Genetic Enhancement and the Harm Argument: A Critique of the Case against the Transhumanist Intent of Germline Enhancement

Michael M. UZOMAH, PhD.
Philosophy Department,
St. Albert Institute, Fayit-Fadan, Kagoma,
Via Kafanchan, Kaduna State.
Email: uzomahmikeabuchi@yahoo.com

Abstract

Germline tinkering is the most contentious between the two forms of genetic engineering because of its inexorable impact on future offspring. For most "harm conscious critics" germline engineering is ontologically evil. Transhumanist genetic engineering is driven by the natural inclination and imperative duty of humans to preserve and perpetuate human species and life. Humans are duty-bond not just merely to preserve life but mere essentially to continually improve the quality of their lives. However, mindful of the possibility of harm that may arise from corrupt intention (that may give room for misappropriation and misapplication) and unintended consequences as a result of the imperfection of this emerging technology, this treatise advocates for a proactive and formidable bioethics and biojuris prudence. It also recommends that when all safety and moral concerns pertaining to human reproductive cloning has been resolved, the principle of caution must be applied. Human reproductive cloning for only reasons that has been universally appraised legitimate and expedient may only be prosecuted where there are strong reasons for thinking the risk of disaster is very minimal, and where the benefit is great enough to override the risk. The method adopted in this treatise is the analytic method.

Keywords: Germline Enhancement, Harm, Reproductive Cloning, Transhumanist Intent,

Introduction

Cloning understood in eugenic and transhumanist angle is a techno- scientific thinking which aspires for bio-manufacturing or bio-proliferation of special breeds of humans with post human qualities. The posthuman is the human person whose potentials have been unleashed and whose health has been optimized (Uzomah and Attoh 29-40).This treatise argues that although one cannot easily disparage the tenability and formidability of the objections (especially argument from harm) against reproductive cloning bordering on its transhumanist implications and possibilities, because most points raised express genuine human concern based on man's global historical antecedents. Nevertheless, the philosopher makes bold to argue on the other hand that even if it is conceded that transhumanist motive is the real motive animating the idea and concept of human reproductive cloning; eugenic and transhumanist intent in themselves are not ontologically immoral but rather corrupt intents or corrupt transhumanist intents are what could be reasonably considered inherently evil. Hence, envisaging the possibility of this corruption of intentions, this work makes a strong case for a proactive bioethics and a formidable bio-medical jurisprudence for the reasonable regulation of gene technology. It further argues that to forestall the likelihood of the phenomenon of unintended consequences, it is wise to counsel that while research on human reproductive cloning for the future cloning of humans continues with other animals as specimens, no human cloning must be allowed till all safety and moral concerns are decisively resolved. The paper recommends that when all safety and moral concerns pertaining to human reproductive cloning have been resolved, the principle of caution must be applied. Human reproductive cloning for only reasons that have been universally appraised as legitimate and expedient may be prosecuted only where there are strong reasons that the risk of disaster is very minimal, and where the benefit is great enough to override any foreseeable harm.

Etymology of Eugenics

Eugenics is derived from the Greek word, *eugenesia* meaning, "to engender well", "well born". According to Iroegbu, "It means to breed better or improve upon what has been bred. Eugenics generally has to do with the good breading and improvement of the species of human beings, using modern knowledge to advance the development of the human species. It has come to assume enormous importance in health science and research" (Uzomah 23-24). In relation to genomics, eugenics involves the genetic modification or manipulating of the genetic constituents of DNA for the enhancement of the human species (Uzomah 23-24).

Eugenics generally has to do with the good breading and improvement of the species of human beings, using modern knowledge to advance the development of the human species. It has come to assume enormous importance in health science and research (Iroegbu and Echekwube 585). Concerning genomics, eugenics involves the genetic modification or manipulating of the genetic constituents of DNA for the enhancement of the human species.

A leap into the historical evolution of Basic and Clinical medicine reveals that eugenic research has its origin in the 19th Century. The concept of eugenics can be traced to the writings of great scholars like the Darwinian theory of the *Origin of Species and Natural Selection,* and Francis Galton (his cousin) who coined and first usedtheconcept. The philosophy behind eugenics goes beyond the general enhancement of the human species. More essentially, it focuses on discriminatory manipulation of human genetic makeup of DNA to ensure that only human species with outstanding qualities are bioreproduced. Eugenics intends to manipulate or modify or genetically engineer human hereditary traits in order to foster the bioreproduction of geniuses in all ramifications. These utopic (genetically engineered) classes of human species are considered the superior race fitted and dully empowered to withstand the vicissitudes of life. Transhumanist pessimists allege that these eugenic humans are intended to be agents of racist dominance.

Eugenics is an applied science that seeks to maintain or improve the genetic potentialities of the human species (Gordon Allen, 193). Eugenics is a biomedical research and practice seeks to maintain or improve the genetic potentialities of the human species. It is a biomedical technology poised for the upward enhancement of human conditions beyond natural human limitations. It is the science and art of creating better, healthier, super-brilliant, etc. human species. Ultimately, human germ-line genetic intervention targets to eliminate human fragility in human existence and experience by improving the capacities and qualities of humans.

Transhumanism

Transhumanism is both a biotechnological aspiration as well as a philosophical vision of a material transfiguration of human condition and experience which ultimate culmination is the man-technology singularity or convergence (Uzomah and Attoh 29).The concept of transhumanism embodies the following posthuman conditions: beyond humanism, meta-humanism, advanced-humanism, improved humanism, transcendental-humanism, superlative-humanity and post-humanism. It can also imply transfigured and redeemed human condition. In other words, these terms can be properly used interchangeably with transhumanism.Transhumanism is a dynamic philosophy, intended to evolve as new information becomes available or challenges emerge. One Transhumanist value is therefore to cultivate a questioning attitude and a willingness to revise one's beliefs and assumptions (Bostrom, cited in Uzomah and Attoh, 31). It is a humanistic philosophy which aspires to consolidate genomic information with information technology to metamorphose into a new human condition referred to as posthuman condition. Bostrom, emphasized this humanist root of Transhumanism as he noted that "Transhumanism imports from secular humanism the ideal of the fully-developed and well-rounded personality. We can't all be renaissance geniuses, but we can strive to constantly refine ourselves and to broaden our intellectual horizons" (cited in Sorgner, 35). Worthy of note here is the fact that Transhumanism is higher than humanism. It is an intellectual and cultural movement, whose proponents declare themselves to be heirs of humanism and Enlightenment philosophy (Bostrom, 203). The goal of transhumanism is to create ideal humans with improved posthuman capacities and qualities in an ideal world of material abundance that promises stability and full life.

In the transhumanist reproductive scheme, for instance, the genetic makeup of upspring will never be left to the blind chance of natural selection that takes place when the billions of sperm deposited in the body of the woman jostle for a chance to be the one and only to fertilized an ovum.

Rather, parents may choose not just the genetic composition of their would-be children but in addition they now can determine their sexes. The goal of transhumanists is to make designer babies that are beyond the natural limitations of an average human person. Jeffrey P. Bishop, in *Transhumanism, Metaphysics, and the Posthuman God,* succinctly explained the implicit logic that underpins Transhumanist aspiration thus:

> Transhumanist philosophies seek to transcend human frailties, not by relieving the human condition of its frailties, but by relieving us of the human condition itself. It takes the human as its origin and the posthuman as its telos even while it is an ill-defined telos. And its rationality is the logic of technology, to move us from human frailty into the realm of posthuman goods. Its logic however is not new. It is as old as the Enlightenment, and it deploys the metaphysics of efficient causation to bring into Being, a new being (701-702).

This implies that the logic behind transhumanism is not the destruction of present human nature, rather, to work on the existing genetic composition of the human species in order to improve already existing capacities and qualities. Of course, the telos of human genetic engineering is for both therapeutic as well as enhancement. Through therapeutic cloning, human frailties and infirmities are treated from their genetic root. Through genetic manipulation, human genes are enhanced beyond natural state. Be that as it may, the transhumanists conceived human nature as dynamic and flexible to mutation. In the words of Sorgner, "Transhumanists view human nature as a work-in-progress" (1). In affirmation of the dynamic nature of human nature, Bostrom points out that: "A common understanding is that it would be naive to think that the human condition and human nature will remain pretty much the same for very much longer" (200). On his part, Bishop did not mince words in establishing that "A transhumanist perceives the current state of humans in an evolutionary transition, on a transitory journey from ape to human to posthuman, and thus its philosophy is called transhumanism. The goal of transhumanism, then, is to achieve the posthuman being. The posthuman is a future being-a person who constructs himself or herself out of various technologies. Although, the posthuman isa speculative projection into the future however, it is envisaged that posthuman beings would be very different from current humans" (700). The main point of emphasis in these allusions is the fact that the transitory nature of the human person is not self-motivated or animated, rather, it is influenced from both within and without. Hence, the journey towards post-humanism is animated and determined by technology. Such that the ultrahuman or the transcendent human would not be a new human being altogether, rather, a technological construct out of the old dynamic human nature. This construct out of technology would not only boast of the best and amplified human capacity, but in addition and most importantly would glory in an existence that is devoid of mortality. Moreover, having been freed from every known human infirmities and having conquered death, the post-humans would live lavishly in a world of superabundance.

*Transhumanism is an eschatological vision of a material transcendence of human experience. It is a material paradise here on earth. This is a new phase of human existence and experience that would phase out this present pernicious human condition. It is a state and condition of existence of transfigured, transformed, redeemed and improved human beings. This "Ideal World" designated as the age of artificial intelligence (AI) is realisable through the incredible knowledge accruing from human genome and nanotechnology. The transfigured and improved human race in this era would transcend all known human existential problems like human suffering, disease and death. Other human contingencies and vicissitudes that belong to the old order that would be alien in this millennium of transcendence include scarcity of all sort, limitedness and paucity of information (Uzomah23-28).*The future of mankind in the providence of biomedicine may just be thekingdom of transhumans; the kingdom of exceptional humans and the ideal world of superior humans who are perfect, stable and well fitted to enjoy the fullness of life***(Uzomah 23-28)**.

Transhumanist optimists and scholars strongly believe that reproductive cloning offers an inviolable opportunity to bioreproduce humans beyond average human condition. According to Snead, **"**There are even arguments about the possible virtues of trying to reproduce a person of great value through the process of cloning" (488). Individuals who are geniuses in different worlds of life may be cloned to perpetuate the best of human qualities. Not only that they can be cloned individually, but an individual clone may be a mix or blend of certain excellent and exceptional qualities of these geniuses based on the innovative aspiration of scientists and other stakeholders.

For instance, in philosophy, great minds like Plato, Aristotle, Augustine, Thomas Aquinas, David Hume, Immanuel Kant, Pantaleon Iroegbu, Joseph Omoregbe, etc.; in Literature, literary icons, like Sophocles, Aeschylus, Homer, William Shakespeare, Chinua Achebe, Wole Soyinka, etc.; Men of science like Galilee Galileo, Copenicles, David Bacon, Gregor Mendel, etc.; great celebrities in the entertainment industries like Michael Jackson, Celine Dion, 2face, Lucky Dube, Bob Mali, Oliver De Coque, Fela Anikulapo,; in the world of combat Sport, superstars like John Cena, the Undertaker, Big Show, McHenry, etc. may be cloned to reproduce not just their kinds, but hybrids with more enhanced physical and intellectual capacities and strengths.

The Harm Argument

Eugenic Cloning and Psychological Harm

One of the arguments that feature most prominently in debates on reproductive cloning is the claim that it portends grave psychological harm to cloned offspring. Green indicated that critics of reproductive cloning may ask, if a cloned child is brought into being through the replication of the genome of a parent or an admired celebrity like Tiger Woods, for example, will the child be forced to live his or her life under a cloud of imposed expectations? Some ask whether the parents of a cloned child would be able to love their child with a love that does not depend on the extent to which he or she measures up to some preconceived standard of excellence (Uzomah157-160). The background, clime and other germane factors may inhibit the manifestation of these supposed standards of excellence. And when cloned individuals are not matching up to these preconceived expectations, the purpose of such cloning project would have been defeated. This is not to mention the psychological trauma and friction this may generate between the parents or guardians of the cloned and the cloned.

It is germane to place on record that the bio-creation of people after these super stars does not automatically imply that they would take their path. It is possible that even when these individuals are successfully cloned, their respective clones may not take to their lines of professions. For example, Brimah, is of the view that "cloning a special person like Mozart does not necessarily mean that the clone will eventually be a musical genius as was the real Mozart (71). Genetic composition alone does not determine the personality of individuals, other factors inevitably influence the personality and individuals' career choices.

Misappropriation of Reproductive Cloning for Warfare

Another related ethical concern raised against cloning is the possibility of the grave misuse of cloning for war or domination in the mannerof atomic or biological weapons of mass destruction. This is the fear that cloning somehow threatens to bring catastrophic risks. Green argued that if we open this "cloning door" even a crack, multiple harms will follow. The analogy often used here is the case of nuclear energy, where we went in a few years from the research laboratory to a world threatened with nuclear disaster" (Uzomah 160). This age is an age where the core countries are trying to assert themselves at the international political space and halls of powers with the accumulation of missiles for warfare. Hence, if human cloning is allowed, just as this military technology has been grossly abused by nations, they may even seek to enhance every tendency in humans that predisposes them to warfare in cloned soldiers. The product and aftermath of eugenic human cloning may be ruthless commanders and savage battalions with no known human parents or families whose existence and essence is to be wolves onto fellow men.

Transhumanist pessimists contend that one of the greatest harm or threat eugenics and transhumanism portend to humanity is that reproductive cloning may also be used to reproduce and replicate Superhumans in the ever-changing context of modern warfare, the production of an army of cloned warriors. The bestial instincts of these warriors may not only be activated but also amplified through genetic tinkering. When this is successfully done, these warriors would have been engineered to be ruthless in nature and outlook to prosecute warfare with least consideration of the core values of humanity. Green asserted that "Where cloning is used to mass-produce human beings for slavery, war, or other forms of control, you do not have to go too far to find an identifiable candidate for people's fears in this regard, be it Saddam Hussein, Osama bin Laden, or some other fanatics" (Uzomah 157-160). One may reasonably assert that if the power of cloning was available in the hands of the Romans of old, they would have used it to clone soldiers to prosecute their famous wars of conquest. In like manners, if the Germans and their racist (anti-Semitist) leader Adolphus

Hitler were endowed with the incredible power of cloning, they would have equally used it to reproduce giants and ruthless armies to prosecute their supremacy wars to a lather conclusion. It has been argued that the idea behind the aspiration for reproductive cloning of superhumans is the supremist and racist ideology. Globally, men and women of goodwill in the strongest term possible detest this obnoxious ideology. Through this ideology, cloning technology has the mechanism of bioproducing soldiers whose animalistic instincts would be amplified and made dominant nature. These clones (monsters) may have the capacity to unleash untold terror and unimaginable humanitarian atrocities and catastrophe on humanity.

Furthermore, it is reasonable to point out that the strongest observation or critique of reproductive cloning especially that animated by eugenics and transhumanist ideology that is related to the possible misuse or misappropriation is that, it may lead to unintended consequences. The law of unintended consequences may turn clones into monsters, Frankenstein and instruments they may not be able to control. This concern is grounded in the phenomena currently experienced in the world. Today, the entire globe is in a precarious state because of the multiplying effects of industrialisation and urbanisation, the handiwork of science and technology. Consequently, Sara Goering maintained:

> … I find recent advances in genetic technologies both fascinating and frightening. Future technologies for genetic therapies and elimination of clearly deleterious genes offer us the ability to get rid of the cause of much human suffering, seemingly at its physiological root. But memories of past eugenics programs gone horribly awry (whether we speak of Hitler's program, California sterilization laws and practices of the 1920s, or even contemporary practices, such as attempts to work out deals that exchange sterilization for early prison release) must make cautious our initial optimism for these generally well-intentioned programs. Most often the scientist proceeds in research with the best of intentions, but that does not make all scientific investigation worth pursuing (Uzomah 157-160).

In other words, a beneficent motive is not enough to justify possible human reproductive cloning, for unintended consequences may far outweigh the supposed good or wellfaric intentions. Since the human mind is desperately wicked and crooked, scientists and geneticists may astutely misappropriate cloning technology senselessly and irrationally to achieve parochial and nefarious ends. And when this happens, society will be in real and profound jeopardy.

One cannot easily argue away the tenability and formidability of the compound objection against reproductive cloning bordering on its transhumanist implications and possibilities. All points raised by this compound objection express genuine human concern based on man's global historical antecedents. Nevertheless, one may boldly argue on the other hand that transhumanist motive is not ontologically harmful and parochial, rather, it may become harmful and parochial at the level of corruption of intention and misappropriation and application. Hence, envisaging the possibility of this corruption of intentions, this treatise makes a strong case for bio-medical jurisprudence for the reasonable regulation of gene technology. It further argued that to forestall the likelihood of the phenomenon of unintended consequences (as alluded to in the compound objection above), it is wise to counsel that while research on human reproductive cloning for the future cloning of humans continues with other animals as specimens, no practical human cloning must be allowed till all safety and moral concerns are decisively resolved. Moreover, even when all safety and moral concerns on human reproductive cloning have been reasonably resolved, the principle of caution must be applied. Human reproductive cloning for only reasons that have been universally appraised as legitimate and expedient may be prosecuted only when possible, the harm or risk is very minimal, and where the envisaged benefit abundantly overrides the foreseeable harm.

Replacement of Sexual Reproduction with Cloning and it's for Fetal and Neonatal Safety

Generally, the perceived risks of cloning considered as contravening the principles of non-maleficence include the alleged“massive replacement of sexual reproduction with cloning. And as such, reproductive SCNT is believed to violate deeply cherished values and traditions. It has also been argued that concerns about fetal and neonatal safety alone make the application of reproductive

SCNT to human procreation unethical. Beyond these safety concerns, the conclusion reached by the Health Assembly in 1998 that the replication of human individuals through cloning would contravene human dignity and integrity, is also widely held" (WHO, no. 10).

Notwithstanding the compelling forces of these ethical concerns raised above, scholars sympathetic to the course of gene technology in general and cloning in particular are not perturbed. On the contrary, they are of the plausible opinion that blanket impugning of cloning engineered by apparent anxiety or impulsive uncertainty is not healthy for the worthy course of the promotion of human life and health. Consequently, in defense of human cloning they have advanced moral arguments which investigate the positive prospects of cloning. They would rather encourage opponents of human cloning to focus their attention on enquiring if there is a moral right to use human cloning; what individual or social benefits might human cloning produce, in terms of the individual cum social benefits accruable from human cloning; etc. Yanagimachi is of the opinion that "Although concerns about fetal and neonatal safety alone make the application of reproductive SCNT to human procreation unethical at present, improvements in cloning may make safety concerns only a temporary barrier to reproductive cloning. Moreover, researchers have proposed using SCNT to generate embryonic stem cells for persons who need tissues or organs…" (Uzomah 158). Dominko, Luetjens, et al, claimed that the development of SCNT for such therapeutic purposes, in which embryos are not transferred for pregnancy, could produce the knowledge necessary to make reproductive SCNT safe and effective (Uzomah 158). To reinforce this argument one may add that advocates of human cloning do not ask that at the moment human cloning should be legalized owing to its grave health fatality. I think no sane person can advocate for that for it amounts to unwarranted and senseless foolishness to the highest order. Rather, they strongly hope and contend that when the procedure has been perfected, it holds marvelous and relishing potential for the advancement of the life and health of humanity.

This bold and laudable claim is validated by the most recent and latest milestone in reproductive cloning that has indicated that the tinkering or altering of genes of the clones will not only help researchers probe the mechanisms behind human diseases, but aid drug screening and the development of other therapeutics. This indication was given by Poo, co-author of the research and Director of the Chinese Academy of Sciences' Institute of Neuroscience. While announcing the cloning of the two primates Zhong Zhong and Hua Hua, he told the *Guardian*, that the clones could help scientists probe how the behaviour of identical twins' genes becomes more dissimilar over time as environment modification of their DNA build up. Implicit in Poo's claims is the indication that reproductive cloning irrespective of other ulterior reasons is ultimately therapeutic in teleology (Uzomah 157-160).

Granted this fact, I strongly suggest that as the debate on the moral worth of cloning ranges on, instead of outright discontinuation of research in cloning, it will be more profitable for humanity if the principal focus should be on the need to establish a "meaningful and healthy boundary" that must not be bridged until all moral and safety questions raised are considerably resolved. What actually does the human person deserve? Perfect or absolute moral dignity sealed by genetic infirmities that makes life unappealing at the expense of development and enhanced life and health? Is it not morally reprehensible to refuse to do anything towards ontologically alleviating the deplorable and infirm conditions of man even when man has advanced resourceful knowledge of human genome on the pretext of protecting human dignity? I strongly believe that the zenith of human dignity is that man is able to critically engage his rationality to advance techniques and procedures that grandiosely enable him to achieve self-procreation and preservation in such a manner that other animals are by nature not enabled to. Is the value and essence of human rationality just to engage in mere 'moral judgments' under the unconscious influence of conservative fundamentalist religious orientation or more essentially to help to creatively answer and resolve human problems? Human rationality is worthless if it cannot ontologically and sustainably engage human existential questions especially those bordering on his very continual existence and perpetuation.

Reproductive Cloning Considered as a "Baconian Project"

The aspiration for reproductive cloning from eugenic and transhumanist perspective has also been attacked from the theological (Christian) point of view. This perspective sees it as a "Baconian Project" of (re)producing perfect children. According to Verhey, one of the exponents of this view:

> The Baconian project and the project of liberal society conspire to distort our relationship with our children. The suspicion of nature joined to confidence in technology and the celebration of options conspire to nurture a new "wisdom" about parenting, a new project of reproduction. We are tempted to view our children as human achievements rather than as gifts of God and as the basis of hope rather than as a gesture of our hope in God. Few people think any more that children are the property of their parents, to be disposed of as parents choose. Today the confusion stems rather from the view that parents have the awesome responsibility of making perfect children, and of making children perfect in order to assure them a happy and successful life. But this account of parenting turns our children into products, into human and technological achievements. Such an account allows the abortion of the unborn who do not meet our standards of quality control, the neglect of newborns with diminished capacities to achieve our ideal of the good life, and the pursuit of technical possibilities of genetically improving our children. Such a project may finally reduce our options to a "perfect child" or a dead child (17).

Furthermore, Verhey, maintained that the project of (re)producing perfect children is a powerful, but foolish, map to locate our genetic knowledge and to orient our reproduction within it. We must look for wisdom elsewhere. In this same line of theological objection to reproductive cloning, Mark Cherry, in *Are We Asking the Right Questions?* argued that "Human beings are created to worship God," and If, in our moral analysis, we only inquire after temporal human goods and focus on equality, rights, justice, or fairness, we will fail to appreciate the depth of our humanity (86).

The salient point of this theological interjection is that cloning neglects the spiritual essence of man in its artificial plan of reproduction. And if human reproductive cloning is allowed on eugenic import that it would invariably cause lethal harm to the eschatological and salvific teleology of Christianity. Mindful of this and other theologico-ethical concerns about biotechnology in general and reproductive cloning in particular, Stuart R. Sprague lamented thus:

> … And today when scientists give us the option of changing the human body at the cellular level through cloning, the moral stakes seem higher and the way forward is more cloudy and uncertain. In decisions about whether and how to employ these medical technologies, the issues we face may be deeply personal, yet they also raise questions about our common nature as human beings and creatures of God (Uzomah,157-160).

These concerns interrogate the consequences of cloning to the human person created *imago dei*- in the image and likeness of God. The image and likeness of God in man is the metaphysical nature and essence of man which disposes him to certain teleological goals that are believed may be grossly undermined if reproductive cloning is allowed to see the light of the day.

A critical examination of the main thesis of this theological objection reveals the spuriousness of the objection. To begin with for instance, one straight question that scholars who are theologically oriented must answer to validate their objection is, how will cloning distort the concept of the image of God in man thereby derailing the eschatological and salvific teleology of Christianity? If the image of God in man is the soul, do clones not possess a soul just like humans produced through natural reproduction? Is it not religious orientation and indoctrination after birth that makes one to be inclined to religion and her heaven based essence instead of circumstances of conception and mode of birth? Moreover, if scientists and geneticists are accused of 'playing God', that shouldn't be seen as negative because even the same God endowed man with the sublime faculty of intelligence and brilliant prowess. It won't be out of place for the philosopher to hold that the essence of this sublime faculty is to enable man to creatively invent sustainable remedies to specific human ailments and deleterious conditions. The image of God in man is not just the soul, but most essentially, the sublime faculty of reason and intellect connected man more to God, especially for the fulfillment of man's temporal essence and good.

As a natural theologian (metaphysician), I have always postulated that man's creative prowess and ingenuity is the image and likeness of God in man. Human intellect and creative

ingenuity is an inalienable power of the human soul. In philosophy (the Science of science) and as well as in the empirical sciences, man engages this transcendental image and likeness of God in him in the onerous problems that besiege his embattled nature. Therefore, it is not the case that bioscientists and geneticists are playing God in the art and science of cloning in particular and gene technology in general, rather, they are effectively playing their roles in accordance with their essence as co-creators with the divine mandate to rule, dominate and subdue the earth. Even the Christian Scriptures in Psalm 8 configures man as a creature who has been made little less than a God. He by this configuration ought to be a created creator, to further the creation of his creator. He ought not to merely exist in and with nature, rather he is to continually put his prowess into active use to perfect the imperfections of nature in himself and the external environment.

In all, without any iota of equivocation, I maintain that the main motivation of most religious judgments is their spontaneous resentment for human interventions in a natural process dubbed as artificial and contrary to the will and purpose of the creator. This disdain of course, is not justifiable on rational grounds. Man should be able to innovatively put his transcendental qualities to use under the governance of practical reason. After all, the glory of God is man fully alive. Moreover, the existentialist philosophy exults man to employ all he has to engage the drama of life in order to work out his essence. Man is not a robot that must flow with a given essence. The human body and nature is a work in progress, therefore, humans like their creator were gifted creative prowess to further work on human nature on its transit to perfection. The theologian must note that God made humans as small gods to finalize the creation of humans according to his divine plan. Understood in this sense, eugenic and transhumanist cloning motivated by humanity is not destructive of the divine essence and dignity of humans, rather it is man's rational and practical participation in the divine law of human evolution. Human rationality would be worthless if all it could do is to incessantly advance speculative and impracticable norms without creatively furthering work on human nature.

Observation and Recommendation

The contemporary mind is faced with a dilemma regarding the paradoxical expediency of gene technologies despite certain identified ethical inconsistencies and consequences it has with regard to the concept of human dignity and integrity. As it stands, I strongly believe that the contemporary man is left with only one morally acceptable and most essential option as far as human life and health are concerned. The option is, continuing intense research and analysis in gene technology, but subjecting same to the descript regulation of ethical principles and ethico-medical principles. Certain ethical theories and ethico-medical principles like, deontology, situationism, utilitarianism, etc. and autonomy, non-maleficence, beneficence, justice and veracity, respectively, are fundamentally relevant to ensuring gene technology that ensures a healthy compromise. In pursuance, most arguments advanced either against or in favour of gene technology leverage on these ethical doctrines and biomedical ethics.

From the foregoing evaluative engagement, it is my firm belief that most arguments that today serve as formidable positive objections of genetic modification both at the level of somatic and germline modifications that border on safety and risk concerns would in time become irrelevant and redundant as gene technologies continually undergo improvement and advancement. Meanwhile, for the main time, while humanity nostalgically yearns for this era of perfection of gene technologies, I suggest that caution must be the watchword. The "principle of caution prescribes that "We should alter genes only where we have strong reasons for thinking the risk of disaster is very small, and where the benefit is great enough to justify the risk. There might, of course, be epistemic issues but, conceptually, this is, I think, is right" (Glover 42-3).

In the final analysis, from this critical ethical evaluation, the researcher makes bold to argue that human nature is imperfect because it is bedeviled by ontological evils, disease, and frailties. This imperfect nature presupposes that human dignity and integrity is imperfect in the face of these infirmities and frailties. Genetic enhancement wouldaim, *most fundamentally*, at the improvement of the human experience. What end could possibly be nobler than that? Therefore, I strongly maintain and argue that any genetic intervention that aligns with the biomedical principles of autonomy, non-maleficence, beneficence, justice and veracity, should be considered inherently complementary and essential for the promotion of human dignity and integrity. Therefore, deontologically, biomedical scientists and physicians have it as a categorical duty to carry out such somatic and germline engineering. When they are not misappropriated, guided against derailment

and unnecessary compromises and when they are prosecuted under the reasonable regulation of practical wisdom epitomised by established ethico-medical principles, gene technologies are compatible and consolidate human dignity and integrity. On the strength of this, the researcher maintains that as far as human life, health and wellbeing is concerned, the notion of human dignity and integrity is never absolute since human nature is bedeviled by frailties and malaises that make external interventions inevitably inevitable. These frailties and malaises corrupt the internal mechanisms for self-restoration of the human body from genetic root. Consequently, genetic tinkering becomes not just an inevitable necessity, but essentially an ontological approach towards improving human health at least to average and at most beyond average (optimisation). Man is duty-bound not just to cure illness but to ontologically address the causes of illness and deleterious medical conditions through genetic engineering. In line with Kant's deontological postulations, every man and women of goodwill and of sound reason engaging in some genetic enhancements (those that passed the test of medical ethics and the dictates of practical reason) either as a physician, therapists or a patient would always wish that every rational human being everywhere in the world with expedient medical condition should do the same. In this sense, eugenic or transhumanist cloning animated and motivated by this moral duty are expediently and most fundamentally justified.

Conclusion

From the critical analysis above, one makes bold to argue that the eugenics and transhumanist motive of reproductive cloning is not intrinsically harmful or parochial, however, it may be considered harmful and parochial at the level of misappropriation and misapplication. Genetic enhancement surely could be applied to nefarious ends, and we always must be vigilant against such abuses. Therefore, to forestall misappropriation and the mortal destabilization of the dignity and integrity of the human person, there is a compelling need for a proactive bioethics and a formidable bio-medic jurisprudence. Law is expedient for the effective enforcement of biomedical principles.

Works Cited

Allen, G."Eugenics"*InternationalEncyclopedia of the Social Sciences,* Vol. 1968.

Allen, Verhey, "The Cultural Geography of Cloning", in Kruschwitz, Robert B. ed. *Cloning, A Christian Reflection: A Series in Faith and Ethics*, USA: The Center for Christian Ethics Baylor University, 2005.

Bishop, Jeffrey P. "Transhumanism, Metaphysics, and the Posthuman God", Oxford: Oxford University Press, on behalf of the *Journal of Medicine and Philosophy Inc*., 2010.

Bostrom, Bostrom, Nick, "The Fable of the Dragon Tyrant".*Journal of Medical Ethics* 31(5), 2005.

Bostrom, cited in Sorgner, Stefan Lorenz, "Nietzsche, the Overhuman, and Transhumanism", *Journal of Evolution and Technology*- Vol. 20 Issue 1 – March, 2009.

Brimah, Josephus J. "Moral Arguments in Favour of Human Cloning", in *International Journal of Humanities and Social Science*, Vol. 6, No. 9; September, School of Education Njala University Sierra Leone.

Iroegbu, Pantaleon and Echekwube Anthony, (Ed). *Kpim of Morality, Ethics* Ibadan: Heinemann Educational Books Plc., 2005.

Snead, O. Carter, "Preparing the Groundwork for a Responsible Debate on Stem Cell Research and Human Cloning", in *New England Law Review*, Vol. 39:479, England: Notre Dame Law School, 2005.

Uzomah M. M. "Mankind's future in the providence of bio-science: A nostalgia for the eugenic teleology of genetics and genomics", Journal of Emerging Technologies (JET), Vol. 2. Issue 1, (2022). ISSN 2710-0187 (Online) https://journals.jfppublishers.com/jet/

Uzomah, M. M. & Attoh, U. S. Transhumanism as a philosophy of material transfiguration: A critical analysis. *Social Sciences, Humanities and Education Journal (SHE Journal)*, *1*(3), 29 –45. DOI: 10.25273/she.v1i3.7551, 2020.

Uzomah, M. M. *The Necessity of Jurisprudence for an Effective Bioethics in Gene Technology and Human Dignity,* A PhD Dissertation submitted to the Department of Philosophy, Ekiti State University, Ado- Ekiti, Unpublished, 2019.