A COMPARATIVE STUDY OF HEIDEGGER’S TECHNOLOGY AND CONTEMPORARY TRANSHUMANISM

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Abstract

The advancements associated with technology have affected virtually every aspect of being, man inclusive. Technology has turned out to be an unopposed fate of our age; technology is our world. The undeniable technological culture in the contemporary society which has placed everything as a subject of technological manipulation has had ambivalent effects. We are thus separated from our nature, as we are viewed solely from a technological dimension and even considered as objects of manipulations. The transhumanist movements have seduced man with the very best of these technological promises. This research sets out to examine the contemporary biotechnological society and the anthropological abnormalities that have plagued its present existence. Many thinkers and philosophers have spoken of the ill-effects of biotechnological advancements while some have projected ideas aimed at the deification of technology; some of these thinkers will be reviewed in this work. The major concern of this work is to critically and systematically analyze the effects of the contemporary biotechnology on man. Hence, the venture of this work is to chiefly explore Heidegger's conception of technology and technological advancements in which he tried to bring the essence of technology to light. The essential questions are; to what extent does technology enslave the human race interfering with Dasein, our potential for revelation of being? Is man a perplexed victim at the overpowering hands of technology? What future does the praxis of transhumanism and biotechnology promise the human species? Has technology not travelled a long way from "pro-man" to a "contra-man" ideology? A critical evaluation of this problem will gear us into a new phase of relationship with technology.

Keywords: Technology, Biotechnology, Transhumanism

Introduction

The enlightenment view of history is the triumph of the rule of reason operating on the realm of ideas. The history of man has revealed scores of achievements, inventions and discoveries in various fields of life. Severally, there have been and there still are attempts at the deification of man as the god and master of the universe. Assuming such apotheotic position, man has made several attempts to disrupt natural order and invent things novel and unimagined before. Contemporary man seeks an all-round anthropological transcendence whereby he will overcome all human limitations and constraints. This idea is well captured by...
Mondin as he articulates that ‘man is a supreme question to man’; this subsequently led to dehumanization and a devaluation of human dignity, a collapse of the human values.

Man has a growing consciousness of the universe in flux. With the theory of Evolution, the dominant concept of man in relation to his central position in the universe is greatly affected. The submerging of the entire reality of human nature within the *cosmogenetic* trend of natural history was a heavy blow to man's conception of himself and his role in the universe. For the last several decades, a strange liberation movement has grown with the promises of emancipating man from all biological constraints. With particular emphasis on human inventiveness and self-transcendence coupled with an exaggerated promise of superseding this inventiveness, the *transhumanist* movement has attracted a lot of curious attention from scholars. Technology has no doubt become the most powerful and invisible "god" of the 21st century. It has opened the great treasures of human expertise but has at the same time provoked numerous problems to contemporary man.

Technological evolution can now be seen as a continuity of the human biological evolution. This evolution from primitiveness to contemporariness has moved drastically from a "pro-man" to a “contra-man" point of view. There are various critical views suggesting that technology has crossed the boundaries of accepted norms, since man has made several unnatural attempts to create nearly-human robots; create another gender, transgender, test-tube babies, etc. Such progressive metamorphosis has actually engendered appreciable level of development and growth in different fields of human endeavors but these comes at a cost. In recent decades, advancements in science and technology have given a radical inclusion in the manufacturing of inanimate materials to the engineering of living organisms and human life. Heidegger comprehends the dangers associated with this radical development and suggested a necessary human comportment towards technology. Heidegger upholds that man experiences the truth of being in the form of something technical but the essence of technology is not all that technical but belongs to the realm of arts.

**Explication of Terms**

**Technology and Biotechnology**

Technology is etymologically derived from the Greek *Techne-* meaning skills, arts, craft work or method of making and doing things and *Logos-* meaning a study or discourse. Literally speaking, it can be understood as a discourse or treatise on an art or the arts. Technology refers to methods, systems and devices which are the

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results of scientific knowledge being used for practical purposes. Technology is the application of scientific knowledge for practical purpose. Technology is a term describing the use of both primitive and highly advanced tools and methods of work. Abstractly in the category of Aristotelian four causes as reconstructed by Heidegger, technology originates with man’s action (efficient cause) which works on the “givens” of the universe (material cause) thereby producing technical things (formal cause) in view of better life, generally an enhanced material well-being for the human being (final cause).

Biotechnology on the other hand, is the application of the principles and practices of engineering and technology to the life science. This implies the use of technology in the enhancement of the lives of living organisms.

Transhumanism

Transhumanism is a way of thinking about the future that is based on the premise that the human species in its current form does not represent the end of our development but rather a comparatively early phase. It promotes an interdisciplinary approach to understanding and evaluating the opportunities for enhancing the human condition and the human organism opened up by the advancement of technology.

Appraising the Notions of Transhumanism and Technology

In his article, Transhumanist Value, Nick Bostrom defines transhumanism as a movement which promotes an interdisciplinary approach to understanding and evaluating the opportunities for enhancing the human condition and the human organism opened up by the advancement of technology. The technologies included in this transhumanist movement range from already existing ones like genetic engineering to anticipated ones like artificial intelligence. Thus, transhumanism encompasses even radical extension of human health-span, eradication of disease and argumentation of human intellectual, physical and emotional capacities. The notion of transhumanism is inherent in the belief that man is still an evolutionary being. As a work in progress, he can be transformed to a being with greater capacity than the present human by technological enhancements. He further affirms that the nature of transhumanism does not entail a technological optimism yet he never dismissed the dangers contained in such a

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venture. These dangers for him range from enormous harms caused by misuse of technology to even a possible extinction of human intelligence.

He dwelt on the limitations of the human modes of being as factors that spurred the idea of technology. For Bostrom, these limitations are so pervasive and familiar that they are often unnoticed. He outlined these basic limitations as average life span, limited intellectual capacity and bodily functionality. He argued that the human physiological and psychological domains are not as highly developed as they should be. Thus, transhumanist movement suggests a modification in the sensory modalities, special faculties and sensibilities.

He went further to explain the core of the transhumanist values which he identified as an attempt to explore the posthuman realm. The desire to explore the posthuman realm does not entail an abandonment of our current values; rather, it entails an insistence which will enable us to realize our ‘ideals’ even when they are located outside our accessible biological modes of being. For him, we can overcome many biological limitations though there are some whose transcendence appears impossible. Transhumanism offers us a chance for this substantial modification. Technological enhancements of humans are means through which this goal can be pursued.

Jerry Obi-Okogbuo in his book, Modern Science specifically in chapter thirteen dwelt on the issue of Technology. The progression of his work commences with his classification of science into pure and applied science. Pure science deals with knowledge for its own sake spurred by the motive of curiosity or the will to make intelligible. Applied science which he otherwise referred to as technology designates a systematic application of scientific knowledge science to control and manipulate reality for the achievement of desired human goal. Technology in contrast to the will to make things intelligible is characterized by a will to order- the quest to control nature.

He further highlighted four driving motives of technology as productivity, instrumentality, experimentality and utility. With these tenets, he established technological definitions beyond the borders of mere application of scientific knowledge and traces its etymology to Techne and Logos. Techne means a set of principles, regular method, rational method, or order for the production of something or for the achievement of practical end state. It involves rationality and is therefore distinct from art. Following Aristotelian and Platonic distinctions between techne and episteme, (science and knowledge), he asserts that techne is geared towards practical results whereas episteme is a theoretical knowledge geared towards itself. The next concept derived from technology is Logos which signifies study and adds a sense of rationality to the term technology.

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14 Jerry, Obi-Okogbuo. Modern Science, Threshold & philosophical problems, 235.
Okogbuo also stressed the synonymous relationship which exists between science and technology as both disciplines enjoy a symbiotic Union. They stimulate and complement each other; some philosopher even coined the term *technoscience* to refer to this confluence. Such inseparable relationship also exists between philosophy and technology. If philosophy is removed from technology, technology loses its rational element.  

The features of modern technology were also not missing in Okogbuo's work as he establishes technology as a means to an end because it provides basic human necessities. He also holds that technology shares an ambivalent effect as it decrees man's overdependence on nature and leads to such enlightenment which confers upon humanity the power to master, control and explain cosmic forces. This notwithstanding, technology has caused a high level of obsolesce and exploitability as the useful life of a machine is dependent not on its durability but on the time needed to develop more productive ones. More so, there is a parasitic effect associated with technology which is seen in its irreversible exploitation of nature without replenishing her.

He further literates on the dangers of technology summarized as thus; hubris, *technolatry*, technocracy, and functionalism. Seduced and intoxicated by technology, man has misused technology by an unlimited admiration with its extremity as an adulation of technology. This has led to a reign of technology characterized by a culture of materialism and a preference of quantity over quality. Individuals hence are defined in terms of functions and lack an essential inherent worth. Accomplishment is now seen as an end in itself. Okogbuo thus affirms: “in such a contrasting situation, man is downgraded to the level of objects or instruments to be manipulated. He is reified. He is made to worth nothing more than a cog in the productive wheel”.  

The reviewed authors actually presented the highs and lows of technology and its manipulative nature, but paid very little attention to the question about the real “essence of technology” and the supposed human relation to it. Heidegger attempted to answer these very questions, hence, the rationale behind the centralization of our inquiry on him.

**Heideggerian Intention on Technology**

Heidegger’s inquiry into the nature and essence of technology was not purely to criticize it. Hence, he was not against technology. His quest was simply to disclose what technology actually is and the concealed danger in technological domination which darkens and makes us forget originality. Thus, he ventures into creating a dichotomy between technology and the essence of technology. Technology is not

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equivalent to the essence of technology\textsuperscript{17}, because the essence of technology is by no means technological.\textsuperscript{18} He aims at questioning technology so as to prepare a free human relationship towards it. This relationship, he believes, will be free if it opens our human existence to the essence of technology.\textsuperscript{19} This relationship leads man not to an abandonment of technology but a deciphering of its latent dangers.

**Technology as a means to an end**

Traditionally, the essence of technology is viewed from dual instrumental and anthropological definitive perspectives; thus, the conception of technology firstly, as a means to an end and secondly, as a human activity.\textsuperscript{20} Heidegger holds that these two definitions are not mutually exclusive and are inseparable, for to posit ends and procure or utilize the means to them is a human activity.\textsuperscript{21} There is an inadequacy in the understanding of technology as a means to an end since it does not expose the essence of technology. A means is that whereby something is effected and thus attained.\textsuperscript{22} A means to an end implies a cause that brings about an end. Every effect is a consequence of a cause, therefore a recline on the principle of causality is pertinent in the venture of discovering the essence of technology. To establish his point clearer, Heidegger draws us back to the Aristotelian four causes: “What technology is when represented as a means discloses itself when we trace instrumentality back to fourfold causality”.\textsuperscript{23}

**Fourfold Causality: A Way of Being Responsible**

As already noted, Aristotle outlined four causes viz: the *causa materialis*, the *causa finalis*, the *causa formalis* and the *causa efficiens*. The formal cause is the essence of a thing, the form being actualized in its matter; that which makes it the sort of thing it is.\textsuperscript{24} The material cause is that out of which a thing is made, the efficient cause signifies that by what a thing is made while the final cause designates the end for which it is made.\textsuperscript{25}

According to Heidegger, the four causes are co-responsible for whatever that is made. Yet, discussing the primacy of the human element, Heidegger asserts: “the *causa efficiens* but one among the four causes, sets the standard for all causality”\textsuperscript{26}

Originally, in Greek *per se*, “cause” (*aition*) has nothing to do with bringing about and effecting rather it refers to something of which something else is indebted. The


\textsuperscript{18} Martin, Heidegger. *The Question Concerning Technology and Other Essays*, 4.

\textsuperscript{19} Martin, Heidegger. *The Question Concerning Technology and Other Essays*, 3.

\textsuperscript{20} Martin Heidegger. *The Question Concerning Technology and Other Essays*, 5.

\textsuperscript{21} Martin Heidegger. *The Question Concerning Technology and Other Essays*, 4.

\textsuperscript{22} Martin, Heidegger. *The Question Concerning Technology and Other Essays*, 6.


\textsuperscript{26} Martin, Heidegger. *The Question Concerning Technology and Other Essays*, 7.
four causes are ways, all belonging at once to each other, of being responsible for something else. This can be illustrated using a wood out of which a table is made. As a matter (hyle), the wood is co-responsible for the table and the table is indebted to the wood as well as it is indebted to the tableness (its form) and to the carpenter. Heidegger goes ahead to sustain that

“The four ways of being responsible bring something into appearance. They let it come forth into presencing. They set it free to that place and so start it on its way, namely, into its complete arrival. The principal characteristic of being responsible is starting something on its way into arrival. It is in the sense of such a starting something into arrival that being responsible is an occasioning….”

This led Heidegger to the discovery of the essence of technology. Since occasioning has to do with bringing forth and appearance, which moves from concealment to unconcealment and thus, Revealing (aletheia), every bringing forth, therefore, has revealing as its very foundation. He continues to sustain that “if we inquire step by step into what technology represented as a means actually is, then we shall arrive at revealing… Technology is therefore no mere means. Technology is a way of revealing. If we give heed to this, another whole realm for the essence of technology will open itself up for us. It is the realm of revealing, i.e, of truth”

Technology is a mode of revealing. Technology comes to presence in the realm where revealing and unconcealment take place, where aletheia, truth, happens. Heidegger conceives the essence of modern technology as Enframing, otherwise, “Ge-stell”.

**Gestell: The Essence of Technology**

Gestell in ordinary German means a physical framework, frame, or structure. But Heidegger is obviously not using the word in the literal meaning. His translators sometimes translate Gestell as "enframing. Having outlined the definition of essence of a thing as “what this thing is”, Heidegger maintained that technology in this sense has a double essence which are essentially anthropological and instrumental. Upholding further that the dual characteristics of technology are not objectionable, they still are not in correspondence to his very comprehension of essence. Essence for him implies a way through which truth is revealed to human existence. The relationship between man and technology will be free if it opens our human existence to the essence of technology. He opined that the essence of technology is mutually exclusive from anything technological. An illustration goes thus: the

31 Martin, Heidegger. *The Question Concerning Technology and Other Essays*, 3
The essence of technology is by no means anything technological, thus, we shall never experience our relationship to the essence of technology so long as we merely conceive and push forward the technological. Put up with it or evade it, everywhere we remain unfree and chained to technology whether we passionately affirm it or deny it.32

Since the essence of technology is nothing technological, Heidegger conceives it as Enframing or Gestell. In ordinary German usage, Gestell designates some kind or apparatus or the name for a skeleton. Using it as the essence of modern technology, Heidegger defined Enframing (Gestell) as the gathering together that belongs to the setting-upon which set upon man and puts him in the position to reveal the real, in the mode of ordering, as standing-reserve. As one who is challenged forth in this way, man stands within the essential realms of enframing (Gestell).33

As a mode or a way of revealing, technology reveals the world to us, it reveals possibilities. It brings forth something that connects us with ideas, forms, matter and the world. The enframing (mode of revealing) that dominates modern technology is a technological understanding of being. According to Heidegger, there is a distinction between the traditional and modern ways of revealing; whereas the former is “bringing forth”, the later “challenges forth”. When Heidegger speaks of technology’s essence in terms of challenging or positionality, he speaks of modern technology and excludes traditional arts and tools which we might in some sense consider technological.34 Therefore, modern technology challenges man and views him as an object of technological manipulation- A truism which underlies the transhumanist movement agenda.

Modern Technology and Its Dangers

According to Heidegger, modern technology is simply a lens through which reality is disclosed to us; thus, it is also a mode of revealing. Everything we perceive or think of emerges from concealment to unconcealment. Reality reveals itself to us in very specific ways. In contrast to the Greek understanding of techne as making or helping things into being, modern technology forces things into being. It provides a distinctive way of revealing. Technology comes from within us, from within our desires which are both constructive and destructive. Thus, the Dasein is the being for which concealment occurs. It uncovers and brings forth the mysterious revelations of beings. The modern technology has another phase of revealing; it

32 Martin, Heidegger. *The Question Concerning Technology and Other Essays*, 4
challenges the physical world and supplies energy. This is what Heidegger referred to as “Standing reserves”.35

The danger posed by modern technology is its view of reality only as standing reserves, a raw material. Standing reserve is just an aspect of the whole of reality. This is primarily caused by our misconception of the ideology of being. Modern technology has been plagued by a character of a technological framework which dominates the way the Dasein approach the world. This technological understanding of being, thus, posits the ultimate danger of the modern technology since it constricts our experiences of things as they really are. As such, humans interpret themselves as raw materials (human resources) and hence, try to manipulate others humans and themselves as means to an end. Humans are no more seen as beings that can have deeper interpretations of the world; instead, they are merely raw materials for experimentation and manipulation; more like an inventory in the warehouse. Mark Blitz captured this very well when he averred:

> Everything approaches us as a source of energy or as something we must organize. We treat even human capabilities as though they were only means for technological procedures, as when a worker becomes nothing but an instrument for production… Each and every thing that presents itself technologically thereby loses its distinctive independence and form. We push aside, obscure, or simply cannot see, other possibilities.36

**Transhumanism: An Evolution of Anthropomorphic Technology**

It is often taken that the major inspiration of *transhumanism* is traceable to Nietzsche’s doctrine of *der ubermensch* (*the overman*), but Nietzsche never meant a technological transformation. Rather, he seeks a kind of personal growth and refinement in exceptional individuals.

The coalescence of an identifiable *transhumanist* movement began in the last decades of the twentieth century. In 1966, FM-2030 (formerly F.M. Esfandiary), a futurist who taught "new concepts of the Human" at The New School for Social Research in New York City, began to identify people who adopt technologies, lifestyles and world views transitional to "posthumanity" as "transhuman" (short for "transitory human"). In 1972, Robert Ettinger contributed to the popularization of the concept of "transhumanity" in his book *Man into Superman*. FM-2030 published the Upwingers Manifesto in 1973 to stimulate transhumanly conscious activism.37

*Transhumanist* represents the contemporary trend which seeks a confluence between technology and humanity. It can be approached in two ways; either as a

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mechanization of humanity or as a humanization of technology. Either ways, man and technology stands significantly as the key concepts and man is seen as an object of technological manipulation. The singular goal of the transhumanist movement is the enhancement of humans through science and technology. It can be viewed as a technological evolution moving towards the goal of human enhancement or an anthropological evolution of man to a more technological being. As an “ultra-humanist” movement, transhumanism challenges human limits and seeks to overcome them via technological advancements. This goal is achieved through regenerative medicines, mind uploading cryonic, radical life extension, etc.

**The Transhumanist Declaration**

This is a consensus which highlights the basic principles of the transhumanist movement. Below is an outline of the March 2009, declaration of the Transhumanist movement:

- **Humanity stands to be profoundly affected by science and technology in the future.** We envision the possibility of broadening human potential by overcoming ageing, cognitive shortcomings, involuntary suffering, and our confinement to the Planet Earth.
- **We believe that humanity’s potential is still mostly unrealized.** These are possible scenarios that lead to wonderful and exceedingly worthwhile enhanced human condition.
- **We recognize that humanity faces serious risk, especially from the misuse of new technologies.** These are possible realistic scenarios that lead to the loss of most, or even all, of what we hold valuable. Some of these scenarios are drastic, others are subtle. Although all progress is change, not all change is progress.
- **Research efforts needs to be invested into understanding these prospects.** We need to carefully deliberate how best to reduce risk and expedite beneficial applications. We also need forums where people can constructively discuss what should be done and a social order where responsible decisions can be implemented.
- **Reduction of existential risks and development of means for the preservation of life and health, the alleviation of grave suffering, and the improvement of human foresights and wisdom should be pursed as urgent priorities, and heavily funded.**
- **Policymaking ought to be guided by responsible and inclusive moral vision, taking seriously both opportunities and risks, respecting autonomy and individual rights, and showing solidarity with and concern for the interests and dignity of all people around the globe.** We must also consider our moral responsibilities towards generations that will exist in the future.
- **We advocate the well-being of all sentience, including human, non-humans animals, and any future artificial intellects, modified life forms, or other intelligence to which technological and scientific advances may give rise.**
We favor allowing individual wide personal choices over how they enable their lives. This includes use of techniques that may be developed to assist memory, concentration, and mental energy; life extension therapies, reproductive choice technologies; cryonics.\(^{38}\)

**Transhumanism and Dasien: Relations and Implications**

The attractive nature of the *transhumanist* declaration surely appears seductive and can be viewed as one of the best progressive intentions. But these declarations are also ways of revealing. They reveal certain truths which are *enframed* within them. The danger attached to it is even contained in the captivating promises it makes. The movement of *transhumanism* perplexes the current understanding of the human not necessarily through its past and present legacies but through the possibilities ascribed within its possible biological and technological evolutions. *Transhumanism* explores the benefits and repercussions of what technology could do for humanity; however, it assumes that technological boundaries are nonexistent.\(^{39}\) The crux of *transhumanism* will surely intertwine us with our technology and as such, this merger of our forms and the products of our thoughts tend towards our possible extinction.

The *transhumanist* perseverance in recognizing science and technology as the main asset of reformulation of the humans runs the risk of techno-reductionism; technology becomes a hierarchical project, based on rational thought driven towards progression. Following this line of thought, everything is interpreted from a technological framework. However, Heidegger, as earlier noted, argues that the essence of technology is by no means technological.\(^{40}\) Technology is not the supreme goal of humanity. It affects man’s calculative thinking. In the words of Heidegger, “the approaching tides of technological revolution in the atomic age could so captivate, bewitch, dazzle, and beguile man that the calculative thinking may someday come to be accepted and practical as the *only* way of thinking.”\(^{41}\) This leads to a misconception of our understanding of being. People are used as resources until they are no longer needed and thus, discarded. The need for a break out of the technological understanding of being becomes more urgent if we are threatened by the dominating and controlling power of technology. We need to be freed from a seeming technological imperative so as to critically discuss its pros and cons.

This technological understanding presents technological enhancement and efficiency as our only goal. Efficiency which culminates at getting most out of ourselves and every other thing is good so long as it is not viewed as the only end for man to which other ends must be subordinated.

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\(^{39}\) [https://rationalwiki.org/wiki/Transhumanism](https://rationalwiki.org/wiki/Transhumanism) (accessed 03.04.2019, 8:30pm).

\(^{40}\) Martin, Heidegger. The Question Concerning Technology and Other Essays, 4.

\(^{41}\) Martin, Heidegger. Discourse on Thinking, 36.
Gelassenheit: the Heideggarian Solution

Gelassenheit is a German word which designates comportment, tranquility, calmness, stillness and composure. Heidegger suggested such an attitude in our relation towards technology. He was positive about overcoming the problems posed by technological advancements as he affirms that we can use technical devices, and yet with proper use also keep ourselves so free of them, that we may let go of them at any time. We can use technical devices as they ought to be used, and also let them alone as something that does not affect our inner and real core. We can affirm the undeniable use of technical devices, and also deny them the right to dominate us, and so to warp, confuse and lay waste our nature”.  

This entails a kind of embracing technological advancements yet setting boundaries for it, regulating it- a midway between an undue deification of technology and an unnecessary annihilation of technology. Heidegger further calls for the recognition of the supremacy of the Dasien over technology:

We let technical devices enter our daily life and at the same time leave them outside, that is, let them alone as things which are nothing absolute but remain dependent upon something higher. I would call this comportment towards technology which expresses “yes” and at the same time “no” by an old word, releasement towards things. 

There is thus a huge possibility of dwelling in a seeming technological world without losing our originality and without being imperiled by it. We need such a comportment which will enable us not to view things only from a technological dimension. Furthermore, we must discover the latent meaning hidden in technology. To accentuate this Heidegger contends: “the meaning pervading technology hides itself, … we stand at once within the realm of that which hides itself from us and hides itself just in approaching us.” This comportment which enables us to keep open to the mystery of technology is known as openness to mystery. These two comportments, namely, Releasement and openness to mystery, belong together and enable us to overcome the seeming dominance of technology.

Evaluation

There are definitely no objections to technological and biotechnological improvements but they must not trespass the boundaries of accepted norms. The Transhumanist advocates, for instance, think that they understand the constituents of a good human being; they are happy to leave behind the limited, mortal and natural beings they see around in favor of something better: but do they really
comprehend the ultimate human goal? The question of what should be natural to man should not be reduced to mere biologism\textsuperscript{46}, since the biological process is simply one out of the many dimensions of man. To decipher what is good for man, one must see him in the total context of his place in nature and the universe.

Life is at the same time adventurous and conservative.\textsuperscript{47} Biotechnology has aided man in his adventurous quest for novelty through the introduction of technological possibilities for human self-modifications. It would be dangerous to nibble at biotechnological tempting offers without realizing that they come at a frightful moral cost. There are ethical and moral consequences of contemporary biotechnology which ought not to be overlooked. A curious minded person would wonder whether or not these technological sophistications are revolutions against nature and order.

The problems inherent in biotechnology should make man introspect at the real conception of living a better life and hence, make a moral distinction and imperative along the path of technological advancement. A quest to overcome constraints which define the character of the moral world is an issue of moral adrift. What will be left of human life if one function after another is either overtaken by machines or genetically suppressed? The zenith of contemporary transhumanist venture is to create a super intelligent technology more intelligent than man. If this is allowed to happen, man will either be defeated by his own creature or at worst, man will end up in a voluntary submission to his own creature. Things are bound to lose their distinctive nature when viewed solely from a technological perspective. Technology displaces being from their state of originality. As Heidegger affirms, things show or reveal themselves to us in diverse ways; technology is but just a way of such a revelation and must be experienced within its own boundaries and domain.

Technology cannot be made the ultimate goal without entailing the subjection of man's spirit to matter. In such a case, man's intellectual activity would be placed at the service of the material world as its ultimate purpose and meaning. Technology cannot be considered as the supreme form of rationality or the supreme norm for all human values. Biotechnological advancements are here to stay and its ingenuity should be welcomed as a contribution to the common good through which man ennobles himself. Yet, it should be placed within the horizon of ethical scrutiny and be stripped of or redirected in any attempt to dehumanize and devalue the human person. Biotechnology should be used for man's constructive service, for it is made for and by man. While not being anti-technology, a strict caution should be put on the unnecessary exaggerations of contemporary biotechnological enterprise.

Conclusion

\textsuperscript{46} Owen, Garrigan. \textit{Man's Intervention in Nature}, 171.

\textsuperscript{47} Owen, Garrigan. \textit{Man's Intervention in Nature}, 189.
This work neither proposed the idea of technophilism\(^{48}\) nor that of technophobism.\(^{49}\) Far from these, this work aimed at emphasizing that despite the many marvels of technology, each has come at a very high cost. Man should not be used as an object of technological manipulations to the extent of depersonalizing him. Man should not be stripped off his humanity and clothed with a delusional garment of mechanization. Every attempt at a humanization of technology and a mechanization of man should be eschewed. Man must be liberated from the seeming bondage of technologism, not by a rejection of technology but by a clear perception of its latent dangers. This consciousness brings forth cautiousness. This research is simply a proposal of a way of getting technology under human control so that it can serve our rationally desired ends. Indeed, technology is meant for man and not man for technology.

**Works Cited**


\(^{48}\) _Technophilism_ is an uncritical enthusiastic belief that technoscience is the key to all human problems.

\(^{49}\) _Technophobism_ is the fear to undertake productive research because nature is considered sacred and should not be desecrated