Applied Political Philosophy: Combatting the Dangers of Transhumanism by Placing Human Dignity in the Battle over Bioethics and Human Enhancement in America

Cole Mailloux

Dr. Gaelan Murphy

POLS 499 (Honors Thesis)

April 23, 2018

Introduction

The desire for human enhancement dates back to the initial conception of human civilization. For thousands of years we have continuously attempted to enhance physical and mental capabilities through various means, sometimes with inconclusive, comic, or even tragic results. The industrial and technological revolutions alleviated many of our social and individual health requirements, but also intensified our desire for enhancement. However, up until this point in human history, most biomedical advances, whether successful or not, merely attempted to restore things that were perceived to be deficient, such as vision, hearing, or mobility. Inventions that have attempted to improve on nature, such as anabolic steroids or Ritalin, have been relatively modest, incremental, or detrimental to overall long-term human health.

Regardless, recent scientific and technological developments in areas such as biotechnology, information technology, and nanotechnology, humanity appears to be on the cusp of an enhancement revolution (Masci, 2016, para 3). If, or more likely when it comes, this societal transformation will be prompted by continuous efforts to aid people with disabilities and heal those who are diseased. While biomedicine is constantly making rapid progress in new restorative and therapeutic technologies, these could in turn have immense implications for human enhancement.

As an example, the prospect of advanced genetic engineering has recently become much more real, spurred by the development of inexpensive and sophisticated gene mapping technology which gives scientists an increasingly comprehensive understanding of the human genome, and the development of a powerful gene editing technology known as CRISPR (para 27). CRISPR is a much more efficient and accurate approach to gene editing because it uses each cell’s immune system to target and splice out parts of its DNA and replace them with a new

genetic code. In 2016, the US government approved the first human trials using CRISPR to strengthen the cancer fighting properties of the immune system of patients who are suffering from deadly cancers, specifically melanoma. An even more intriguing possibility involves the altering of genetic makeup at embryonic life stages, a process known as germline editing. Here, the alteration of gene lines (say the elimination of the gene for Tay-Sachs disease) occurs in an embryo's eight to 16 cell stage which will duplicate and produce an identical change in each of resulting person's trillions of cells, not to mention the cells of their descendants.

While CRISPR potentially presents a very beneficial treatment and health-defect prevention mechanism, many scientists have also identified an array of potential dangers that arise considering our knowledge is insufficient in determining the safety of changes that can be passed down to future generations (para 30). Further concern arises from the idea of using this new technology to edit embryos for non-therapeutic purposes where CRISPR may one day allow for a scenario where parents could choose a variety of genetic options for their unborn children, including cosmetic traits such as eye color, or enhanced physical and cognitive abilities.

Along with the inventions of transcranial direct-current stimulation, and the manufacturing of synthetic blood, CRISPR, and other recent biomedical advances, pose different questions and concerns to different traditions of thought. Those who perceive a "cost-to-self" question whether people will truly be happier if enhancement progresses. These philosophers attribute happiness to good character and virtuous living, as opposed to unhackneyed physical prowess or dramatically longer life spans. Happiness then is found in both happy and difficult lived human experiences, none of which are provided by enhancement. Happiness can also be argued to be contingent upon limitations. For example, the experience of happiness absent any knowledge of sadness (a natural limitation) cannot possibly yield an equally significant output

value compared to that which happiness in the context of pain or sorrow would. Conversely, those who emphasize a "cost-to-society" perceive the increased social tensions that result from the rich and privileged gaining superior access to expensive new enhancement treatments before the less fortunate, as exacerbating an already growing gap between societies rich and poor classes. In this sense, potential enhancement may also threaten our shared (equal) humanity by altering individual's human limitations, and hence, human nature, by allocated them significantly increased powers and creating second tier of human status or at least differentiated status.

As an increasingly significant school or thought, transhumanism (a term coined in Julian Huxley's 1957 essay) adheres to the notion that the human species can transcend itself in its entirety, or transcend humanity (para 61). Contrary to critics concerned with costs-to-self, supporters of human enhancement claim that life will still be meaningful and challenging in an "enhanced" world. Just as they have no changed as society has changed, the things that effect human character, or the things that make life meaningful, will not change as a result of human enhancement. In response to costs-to-society critics, transhumanists advocate that the goal is not to create a superior race of humans (and sub-humans), but rather to improve humanity and the "flawed" human condition. It is simply a continuation of the historic practice of making life better through advancement, especially through technological advancement.

The formal US bioethical debate takes place in the presidentially appointed Council (or Commission) on Bioethics which produces influential academic work and numerous policy recommendations concerning the advancement of biotechnology and its implications on American lives and society. However, the council has remained vacant for over a year under the current Trump administration indicating that there is either a diminishing faith in the effectiveness of the Council's function as a philosophically leaning advisory group or that

President Trump simply believes he doesn't need one. Either way, the two previous council formations constructed by President Bush and President Obama have faced wide-spread criticism regarding their partisan nature and compositions. While Bush only elected his council after making a major decision against stem-cell research and appointed a heavily biorestrictive-orientated council, Obama, in response, appointed a contrastingly bioprogressive-orientated council (characterized largely for its anti-biorestrictive stance). This came as a surprise as Obama's politics appeared to be post-partisan. Many had hoped that his open and conciliatory political posture would translate into the discourse of bioethics, however, the council reflected a heavily bias bioprogressive view without much, if any, consideration for the valid dangers conserving humanity (human dignity) presented by the biorestrictive tradition (Antiel, 2009, para 3 & 5).

While Obama's Council was generally regarded as bioliberal in nature, a philosophy that advocates for the advancement of biotechnology insofar as it does not harm social fabric or intensify social stratification, its substantial anti-biorestrictive stance led many to perceive the council as overly bioprogressive and susceptible to transhumanist inclinations. The bioprogressive camp advocates for the free flow of biotechnological advancement without the hindrance of government regulation. While its spectrum range allows for bioliberals who advocate for some form of technological restriction, it is primarily characterized by the transhumanist doctrine and those who maintain that unchecked technological advancement is best for the progression of humanity and society. Transhumanists believe that technology will elevate humanity and society past its primitive and limited nature. On the opposing end of the spectrum, the biorestrictive position also allows for bioliberalism in that it seeks to alleviate the detrimental effects of technological advancement and often advocate for equal human dignity.

However, the biorestrictive position is primarily based upon the notion that to protect humanity (natural human dignity), biotechnological advances must be constrained so as not to alter our natural human abilities, physiology, or limitations whereas bioliberals only focus on differentiation in human dignity (equality) and not necessarily on any limitation range. Biorestrictive proponents tend to identify more closely with bioconservatives claims, which often (but not always) rest upon religious premises (particularly in identifying with a natural human nature) and traditional conservative practices.

I forward a recommendation for the current US administration (or more likely the one proceeding it) to formulate a bipartisan council on bioethics that produces unbiased council publications and policy recommendation. Additionally, it must recognize the necessity of technological progression in alleviating current levels of human suffering, while primarily considering the very real, non-religious implications that these advances will have on both humanity and society. The incomplete (naïve) transhumanist doctrine that largely constitutes the bioprogressive view should be almost entirely disregarded as it fails to recognize the actual conditionality of human dignity by prioritizing productivity over the things that truly make us human. However, a fully biorestrictive council would and has resulted in skewed and widely disagreeable works regarding the optimal future of humanity on account of both its uncompromising nature in a world increasingly dependent and improved by technology. Its seemingly religious undertones have no place in a functioning liberal democracy's policy formulation process.

Therefore, I propose a council that reflects a "biopermissive" perspective which recognizes both bioconservative and bioliberal fears regarding human and social welfare while at the same time, allowing for the imminent and necessary technological advancement that will

improve these welfares. Such a viewpoint would not make the transhumanist mistake of neglecting the importance of contrast-dependency (the mutually necessary distinction between positively and negatively perceived values) and would not reduce human dignity to productivity as transhumanist also do. It would equally reflect the critical bioconservative and bioliberal fears in such a way that respects the valid concerns of both traditions while allowing for the overcoming of their restrictive barriers, specifically the barriers presented by bioconservatism.

To achieve this, we must establish a minimalist framework of compromise between bioconservatives and bioliberal factions that rest upon basic and agreeable fears and allows for a cohesion of perspectives. Optimistically, this type of council will produce rational, non-bias, and effective policy recommendations that are desperately needed in an increasingly technological world; one where preemptive regulatory frameworks are necessary in the face of exponentially, and in some cases unpredictable, developing technologies. I propose that the primary mechanism through which to achieve such a compromise can be found in Francis Fukuyama's identification of Factor X which represents a comprehensive and non-religiously based conception of the human essence (human dignity). In identifying and respecting Factor X, bioliberals must agree not to impede upon its conception of human dignity and bioconservatives must agree to allow for biotechnological advances that allow for individuals to maintain or achieve conditions that resemble those of natural human capacity and equal social arrangement. These natural capacities could include parameters such as an optimal 20/20 vision, improved hearing not surpassing the natural hearing range (20hz to 20,000hz), and mobility technologies that allow for basic human functioning such as walking and opening a door while not stretching beyond natural physical limitations. Enhancement past these optimal variances has the potential to create a second tier of humanity. Of course, professional sport, occupational, educational, etc. organizations will

reserve the right to restrict any such apparatus's if they present any danger or clear disadvantage to others involved. The main benefit that such a council formulation and perspective will produce is the foundational compromise established between bioliberal and bioconservatives proponents that will allow for effective debate and further cohesion within bioethical discourse. It will ultimately allow for both bioconservative and bioliberal traditions to have voices in the room and the wider bioethics debate.

In this essay, I argue that both bioprogressive and biorestrictive traditions are insufficient on their own in the production of effective policy recommendation because they fail to recognize the agreeable fears and human/social welfare prospects that biotechnological advancements present. While transhumanism fails to correctly recognize human dignity, bioconservatives conversely fail to recognize the importance and benefits to humanity made possible by the scientific and technologically-orientated advancing contemporary world. Together, bioconservative and bioliberal traditions can cohesively find compromise that will result in meaningful biotechnological policy and regulation. It will also enable them to properly address the growing dangers presented by an increasingly prominent transhumanist doctrine (where bioliberals have proven unable to do so alone). Reflecting a predominately bioconservative framework, a hybrid of biorestrictive and bioprogressive viewpoints within the council on bioethics, which represents a new biopermissive viewpoint, will allow for both the advancement and protection necessary in progressing humanity and society without impeding upon either. This biopermissive framework entails a combination of perspectives (excluding transhumanism) that preserves only the necessary technologically progressive element contained in the bioprogressive perspective (the bioliberal progressive element insofar as it doesn't harm it

society), and the bioconservative concern for the protection of human dignity. This will ultimately be achieved through the universal recognition of Factor X.

The first section of this paper is dedicated to defining the transhumanist doctrine which has been gaining significant philosophical and political steam since its emergence in the late 20th and early 21st century. I will explain why as a doctrine, transhumanism is inadequate, in the sense that it presents an incomplete, inconsistent, and incoherent attempt at philosophy on account of its misinterpretation of its own philosophical foundation as well as its inability to come to consensus regarding important terminology and concepts. As such, transhumanism fails to present the legitimate threats that it itself poses towards humanity in the form of human dignity.

The second section is dedicated to the presentation of the established bioethical doctrines representing the two major factions in the formal debate (the two preceding bioethics council formations) in order to identify their chief concerns and shortcomings. I will explain, in detail, why both bioconservatism (representing the biorestrictive camp) and bioliberalism (representing a bioprogressive perspective [absent transhumanism]) are inadequate on their own in addressing the common pool of danger that both doctrines determine to be human-life threatening. At the end of this section, I will present a non-religious and widely agreeable conceptualization of human dignity which will underpin the cohesive element (Factor X) that both camps will be able to cohesively collaborate their perspectives around (forming a hybrid perspective). Although arguably, this reflects a slightly bioconservatives bias, it is deemed necessary by the establishment of the existence of human essence and the ensuing necessity to protect it.

The third section serves as an in-depth inquiry into the composition, operations, and criticisms of the previous two Bioethics Council. Finally, the fourth section will translate these

problems into real-world policy implications by illuminating the failures of previous doctrine-partial presidential councils. I will identify a practical solution found in the common fears and basic objectives of each intellectual body and their agreement on enhancement thresholds maintaining desirable levels of values endorsed by bioconservatives while allowing for increased welfare for human beings. This will ultimately center around a common conception and agreement upon Factor X.

Transhumanism (Bioprogressives)

Why is Transhumanism Important?

Transhumanism has long been considered a small, insignificant, fringe movement in philosophy and futurology often associated with its shared ideas expressed in popular science fiction (Porter, 2017, p. 239). However, transhumanism is gaining steam as a cultural and intellectual movement and becoming an increasingly influential political force. It is imperative to this paper that the movement is framed in its formal context and separated from its informal context popularized by the informal culture associated with science fiction productions and publications.

This is evidenced by the Transhumanist Party of the United States, which emerged onto the political scene in 2014 and headed by a man named Zoltan Istvan who ran for president in 2016 and co-founded the Transhumanist Party Global in 2014. This party represents a growing umbrella organization supporting and coordinating national transhumanist political parties on all continents. Understanding transhumanism is becoming of utmost importance, not only because of its currently escalating status as a cultural and political force (and the potential ramifications for bioethical discourse and public policy), but because of the imminence of groundbreaking biotransformative technological advancements that transhumanist's focus on (p. 239).

Transhumanism as Thought by Transhumanists

For the purposes of this paper, I will employ the broad and encompassing definition provided by Allen Porter: “Transhumanism is a technoprogressive socio-political and intellectual movement that advocates for the use of technology in order to transform the human organism radically, with the ultimate goal of becoming ‘posthuman’” (p. 237). While transhumanism does not necessarily take such a radical form in current formal political and intellectual contexts, it is important to recognize the substance of the movement’s roots. Thus, while not all transhumanist proponents specifically employ posthuman rhetoric, posthumanism is innate to transhumanist thought and therefore must be further demarcated alongside transhumanism.

One of the most prolific transhumanist academics, Nick Bostrom, characterized transhumanism as a futurist way of thinking based on the premise that the current form of the human species is not representative of our final development, rather a relatively early phase (2003, p. 4). Bostrom presents a dyadic formal definition of transhumanism that includes both the fundamental improvement of the human condition by enhancing anti-aging, intellectual, physical, and psychological capacity through technological advancements as well as the overcoming of natural human limitations. (p. 4) It is important to note the transhumanist recognition of human limitation and its perception as something to be overcome.

As a derivative from enlightenment rationalism and humanism, transhumanism emphasizes the importance of the individual (p. 4). It promotes rational and free thinking as well as a common concern for fellow human beings as a means through which to reach a higher potential achievable in the same way that we use rational means to improve the external world. Thus, transhumanism considers itself unbounded to traditional humanistic methods, which are limited to things such as education and cultural development. Instead they turn to technological

means in hopes to overcome the notion of "human" and its inherent biological, genetic, and intellectual limitations.

According to transhumanists, the "transhuman" represents a transitional stage of human evolution which will conclude in a "posthuman" state as a direct byproduct of technological enhancement (Porter, p. 238). While "transhuman" may ambiguously refer to the transitionary "human" or the transcendence of "human", "posthuman" explicitly refers to the goal of transhumanism: existing so radically different from natural or current human physical, cognitive, and emotional capacities so as to exist independently from human beings, or more precisely, to no longer exist as human. Transhumanists are careful not to exclusively separate the "posthuman" from the "human" and emphasize the non-implication of human extinction (Bostrom, p. 5). Thus, they portray a posthuman future as one where the human species can co-exist with a post human species derived from the former. The state of "posthuman" will result from naturally subsequent "transhuman" yearning: to reach new intellectual heights; gain immunity from decease and the human aging process; to maintain unlimited youth and vigor; to exercise complete control over desires, moods, and mental states; to circumvent sleepiness, hate, or mental illness; increased capacity for love, creative expression, and serenity; and to experience states of consciousness that current human limitations prohibit (p. 5). Through the accumulation of these capacities over an increasingly (if not infinite) period of time, leading an active and healthy life would necessarily lead anyone to post humanity.

The posthuman is an ambiguous subject as its exact form cannot be specified. It can take the form of synthetic artificial intelligence (not derived from humans but created by them), enhanced uploads (the storage, continuance, and operation of an individual's mind), or an amalgamation of profound augmentation to biological humans (p. 5). In order for direct

enhancement of the human biological state, radical technological modifications of the brain and body would be essential (p. 6). Forms this enhancement may take could be but are not limited to: advanced nanotechnology, genetic engineering, psychopharmacology, anti-aging remedies, neural interfaces, information management and memory enhancement drugs/neural mechanisms, or wearable/biologically integrable computers.

However, transhumanism does not necessarily entail such radical alteration and enhancement. The term "transhuman" can be traced back to futurist F.M Estfandijary (1989) who initially referred to transhumanism already existing in its early state through mechanisms such as prostheses, plastic surgery, intensive telecommunications, increasingly cosmopolitan worldviews, agronomy, and mediated reproduction. Admittedly for Bostrom, Estfandijary's diagnostics are of dubious validity as they do not align with Bostrom (and the majority of transhumanists) view of the transhuman state which more closely associates with physical human alteration as opposed to social environmental alterations including unproductive cosmetic "enhancements" (2003, p. 7). It is here we may also note, the vast ambiguity and uncertainness of many transhumanist concepts.

Transhumanism and Its Supposed Connection to Traditional Philosophical Thought

Transhumanists often attempt to draw upon, or claim continuity with, established intellectual traditions in order to establish philosophical legitimacy and to reassure those, especially "bioconservatives," who question the radical nature of the transhumanist project and its inherent implications concerning the discontinuity between human beings and the posthuman (Porter, 239). These connections proclaim common or shared ground with classical traditions of thought with regard to human ideals and aspirations. Susan B. Levin critically evaluates these invocations and appropriations of ancient philosophy employed by transhumanists, concluding

that not only do these claims reflect dire misconceptions and misreading's, but that when thoroughly considered in proper context, these ancient sources in fact largely oppose transhumanist claims. Further, these ancient sources serve to expose weaknesses in transhumanist conceptions and argumentation. Levin argues that in in their appeals to antiquity, transhumanists neglect to factor the particular historical setting into particular ancient ideas, invalidating the claim that antiquity manifests the same foundational aspiration or presentence for transhumanist views (Levin, 2017, p. 283).

When Levin compares transhumanist discourse concerning conceptions of the human, the posthuman, and the relation of the two with ancient conceptions of the human, the divine, and their relation, she discovers that on antiquity, the tendency of transhumanist discourse is consistent: too explicitly declare or implicitly assert the claimed structural analogy and then eliminate or neglect the ontological gap (between reason and divine existence) characteristic of the ancient conception of the relation between the human and the divine (Porter, p. 242). The transhumanist conception of the posthuman (as achievable rather than merely an ideal) directly depends on there not being a fundamental or insurmountable gap between the posthuman, the transhuman, and current state of human. Therefore, this conception is necessary for the analogy to hold.

For antiquity, ideals are *ideal* as opposed to achievable. Levin refers to them as guideline or models for human conduct where success would entail the approximation, as closely as possible, with what is viewed as optimal while necessarily falling short (Levin, p. 284). Whether we consider platonic forms such as "the idea of the good" and "beauty", or Aristotelian ideals of self-contemplation of the "Prime Mover", it is most likely that they consider these ideals humanly unachievable as they are exclusively characteristic to the divine, which is external and

inaccessible to humanity (Porter, p. 244). Correspondingly, for antiquity, it is conceptually impossible for a human to become or achieve a formal ideal in the realm of human existence. This is because ideals represent an objective or "otherworldly" realm that is inaccessible to humans and our limited natures. This is in stark contrast to transhumanist conceptions which portray the posthuman as an achievable ideal through technological human enhancement which will elevate humankind past these limitations.

Transhumanist rhetoric tends to be hyperbolically optimistic in expressing enhanced physical, cognitive, or emotional capacities (p. 244). The pervading sense is that posthumans can "have it all" or a life constituted of pleasure and absent of suffering (p. 245). According to Porter, the question for transhumanists is whether or not this is conceptually coherent. Bostrom (2008, p. 5) forwards the idea that the further we attempt to explore posthumanity, the more our ability to conceive it dwindles or trails off. Porter argues that this might be due to cognitive limitations, rather deeper issues of conceptual possibility (p. 245). While antiquity claims that contrast dependency is necessary for aspiration, is it not conceptually coherent to assert that contrast-dependency can be eliminated, as transhumanists do, without thereby removing a crucial condition for the possibility of aspiration itself.

Levin presents this as a challenge to transhumanists by noting that transhumanists cannot escape contrast-dependency neither between the human and the postman nor with the existence of the posthuman itself (p. 245). Contrast dependency entails that for any positive value to exist, there must also exist an equally negative value. A value without its corresponding contrastive value, becomes less, if not nothing, of a value itself. For example, without sadness, there would be no such thing as happiness because happiness, absent of sadness, would not hold the same

significance, however, it may take on a different significance, perhaps contrasting only laughing, and in turn become associated with merely a neutral emotional state.

The use of comparative adjectives and adverbs to describe posthuman capacities such as “better than humans”, “stronger than human”, or “smarter then human” inevitably employs contrast dependency. Furthermore, even if the posthumans were able to eradicate historical human causes of tragedy, the sense of the tragic will still remain; it will merely translate into another alternative tragic form that effect human organisms. The argument here is that in transhumanism’s efforts to fully eradicate humanities problems are futile because of the essential principle of contrast-dependency. The notion of weakness would not disappear in the wake of human enhancements, rather it would take on a new form. One that contrasts the new heights in the concept of strength. Thus, these hyperbolic promises that transhumanist associate with the closer achievement of a posthuman state, will not necessarily lead to the elimination of the negative values corresponding new positive values. It will rearrange the contrast-dependency of terms in an unpredictable manner. If eliminating death was an attempt in the eradication of tragedy, tragedy would only take a new form; perhaps one absent the notion of death or one that primarily identifies with the severing of personal relationships. The sense of the tragic is partially rooted in the sense of the happy, joyful, or fortunate. These contrasting values depend on one another to contrive their own value assessment and meaning. Thus, it is impossible to eradicate all negative values as transhumanism claims to be able to do.

The problem that Allen Porter identifies here is that transhumanists seem to want and believe in the possibility that they can “have it all” without any sacrifice or downside (p. 245). They advocate for a world of perpetual bliss unblemished by suffering or involuntary experiences of unhappiness. This view seems to be conceptually incoherent insofar as it strives

for the maximization of positively perceived values alongside the elimination of negatively perceived values on which those particular positively perceived values certainly depend upon as a necessary conceptual contrast. Furthermore, this view may seek to maximize multiple values which may be incompatible.

Transhumanists then must argue persuasively that human's innate inability to transcend contrastive thought is only a contingent function of our physiology, psychology, and language as opposed to existing as a function of a deeper-rooted conceptual necessity independent of human nature or human beings (p. 246). As it appeared to the ancients, it would seem that contrast-dependency is not only a necessary component of human aspiration (we must experience a lack of something to experience an aspiration towards it) but is in fact an absolute characteristic of comparative or evaluative thought. In light of this, the question becomes: if it is impossible to maximize certain values on account of the nature of these values (and not on account of technologically conquerable human limitation), what justification would transhumanist exhortation to radical enchantment rest upon then? This is the question that transhumanists have thus far failed to recognize and address.

Another common connection for transhumanist thought is to that of Friedrich Nietzsche (p. 246). While some inside the transhumanist camp see only surface level similarities (Bostrom, 2005, p. 4), others such as Max More (2010, p. 1) see "fundamental similarities" between Nietzsche's conception of the *Übermensch* (or overhuman) and transhumanist's conception of the posthuman. Through examining transhumanist efforts to identify with antiquity, not only do we expose the unfounded nature of these claims but also weaknesses in transhumanist conceptions and argumentation. Likewise, when we evaluate transhumanist conceptions posthuman with Friedrich Nietzsche's conception of the overhuman, the invoked continuity

between the sources conceptions falls short of validity and Nietzsche's conception again (like antiquity) serves critically to expose problems within the transhumanist conception.

Ciano Aydin identifies that like the language of antiquity, Nietzsche's conception of the overhuman is not contextualized as an achievable ideal – in direct contrast to the transhumanist ideal of the posthuman (Aydin, 2017, p. 313). Nietzsche's overhuman represents an ideal of self-master over the will and over the self as a whole: one who passes the test of the eternal return consistently (a humanly unachievable maxim-test of practical reason). Most of us, who experience moments of suffering, wrongdoing, etc., would not wish to repeat these moments eternally (Porter, p. 247). The idea of the overhuman then, is one of "self-overcoming" or overcoming the human self. It is therefore, impossible for any human being to achieve as it serves as a regulative mechanism as opposed to the posthuman ideal which presents itself as achievable.

Prevalent throughout all of Nietzsche's philosophy is a critique of essentialism (p. 248). The fundamental principle of essentialism holds the view that every entity has a set of necessary attributes or non-contextual (atemporal, nonspecial, etc.) "essences" that cannot be altered or removed without altering the entity itself. An example of such an attribute would be life to a person. While a person could live without a voice (an example of an accidental attribute), he could not be a person without life. Humanism, which prioritizes the well-being of humankind (and individual humans) over divine or non-human entities as discussed above, is intrinsically essentialist and Nietzsche lumps it in with Platonism, Christianity, and democracy as ideologies that his philosophy (specially the concept of the overhuman) critically opposes (p. 248).

As Aydin argues, the primary dilemma presented by the transhumanist ideal of the enhanced posthuman is that while transhumanists desire a radical change in (or from) the human,

simultaneously they do not wish to jeopardize the humanist values and goals that they claim continuity with (Aydin, 2017, p. 315). Without the essentialist framework of humanism, transhumanists would not be able to establish any clear criteria for what can be considered enhancement, health, "better then human", or a multiplicity of critical concepts that the doctrine rests upon. Herein, we may observe not only a major contradiction, but also transhumanism's inability as a doctrine to present a clear, complete, and comprehensive theoretical framework for itself and a failure to identify itself with established traditional philosophical theory. Therefore, not only must it address the contradictions that exist within the doctrine, it must also establish itself independently from traditional philosophical thought.

In extension, there is another way in which transhumanism overlooks Nietzsche's intentions in such a way that they are unable to interpret their true meanings. A closer reading of Nietzsche yields a very anti-transhumanist rationality. Nietzsche describes the world in a nihilistic state in part due a never-ending struggle for the "will to power" (Nietzsche, 1968, §1067), the desire for achievement and the striving towards the highest possible position in life, which Nietzsche claims is the driving force in humans. In this sense, transhumanism is the climax of the will to power as it aims to overcome our present limitations and take control of our evolutionary future. Transhumanism then inevitably leads to nihilism as our focus shifts from religion (on account of the "Death of God") and rationality, towards scientific discoveries and ways of understanding the world (Kaufman, 1976). While transhumanists often interpret this as the realization of human agency in overcoming our limitations and suffering through technological advancement, a more careful reading of Nietzsche will reveal that this type of striving towards the will to power will inevitably lead to nihilism. It is self-actualization or individual moral constructions that Nietzsche believes lead to the overhuman, not external

production of technologies that will effectively separate us even further from ourselves (p. 138, 139).

Transhumanists, such as Charles Rubin, explicitly identify human dignity with productivity, namely, our powerful inventions (Lawler, 2009, p. 42). According to this view, humans are most undignified. We are the only animal that cannot achieve equilibrium with its natural environment and slightly resemble a virus plaguing nature as humans cannot help but be restlessly discontent with nature's cruel and random indifference to each of our particular existences. Because nature is itself an accidental, impersonal process, and humans, in our freedom are accidental exceptions to many natural rules, as surely it would be undignified to meekly accept what nature imposes on us. As free, technological beings who have the ability to transform nature with our desire for individual security and significance, humans display our dignity by imposing our will on nature to create a world where we can live as dignified beings or, as Lawler puts it, "miserably self-conscience and utterly precarious accidents" (p. 42). However, humans possess the ability to free ourselves from our all-too-human or natural limitations and to bring our bodies under our rational and willful control. In this sense, dignity is exhibited in the freedom that produces the rational control that allows us to give order to nature, including our own bodies.

Therein, the point of human freedom would be to devote yourself to an endless and ultimately futile effort to make yourself into something you are not. However, our dignity does not depend on our technological transformation of nature. Instead, humans are already free and dignified, because what we think and do, insofar as we are human, is not determined by impersonal natural forces. We are free to treat other dignified humans as equal humans, and not merely as impersonal means to achieve our personal goals. By disregarding actual human

dignity, or the things that that makes us human, transhumanism reduces our dignity to productivity by equating our purpose with the "betterment" of humankind. The overriding drive to advance the human enhancement project through technological means necessarily reduces human dignity to productivity which in turn reduces other humans into exploitable resources which would obviously have detrimental consequences for the future of humanity, society, and more specifically human rights.

Thus, dependence on technology in the endeavor towards the will to power, through the emphasis on utility maximization, will inevitably lead to nihilism, the belief that all values are baseless and that nothing can be known or communicated. If we perceive the human purpose to be productivity in the attempt towards human perfection and we strive only towards utility maximization to achieve this goal, we will effectively allow our dependence on technology, as a means of utility maximization, to surpass the very thing that makes us human: our intrinsic dignity. We would become slaves to technology or technology would simply overpass us as technology has more utility in the sense of technological progression then we ever could.

The Inadequacy of Transhumanism

The essentialist absolutizing of the humanist values-framework that transhumanism champions, faces a reoccurring problem through transhumanist theory and discourse that Porter refers to as the "value(s) problem for transhumanism" (p. 249). Contrary to the implications of transhumanist discourse, there is no current consensus within the doctrine on necessary criteria to determine values such as "enhancement" and "health". The example that Porter gives involves a well-known excerpt from Bostrom (2014, p. 112) that suggests a posthuman is as much smarter than a human being, as a human being is smarter than a beetle (and similar claims are made pertaining to physical, emotional, and cognitive aspects as well). Porter posits that what would

constitute “enhanced” from the current human point of view will qualify as “natural” for posthumans. Conversely, what constitutes “natural” from the current human point of view will qualify as “disabled” from a posthumans. Thus, in such a situation, these terms would hold inconsistent and quite contradictory meaning. What Porter emphasizes in this problem is that context matters (p. 249).

Aydin, adds to the conceptualization of this problem by further illustrating how transhumanist discourse on enchantment is self-undermining because of its neglect to recognize the dependence of values on context. Transhumanists will make connections between fixed, (trans)humanist values, the capacities that contribute to realizing those values, and enhancement technologies that could improve those capacities (p. 250). Aydin further posits that it is not just that transhumanists attempt to reduce human beings to characteristics (smarter, faster, stronger) that they consider ideal in their current historical time and scope, it is that what they define as “normal” or “healthy” is redefined in terms of what the ability of technologies allow them to measure, diagnose, and treat (p. 317, 318). In this context, a brain implant allowing for extra information is not a neutral technology; in fact, this type of technology has its own particular conceptions of “memory” or “rationality” and thus, understands memory in terms of “processing and retrieving information” (Porter, p. 250). Therefore, improving rationality would become a matter of increasing processing speed and the ability to retrieve greater quantities of information more efficiently. This same principle applies to the way genetic engineering norms conceptions of autonomy and nootropics (a IQ “enhancing” technology) norms conceptions of intelligence.

Herein, we note the inability of transhumanism to arrive at a discernable consensus on critical terminology and conceptualization. The allowance of ambiguity in terms as fundamental as “transhuman,” perpetrated by even the foremost proponents such as Bostrom, is unacceptable

in terms of validity and doctrine legitimacy (2003, p.6). This disregard for validation is repeatedly illustrated in Bostrom's "Transhumanist FAQ" in which he refers to standards by which humans may be considers "human" but fails to provide any such criteria (p. 5). Such an undefined concept, the criterion of "personhood," could pose an existential threat by posthumans who do not recognize the moral status or personhood of humans and vice versa (such a threat presented in *Terminator* or *Matrix* films) (Porter, p. 240). Transhumanists oppose any criteria for personhood that includes species-membership, since that could entail human judging post humans to be non-persons and vice versa. If what Bostrom suggests (as discussed earlier) is that the gap between posthuman human intelligence is more comparable to that between a human's intelligence and beetles than it is between a human genius's and the average human, then how is it possible to determine what posthumans will consider to be "advanced" cognitive capacities? The very distinction posthuman itself suggests a certain separation with the current natural human form. Therefore, why should personhood be assumed as a constant that will directly translate between the independent entities? This breed of hasty, unharnessed thought is dangerous to both society and humanity, especially when it is so prepared to "tamper with nature" as "it is often right to tamper with nature" and recognizes the manipulation of nature as "an important part of what civilization and human intelligence is all about" (Bostrom, p. 35). If, as Porter suggests, values cannot be maximized in the way that transhumanism hopes to achieve, how can indiscriminate manipulation of nature be justified?

This blatant disregard for nature, a concept they do not strive to define (let alone protect) can be attributed to a multiplicity of inadequacies throughout the transhumanist doctrine. It directly contributes to the inadequate attention and response transhumanism receives from legitimate philosophical doctrines such as those argued by bioconservatives and bioliberal

factions in the philosophical/political bioethical discourse. In addition, transhumanism suffers from a crisis of identity. In claiming to associate with or even continue ancient established philosophical traditions, transhumanism not only finds itself failing to adhere with recognized and reputable collections of thought, but should in fact find itself challenged and in some cases vulnerable or exposed in terms of structural and argumentative weaknesses. In its inadequacy to present coherent and consistent terminology and to truly recognize its own naivety (such as exhibited by its lack of understanding of contrast–dependency), transhumanism is doomed to prioritize productivity and ultimately result in a state of human extinction or subjection (as less productive entities) and a state of nihilism.

Therefore, in its infant state, transhumanism must establish its own identity independently from these conventional schools of thought, as a postmodern philosophy; specifically, one which differs from the controversial "father of postmodernity" and his critique thereof, provided by Nietzsche. Perhaps transhumanism should focus upon and further study the concepts of self-consciousness, scientific knowledge, rationality, technology, and social/biological progression. However, the current state of the doctrine of transhumanism is incomplete, inadequate, and ultimately illegitimate. As an illegitimate doctrine, transhumanism is unable to present itself to contemporary arenas of bioethical debate and policy implementation in such a way that accurately represents the dangers that it possesses. Transhumanism must collect and establish itself (and its concepts) in a manner conducive to a supporting consensus and present itself as a comprehensive philosophical doctrine so as to provide bioconservatives and bioliberal intellectuals with a tangible opponent; one which may unite them in consensus of the shared dangers they wish to circumvent in the face of imminent and exponential biotechnological advancement. Currently, transhumanism fails in this sense. This is frequently reflected by the

bioliberal camp which occasionally displays transhumanist-like values and oversights in its overzealous efforts to confront biorestrictive ideas.

Bioconservatives (Biorestrictive)

Bioconservatives and Their Relation to Bioliberals (Bioprogressive*)*

The term "bioconservatives" carries with it multiple connotations. Therefore, before I proceed it is necessary to dispatch with any unwarranted associations with the base term "conservative" that often lead to the disruptive deployment of the conservative/liberal dichotomy that persists today in modern politics. Likewise, while the term "bioliberal" refers to the permissive space in the bioethical spectrum, it should not be confused or entailed with traditional political liberalism. For the purposes of this paper, "bioconservative" should bring-to-mind three fundamental features: (1) its emphasis on the limitations of human reason; 2) the protection of traditional attitudes, values, and beliefs that dictate cautious or aversion to changes from the status quo; and (3), a restrictive stance regarding human enhancement through technological or pharmaceutical means (Giubilini, & Sanyal, 2015, p. 234). Thus, bioconservatives not only accept the physical, emotional, and cognitive limitations that transhumanists seek to enhance, as natural human features, but also advocate for the protection of human limitations, specifically through the harnessing of biotechnological advancements.

While bioliberals may propose certain boundaries on bio-technological advancement, they do not do so based on the same grounds nor to the same extent as the bioconservatives who object to the very principle of bio-technological advancement and its adverse effects on human nature (p. 238). Contrary to the bioconservative techno-restrictive stance, the bioliberal does not object to human enhancement in principle, only to the adverse effects it may have on society. Giving the priority to societal conditions, the bioliberal endorses a techno-permissive stance on

bio-enhancement as a necessary vehicle for social health and equality. Therefore, the bioliberal approves of bio-technological enhancement is so far as it is sufficiently safe and is administered in such a way as to have an egalitarian effect on society (is distributed fairly). While bioliberals are not to be confused with political liberalism, bioliberal advocacy rests on the shared reform-liberal principles of equal opportunity or equal access to opportunity and an emphasis on social welfare (p. 235).

According to this position, both enhancement and therapeutic treatment of disease are equally acceptable means to increase welfare. For example, Frances Kamm argues that treating a disease may not necessarily bring a higher net gain of well-being than enhancing natural human functioning given that some illnesses result in states that are less undesirable than, or equally undesirable to being at the low end of the natural range of human functioning (Kamm, 2009, p. 103). The aim of this type of argument is to present the moral case for therapy as stronger than that for enhancement. Within this strand of thought, there may even be a stronger case for enhancement than for some therapeutic interventions.

Herein, we may observe that the primary concerns of the bioliberal to be of an egalitarian nature. The danger is that human enhancement technologies may only be accessible to a small proportion of the world wealthiest population, which would exacerbate the already marked inequality between the rich and the poor (Mehlman & Botkin, 1998). It is also important that enhancement interventions not drain resources away from necessary medical research concerning serious deceasing that pose the largest threat to the well-being of the poor majority of the world (Giubilini, & Sanyal, p. 236). Here, the aforementioned “therapy versus enhancement” dilemma comes into play. For example, given that there are limited health care resources available in the world and that a vast majority of humans do not have access to it, it could be argued that therapy

has priority over enhancement in order to ensure everybody has an equal level of opportunity (Daniels, 1985; Buchanan, & Brock, & Daniels, & Wikler, 2000; Daniels, 2000).

Bioconservative Objections to Enhancement

Complexity of Human Nature

The first major justification bioconservatives may employ in favor of a restrictive stance is relative to questions concerning the complexity of human nature (Giubilini, & Sanyal, p. 238). According to Chair of the Bush Administration's President's Council on Bioethics, Leon Kass, the human body and mind are highly complex and delicately balanced resulting from a long period of gradual and exacting evolution (President's Council on Bioethics, 2002, p. 287). Ill-considered attempts at enhancement or "improvement" most certainly put this delicate balance at risk. One worry, expressed by Francis Fukuyama, is that because our limited understanding of specific genotypes and the complex interactions between single genes and phenotypic traits, altering any single gene or genetic sequence to obtain in the pursuit of a desirable trait might have bad unintended consequences for the expression of other desirable traits (Fukuyama, 2002, p. 74, 75).

For some bioliberals, this argument from complexity is perceived to rest upon a misunderstanding of evolution (Powell, & Buchanan, 2011; Buchanan, 2011). Allen Buchanan argues that the view expressed by Leon Kass and the Presidents Council incorrectly assumes that evolution is a "Master Engineer" that makes its creation a completed masterpiece that could only be ruined by human tampering (in the hopes of improvement) (Buchanan, p. 156). The fact that natural selection has operated on or emphasized a particular trait does not necessarily ensure that the trait is optimal for a particular given end, or human well-being (Giubilini, & Sanyal, p. 238). That being said, it is debatable whether the practical approach taken by the President's Council

should be interpreted in such a way. To err on the side of caution regarding certain changes is not necessary to claim that the status quo is optimal, or a completed masterpiece. If they are unable to provide grounds for thinking that the status quo is a local optimum when techno-permissive proponents forward the idea that the burden of justification falls upon techno-restrictive proponents, the bioconservatives predisposition regarding the ignorance (limitation) of human nature often plays.

Intuition and Emotion

The second major question posited between the two camps is one concerning both intuition and emotion in the bioconservative approach. Some conservatives place a significant amount of weight on emotions (disgust, repugnance, revulsion, etc.) to ground their opposition to biotechnological human enhancement (Giubilini, & Sanyal, p. 239). Both conservatives (Levin, 2003) and bioliberals (Macklin, 2006) recognize this response reliance as a distinguishing feature of the conservative restrictive stance. In the conservative tradition, it is a largely held belief that the feeling of disgust allows a moral agent to recognize moral violations (Kekes, 1998, p. 106). This approach stems from deep within the non-rationalist strand of the modern conservative tradition, back to Edmund Burke who displayed skepticism human reasoning capacities (Giubilini, & Sanyal, p. 239).

Continuing this tradition, Leon Kass and Bush's Council on Bioethics continued this tradition by defending the role of repugnance and establishing it as a reliable moral guidance in the field of biotechnologies. The view here is that repugnance serves as the emotional expression of deep wisdom and exists beyond the ability of human reason to fully articulate it (Kass, 1997, p. 20). Michael Sandel adds to the objection of enhancement by claiming that bioliberals tend to appeal first and foremost to the language of rights, autonomy, and fairness without

acknowledging the difficult questions that elude these terms (Sandel, 2007, 9, 10; Sandel, 2004, p. 51). Herein, he indicates that an intuitive understanding, one that exists beyond narrow modern bioethical vocabulary (Giubilini, & Sanyal, p. 239).

While bioconservatives appeal to wisdom of intuitions and emotions, bioliberals tend to focus the primacy of rational argumentation and view intuitions and emotions as sources of bias; however, Alberto Giubilini argues that this methodological divide may be less significant that either side perceives it to be (2015, p. 39). The bioliberal approach of rationality-over-emotions/intuitions often results in shifting the burden of proof onto bioconservatives and challenging them to provide argumentative support for their proposed restriction (often labeled intuitive, emotive, and irrational) on enhancement (p. 40). Giubilini supports his findings by first establishing that bioliberals also have their typical intuitions and emotive responses and are therefore exposed to potential biases in the same way bioconservatives are, and second by proving that intuitions and emotions are not necessarily antithetic to reason and rationality.

Rather than differing in bias intuitions, the bioconservatives and bioliberal approaches both rely on intuitions but on different sets (p. 42). These different intuitions are products of emotion. The autonomy-based morality employed by the bioliberal approach is characterized by anger when autonomy violations occur while the bioconservatives approach is characterized by contempt or disgust. It's this emotional difference that account for many of the differences between the two camps, not a difference of arguments or reasoning. Is it not true that even the predisposition to dispose of value judgements is itself a value judgement? Albeit, preferences to equality (or personal liberty as transhumanist may advocate) are predisposed value judgements and carry with them bias just as bioconservatives intuitions do.

Intuitive and immediate responses in general can result from atomized processed based on explicit and consciously held reasons which in turn, expresses a form of rationality (p. 43). Thus, rationality and intuitive or emotive responses are not necessarily mutually exclusive. Giubilini uses the example of someone feeling repugnance at the thought of human cloning or intuits an infringement upon their perceived notion of human dignity. Although theses judgments may not be inferred from a particular principle, it does not necessarily mean that these judgments cannot be justified by any principle or higher-priority moral goal or that they are not an accurate independent reflection on morality that was previously made. Giubilini suggests that there is something to be gained in terms of reflective capacity and dialogue if we dig deeper than the first level of intuitive and emotive responses and accept the idea that intuitions and emotions can express reasons, and sometimes good ones (p. 45). Bioconservatives have an edge (maybe on account of frequently being bearer of the burden of justification) in the capacity to recognize intuitions that ground one's moral stances.

However, in consideration of this entire argument, it is obvious that any reliance on intuition presents a weak argument. But it is an important one to mention as George Bush personally relied on "gut" feeling (intuition and emotion) to make important decision regarding stem cell research (Myers, 2006; Philbrick, 2010, para 8). Intuitions are subjective and often even internally contradictory. For example, when you pass a car wreck many of us experience both the impulse to *look* and to *look away*; we display repulsion and appeal at the same time. Therefore, any reliance on intuition by either bioconservatives or bioliberal traditions, be it anger or repulsion, is a fallible method to approach enhancement.

Human Dignity

When faced with the justification of a restrictive stance toward biotechnological human enhancement, some avowedly conservative positions invoke the concept of human dignity and the threat that enhancement necessarily poses toward it. The first thing to know is that there is no consensus of a definition of dignity in conservative literature, with some even acknowledging the term as abstract and highly ambiguous (Kass, 2009, p. 306). The debate in the bioethical community often revolves around whether or not there is a common nature shared by all human beings, which is unwarrantedly violated through biotechnological enhancement or the "improvement" of one's capabilities beyond the "species-typical" norm (Eberl, 2014, p. 289). The concept of human dignity that lies within a common nature, stems from traditional conservative philosophical roots and Thomas Aquinas's influential theory of human nature, which notes specific key traits shared among human beings that defines each as a "person" who possess inviolable moral status. These features include self-consciousness, awareness, capacity for intellective thought, and volitional autonomy.

The dignity of moral worth of a human assumes universality amongst human individuals (including infants and the severely intellectually disabled) and is said to be due to some feature of this human nature (Lee, & George, 2008, p. 412). General bioconservative opposition to enhancement is grounded in the idea that enhancement may change these key features of human nature in such a way that an individual may fail to have dignity or may have a different degree of dignity than an unenhanced individual (Giubilini, & Sanyal, p. 239). While for some the source of human dignity may emanate from god and our relationship with god (Meilaender, 2009, p. 264), dignity is not necessarily contingent on religious terms. In avoiding these religious connotations, we observe the danger presented by the existence of a one human "author" or "creator" who designs the talents and powers of another through means such as pre-implantation

embryo selection or genetic engineering. The created individual would then lose (to some extent) the dignity that comes from being an individual whose talents and powers are seen as simply gifted by nature (Sandel, 2004, p. 54). As Fukuyama argues, if our basic values are defined in response to features of human nature and that enhancement may change, then we are at risk of destabilizing those values (2002, p.7).

If such a conception of shared human dignity exists, then it is indisputable that transhumanist claims and efforts would serve to undermine it. However, Nick Bostrom argues that one important aspect of humanism that must be retained in the transhumanist doctrine is its view of dignity (O'Mathúna, 2013, p. 108). Humanism has accepted the inherent dignity of humans, and utilized it as the foundation for human right and autonomy. However, Bostrom claims that transhumanism allows people to "embrace technological progress while strongly defending human rights and individual choice" (Bostrom, 2005, p. 203). Yet even other techno-progressives can see that Bostrom is depending on a view of dignity that he is also attempting to reject. Carl Wolfe (2010) echo's Foucault's in claiming that humanism has always leaned upon conceptions of human borrowed from religion, science, or politics. While Bostrom attempts to cling to an inherent view of dignity, at the same time he denies that there is any unchanging aspect to human nature (O'Mathúna, p. 108). He claims that dignity lies in both "what we are, and what we have the potential to be." (Bostrom, p. 213). However, "what we have the potential to be" is variable and contingent on factors yet to be attained; it is not inherent dignity, rather circumstantial dignity (O'Mathúna, p. 108). Through his claims, Bostrom has conflated these two dimensions in such a way that human dignity becomes variable. In this context, the basis for equal rights for all humanity is vanquished and instead, rights and dignity become contingent on one's abilities and circumstances.

The 'God Card'

The final accusation we will discuss, is one bioconservatives frequently present in the bioethics arena regarding enhancement: 'playing God' (Giubilini, & Sanyal, p. 239). The bioprogressive counter argument not only brings up the very existence of god, but also brings up human's place in nature as a substantially influential element in that humans have the ability manipulate nature and even transcend human nature itself. Thus, while some criticize human attempts to play god, other, transhumanists, embrace it. To an extent, some bioconservatives even criticize bioliberals who advocate for such natural manipulation in the name of alleviation of human suffering and social equality. These bioliberals justify such action in the pursuit of the enhancement of human or social wellbeing, but not usually to the extent of transhumanism (although sometimes it appears so).

However, there exists a multiplicity of different objections in this context and it remains unclear which presents the most promising source of moral objective to specific types of enhancement. The charge of someone 'playing God' implies some account for the proper role of human in nature (below God). There are three main models in Christianity: (1) domination, (2) stewardship, and (3) co-creation (Coady, 2009, p. 157, 160). The "domination" model places humans under human domain which leaves no reason to object human manipulation of it. The stewardship model rewards human with the responsibility of care or maintenance of nature. Under this model, there must be some flexibility allowing for humans with (at least) non-human nature. A plausible account of stewardship must allow for proper care to extend beyond merely conserving the natural order and include some human design in the shaping of natural orders (Giubilini, & Sanyal, p. 240). The third model then, co-creation, suggest that humans are creators or shapers of the natural order alongside God.

The main models of human nature and its relations to God and the natural order in Christian theology, do not rule out the possibility of human enhancement on the grounds that it involves human design within the natural order. A likely and promising path for the theologians may be to appeal to scripture or church authority to proscribe specific enhancements. On this path, Coady urges caution and insists that this approach remains consistent with the legitimate (limited) human role in alleviating human suffering in both the stewardship and the co-creation models. In other words, this approach must remain mindful of the temptation that human authorities face to 'play God' in the interpretation of gods will (Coady, p. 161).

An example or version of the 'playing God' objection can be found in Michael Sandel's (2007) approach towards human societies depicting them as having a drive to master nature. One of the restraints on this drive is the development of an appreciation for features seen as gifts to be respected as they are (Giubilini, & Sanyal, p. 240). What Sandel advocates for is 'an openness to the unbidden' or that which arises without conscious effort. While some theists may describe the 'value of giftedness' or the value allotted to the gifts human beings have been naturally gifted with as an appreciation of God's creation, Sandel argues that a secular reason to value the given as a gift is that an unchecked drive for mastery would lead to undesirable consequences for humanity and for the responsibility humanity holds.

The Inadequacy of The Bioconservative Human-Nature Objections

Kehane, Pugh, and Savulescu (2016) contend that the most pressing criticism against bioconservative thought is raised with the human nature objection and the fact that the violation of which would result from enhancement technology, particularly "normality" (natural) transcending enhancement, that would radically alter our natural capacities (p. 406). Superseding human nature, then, would inevitably lead to inherently wrong or undesirable consequences

(Fukuyama, 2002). The human nature objection has been subject to forceful and sustained criticism that opponents of enhancement have so far failed to address (Buchanan, 2009; Harris 2007; Kahane & Savulescu, 2015). Primarily, the main challenge for advocates of the human nature objection is to explain why the relatively contingent and arbitrary feature of human nature, selected through blind evolutionary processes, bear intrinsic value (Kehane, Pugh, & Savulescu, p. 407) This pessimistic account presents a further challenge to the idea that we have inherent reasons to preserve human nature (Buchanan, 2011).

Allen Buchanan (2009, p. 141) attributes two chief concerns of bioconservatives employing the human nature objection: (1) enhancement may alter or destroy human nature; and (2) if this occurs, it will undercut our ability to ascertain the good because, for us, the good is determined by our nature. He contends that the first concern assumes that altering or destroying human nature is itself a bad thing and that the second assumes that human nature provides a standard without which we cannot make coherent, defensible judgements about what is good. Buchanan argues that there is, in fact, nothing wrong with altering or destroying human nature because, in a plausible understating of what human nature, it contains bad as well as good characteristics and there is no reason to believe that eliminating some of the bad would endanger the good as to make the elimination of the bad impermissible. Buchanan also argues that altering or destroying human nature does not necessarily have to result in the loss of our ability to make judgements about the good because we possess a conception of the good by which we can and do evaluate human nature. In other words, we already possess ideas about the good, and altering human nature, will not alter the (already) existence of these judgements. In this, Buchanan presents a conception of the good that transcends human nature by existing separately from it; the good is not contingent on human nature. For these reasons, appeals to human nature tend to

obscure rather than illuminate the bioethics debate because human nature is a non-contingent factor.

Transhumanism is often described as an affront to human dignity or the human nature objection in a way appears to achieve the halting of further debate (Palk, 2015, p. 39). The efficacy of both concepts has been widely questioned and left bioconservatives discourse in a state of uncertainty, inconstancy, or non-consensus. Thus, the main criticism is a general accusation depicting the ambiguous nature of these concepts and the lack of adequate definition by those using it. It is also criticized for is supposedly religious undertones and the fact that it may be used to argue for diametrically opposing positions within the same argument due to a dichotomy of distinct and conflicting interpretation. The religious undertones, often underlying claims to human dignity, prove problematic as religious sentiments are not universally ascribed to and present a certain state of weakness in an objective and secular political arena.

The Necessity of Universal Recognition of Human Dignity

Characteristic to any debate in the field of bioethics, particularly in areas of bio-enhancement, is the claim or at least mentioning of a collective human dignity which is shared by all things human and subsequently must be protected in order to preserve all things human; specifically, the very thing that makes us human and separates us from all things non-human. Opponents of the notion of human dignity often refer to its non-scientific argumentative grounding and it supposedly religious premises (Pinker, 2008). While these are perfectly reasonable criticisms, they are not universally applicable to all modern accounts of human dignity (Lawler, 2009, p. 41). Not only do non-religious conceptions of human dignity exist, they formulate a much more convincing conceptualization of the very vague and obtuse indefinite

subject. Although dignity exists as an abstract and unfixed concept, this does not mean we should not seek it out, even if it only leads to more questions.

According to prominent bio-conservative Peter Lawler, an interesting non-Christian addition to the literature of equal dignity comes from the thoughtful evolutionary scientist Daniel Dennett who claims that human beings are different enough from other animals to need morality (p. 41). Contrary to Pinker's rejection of the very notion of human dignity, Dennett believes confidence in the existence of dignity is essential to human existence. In agreement with Pinker, Dennett also believes that Christian claims (the majority of claims for dignity) have been refuted by the scientific discovery that everything we think and do has a material cause. In Dennett's line of reasoning then, beliefs in dignity and the soul have been discredited, similar to any unobservable (therefore unsubstantiated) claims regarding the existence of mermaids.

However, Dennett provides a scientific explanation for why we need this scientifically discredited belief in dignity. As social animals who have brains capable enough to conceive projects that enable us to live purposeful lives, we cannot provide a scientific basis for the freedom that is at the foundation of human conceptions of purpose (p. 42). Therefore, we cannot live well without useful illusions such as free will, love, and dignity. In this context, the idea that any particular human life at all matters becomes merely fiction, however, Dennett maintains that it is a fiction worth maintaining. Because we know that nihilism has a variety of undesirable social consequences, these illusions must be sustained in the face of what may be our accidental, material, and evolutionary existences. Therefore, we should justify our allegiance to the useful fiction of equal dignity by acknowledging the good life it makes possible as it is indispensable for the social norms and trust necessary to perpetuate essential social and political institutions. While the validity of the belief is of little consequence to this view, science is able to explain

why we need to believe it anyway. This is not so much about accepting whatever beliefs make us happy, it about accepting whatever beliefs allow us to function socially. Dennett's explanation implies that he denies the reality of the dignity he himself displays only because to do otherwise would require admitting that human beings are mysteriously disconnected from nature or materialistic causation. Yet, in his well-intentioned confusion, he remains stuck in acknowledging that we are the only species that can be held responsible for perpetuating human nature and the conditionality of life on our planet; there must be some dignity in that.

Lawler then points out that moral philosophers contributing to the bioethics debate provide a more comprehensive explanation of dignity (p. 47). From this perspective, it becomes much clearer that dignity may not be merely an illusion (p. 48). Human dignity is a natural excellence that all humans share. At this point it is important to note the use of the term "natural" over "normal" because natural human features and characteristics derive from a greater view of intrinsic human dignity, whereas normal features often the vague and disconnected elements that transhumanists naively standardize and measure from. It is our rational nature (not our reason as Kantians might posit) that elevates us, making each of us a "person" as opposed to merely a "thing" with the natural capacity for conceptual thought, deliberation, and free choice. Every "person" has the capabilities to give moral self-direction to one's own life, which is an ability worthy of "intrinsic-respect," regardless of whether a particular person has accomplished anything along those lines. Therefore, we are all awarded dignity, which should come along with absolute rights, for the entire duration of our existence on account of our unique being, from our moment of conception to our biological death.

We should never be expendable with other's purposes in mind. Our free and rational awareness of our irreplaceability and precariousness (in the Lockean sense), along with our

natural desire to preserve ourselves (in the Hobbesian sense), is what should condition our relationship with other persons. We refuse to fall at the whim of anyone else, and the contractual relationships we form amongst ourselves are formed on the basis of reciprocal recognition of the justice of our refusals. This frame cannot remark on whether or not embryos have rights, but from a purely scientific perspective, the unobservable personhood of an embryo versus the observable personhood of a conceived human may serve to justify the revitalization of life to a conceived individual. Additionally, such a perspective may speculate that euthanasia (under the appropriate circumstances) could be permitted; however, this is a lofty speculation as such circumstances would an interpretation of what human rights this human dignity may merit. This conversation is of course beyond the scope of this essay but results as a direct byproduct of its findings.

To understand dignity in terms of autonomy (in the Kantian sense) or productivity (in the transhumanism sense) will render it practically impossible to choose against productivity-orientated biological enhancement (p. 49). The enhancement of an individual beyond the natural range of human capability (including the defiance of aging, the suppression of negative emotions, or the acquisition of super cognitive abilities) in an increasingly meritocratic society becomes inevitability a means to maintain social position. If it becomes an offense against autonomy to restrict choosing against nature and for enhancement, then few may find themselves able to choose against enchantment and in favor of their natural moods, emotions, memories, or bodies. If there exists no natural rational, and dignified limits to our free choice, it will increasingly seem that we have no choice but to maximize productivity. Therefore, in accordance with the previously discussed detrimental consequences that follow the transhumanist reduction of dignity to productivity, natural human limitations are something that must be protected along

with the natural human dignity they encompass. Hence, human dignity, which necessitates our "personhood" is contingent upon the restrictions imposed by natural human limitations as the existence of humanity as we know it, does not necessarily exist outside of these limitations. Human limitations are, in the same sense as dignity, natural and should be protected in the name of protecting natural human essence.

To extrapolate on this human essence and for the purposes of this essay, we will utilize Francis Fukuyama's factor X as a label for human dignity. Factor X remains when we strip any person's contingent and accidental characteristics away and consider the essential human quality underneath that is worthy of a certain level of respect (Fukuyama, 2002, p. 149, 150). Factor X represents the most basic meaning of what it is to be human. If all humans are equal in dignity, then Factor X must be a characteristic universally possessed by humans.

Fukuyama's claim faces two major problems. The first, pertains to what the source of Factor X is. Traditional contenders include religious justifications, as well as moral autonomy universally possessed by all human beings (p. 151). The second problem relates to the fact that the notion of human essence, more so than that of human nature, has been thrown into dispute by Darwin's finding, which lead to the realization that instead of some ultimate goal serving as the main drive for humans, evolution is a blind and somewhat haphazard process (Palk, 2014, p. 157). In other words, human essence is a contingent factor in that it could have been a result of the whims of haphazard evolutionary process and therefore, does not correlate with any particular moral order. While the notions of human essence and human nature are often used interchangeably, for Fukuyama, the latter is defined with reference to the identification of concrete characteristics such as atypical behavior, whereas human essence is less explicable (p. 157).

To address the first problem, Fukuyama investigates three possibilities for the persistence of faith in the notion of human dignity. First, the enduring utilization of human dignity may be due to Weber's notion of the "ghost of dead religious beliefs that continue to haunt us" (p. 156). Second, Nazism, as founded upon an explicit disregard for equal possession and measure of human dignity amongst all human beings, provides a horrifying example of what is possible when human dignity is negated (Palk, p. 157). The third possibility forms the core of Fukuyama's argument which states that tenacity of the belief in the existence of a universal human dignity is attributable to "the nature of nature itself… moral order comes from within human nature itself and is not something has to be imposed on human nature by culture" (Fukuyama, p. 156). In other words, the tendency to recognize all human beings as equally deserving of a certain level of respect, a validation of their intrinsic dignity, persists because it is part of our human nature (Palk, p. 157).

It is this quality that Fukuyama fears will be threatened by aims of transhumanism. This fear is based upon the contention that radical human enhancement will reduce the genetic diversity between individuals on the one hand, while intensifying differences between social groups on the other, due to unequal access to bio-technology. In this context, he presents a bio-liberal concern but addresses it through the traditionally bio-conservative idea of human dignity. The natural genetic inheritance lottery, as Fukuyama argues, is "profoundly egalitarian" (Fukuyama, p. 157) in that all individuals are equally vulnerable to the inheritance of defective genes which may produce undesirable effects. If the genetic lottery is eradicated, and the lottery is ultimately viewed as a product of choice, Fukuyama argues that this will ultimately lead to the erosion of important human values such as empathy for others who are the mercy of the genetic lottery (Palk, p. 158). Correspondingly, it would also lead to the erosion of the humble

appreciation that one has for the whims of chance and their avoidance of the defective/undesirable genes.

The risks for equality and human rights posed by such attempts to alter human nature, and subsequently Factor X or human essence, have not informed of us the nature of factor X by which human dignity is awarded universally to all human beings. Additionally, the notion of human dignity also requires an explicit explanation that builds upon the claim that it implies a call for respect or equal recognition. Fukuyama identifies Factor X by examining the conditions by which consciousness as a product of evolutionary development was able to arise. The explanation lies in the nature of complex systems and the relationship of part to wholes. This relationship resembles the hermeneutic circle famously utilized by Hegelian scholars, such as Hans-Georg Gadamer, which posits that to fully understand a text, ones understanding of the text as a whole is established by reference to the individual parts and conversely, ones understanding of each individual part is only achievable through reference to whole. Without an understanding (or the existence in this case) of both, it is impossible to fully understand (actualize/constitute) either the whole or the individual parts.

It is not only the human brain, and thus consciousness, which displays complexity, but the wide range of human capacities in general (Palk, p. 159). If we can identify particular human traits, such as the disposition that lead us to structure the world in accordance with political thought which was argued by Aristotle to reflect the purpose of humankind (for the endless pursuit of the betterment of life [the good life]), it becomes increasingly apparent that such a tendency is attributable to presence of “human sociability and language”, and their refinement over a extended period of evolutionary development (Fukuyama, p. 165; Palk, p. 159).

Fukuyama argues that “human politics, though natural in an emergent sense, is not reducible to either animal sociability or language, which were is precursors” (Fukuyama, p. 166).

Furthermore, human emotion adds an additional layer of complexity to the problem of comprehending human consciousness (Palk, p. 159). In contemporary cognitive neuroscience, there is an emerging trend to interpret the workings of consciousness in terms of mechanistic models of the brain, where the brain is viewed to resemble a machine with a highly complex functionality. In the field of artificial intelligence, it is widely expected that it’s only a matter of time before human intelligence will be duplicated computationally as described by leading transhumanist Ray Kurzweil (2005). Fukuyama argues that whilst the emulation or surpassing of human intelligence is a distinct possibility, it is impossible to see how machines will come to acquire natural human emotions (Fukuyama, p. 168).

While the presence of various emotions could be explained by evolutionary biology, in regard to their ability to ensure the survival of the species, it is the particular subjective form that these emotions take and the fact that there are no obvious reasons for this forms selection in the course of evolutionary theory, remains a mystery (Palk, p. 159). Fukuyama argues that the human distinctiveness of Factor X, rather than associations with human rationality or moral autonomy, is attributable to the fact that consciousness, combined with human reason, language, moral choice, and emotion in such a way that the production of human politics, arts, and religion is made possible by our natural capabilities (Fukuyama, p. 170). The summation of nonhuman precursors of these human abilities that existed throughout evolutionary history, along with all of the causes and preconditions that were necessary for their emergence, collectively fall short in adding up to the human whole.

In other words, the claim that there is no unique human essence because the genomes of human beings and primates are virtually identical and there exists no substantive difference between the two species, is clearly insufficient (Palk, p. 160). This is because the non-linearity of complex systems, such as human consciousness, exists in such a way that seemingly minute divergences are able to produce major and unpredicted effects. At some point during human's evolutionary development, an ontological leap occurred, from parts to whole, that ultimately has to constitute the basis for human dignity (Fukuyama, p. 170). If dignity and an elevated moral standing that surpasses that of all other species are attributed to humanity on account of this complexity, then Factor X cannot be identified with any specific or single human capacity or quality. Rather, Factor X is the whole, which possesses something over and above the combination of its constituent parts or the individual human abilities and characteristics which grounds human dignity (p. 171). Fukuyama argues that it is the blueprint of the human genetic structure, which enables each individual to manifest Factor X (Palk, p. 160). Therefore, the risks posed by tampering or altering this structure may, as a result of mechanism of non-linearity, result in devastating consequences for human dignity.

In encompassing human dignity, Factor X refers to the complex nature of human beings, whose capacities and abilities exceed explanations associated with their constituent biological parts and processes (Palk, p. 160). This implies that these constituent biological parts and functions which together compose Factor X are interrelated and cannot exist in the absence of others (Fukuyama, p. 171). For example, human rationality is impacted upon by various emotions which can potentially either impede or sharpen it (Palk, p. 160). Thus, the ability to articular human values and pursue an ethical course of action is made possible because of both human rationality and human emotional proclivities, as well the other various factors including

the emotional and rational disposition of others (Fukuyama, p. 172). Therefore, if transhumanism where to exceed human limitations by suppressing or enhancing certain emotions, it would directly impact natural human functionality. Hence, these limitations are essential in maintaining Factor X or the distinctive human essence.

Fukuyama argues that it our full range our complex evolved natures which must be protected against attempts at self-modification or the threat of radical enhancement. We must maintain both the unity and continuity of human nature to sustain the notions of human dignity as well as human rights (Palk, p. 160). By prioritizing the total eradication of all forms of physiological discomfort, affliction, and limitation, this bio-progressive overriding imperative, due to the fact that it focuses on one component of human functioning only, disregard the complex whole. The most vulnerable human complexity is the range of human emotions, which is threatened by the growing strength of the neuropharmacology industry, which enables the diagnosis and eradication of problematic affective states and emotions. While is should not be interpreted as a criticism against the use of treatment for those who require medication to address pathological issues of levels of functioning, his concern lies with the indeterminate nature of the treatment/enhancement distinction. The blurred lines will in all likelihood serve as the means through which enhancement endeavors will be introduced and ultimately legitimized. Furthermore, the biotechnological imperative, mentioned previously, tends to frame effective states of consciousness in terms of negative or positive, desirable or undesirable categories. What Fukuyama argues is that the various supposedly negative affective states are inextricably lined to, or enable, the manifestation of positive emotions, in line with the previously established necessity of contrast-dependency. In this, what we consider to be the highest and most admirable human qualities, in both ourselves and others, are often related to our approach or our reaction

to, confront, overcome, and succumb to pain, suffering, and death (Fukuyama, p. 173). If these human evils no longer existed, there would be no sympathy, compassion, courage, solidary, or strength in character. It is our ability to experience these emotions which connects us with all other human beings.

The President's Commission/Council on Bioethics

The President's Commission for the Study of Bioethical Issues (The Bioethics Commission) is an advisory panel composed on American intellectual leaders in medicine, science, ethics, law, and engineering (Klugman, 2017). The Bioethics Commission advises the President on bioethical issues and seeks to identify and promote policies and practices that ensure scientific research, health care delivery, and technological innovation are conducted in a socially and ethically responsible manner. With the exception of George W. Bush, every President since Gerald Ford (1974) has employed a commission.

President George W. Bush commissioned the President's Council on Bioethics (PCB) in 2001 which operated until its dismissal by President Barack Obama in 2009. It was then replaced and renamed the Presidential Commission for the Study of Bioethical Issues (2009-2017). The PCB has been famously criticized for its heavily conservative-orientated approach to the relevant topics of its time such as stem cell research, human cloning, reproductive technologies, and caregiving. Controversy surrounding the PCB began even before its formal establishment, when Bush announced a policy on federal funding of stem cell research in the same national address that he announced his intention to create the PCB. Instead of first establishing a council capable of providing adequate advice on this complex matter, Bush arrived at his own restrictive position on stem cell research permitting it only for a small number of cell lines that were already created prior to his announcement, for which he stated, "the life and death decision had already been

made" (Green, 2010, p. 197; Bush, 2001, para 3). With a key bioethical decision already being made, the council's independence or ability to recommend another different course from the one the President had taken was called into question from the very start. (Green, p. 197)

It's composition also brought with it wide-spread scrutiny from bio-technological progressives. Bush appointed to head the council, Leon Kass, a well-established scientist-physician with immaculate credentials as a conservative bioethicist. In his early work, Kass opposed the development of in-vitro fertilization arguing that it could erode traditional marriage and replace "procreation" with "manufacturing" (Kass, 1974, p. 1174). Although Kass has since dropped his objection to in-vitro fertilization, his work as the head of the council was heavily focused on biotechnology's negative impact on traditional marriage and family relations (Green, p. 198). The PCB membership composition was heavily skewing a conservative direction that reflected the chairman's critical view of the value of scientific and medical progress (p. 199). From its conception, the panel was accused of allowing partisan politics to influence its composition (p. 200).

At first glance, the conception of the council's work is inviting as it was created to debate a wide range of philosophical issues focused on ends as well as means, and was committed to articulate a full range of human goods that the state can be eager to promote and defend (p. 201). Kass and the other council members hoped to conduct a broadly education function by creating a body of wise reflection to which the nation could turn to for guidance on some of the most pressing and perplexing questions posed by the advancement of biomedical technology (p. 202). However, in reality what could have served as a broadly humanistic inquiry, untethered from the need to provide concrete policy advice to agencies facing ethical dilemmas, instead became a form for those opposed, often on sectarian religious grounds, to all possibilities of modern

reproductive and genetic medicine. This contrasted with preceding public bioethics conducted by presidential councils which had served as “regulatory bioethics”. These efforts attempted to find a middle ground between supporters and opponents of biotechnological practices and to establish a procedural consensus that would eventually result in the regulation of that practice as an agreeable alternative to banning or restricting it all together. Instead, the PCB amounted to more a critique of modern medicine, its practices, and its values.

Another major observation provided by Green invokes a criticism of the direction of the PCB and its heavily focused emphasis on reproductive technologies or proposed practices or policies, such as assisted suicide, which were perceived to threaten the medical/biological status quo (p.203). Instead, Green proposes that could have concentrated its efforts towards more pressing biomedical priorities such as issues pertaining to equity and justice in the American health care system. Thus, Green accuses the conservative “prophetic bioethics” exercised by the PCB as being akin to various religious fundamentalism opposed to modernity and social transformations as opposed to social activism and justice.

Recommendation

Although the wide-spread criticism of the PCB may be over stated, there was a multiplicity of lessons to be learned from its failing as a new approach to bioethical discourse and policy recommendation panels (Green, p. 213). First, the council should strive to achieve genuine diversity and balance in membership to merit the respect from the biomedical and bioethics communities, and to produce comprehensive and widely agreeable publications. This means the integration of front line research scientists and active clinicians along with more philosophically derive perspectives. Liberal and conservative political administrations will understandably appoint council members partial to their views, but an effort must always be

made to achieve balance and a consensus across the political, medical, and bioethical communities.

Second, the council should focus more directly on regulatory advice tied to specific and pressing issues (p. 214). Although wide-ranging and useful in the engagement of seminar-like examining of medicine and bio-medical research direction, a national commission is not the place for such intellectual exploration. Rather, national and international think tanks should fulfill this role and answer these basic inquiries including the definition of death, the determination of the moral status of an embryo, or the how to conduct a newborn screening. These can enter into the council's discussion as broader reflections in the commissioned papers tied to the specific regulatory issue. However, devoting major council deliberations invites speculation and ideological position taking unattached to immediate practical needs.

Last, the council should strive to confine commission discourse within the bound of something conceptually equivalent to John Rawls "public reason", where citizens have a "duty of civility" or the moral obligation to cast the principles and policies they advocate for so as to appeal to everyone's welfare rather than private philosophical, moral, or religious values (1993, p. 215). This does not necessarily entail the elimination of religious and metaphysical perspectives in public debate (which is impossible), but it advocates for a common respect for others through putting aside arguments that hinge on faith propositions not acknowledged by others. Furthermore, there should be a willingness to re-cast these arguments in terms of evident impacts on everyone's well-being.

Obama's Bioethics Commission largely focused on neuroscience, responding to pandemics, incidental finding in research whole genome sequencing, human research subject's protection, and synthetic biology (Klugman, paragraph 8). Obama made it clear that that he

intended to replace the committee with one that offers practical policy options over philosophical guidance (Nicholas, 2009). Obama's efforts were very much taken in response to the failing of the PCB which may have been established to justify Bush's positions on stem cell research and abortion. However, Obama has often been criticized for the same offense himself desiring to see his policies back by expert consensus more likely realized by a commission composed of like-minded political liberals (Campbell, 2009). One thing was certain, the panel presented a model much more orientated to practical policy formulation and recommendation then the previous PCB.

In 2018, the world continues to grapple with a host of new life science technologies at an exponentially increasing rate of discovery and innovation. These breakthroughs will not taper off on account of administrations choice to not explore these tools or their profound implication for policy. Even if the US does not research these areas of contention, the rest of the world will. President Trump appears to have given little or limited thought to bioethical matters or ethical principles that would influence his administration policy-making (Klugman, 2017). This poses a danger as bioethical issues have the potential to abruptly explode into public consciousness. Common misunderstandings of the multiple meanings of ethics might be a reason why Trump has yet to establish a bioethics commission. Another explanation could lie in his apparent disregard for science (illustrated in his lack of a White House science advisor) or his reliance on a small group of inner circle family loyalists. Albeit, it seems as though the very seasons that he is unlikely to commission a bioethics council are the very same reasons that he needs to establish one.

Identifying Similarities and Areas for Compromise or Reconciliation Between Bio-Conservatives and Bio-Progressives (Bioliberals)

Self-proclaimed bioprogressive Jason Moreno wrote in his book, *The Body Politic: The Battle Over Science in America*, that the concern of bioconservatives with human dignity can provide a kind of bridge and can become part of what his calls "new biopolitics" (2011, p. 173). He argues that human dignity is the basis of every important human rights convention and functions as a shared value even if is often interpreted differently. While this is a disputable statement by many standards, as human dignity is utilized in many different ways to explain many different things (such as transhumanist association of dignity with productivity), Moreno presents an interesting point in that mainstream bioconservative and bio liberal proponents generally agree upon some form of common dignity or at least a shared value (a notion that the liberal international community communicates through a recognition of universal human rights). Although his work is relatively unclear on what kind of characterization dignity can be given within a bioprogressive framework, it serves as a sufficient preface to a fundamental discussion regarding bioprogressive and bioconservatives cooperation within the field bioethics, or practical policy recommendations at least. After all, the purpose of this paper is to provide a framework, albeit minimalist, for the bioethical debate to flourish in a bipartisan council formation. At the very least, if dignity cannot be decided, the determination that productivity and the valuation of untidily maximization, present a pressing concern for any moderate bioethicist conversation. While dignity may remain unfixed, it is agreeable that productivity is not a viable direction of change or "dignity-evolution:" the notion that dignity changes over time. Thus, a base common conception of dignity, albeit indefinite, would serve to protect humanity and supplement current bioethical discourse.

In debate with bioconservatives, bioliberals are often dismissive of the conservative values too which bioconservatives frequently appeal (Roache, & Savulescu, 2016, p. 1).

Consequently, bioconservative justification for opposing enhancement remains poorly understood by bioliberals. By appealing to values that are shared by both bioconservatives and bioliberals, Rebecca Roache and Julian Savulescu (2016) argue that there is a possibility for both camps to share a common platform on which human enhancement can be constructively debated in the policy recommendation arena. This would allow for the overcoming of the restrictive barriers presented by both camps. The areas for compromise and cohesion are as follows:

Caution Towards Enhancement

Unlike transhumanists, it is undeniable that bioliberals can recognize the value of caution about when it comes to enhancement (p. 6). However, bioconservatives maintain that whilst enhancement should not be embraced if it is unsafe, the most important objections do not relate to safety (p. 4). The bioconservative objection to enhancement based on the possibility that it might destroy more value than it creates is unconvincing unless bioconservatives can provide good reason to believe that fundamental human values are more effectively promoted by abstaining from enhancement then by pursuing it. Bioliberals often counter-argue that some bioconserative values are better promoted by enhancement then by opposing it.

In response, bioconservatives justify their partiality to caution by attributing the way things are (or, perhaps, the way things used to be in a perceived bygone era when everything was better), and in particular the traditions that conservatives esteem, to the accumulated wisdom of our ancestors; as opposed to current whims or random circumstances (p. 4). This reverence for established wisdom, combined with pessimism about societies ability to withstand radical change, leads bioconservatives to oppose any attempt to overturn the status quo. Since established wisdom plausibly exceeds that of bioliberals, it is more likely that bioconserative

values will be preserved through enhancement opposition then by embracing it. Herein, we may observe a certain reverence to antiquity.

Bioliberal enhancement proponents are unlikely to advocate for radical social change (or technological or ideological revolutions) that bioconservatives typically fear, but instead incremental change as technology advances. However, bioconservatives may choose to endorse the hardline conservative view that status quo represents the ideal state, from which even gradual changes are undesirable (p. 6). Bioliberals not only recognize the value of caution about enhancement, but even heed the bioconserative warning not to be seduced by the appeal of human enhancement without first questioning the values it promotes. They can acknowledge that the pursuit of enhancement may be guided by initially appealing values only if these values are balanced. Premature promotion of a narrow range of values may result in disaster.

The Best Way Forward Includes the Disposal of Intuitions

Even though, bioconserative and bioliberals may agree that established wisdom outweighs that of today's thinkers, it is not a sufficient justification for bioconservatives value being better safeguard by favoring opposition to enhancement over permission (p. 6). Accordingly, as everybody experiences intuition and bias, as there is not such thing as a value free judgement (to attempt a value-free judgement is a judgment in itself), it also necessary to deem bioliberal intuitions as equally invalid and equally dispensable. Obviously, history does change and progress is made. History is full of attempts to improve the human condition, and the human (p. 7). Therefore, it is impossible to argue that the desire to enhance traits like intelligence, strength, and self-confidence is opposed to established wisdom.

Thus, the bioconserative may appeal to intuitions. This characteristic conservative appeal enables bioconservatives to insist both that enhancement conflicts with established wisdom, and

that it is possible to articulate how and why this is the case (p. 8) However, different people have different intuitions; bioliberals do not share the bioconserative intuition that enhancement is bad. Therefore, in order to determine any kind of valid intuitions, there must be an appeal to some standard of evaluation independent of the individuals. Furthermore, people's intuitions change over time. Even Leon Kass recognized that has softened to the idea of cloning since it first came to public attention (Kass, p. 17). Given this, it is likely that even people with an aversion to enhancement would eventually become more accepting of it if they were repeated or regularly confronted with it (Roache, & Savulescu, p. 8). Moral acceptability must be assessed with reference to considerations independent of individual's unanalyzed intuitions.

In this, it is mutually agreeable that intuitions are not an acceptable means of judging allowable enhancements. However, as they are indispensable in that there is not such thing as a value free judgement, an appeal to an external objective measure, such as human dignity, would place certain intuitions above others. Of course, without validation, these intuitions have no place in the formal bioethics debate. But if they are able to appeal to the agreeable standard of Factor X enhancement and limitation, they may prove as acceptable tools, that may be utilized by both camps, to construct an initial, albeit frail and incomplete, argumentative platform to forward a position regarding the restriction or permission of certain forms of enhancement. Admittedly, this a weak cohesive element, but it appeases traditional conservative values and poses no determinate costs to the cohesion of bioliberal and bioconservatives perspective in that it only provides partial and unsubstantiated argumentative grounding.

A Foundation Based Upon a Common Understanding of Factor X Enhancement

A certain degree of enhancement could be agreeable for both bioconserative and bioliberal camps if it could avoid undermining bioconservatives values by embodying a specific

type of enhancement that instead explicitly promoted these values. For the sake of the argument, we will employ Factor X to represent the difficult-to-define aspects of humanity that bioconservatives fear with be undermined by enhancement (p. 149). These concepts include wisdom, dignity, appreciation of giftedness, openness to the unbidden, or any conservative values that we have previously discussed. Anticipating how bioconservatives might resist Factor X could help identify what bioconservatives find objectionable about enhancement even when bioconservatives find this a near impossible task; Sandel argued that when science moves faster than moral understanding, people struggle to articulate their anxiety (2004, p. 1, 9).

Bioconservatives might resist Factor X enhancement for two reasons: (1) they might think enhancement, even of the values they endorse, is dehumanizing; and (2) they might worry that Factor X enhancement would increase Factor X beyond a desirable level (Roache, & Savulescu, p. 9). Bioliberals would argue, that enhancement would not dehumanize, but instead amplify much of what is good about being human (p. 13). However, those who are worried about dehumanization may posit that what's important is not whether enhancement would promote worthwhile values, but how it might alter public perception of the enhanced and/or the unenhanced. For example, if people were to focus abstractly on human capacities and their usefulness, they would take an impersonal view of other people as things capable of being improved rather than as individuals. Therein, enhancement could lead to dehumanization. While it cannot be said with certainty whether introducing enhancement into society would lead people to view themselves and others in this undesirable way, it can, at the very least, be argued that bioconservatives and bioliberals approach the potentially dehumanizing effects of enhancement in a cautious way.

As for the second reason bioconservatives may resists Factor X enhancement, they may argue that their esteem for Factor X does not commit them to endorsing the view that Factor X should be indiscriminately increased (p. 13). Instead, bioconservatives may argue that there is an ideal (or even threshold) level of Factor X which would be undesirable to exceed (p. 14). However, these arguments do not justify the outright rejection of Factor X enhancement (p. 16). According to Roache and Savulescu, bioconservatives clearly believe that there is not enough Factor X in the world and that it ought to be promoted. If there is a certain threshold of Factor X which if exceeded would lead to undesirable effects, then bioconservatives have reason to endorse Factor X enhancement up to, but not beyond, that level.

Excluding "normality-transcending" (natural) enhancements and the perspectives of radical bioconservatives or bioliberals, such as nick Bostrom's identified "democratic transhumanists" (2003, p. 44), a sufficient amount of pragmatic bioconservatives and bioliberals can find common ground within the limits of what Kahane, Pugh, and Savulescu call "normal human variation" (2016, p. 407). This sort of enhancement is referred to as "normal-range" ("natural") enhancement. An example of this type of enhancement would be the use of existing pharmaceuticals such as Modafinil, which enhances cognitive capacities such as executive function, attention, learning, and memory (Battleday, & Brem, 2015).

Considering the failures of the familiar form of the human nature objection, the best alternative conservative mode of valuing that can be agreed upon is the partiality to humanity (Kahane, Pugh, & Savulescu, p. 407). Within this reasonable partiality, bioconservatives can allow for "natural range" enhancement in the pursuit of bettering humanity without risking it via "nature-transcending" enhancements. In addition, bioliberals can agree on this cautious approach to enhancement and its promising benefits for humanity as well as distribution and access

regulations in order to ensure that greater society shares equally in the human enhancement and assistance technologies. While there is still a tremendous amount of middle ground to disagree on such as the life's starting point and the ethics of stem cell research, the world can benefit from establishment of high and low thresholds in bio-technological advancements in both the allow-ability of desirable enhancement as well as restrictions upon harmful enhancement and its undesirable effects. Thus, bioconservatives and bioliberals may come to compromise and develop the capacity to facilitate effective biotechnological policy allowing for human progress and societal advancement while ensuring the protection of humanity.

Summary

Ranging from radical bioconservatives to radical bioprogressives, this essay attempted to establish a comprehensive framework through which to view the major competing perspectives within American bioethics. On one distant side, transhumanism advocates for full and unhindered progression of human enhancement biotechnologies in the hopes of one day surpassing our natural human form to achieve a state of posthumanity. On the opposing, furthest-reaching side of the spectrum, hardline bioconservatives are opposed to the very principle of human enhancement on the basis that it misunderstands and overlooks the complexity of human nature, contradicts (conservative) natural intuitive and emotive responses, and most importantly, assumes a godlike role in tampering with human nature/dignity. Bioliberals can be often be found in the middle of the spectrum floating in between bioprogressive and biorestrictive positions in a biopermissive space. Here, they advocate for the facilitation of human enhancement insofar as it benefits all human kind and not merely the already advantages groups in society, as well as poses no real threat to humanity. While there are some bioliberals who dismiss bioconservative claims because of vague conceptualizations and religious undertones,

those who are pragmatic and maintain a truly comprehensive understanding of both camps must now recognize the common fears and objectives that exists in-between the bioconservatives and bioliberal spectral spaces. Moderate bioconservatives can at least agree with pragmatic bioliberals on the shared preferences toward caution and “normal-range” (natural) human enhancement.

Transhumanism presents a dangerous, incomplete doctrine, that is quite inadequate at presenting itself as a significant danger to humanity and society. In the wake of transhumanism’s inability to present its inherent dangers effectively, the bioconservative and bioliberal dichotomy need now more then ever, to come together, disperse with bipartisan politics, and find a suitable compromise in order to move forward and protect humanity from the dangers emanating from an exponentially advancing world of technological innovation and breakthroughs. The most dangerous bioethical situation is one where we can find no consensus in the bioethical debate, or more specially the bioethics commission. Technology will continue to develop and progress whether ethics keeps up with it or not. Absent collectively agreeable definitions, we must find a way to regulate and monitor human enhancement in an effective way that is conducive to both human progressive and the sanctity of humanity. A consensus must follow a mutual recognition of the tangible danger presented by transhumanism and the near overwhelming innovation and advancements in biotechnology that grow ever closer to scientific and clinical reality. The larger argument is simple in the coming together of two traditionally opposing political factions to increase political (policy) effectivity, but the smaller argument is much more complex. Cohesion is ever so necessary in an increasingly technological natured world.

References

Antiel, R. M. (2009). *Obama and the Presidential Council on Bioethics: An insider's view*. Retrieved from https://www.thehastingscenter.org/obama-and-the-presidents-council-on-bioethics-an-insiders-view/

Aydin, C. (2017). The posthuman as hollow idol: A Nietzschean critique of human enhancement. *The Journal of Medicine and Philosophy, 42*(1), 304-27. doi:10.1093/jmp/jhx002

Battleday, R. M., & Brem, A. K. (2015). Modafinil for cognitive neuroenhancement in healthy non-sleep-deprived subjects: A systematic review. *European Neuropsychopharmacology, 25*(11), 1865-1881. doi: 10.1016/j.euroneuro.2015.07.028

Bostrom, N. (2005). In defense of posthuman dignity. *Bioethics, 19*(1), 202–214. doi:10.1111/j.1467-8519.2005.00437.x

Bostrom, N. (2006). The transhumanism FAQ: A general introduction. *Linguistics and Philosophical Investigations, 5(*1), 136-201. Retrieved from https://library.macewan.ca/library-search/detailed-view/phl/PHL2204044?query=nick+bostrom+transhumanist+FAQ

Bostrom, N. (2008). *Why I want to be a posthuman when I grow up*. In B. Gordijn & R. Chadwick (Eds.), *Medical Enhancement and Posthumanity* (107–37). Dordrecht, Netherlands: Springer.

Bostrom, N. (2014). *Superintelligence: Paths, dangers, strategies.* Oxford, England: Oxford University Press.

Buchanan, A., & Brock, D. W., & Daniels, N., & Wikler, D. (2000). *From chance to choice: Genetics and justice*. New York, NY: Cambridge University Press.

Buchanan, A. (2009). Human nature and enhancement. *Bioethics, 23*(3), 141-150. doi:10.1111/j.1467-8519.2008.00633.x

Buchanan, A. (2011). *Beyond humanity? The ethics of biomedical enhancement*. Oxford, England: Oxford University Press.

Bush. G. W. (2001). President's statement of funding stem cell research. *The New York Times*. Retrieved from https://www.nytimes.com/2001/08/10/us/president-s-decision-overview-bush-gives-his-backing-for-limited-research.html

Campbell, C. C. (2009). Dissolution of bioethics council is a loss for America. *St. Louis Post Dispatch*. Retrieved from http://dimaslanjaka.www.a.b.c.steelmonkeyhosting.com/proxy.cgi/en/00/http/www.stltoday.com/stltoday/news/columnists.nsf/colleencarrollcampbell/story/a2538aad388a962b862575e6007f8c59=3f

Coady, T. (2009). *Playing god.* In J. Savulescu & N. Bostrom (Eds.), *Human enhancement* (155-180). Oxford, England: Oxford University Press.

Daniels, N. (1985). *Just health care.* New York, NY: Cambridge University Press.

Daniels, N. (2000). Normal functioning and the treatment-enhancement distinction. *Cambridge Quarterly or Healthcare Ethics, 9*(3), 309-322. doi:10.1017/S0963180100903037

Eberl, J. T. (2014). A Thomistic appraisal of human enhancement technologies. *Theoretical Medicine and Bioethics: Philosophy of Medical Research and Practice, 35*(4), 289-310. Retrieved from https://library.macewan.ca/library-search/detailed-view/phl/PHL2228015?query=Thomistic+bioethics

FM-2030. (1989). *Are You a Transhuman?* New York, NY: Warner Books.

Fukuyama, F. (2002). *Our posthuman future: Consequences of the biotechnology revolution.* New York, NY: Picador.

Giubilini, A. (2015). Don't mind the gap: Intuitions, emotions, and reasons in the enhancement debate. *Hastings Center Report, 45*(5), 39-47. doi:10.1002/hast.458

Green, R. M. (2010). The president's council on bioethics: Requiescat in pace. *The Journal of Religious Ethics 38*(2), 197-218. Retrieved from https://library.macewan.ca/library-search/detailed-view/edsjsr/edsjsr.25676555?query=Presidents+council+on+bioethics

Harris, J. (2007). *Enhancing evolution: The ethical case for making better people.* Princeton, NJ: Princeton University Press.

Huxley, J. (1957). *New bottles for new wine.* London, England: Chatto & Windus.

Kahane, G., & Pugh, J. (2015). Normal human variation: Refocusing the enhancement debate. *Bioethics, 29(*2), 133-134. doi:10.1111/bioe.120145

Kahane, G., & Pugh, J., & Savulescu, J. (2016). Bio conservativism, partiality, and the human-nature objection to enhancement. *Monist, 99*(4), 406-422. doi:10.1093/monist/onw013

Kamm, F. (2009). What is and is not wrong with enhancement? In J. Savulescu & N. Bostrom (Eds.), *Human enhancement* (91-130). Oxford, England: Oxford University Press.

Kass, L. (1997). The wisdom of repugnance: Why we should ban the clothing of humans. *The New Republic, 216*(22), 1-17. Retrieved from https://library.macewan.ca/library-search/detailed-view/cmedm/11654974?query=Kass%2C+L.+%281997%29.+The+wisdom+of+repugnance%3A+Why+we+should+ban+the+clothing+of+humans.+The+New+Republic+17-26

Kass, L. (2009). Defending human dignity. In *Human dignity and bioethics* (297-331). Notre Dame, IN: University of Notre Dame Press.

Kekes, J. (1998*). A case for conservatism.* New York, NY: Cornell University Press.

Klugman, C. (2017). Dear Mr. President: It's time for your bioethics commission. *Biethics.net.* Retrieved from http://www.bioethics.net/2017/05/dear-mr-president-its-time-for-your-bioethics-commission/

Kurzweil, R. (2001). *The law of accelerating returns.* Retrieved from http://www.kurzweilai.net/the-law-of-accelerating-returns

Kurzweil, R. (2005). *The singularity is near: When humans transcend biology.* London: Penguin.

Lawler, P. A. (2009). The human dignity conspiracy. *Intercollegiate Review, 44*(1), 40-50. Retrieved from https://library.macewan.ca/library-search/detailed-view/ehh/41564954?query=human+dignity+conspiracy

Levin, Y. (2003). The paradox of conservative bioethics. *The New Atlantis, 1*(1). 53-65. Retrieved from https://library.macewan.ca/library-search/detailed-view/cmedm/15584194?query=The+paradox+of+conservative+bioethics

Levin, S. B. (2017). Antiquity's missive to transhumanism. *The Journal of Medicine and Philosophy*, *42*, 278–303. doi:10.1093/jmp/jhx008

Macklin, R. (2006). The new conservatives in bioethics: Who are they and what do they seek? *Hastings Center Report, 36*(1) 34-43. doi:10.1353/hcr.2006.0013

Mehlman, M., & Botkin, J. R. (2009). *The price of perfections: Individualism and society in the era of biomedical enhancement.* Baltimore, MD: John Hopkins University Press.

Meilaender, G. (2009) Human dignity: exploring and explicating the council's vision. In *Human dignity and bioethics* (253-277). Notre Dame, IN: Notre Dame University Press.

More, M. (2010). The overhuman in the transhuman. *Journal of Evolution and Technology, 21*(1), 1-4. Retrieved from https://jetpress.org/v21/more.pdf

Moreno, J. D. (2011). *The body politic: The battle over science in America*. New York, NY: Bellevue Literary Press.

Myers, D. G. (2006). Intuition or intellect? *Los Angeles Times*. Retrieved from http://articles.latimes.com/2006/aug/22/opinion/oe-myers22

Nietzsche, F. (1968). *The will to power*. (Walter Kaufmann and R.J. Hollingdale, Trans.) New York, NY: Vintage Books.

Nietzsche, F. (1976). *The portable Nietzsche* (W. Kaufmann, Trans.). New York, NY: Penguin Books. (original work published 1885)

O'Mathúna, D. P. (2013). Human dignity and the ethics of human enhancement. *Trans-Humanities, 6*(1), 99-120. Retrieved from https://bioethicsireland.files.wordpress.com/2009/09/omathuna-2013-enhancement-dignity.pdf

Palk, A. C. (2014). *The morality of transhumanism: Assessing human dignity arguments.* Retrieved from http://scholar.sun.ac.za/handle/10019.1/86727?show=full

Palk, A. C. (2015). The implausibility of appeals to human dignity: an investigation into the efficacy of notions of human dignity in the transhumanism debate. *South African Journal of Philosophy, 34*(1), 39-54. doi:10.1080/02580136.2015.1010133

Philbrick, S. (2010). President George W. Bush's announcement on stem cells. *The Embryo Project Encyclopedia.* Retrieved from https://embryo.asu.edu/pages/president-george-w-bushs-announcement-stem-cells-9-august-2001

Pinker, S. (2008). The stupidity of dignity. *New Republic, 238*(9), 28-31. Retrieved from https://library.macewan.ca/library-search/detailed-view/a9h/31966389

Porter, A. (2017). Bioethics and transhumanism. *Journal of Medicine and Philosophy, 42*(3), p. 237-260. doi:10.1093/jmp/jhx001

Powell, R., & Buchanan, A. (2011). Breaking evolutions chains: the promise of enhancement by design. In J. Savulescu, R. Meulen & G. Kahane (Eds.), *Enhancing human capacities* (49-67). Chichester, England: Wiley-Blackwell.

Rawls, J. (1993). *Political liberalism.* New York, NY: Columbia University Press.

Roache, R., & Savulescu, J. (2016). Chapter 10 Enhancing conservatism. In S. Clarke & J. Savulescu & T. Coady & A. Giubilini & S. Sanyal (Eds.), *The ethics of human enhancement: Understanding the debate.* Oxford, England: Oxford University Press.

Rubin, C. T. (2009). Human dignity and the future of man. In *Human dignity and bioethics* Notre Dame, IN: Notre Dame University Press.

Sagar, S., & Giubilini, A. (2015). The ethics of human enhancement. *Philosophy Compass, 10*(4), 233-243. Retrieved from https://library.macewan.ca/library-search/detailed-view/phl/PHL2240935?query=kass+enhancement

Sandel, M. (2004). The case against perfection: What's wrong with designer children, bionic athletes and genetic engineering. *The Atlantic*. Retrieved from https://www.theatlantic.com/magazine/archive/2004/04/the-case-against-perfection/302927/

Sandel, M. (2007). *The case against perfection: Ethics in the age of genetic engineering*. Cambridge, MA: Belknap Press.

Wolfe, C. (2010). *What is posthumanism*. Minneapolis, MN: University of Minnesota.