of them were physicians themselves, followed this view. Bracken, Brassington – whose article "On Heidegger, Medicine, and the Modernity of Modern Medical Technology" (2007) is well-known – Jacco Verburget, and some others are advocates of this view. Their efforts were to understand medical praxis which starts with referring the patient to the physician. The essence of medical praxis is the patient-physician relationship which is a human relationship. The patient divulges his/her problem to the physician like when he reveals his sins and tells his problems to "master of magus". Expressing pains and seeking to be healed are sacred practices which occur in authentic medicine. However, in such narratives, signs of regression to the mythical idea of disease as the sin and physician as the mediator of supernatural beings can be seen. Nonetheless, when it turns to Heidegger, we found the idea of returning to the day before (or, who knows, the leap to the day after).

Great efforts have been made in line with empathetic and confirmatory understanding of modern technological medicine in the way it is (and not manipulating it through chunking it by local solutions). The common concept of all of these efforts was to extract authentic concepts of medicine, through the transformation of which technology made medical technology a part of technological Gestell and in accordance with its challenging and ordering characteristics. In Zollikon seminars, Heidegger stated that medicine and medical technology are the closest science and technology to the Greek concept of Techne which indicates the artistic aspects of medicine (Heidegger, 2001b). Gadammer – like his predecessor, Heidegger – had reflections on medicine and technology in the form of conferences for physicians. These reflections which emphasized the hermeneutic aspect of medicine were gathered in "The Enigma of Health" (Gadamer, 1996). Fredrik Svenaeus (2000) followed Gadammer's way in understanding modern medicine and bringing its current concepts back to the authentic existential concepts. In his book "The Hermeneutics of Medicine and Phenomenology of Health" (Svenaeus, 2001), he defined medicine as the only science which is in total relationship with signs, and stated that basically medicine cannot be conceived without the concept of signs. That is, in medicine, the things the patient complains about (fever, headaches, and etcetera) are called signs and the things the physician finds in the patient (such as hypertension, absent bowel sounds, enlargement of the liver, and etcetera) are called symptoms. It is evident that the science and technology in which signs have the main role, has inevitably hermeneutic aspects.

Understanding medical technology as a whole – and not presenting local solutions – exemplifies best the Heideggerian concept of establishing a free relation with technology and indicates the fact that technology has an essence independent of man's volition and control.

3. Criticizing Heidegger's ideas on technology (and medical technology)

Criticisms of Heidegger's ideas can be divided into two categories. One is the criticisms which object to considering technology as a general essence and the other category includes criticisms against some parts of Heidegger's idea.

3.1. Criticisms to considering technology as a whole with an essence: The first criticism refers to Heidegger's idea on conceiving an essence for technology as a whole. This stance of Heidegger is not based on common philosophical reasoning expected from a philosopher, but rather on etymological reflections. However, Heidegger himself confesses this and in his article "The Question Concerning Technology", prior to presenting abundance of etymological reasoning, he makes clear his method of reasoning as: "All ways of thinking, more or less perceptibly, lead through language in a manner that is extraordinary." (Heidegger,1977, p.3).

Even some etymologists were doubtful of the accuracy of his reflections on lexicon. For instance, conflicts exist on Heidegger's reflections on the word alethea. Heidegger states that the Greeks employed this word for the meaning of "unconcealment, revealing, and etcetera" and it was translated into factum (or fact) after the establishment of Christian civilization in Rome and, since then, this word has been identified with the word "truth". However, as previously noted, Heidegger sees language as the house of being and conceives no existence for a pre-linguistic truth in which language and its lexicons are merely signs of such pre-thought truth. For him, the locus of thought is not man's mind, but his language. In line with this idea, it is evident that common known philosophical reasoning in which we find the truth are nothing more than linguistic entities which are products of a certain attitude toward language and employing it in a certain manner. Heidegger and Wittgenstein were born in the same year (1889) and they both wrote their philosophy in German. Although there is no evidence that they were informed of each other's ideas, their agreement on "language" is surprising.

The second criticism may be that, by considering technology as an integrated whole, the actual existing variety inside the whole is ignored. This criticism is similar to the criticism which states that "the West" does not have a true essence and whole and if a whole is conceived for it, it is conventional. That is, the West is not a soul or essence prior to its inhabitants, their behavior, and status, which can endow them with their identity and essence. Conversely, the west is nothing more than these behaviors and statuses, and sciences, customs, piety, and paganism emerged in the inhabitants of the west and the (conventional) unity of this system is the same as (conventional) the unity of the West (Soroush, 1995, p.244). Nevertheless, if we look insightfully, the diversity of the parts of the West can be seen along with the conventional unity.

There are thousands of statuses, conditions, descriptions, and states in the West. Attributing all these behaviors and status to one essence is futile (Ibid, p.250).

All of these can also be considered as true for the integrated "essence" of technology. First of all, the essence of technology – if such a thing exists – is made by something other than scientists and technologists. Secondly, scientists and technologists, even academicians, investors, and politicians are all in all human beings. Can the variety of human being's claims, intentions, desires, and states be diminished and identified as a single description of one integrated essence?

Of course, it seems that Heidegger's intention by considering technology as an essence, as he himself explicated, is not something like genus, type, and persistence – which includes no exception (Heidegger, 1977, pp.29-30). Did he divide essence into true and conventional to be questioned? Heidegger's belief that the essence of technology is a way of revealing is almost

close to Foucault's concept of "episteme" or every era's framework of wisdom and even Cohen's concept of "paradigm" with the difference that Heidegger's idea has a larger scope (for instance classical era, Foucault's modern era, Newton's paradigm, and Einstein's paradigm of modern physics are all included in Heidegger's Gestell).

An insight from Foucault can be helpful to make the discussion clear. Foucault states that every framework of wisdom includes guidelines for thinking. These principles of thinking direct most thinkers' thoughts (necessarily with no exception) and consequently those of the common people. Those who are not within its limits are driven to the margins. Such marginal individuals are housed in prisons, asylums, orphanages, and etcetera. If the deepest thinker does not think within the framework of wisdom of his own era – which has its own technical language, writing and reasoning styles, frames of conveying and publishing of thought, and etcetera – and does not organize his thoughts in this framework, he is not considered as wise.

Heidegger does not state that all diverse activities of human beings in the Gestell of technology include challenging, ordering, and control. Decades before thinking on technology, Heidegger introduced the "they" or "being one's self" (they convey the meaning Heidegger intended using "das man" which includes not having a personality independent of all other and independent of dominant orientation of common thought principles) as those who for them good and bad, glory and abjection, success and failure, and etcetera have one meaning and type. For instance, today, success in the university entrance exam is the cause of pride and failure in it leads to the family's shame.

Dreyfus and Spinosa have correctly found that "things could only be brought out in their ownness in a style different from the dominant cultural style … would inevitably be dispersed to the margins" (2014, p.359). This is also Heidegger's view. Furthermore, does not Heidegger know the way of freedom from Gestell of technology in art and specifically in poetry? Are art and poetry actualized by people other than those involved with Gestell?

Another criticism can be presented here. If the essence of modern technology shows itself in something like Gestell and if Gestell is a way of revealing and destining, are not human being's freedom and actions narrowed down?

Heidegger gave a response to this questions in the article "The Question Concerning Technology"; "… destining is never a fate that compels. For man becomes truly free only insofar as he belongs to the realm of destining and so becomes one who listens and hears [Hörender], and not one who is simply constrained to obey" [Höriger] (Heidegger, 1977, p.25). In fact, Heidegger presents the problem of freedom in a frame other than causal determinism. The presented criticism is reliable if Heidegger's attitude toward freedom is the same as that presented in the frame of causal determinism. Nonetheless, this is not the case and his understanding of freedom has differences in terms of essence with other understandings. As was noted, fate for Heidegger means destining to the realm of revealing. Freedom is also "… the realm of the destining that at any given time starts a revealing upon its way" (Ibid, p.25). In other words, freedom is possible in the realm of revealing which occurs from the part of being. If it is fate, does coming to this world with a specific genetic – which is given by the creator or anything else and in a specific environment which we did not select, and the fact that all our conducts are in a certain manner even if they are directed against this doomed genetic and environment, and establishing a relation with them and therefore in their frame – negate our freedom?

In respect to the problem of action, we also noted that understanding is the very action. Therefore, one who understands, acts.

3.2. Criticisms on some parts of Heidegger's idea: Modern technology is nothing more than

continuity of old instruments.

Of course, Heidegger does not explicitly explain that there is an unfillable gap between modern technology and old instruments. However, the instance he provides, comparing the extraction of coal and ore on the one hand (as modern technology) and the windmill on the other hand, correctly directs some such as Dreyfus and Spinosa to say that Heidegger does not recognize modern technology as the natural advancement of old instruments (2014, p.351) and believes in the existence of an essential difference between them. This essential difference is the consequence of an essential difference in the relation of human beings with being.

But what is that essential difference? Heidegger knows the difference in ordering, locking, and storing up the nature which modern technology allows, but old instruments did not treat nature as such. Can the same problem be followed by altering the relation of human beings with being? When, where, and how did human beings start establishing a different relationship with, as Heidegger says, being (since he believed that the starting point of human relation with being is in being's control not human being's)? And what is the exact distinction of this new relation of man with being or existence compared to the previous relation?

However, is Heidegger required to specify the exact time and explicit properties of transition from old instruments to modern technology or from the old relation of human beings with existence to the new relation? Which one of those individuals, who made distinctions among various periods of human life, can do such a thing? Evidently, they cannot be criticized in this respect since, in reality, no clear-cut boundary can be specified between two colors in the light spectrum or between two periods of time. When and where exactly did renaissance start? Who were the people who started it? How about romanticism? What about the industrial revolution or post-modernism? What exists now has taken place in periods and time spans and geographical limits by people who are not so well-known and through a subtle change in an element among other elements which constitute human life (from art to history, to science, from technique to religion, to …). This element establishes itself through time, and it is time that promises the rise of the new era and specifies its characteristics and constituents.

But did not people order, lock, and store up nature by the old instruments in the past? Were ancient human beings unfamiliar with storing up? Was it not Joseph who commanded people to store wheats yielded in seven years of abundance to be used in seven years of famine? Did not the ancient peasant eliminate the weeds among products to order them? Did the word "pruning" appear in the human language after the renaissance era? And the most important of them, did not Heidegger understand the simple fact that even some animals – which are a part of nature and no challenging forth, Gestell, and such things can be conceived for them – sometimes store up and order nature?

With which historical period (for instance, which centuries) that Gestell-like revealing coincides is not evident in Heidegger's works. Our misunderstanding of such concepts as causality and essence in his "The Question Concerning Technology" is rooted in Plato and Aristotle (Heidegger, 1977, p.3).

This shows that Heidegger's intent from the interpretation of human relation with being is not historical, cultural, social, economic, technological, or etcetera changes but changes in man's characteristics and attitudes. To highlight these characteristics and attitudes, Heidegger, employing the rule of specifying objects through their opposites, inevitably was made to highlight their opposite characteristics by attributing them to a specified period. What Heidegger intends by Gestell, is in fact the calculating, ego-centric, fearing, compromising reason which is disguised as the dominant meaning

of reason. Ratio means reason; it means proportion, especially numerical proportion, and calculation is one of its constituents.

To make us conceive a reason other than this reason, Heidegger tells a story from the ancient times, from the Greece prior to Socrates, Parmenides, and Heraclitus. In Heidegger's view, people of that era established a relationship with being different from that of ours. What we have received from the philosophers of the era of Greek mythology, the era before the rise of philosophy, is so little that no such great result can be extracted from it. Heidegger's narrative is fictional, but it seems to be a hope in the future, rather than a narration from the past. The future in which reason is not keen, but keenness is of Satan and love is of human beings. It does not clarify if the era of mythology is the era of thinkers prior to Socrates or will be an era in the future (Feenberg, 2014). Heidegger's history of being should be read from this perspective.

Technological instruments, more than anything else, are things. Hence, why should they not include the fourfold like any other thing? Feenberg asks the same question in his critical article about Heidegger and Borgmann (2014). He wondered if establishing a new relation with being (technological relation) is restricted merely to the human attitude or it can also be found in technological instruments.

In my view, this criticism of Heidegger is not fair. In his article "Building, Dwelling, Thinking", Heidegger not only recognizes a bridge as a "thing" which "… gathers to itself in its own way earth and sky, divinities and mortals" (1971, p.151), but also defines the modern bridge as that which makes possible the reaching of distant places in the quickest way. Everything gathers the fourfold in a certain manner and this characteristic has nothing to do with modernity or pre-modernity. If their gathering characteristic is understood, technological instruments like old instruments have the same characteristic; therefore, they are things – in the sense that Heidegger intended in the article "What Is a Thing".

Conflict of Interests

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