EMENDATED SOCIAL NARRATIVES: THE CHARACTERISATION OF TECHNOLOGY IN NEW NARRATIVES OF SOCIETY

I. Abstract

The most common characterisations of technology in modern culture is of "technology as an enabler" towards achieving our desired state of living (most noticeable in our attempts to use "Machine Learning", "Deep Learning" and "Artificial Intelligence" to develop "Hyper-Individualised" services and products) and "technology as a fetishised object" that is desire manifested in a tangible form that is sensually experienceable (the numerous iPhones with barely discernible differences are a testament to this characterisation). The nature of technology as we create it today has drifted far from these characterisations but the social narratives we construct are still married to these personifications. An example of one such social narrative is that of the "posthuman". A lot of literature and theory around the posthuman that is written today, approaches the idea of the posthuman in a juvenile and objectified manner, thus limiting the scope of what it means to be a "posthuman species" to being technologically empowered and augmented. How can we, as participants in the creation and consumption of technology, understand and rewrite social narratives, such as that of the posthuman age, and what characters and/or roles will technology play in these new narratives?

II. Introduction

This essay is composed of two significant components worth noting. Firstly, I reconstruct a perception of technology, shaped, in a very unstructured manner, by a keen examination and consequent reflection of various texts. These texts either discuss technology, human society or the influences of technique (and its affections 1) on society and vice versa. The second significant part of this essay compares, in contradistinction to one another, the characterisation of technology in two different narratives of society - the Futurist Manifesto of Filippo Tommaso Marinetti and the Cyborg Manifesto of Donna J. Haraway. Though both narratives are written in the same vernacular (that of a manifesto, declaring the intentions and motives of a society in the future), the treatment of technology, first as a concept and then its relationship to society, in each narrative is distinct and informed by keen observations of society, humankind and the views and hopes of the authors themselves. The common vernacular and the disparity in time, socio-political contexts and the resulting characterisations of technology are a useful way to develop an understanding of how we might be able to characterise technology in current and future social narratives.

^{1 &}quot;Affections", here and throughout this essay, is used in the spirit of Baruch Spinoza as in *Ethics*, 1677. Indicates, in this context, the different ways in which technique is manifested/exists within the scope of human reality.

The two parts of this essay work symbiotically with each other to develop a holistic view of technology, its nature and its intersection with social contexts.

III. Ruminations on Technology

Technology, for a long time, has been a confusing term with no specific point of resolution. Defining technology is difficult because, upon reflection, technology is not truly a "thing" of matter that exists as substance on earth and within collectives of human and non-human species. It is a construct that is shaped, not by the objects² it renders plausible, but by the way in which it connects the "machines" (that are derived from "technique"³) to human society. A hunting knife, a coffee-maker, an iPhone and so on, are a series of manifestations of technique that embed themselves into society. The nature of these manifestations is to present themselves as a comfortable means to an end. A "successful" manifestation would additionally mask itself as socially valuable and make the "end being achieved" seem irresistible. This would naturally indicate that the 'genesis" of technology, so to speak, was driven by necessity. If the

 $^{^{2}\,\}mathrm{The}$ objects whose existence are rendered plausible by technology.

³ Technique as explicated by Jacques Ellul in *La Technique ou l'Enjeu du siècle*, 1954.

⁴ Comfortable, in this case, can also be replaced with convenient, safe, efficient and so on. While semiotically, each of these words have vastly varied connotations, for the practical purposes of the above statement, they can be used interchangeably.

definitive scope of what a technological object could be, is broadened, we see that necessity for convenience drives the innovation of technique. Consider a spear as a manifestation of technique. As a hunter-gatherer species, we needed to find efficient ways to hunt and kill large prey to feed ourselves. What might have started as an activity of pelting the prey with stones, evolved, by virtue of observation of ecological contexts (such as sharp canine teeth or beaks of birds), into shaping the stone into a sharp edge that could pierce the flesh of animals, mortally wounding them. This went through further evolution and the sharpened stone was tied to a wooden shaft to provide many more ways of using the essence of this object; an instrument to kill in order to survive. However, echoing Jacques Ellul, technology itself is not the derivative of a means to an end. Technology is the relationship of technique and its manifestations with human and other ecological societies. The symbiotic exchange and influence of one over the other is a more generative manner of perceiving the term technology. In this definition, we are able to account for the volatility of the term itself, the confusion it renders in our attempts to decipher it and finally the lack of persistent resolution in trying to understand the sociological levers that affect its metamorphosing nature. In seeing technology as technique (a means to an end) or as an object (the manifestations of the technique) we tend to define "a technology", a myopic slice of

technological enactment or context, as opposed to the essence of $\operatorname{technology}^5$, as a whole.

IV. Humans and our relationship with the affections of technique

Humans are a fascinating species. Our triune brain has been a gift of grace but also the essence of our eternal state of confusion. We are discovering pieces of our own fabric, too slowly to keep pace with our increasing activity towards laying down corner stones for the future. As a result, we are disposed to believe that it is us, who have created everything that benefits us and improves our quality of life. After all, is that not the most logical rationale for the genesis of a technological society? However, as we observed in the previous section of this essay, the need for developing technique and manifesting it as a tool or a machine is born out of necessity. In the spear example, we saw the birth of an object, born out of the necessity to survive and the identification of an opportunity to kill as a means to survive. This unconsciousness of noticing that technique and its affections are birthed out of societal necessity forces us to perceive technology as "innovation for the purpose of progression". We look forward in arrogant clairvoyance at the plausibility of our creations ameriolating our issues as a society.

⁵ The notion of essence of technology influenced by Martin Heidegger in *The Question Concerning Technology*, 1954.

⁶ Langdon Winner refers to this as Technological Somnambulism in his essay, Technology as Forms of Life, *The Whale and the Reactor*, 1986.

Technology itself is a lot more complicated. Our relationship with the manifestations of technique is in a reverse fashion than we perceive it. We are not in control of these manifestations, as much as they have enslaved us in their reproducibility of convenience. That which we have "created" has captivated us, because we are married to the necessity for replicable technique. In that sense, tools, machines and devices have become indispensable to our existence because they present themselves as the most apparent medium for us to exist within close proximity to our socially defined necessities.

The above text contextualises a number of thoughts, a priori, sans the practical relevance to daily life. I will now examine one context to provide relevance to the thoughts outlined above. The most evident testament to the above commentary is our constant lamentation, in modern society, that we have "become addicted" to our mobile devices. For a moment, let us break down the fundamental functional construct of a mobile phone. First and foremost, a mobile phone is an object. It has the ability to process action based on our input - seen in the way of making a call or sending a text message. It also has the ability to prompt action - every time your iPhone buzzes in your pocket, "notifying" you of activity, it is sending you a prompt that requires you to respond to it. This response may be to commit the action or it may be to ignore the call to action. Within this object, an interface is embedded. This interface becomes our tangible portal

through which we can communicate either input or response to the object. The benefit of the mobile phone being "mobile" in nature lies in its express capability to commit action and prompt us to action with spontaneity. This spontaneity supports and nurtures our capability to communicate with others much faster, more frequently and over large distances. The fact that I can post a major celebratory moment of my life to Instagram while the moment is in occurrence, thereby creating an avenue to share that moment and the consequent celebration with people who couldn't be physically present captures the essence of the mobile device as we see it today. And, in earnest, isn't that what we are addicted to? Spontaneity, mobility, speed, efficiency, shareability and so on. The device is just a physical vehicle that enables these features of societal living in today's world. In that sense we falsely believe that we have been trapped and ensnared by the technological manifestations we have created. We have been ensnared by the perceptible nature of society, through the device that supports and fosters this nature. The technological manifestation is an autopoietic organism whose evolution is fuelled by social necessity and fabric. Frank Lloyd Wright encapsulated a profound thought, on the relationship of the Machine to human society, in the following extract from his essay. "And, invincible, triumphant, the

⁷ Autopoiesis is a philosophical theory of systems capable of self-creation, posited in Humberto Maturana and Francisco Varela's essay, *Autopoiesis and Cognition: the Realization of the Living*, 1973. Especially pertinent to the topic of this essay is their section on "Machines" (Page 78 - 79).

machine goes on, gathering force and knitting the material necessities of mankind ever closer into a universal automatic fabric;...." At the turn of the century, soon after the effect of machines as a construct of technology began to become a subject of widespread debate, Wright was able to accurately point out that the machine itself was a reflection of our societal fabric. It was informed by our necessity and optimises access to the necessity in a convenient form. We are, as a social species, not addicted to "technique manifest" qua "technique manifest" but we are severely addicted to the essence of these manifestations.

V. Society and "modernity"

Now that I have presented a version of understanding technology, the next point of focus within this essay is to make some notes on society specifically within the scope of understanding the notion of "modernity" within the context of society. This is important in order to develop a taste for what it means to develop a "social narrative".

In "We Have Never Been Modern", Bruno Latour expounds the holist concept of a "collective" and draws a contra-distinction against the generalist terminology of "society". In his claim, modernity manifests

⁸Frank Lloyd Wright, *The Art and Craft of the Machine*, 1901.

not just in the conception of a break in the stable ongoings (culturally or otherwise) of time but also in the argument of what conditional realm was better (The old or new)? So "modernity" can not be just a change in human cultural paradigms of social construct but must also take into consideration the ontological realm of the non-human9. Following from the previous sections where I posited an alternate way of perceiving technology as a series of autopoietic manifestations and their relationship with society, modernity would have to reflect not just a change in our humanity and social fabric but must also reflect on the nature of the technological manifestations, the evolved relationship that we have with these manifestations and also the changes that these manifestations have on our collective fabric. For too long, technological fabrication and the "non-human" have been viewed as the "other". This is problematic because it hinders our ability to define our own humanity and see technology as a metamorphosing concept that mutually and symbiotically grows with human society.

In early 2019, I worked on an experimental project that dealt with positing the misconstrued "human" characteristic of identity as a set of abstracted traits that can be heuristically mapped onto technological objects. I developed a series of four objects that were each composed of four electronic components: A photoresistor, an LED

⁹ Bruno Latour, We Have Never Been Modern, 1993.

and a piezo buzzer all connected to an arduino board. Each object would emit a specific colour of light through the LED which was a semiotic cue for "name". Each object would, based on a pre-programmed set of parameters (such as introversion and extroversion), let others know of their presence at different temporal frequencies by saying their names (lighting up). The photoresistors were the "ears" of each object. They would be able to use the numerical readings relayed through the photoresistors to distinguish between the different colours of lights and thereby know which other object they had encountered. The buzzers were used as a way to acknowledge the presence of others. These were triggered, once again through pre-programmed heuristics such as responsiveness and sociability, to create another layer of relational identity within each object. The final step was to model within each object, the capability to adopt identity traits from one another based on the serendipitous frequency of interactions they may have with one another. This generativity was the characteristic of the technological objects that transcended them from mere models fashioned after abstractions of humanity to a robust and autopoietic collective of confused and volatile "beings" 10. The project initially seemed like an unfair anthropomorphisation of technology. However, the emergent characteristics of the essence of the technological objects were a clear indication that we must

¹⁰ The project was completed within the construct of a class called "Digital Development Workshop" at the IIT Institute of Design towards my graduate degree in the Spring 2019 Semester under the guidance of Studio Instructor and my personal advisor, Zachary Pino.

interact with created technological systems and objects with more caution and not in the somnambulist manner we have been thus far. If we are able to recognise the "life" in the technology, there is a good chance that we would be more mindful of how we talk to engage with its manifestations. It is in this mindful and conscious engagement that we transcend to the truly "modern" essence of society that we claim to have established already.

Thus far, I have explored, fleetingly, the meaning of technology, its nature and its essence and the coinciding relationships with society and humanity. The next section picks up two significant social narratives and comments on the nature of technology as characterised within each of them.

VI. Technology as seen in two distinct and clairvoyant social narratives

Filippo Tommaso Marinetti was a late 19th Century avant-garde poet. He is often noted as the person responsible for the birth of the Futurist movement. His intentionally caustic and provocative writing fetishised technology, its manifestations and youth as the pillars of Futurism. At the turn of the century, in 1909, Marinetti published a piece to the Parisian newspaper, Le Figaro, entitled "The Foundation"

and Manifesto of Futurism" 11. A closer examination of the socio-cultural context within which this piece was written, puts one in better stead to comment on the nature of technology as characterised within this dazzling narrative. The beginning of the 20th Century was a time when the social structures of our world had become mechanised and driven largely by economic views and theory. The Industrial Revolution and its effects on human social structures had sunk into our systems deep enough for us to begin to take a stance on what our relationship with the manifestations of technique would be. There was a very evident polarisation amongst significant members of different practices as they saw the effects of technological development only in terms of that which was being produced. Marinetti's Manifesto of Futurism was the first piece that drifted away from the productivity, efficiency, plasticity 12 and enslavement argument. Marinetti saw technology as a scion of speed and youth that would invigorate societies. The fact that technological development happened in tandem with progression of social progression informed his belief that technology, manifest, would fuel us to, "... free this land from its smelly gangrene of professors, archaeologists, ciceroni and antiquarians." The very essence of his characterisation of technology is encapsulated in the first maxim of the manifesto. "We intend to sing the love of danger, the habit of energy and

¹¹ Carma Gorman, The Industrial Design Reader, 2003

¹²Of arts and crafts. William Morris, an English artist, poet and designer believed that machines, printers and other such technological interventions would corrupt the arts and crafts terming them the "Lesser arts".

fearlessness," it reads. The technological manifestations of the day were, stereotypically, skeletal, grungy and touted an expression of invigorated efficiency. These, in Marinetti's eyes, were not traits that said anything significant about the machine qua machine. He takes them to semiotic cues of what a progressive future must adopt within its fabric. He further reinforces this within the second maxim, in reference to the rebirth of literature as, "... intend to exalt aggressive action, a feverish insomnia, the racer's stride, the mortal leap, the punch and the slap." Technology is also not characterised as plastic, dead and inhuman. On the contrary, Marinetti was beseeching society to embrace "machine-ness" and weave technological vigour into its fabric. In maxim four Marinetti redefines the societal aesthetic of the future. "We say that the world's magnificence has been enriched by a new beauty; the beauty of speed. A racing car whose hood is adorned with great pipes, like serpents of explosive breath - a roaring car that seems to ride on grapeshot - is more beautiful than the Victory of Samothrace," he proclaims with uncanny surety. Technology qua technological manifestation was a yardstick of human effort, sweat and work. The machine itself was a benevolent inspirer of action towards, in Marinetti's view, a more fruitful future that was driven by impermanence and aggression. Marinetti's fetishisation of the machine and other technological manifestations is an interesting characterisation of technology because it drifts away from the dominant narratives of a society that is enslaved by the "plastic"

outcomes of technology or of a society that is flourishing as a result of efficient production and replicable outcomes. His "technology" is a teacher, a quasi-god that we must seek to emulate in order to develop ourselves into a more robust, active and regenerative society that has escaped the clutches of the stale past.

Many years after this novel (yet undeniably and problematically provocative) manifesto that romanticised technology was posited, another compelling social narrative was penned by Donna Jeanne Haraway. Haraway is a science and technology studies and feminist scholar. In 1984, she published a piece to the Socialist Review entitled, "A Cyborg Manifesto". The manifesto redefines our perception of technology dissolving boundaries between "human" and "machine" in order to develop a societal belief system that is "faithful to socialism, feminism and materialism" 13. Let us once again reflect on the social construct that this narrative engages. A consciousness has developed towards the injustices of "society" as a hegemonic power on other parts of society. Haraway brings to light the specific injustices that occur within the gender spectrum. The cyborg in her manifesto lives in a strange world with the cyborgs themselves being a "hybrid of machine and organism, a creature of social reality and of social fiction". Our minds that have been programmed by social narratives and political structures to see everything as binaries or

¹³ Donna Jeanne Haraway, *A Cyborg Manifesto*, 1984.

ambiguous spectra are shocked into a renaissance. This "being" is presented as a composite of things that we thought of as being entirely different in essence and spirit. We are not inclined to believe that such a perplexing creature, genderless and ambiguously birthed could ever exist. As Haraway says, "In a sense, the cyborg has no origin story in the Western sense - a final irony since the cyborg is also the awful apocalyptic telos of the West's escalating dominations of abstract individuation.... This rumination makes it easy for us to think of the cyborg as a technological manifestation. For a moment, let us go back to the example of mobile devices from earlier in this essay. Our addiction to the essence of the mobile device (spontaneity, mobility, speed, efficiency, shareability) and the societal necessities it fulfills have made the mobile device not just an instrument of accomplishing these necessities but has driven us to combine our "human" 14 capabilities with the "technological" 15 capabilities to become a part-human part-machine composite that is unable to resolve its actions with a sense of human societal morality or with a technological collective morality. Hararway's narrative causes us to reflect on our own humanity in this age of technological appropriation and fusion. The social narrative no longer talks about the implications of human development on technology or technological

¹⁴ Donna Haraway's "organism".

¹⁵ Haraway's "machine".

development on human society because we have and continue to dissolve those margins under the pretence of "progression".

VII. Conclusion and reflection

This essay has examined alternate definitions for technology, its essence, the social engagement of humanity with technology and thereby briefly positing technology as a self-evolving entity that responds to and influences social fabric. Then the essay deconstructs two significant social narratives, written in the way of a manifesto, and identifies the role of technology as an inspirational ambition to society (Marinetti) and then within and part of our own selves (Haraway). A question left unanswered until now is why is it important to understand alternate characterisations of technology with respect to society? Why can't we continue to think of technology as the iPhone that is glued to my hand or as the coffee machine that allows me to serve a great cup of coffee to a friend who has come home? Our present social narrative warrants that we think more deeply about technology in order to be more mindful of the things we create using its essence and also in the way that it features in our lives. Understanding, speculating and theorising alternate personifications of technology and placing them in social narratives helps us preemptively understand technology as an autopoietic life form and tame the technology or our appropriation of it to develop a more conscious society.

Each part of this essay individually warrants a treatise on its own. However, within the purview of developing a context for alternate characterisations and comprehension of technology, this essay brings relevant theories and thoughts under a cohesive composite.

VIII. Complete list of references and notes

- 1. Winner, Langdon: Technology as life forms The fact that technology is seen as having a "life" that is evolutionary in nature, changes the way we think about it in the context of today. My personal rumination is that technology can no longer be perceived as a "thing" manifest but could be constructively viewed as an evolving species akin to humankind.
- 2. Wright, Frank Lloyd: The Art and Craft of the Machine Wright posits the nature of the "machine" at a time, similar to today, when the models of viewing technology and the very genesis and application of technological production was novel and controversial. This provides an ancient personification of technology along with a historic genesis of a common characterisation of technology today ie; technology as an enabler.

- 3. Marinetti, Filippo Tommaso: The Foundation and Manifesto of Futurism - Marinetti's manifesto of a future ridden with technological presence and advancements of the nature of technology make it another compelling rumination from the annals of history that contribute to the nature of a narrative of society constructed around this fetishisation of technology.
- 4. Maturana, Humberto and Varela, Francisco: Autopoiesis and Cognition - When technology is being spoken of as an evolving technological life form, deconstructing the nature of life forms and what aspects of them can be juxtaposed over this characterisation of technology is important.
- 5. Ellul, Jacques: The Technological Society The relationship between Technology and Society and the unison of the two as a descriptive frame of viewing society is a central part to developing a novel narrative.
- 6. Haraway, Donna Jeanne: A Cyborg Manifesto Redux of the manifesto format but this time a manifesto of the posthuman and not like Marinetti's which is human in contact with technology.
- 7. Hughes, Thomas: Human World Seminal text on how to think about humankind and society. How does it hold up theoretically and practically in this age of the anthropocene.
- 8. Hughes, Thomas: Rescuing Prometheus A documentation of projects that "changed the modern world". How does this

reworking of narratives have any relevance to the world of the posthuman?

9. Heidegger, Martin: The Question Concerning Technology - An essay that discusses the nature and essence of technology beyond the typical interpretation of technology as a means to an end or technology as an object.