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Ethics & Medicine
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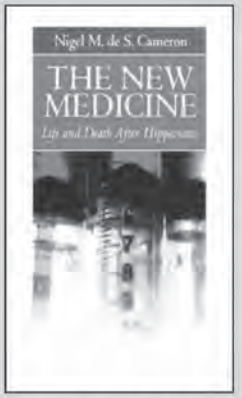
Bulletin Board

THE NEW MEDICINE : LIFE AND DEATH AFTER HIPPOCRATES

By Nigel M. de S. Cameron



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In the reprinting of a very important book for our current times, Dr. Cameron links the rise of the "new medicine" and the fall of the Hippocratic tradition to society's increased acceptance of the practices of euthanasia and assisted suicide. He states that "the medical profession is liable to follow any fundamental shift in society's values" and point to the relationship between Nazi Germany and the Nuremberg "medical crimes" as an example. In the absence of the Hippocratic prohibition against the killing of patients by their physicians, the fundamental value of protecting life is displaced. "the desire of society to avoid suffering, financial burden, and the inconvenience then lead to increasing support for physician-assisted suicide and euthanasia. The author contends that it is imperative for the medical profession to return to its Hippocratic roots.

"In the post-WWII era physicians began to water down the basic tenets of the Hippocratic tradition, and then they abandoned them. That's what this important book is all about: the rise and fall of Hippocratic medicine."
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"In **The New Medicine,** *Dr. Cameron has done much to earn the title of a second Hippocrates."* **Harold O.J. Brown, Professor of the Theology and Philosophy Reformed Theological Seminary**

"The New Medicine *is a persuasive manifesto that should be welcomed by those who have the courage to join a movement to reform aimed at restoring medicine to its healing mission."* **Richard John Neuhaus, Director Religion and Public Life**

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EDITORIAL

Why Doctors Must Not Be Complicit in Killing Their Patients

C. BEN MITCHELL, PHD

In 2015, at least 18 US state legislatures and the District of Columbia are considering whether to allow physician-assisted suicide. It is already legal in Oregon, Montana, Washington, and Vermont. Lamentably, the practice is also legal in the Netherlands, Switzerland, and Luxembourg. This evidence demonstrates that despite advances in pain management and palliative care, the debate is not going to go away.

One factor both proponents and opponents of assisted suicide agree about is the importance of "a good death." Another aspect shared by both is the importance of compassion. Care for the dying is crucial for both groups.

Typically, those who favor assisted suicide argue that suffering is evil. Assisted suicide is therefore good because it eliminates suffering. Additionally, they maintain that people who suffer from a terminal illness have a right to choose not to suffer. Therefore, if assisted suicide is the only means of ending suffering, then those who are suffering have a right to end their suffering by taking their own lives. This is the principle of autonomy. Since terminally ill patients are not well-trained in ending life and often botch up the process, they must depend on physicians to provide them with the successful means to end their lives.

One of the problems with this argument is that it does not work. Not all of the premises are true and, together, they do not lead to the conclusion. Let us take them in reverse. First, although it is true that some persons botch up their suicides, it is not true that suicide requires the technical training of a physician. There are many highly effective means to end one's life, and with the ubiquitous nature of the internet nearly anyone can learn how to commit suicide with a relatively high likelihood of being successful. No training is required.

Second, although autonomy is a key component of human well-being, it is not an absolute human good. There are limits to autonomy. For instance, voluntary slavery is a contradiction. One may not use his freedom to give up his freedom. One may not exercise her will in order to eliminate the exercise of her will. Furthermore, patient autonomy is compromised by many factors in the medical setting. First, there is a *dis*-parity of knowledge and clinical judgment. Physicians, nurses, and other caregivers have a greater knowledge base than most patients. Second, there is the *dis*-ease of illness, especially terminal illness. After all, the etymology of the word "patient" is from the Latin root for "suffering." By definition, suffering limits autonomy.

Third, although suffering is a serious and multifaceted problem, it is not insurmountable. Often when people speak of suffering, they really mean physical pain. As physician Eric Cassell has written, "Although pain and suffering are closely identified in the minds of most people and in the medical literature, they are phenomenologically distinct" (*The Nature of Suffering and the Goals of Medicine* [Oxford, 1991], p. 34). Pain is treatable. We have powerful analgesics and pain

management techniques to relieve nearly all pain. While suffering can be due to pain, it is more often associated with the emotional, psychological, and even spiritual aspects of the human condition. Sufferers often report feeling fragmented, unraveled, or violated by their experience. One's integrity as a person is sometimes assaulted by suffering. Having said that, it is important to know that suffering is also treatable—once it is properly diagnosed. So, assisted suicide is not the only way to end a patient's suffering. Since this is true, relieving the patient of his or her life seems at best a suspicious way to end suffering and a nefarious means at worst. One estimable clinical ethicist, the late Edmund Pellegrino, MD, has argued that "Much of the suffering of dying patients comes from being subtly treated as nonpersons. The decision to seek euthanasia is often an indictment against those who treat or care for the patient. If the emotional impediments to freedom and autonomy are removed, and pain is properly relieved, there is evidence that many would not choose euthanasia" ("Doctors Must Not Kill," *Journal of Clinical Ethics* 3 [Summer 1992]: 97).

This is not to say that those who treat or care for the dying patient necessarily intend to treat her as a non-person, but the systemic inducements to do so must be actively resisted. For instance, despite the fact that most people say they want to die at home, surrounded by loved ones, only about 25% die at home. The antiseptic environment (no pun intended) of the hospital setting tends to be, if not dehumanizing, at least impersonal—hence, the rise of home hospice and home-based palliative care. Furthermore, the evidence shows that caregivers spend less time with dying patients than they did before they were determined to be terminal. This is not to suggest that physicians and nurses are being mean-spirited toward the dying. Rather it is simply true that fewer medical treatments are being offered. A clinician's time is demanded by other cases. Terminal patients often report that they feel they are a burden on family, friends, and other caregivers. They may even feel themselves a burden on the healthcare system itself. As Pellegrino put it,

> Seriously ill persons suffer commonly from alienation, guilt, and feelings of unworthiness. They often perceive themselves, and are perceived by others, as economic, social, and emotional burdens. They are exquisitely susceptible to even the most subtle suggestion by physician, nurse, or family member that reinforces their guilt, shame, or sense of unworthiness. It takes as much courage to resist these subliminal confirmations of alienation as to withstand the physical ravages of the disease.

For these and other reasons, the autonomy of terminal patients is often severely compromised.

For the terminally ill, the restoration of genuine autonomy should be the aim of caregivers. This will require not only the judicious use of analgesics, but the application of compassionate attention to genuinely human needs. Insofar as human death is a human experience, it should be experienced humanely, not inhumanely. Despite its putatively well-meaning intent, assisted suicide is not a humane act.

Finally, physicians should not be deceived by the rhetoric of the assisted suicide debate into thinking that their participation will not harm the practice of medicine. If physicians become complicit in the death of their patients, yet another fear will burden the dying. In a 2011 article in *The Telegraph*, Lord McColl said that "many elderly people in the Netherlands are so fearful of euthanasia that they carry cards

around with them saying that they do not want it." Once lost, trust in physicians will be nearly impossible to restore. Furthermore, once a culture of physician-assisted suicide becomes acceptable, a culture of active euthanasia will not be far behind. Again, witness the 2014 law in Belgium permitting the active euthanasia of children at any age.

Even though in assisted suicide it is the patient who administers the lethal drug, the practice distorts the healing relationship between doctors and their patients. Doctors have a duty to do what they can ethically to alleviate suffering, but they cannot knowingly involve themselves in the death of a patient, even if the patient requests it. Doctors must not be complicit in killing their patients. **E&M**

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GUEST EDITORIAL

Is The Technological Imperative Imperative?

JACOB SHATZER, MDIV, PHD

Can we resist technological possibilities?

Is that even the right question? The debate around the so-called "technological imperative" often takes the form of whether technological developments take on a will of their own. In this version of the story, technology takes on the role of an agent, and the question becomes whether humans can resist that agent.

While the question at first seems to be one of ability—do we have the capabilities of resistance?—we must recognize that the issue is just as much about imagination and desire: Do we *want* to resist technologies possibilities? Do we possess the moral resources, the moral vision, and the moral creativity to resist them? Agrarian poet-novelist-philosopher-theologian Wendell Berry is skeptical. In his recent book *Our Only World*, Berry states:

> The ruling ideas of our present national or international economy are competition, consumption, globalism, corporate profitability, mechanical efficiency, technological change, upward mobility—and in all of them there is the implication of acceptable violence against the land and the people. We, on the contrary, must think again of reverence, humility, affection, familiarity, neighborliness, cooperation, thrift, appropriateness, local loyalty. These terms return us to the best of our heritage. They bring us home (64).

While Berry focuses on land issues, his connection between land and people makes his reflections helpful for virtuous medical practice. If we do not develop the ability to resist the ruling ideas of our age, how can we expect to resist certain technological possibilities? Surely not all biomedical and biotechnological developments should be rejected, but just as surely some should be.

Whether we can or want to resist technological possibilities hinges on the degree to which we are shaped and formed by current technology and an accompanying view of reality. When we encounter new dilemmas, is our greatest hope a technological innovation? In reality, the technological imperative is not an issue of technology taking on agency that must be resisted by human abilities. Instead, our technologies form our wills to such a degree that, while we might be able to resist technology, we do not really want to do so. We prefer picturing the world as a mess of technical difficulties, technical difficulties that will quickly be resolved by additional technologies.

So "resisting" technological possibilities involves shaping moral wills to value the sorts of ideas Berry mentions above: reverence, humility, cooperation, thrift. In the end, virtuous physicians must be not only virtuous professionals, but good neighbors. As Berry exhorts us: "If we are to continue, in our only world, with any hope of thriving in it, we will have to expect neighborly behavior of sciences, of industries, and of governments, just as we expect it of our citizens in their neighborhoods" (156).

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GREY MATTERS

Beyond Humanity: Theological and Biotechnological Perspectives on Enhancement in Dialogue

WILLIAM P. CHESHIRE, JR., MD

In thinking about enhancement technologies, let us begin by acknowledging the mysteries of human existence. – Mary G. Winkler[1]

Abstract

The central question in debates over whether to apply biotechnology to enhance human capacities beyond species norms is that of what it means to be human. A satisfactory answer requires knowledge from multiple disciplines, including not only biology and neuroscience, but also history, sociology, philosophy, and theology. Christian theology, in particular, has rich traditions of reflection on this question, the complexities of which are evident in the diverse perspectives on enhancement held by Christians today. These perspectives may be categorized and expounded according to Niebuhr's five motifs for how Christians throughout history have regarded and engaged culture.

Introduction

Biomedical technology is supplying an ever-expanding array of options to modify the brain and other living tissues. With each advance come opportunities as well as ethical questions. Many of these technologies are welcomed for their therapeutic potential to bring healing and restoration to patients whose lives have been disrupted by illness. Some of these technologies have also been directed to making people, as Carl Elliott put it, "better than well,"[2] or even, as Allen Buchanan put it, "better than human."[3] Medicine, predicts Anjan Chatterjee, may be entering into an era of "cosmetic neurology," in which the use of prescription medications to enhance mood, memory, alertness, and other aspects of cognitive performance to new levels will become increasingly commonplace.[4]

Regarding Human Culture

The challenging ethical questions concerning biomedical enhancement revolve around the central question of what it means to be human. C. Ben Mitchell and colleagues identify this as "the crucial, first-order philosophical and theological question that creates the deepest fault lines in contemporary culture."[5] Decisions of whether, how, or how far to enhance human capacities are based on prior assumptions about the nature and purpose of humanity. These assumptions reside in culture. They draw from the diverse beliefs and values of individuals, communities, nations and their traditions. They find expression in every aspect of human life.

An influential force in shaping public opinion about enhancement biotechnology is the media, which too often seems to conflate the pursuit of beauty with narcissism.[6] The news and entertainment media reflect Western civilization's emphasis on self-image and self-improvement. Favorable media portrayals of cognitive enhancing drugs, without mention of their potential risks, further whet the cultural appetite for their widespread acceptance.[7-9]

In support of, if not also guided by, this cultural trend, a number of ethicists have called for medicine to extend its scope beyond its traditional role of healing and offer pharmacological enhancements to healthy individuals.[10] Others draw distinctions between boosting cognitive performance and gaining wisdom. Ascribing value to the brain or to other people on the basis of their instrumental use, they argue, could lead to the neglect of more important attributes, such as the virtues of humility, altruism, and compassion.[11,12] A notable contribution to this discussion came from The President's Council on Bioethics. Under the leadership of Leon Kass, they took up the enhancement question in the thoughtful volume *Beyond Therapy*, in which they considered "what kinds of human beings and what sort of society we might be creating in the coming age of biotechnology."[13] The Council also explored the character of human agency and the larger meaning of freedom and happiness that contribute to human flourishing.[13]

Regarding Christianity

One perspective on what it means to be human comes from Christian theology, which has rich traditions of reflection on the origins, nature, finiteness, and future hope of humanity. Christians share with secularists many of the same concerns and ethical perspectives regarding enhancement biotechnologies[14] while also considering further questions that transcend secular discussions. A theologically informed perspective can clarify some questions left unresolved by secular reasoning, such as to whom is one obligated in daily life and ultimately. The Scriptures consistently teach that one should love and serve others, especially those who suffer, are marginalized, or exist at life's fragile boundaries. Accordingly, Edmund Pellegrino writes that enhancement procedures "derived from the destruction of human embryos, distortions and bypassing of normal reproductive processes, or cloning of human beings, etc., are not morally permissible no matter how useful they might be therapeutically."[15] Christianity evaluates not only outcomes but also means and motives. Christian faith fosters godly principles for the sake of the common good and is especially concerned with personal character.

Granted, not all bioethicists will agree with the Christian foundations of Pellegrino's stance. Throughout its history, Christian perspectives on humanity have existed alongside and in dialogue with competing perspectives within the broader culture. This exchange of ideas continues in regard to differing perspectives on questions of biomedical enhancement. Mutually charitable dialogue on controversial issues is healthy for society and promotes growth in wisdom, for only by allowing all a voice, listening to other perspectives, and evaluating their consequences can ideas be tested.

On these issues one finds a diversity of perspectives, not only in the culture at large, but also among Christians, who are not monolithic in their approaches to

the perplexities of biomedical enhancement.[16] There are a number of reasons why Christians may differ in their views on this issue. One is that the Bible does not specifically address biomedical enhancement. Biomedical technologies that could be used to re-engineer human nature, such as genetic interventions, germline modification, cloning, or microelectronic neural interfaces, were not only unknown but unimaginable to Scripture's human authors in antiquity. Even today these technologies are so novel that many people have not thought through all of their implications and potential consequences. Scripture does, however, provide sound moral principles by which to evaluate the human application of technologies.[17] Another reason is that Christians differ in how they orient their lives within their worldview. They may differ in their ordering of biblical principles or in how consistently they think about them or live them out. Still another reason is that Christians dwell in what Augustine characterized as two cities, one of Man, the other of God,[18] one of culture, the other of Christ, both of which to varying degrees influence attitudes, habits, and aspirations.

Loving One's Niebuhr

The theological ethicist H. Richard Niebuhr, in his 1951 book *Christ and Culture*,[19] outlined five categories that describe how Christians have related to the culture at various times in history. He characterized them as: (1) Christ against culture, (2) Christ of culture, (3) Christ above culture, (4) Christ and culture in paradox, and (5) Christ the transformer of culture. Niebuhr refers to adherents to these categories respectively as radical Christians, cultural Christians, synthesists, dualists, and conversionists.

Niebuhr defines culture as "the artificial, secondary environment which man superimposes on the natural."[19] Bioenhancement technologies, the scientists who originate them, the companies that develop them, the legislative authorities and professional organizations that regulate them, the healthcare institutions that implement them, the healthcare professionals who prescribe them, and the patients who choose them all are aspects of culture. Examining through a Niebuhrian lens the ways in which Christians have engaged the cultural aspects of biotechnological enhancement may yield helpful insights. The following discussion addresses each of the five categories in turn and does not attempt to identify any one category as complete or alone correct.

Christ against Enhancement

The first category sharply demarks a polarity in which the Christian rejects the culture that promotes biomedical enhancement. An example of this culture may be found in the utilitarian risk-to-benefit analysis of Henry Greely and colleagues. They claim that the widespread use of enhancing drugs will be "increasingly useful for improved quality of life and extended work productivity" and will thus "benefit both the individual and society."[10]

The radical Christian regards culture as deeply corrupted by original sin. Within this perspective, biomedical enhancements, being part of culture, work to transmit the destructive effects of sin and have the potential to magnify human depravity. Drawing from the history of medical and nonmedical uses of psychoactive drugs

and their social consequences, there is reason to anticipate the potential for societal harms. Medical experience with cocaine, which at first was thought to be a beneficial drug, is a case in point.[8,20] Even medically safe forms of enhancement could introduce or exacerbate social problems, such as a widening gap between the enhanced and the nonenhanced, between those who have access to enhancing drugs and those who do not or choose not to use them.[21]

Radical Christian stances against enhancement are of two types. One responds to a culture steeped in enhancement biotechnologies by retreating into monastic abstention in an effort to break free from the forces that propel humanity toward an anticipated dystopia. In seeking to preserve a pure faith, however, the radical Christian cannot step out of culture. The pious enclave is itself a subculture tainted by the ubiquitous effects of the fall. Enhancement biotechnologies once implemented may inevitably touch us all—if not directly, then indirectly.

The other radical Christian stance withdraws in disinterest, assuming that questions of enhancement do not pertain to one's life or medical practice or are irrelevant to one's private faith in God. The healthcare professional who lacks formal training in ethics may too readily defer decisions to others who do not share an obligation to the health and well-being of the community.

Biomedical enhancements have the potential to alter human nature, some in subtle ways, others more profoundly. Considering the stakes, it is surprising that there has been relatively little effort by Christians to think carefully about and address the implications of human enhancement and biotechnological re-engineering. Commenting on this subject, John Kilner writes, "The magnitude of these challenges to human and environmental well-being is staggering, yet the silence and inaction of most churches in this arena is distressing."[22] The radical motif is open to the criticism that a withdrawn faith becomes irrelevant to the world that the Creator deemed good (Gen 1:31) and that Christ came to save (John 3:16-17).

Christ of Enhancement

The second category leans toward the opposite pole and endorses the culture that promotes biomedical enhancement. The cultural Christian embraces culture's highest achievements, which in this case include breakthroughs in biotechnology. Wherever humanity is striving toward perfection, the Christ-of-culture motif assumes that this will converge with the full potential of humanity as exemplified in Christ.

The cultural Christian perspective skips over asking critically what is meant by "better"[23] and simply accepts enhancement biotechnologies as beneficial, provided everyone has equal access to them. Noting that breast augmentation and other forms of cosmetic surgery have become widely accepted, the cultural Christian perspective, seeking to love others (Mark 12:31; Matt 22:39), welcomes psychopharmacologic and other interventions that are intended to make patients happy, deeming them ethical as long as they are legal and freely chosen.

The cultural Christian perspective tends to affirm technology uncritically and, in so doing, may accommodate the doctrine of the technological imperative.[24] This fatalistic worldview holds that if an action is technically possible, then one ought to pursue it as a moral imperative, because inevitably in time the action will be

taken. Translated into public policy, the technological imperative asserts that society is obligated to develop, or at least permit to be developed, any and all conceivable technologies, because in the end they will arise anyway. For example, Martha Farah writes from a secular perspective that enhancement of the healthy "is now a fact of life, and the only uncertainties concern the speed with which new and more appealing enhancement methods will become available and attract more users."[25] On closer inspection, the technological imperative only masquerades as a form of ethics. Rather, it suspends ethical judgment, replacing human decision with an autonomous technology that exists as an end in itself. By choosing the path of inevitability wherever it may lead—that is, wherever the powerful choose to take it—one rejects ethics and, along with it, moral responsibility. Worse, the cultural Christian risks collaborating with evil.

The cultural Christian perspective is also open to the criticism that it relies on a relativistic secular standard. What is meant by "better" depends on current trends and tastes. The trajectory of human enhancement shifts season by season, always aligning with the caprices of culture. So many possible versions of a Christ allied with biotechnological enhancement cannot all be valid. Albert Schweitzer once observed that so many scholars have looked for Jesus down the deep well of history only to find their own reflection.[26] Christ's character, however, does not change (Heb 13:8).

Christ above Enhancement

The synthesist finds in biotechnological enhancements a continuity of divine and human contributions, both of which are possible only by divine grace. The synthesist merges into one system of value and practice the work of human beings and of God in which, provisionally and symbolically, the cultural aims toward the spiritual.

Among current cultural perspectives is Wrye Sententia's assertion of a right of "cognitive liberty," which she defines as "every person's fundamental right to think independently, to use the full spectrum of his or her mind, and to have autonomy over his or her own brain chemistry."[27] The synthesist Christian perspective may identify this liberty with the freedom available in Christ (Rom 8:1-2, Gal 5:1). Such freedom abounds in creative applications, since men and women are bearers of the image and likeness of the God who created them (Gen 1:27) and have been given dominion over the creation (Gen 1:28).

The synthesist accepts biotechnological enhancements as the means to do good. Doing good might mean taking a performance-enhancing drug in order to increase one's capacity to serve others. For example, a sleep-deprived physician who has been on continuous hospital duty for 24 hours might take a wakefulness-promoting drug in order to lessen fatigue while seeing patients for another 12 hours or longer.[11] Any personal medical risk taken might be viewed as an altruistic, noble sacrifice. The synthesist might also be inclined to equate degrees of performance with grades of spiritual perfection.

In principle, the synthesist approach might accommodate even a radical re-engineering of humankind if that were thought to bring humanity closer to communion with God. If it were possible to upgrade the human brain to process information at the computational level of a supercomputer, or through a neural interface link the brain to

a powerful cloud-based data processor, would such a brain be more capable, as Kepler put it, of "thinking God's thoughts after him"?[28]

The synthesist Christian perspective is open to the criticism that, in affirming the value of culture and of what divine grace accomplishes through culture, it passes too easily over the problems of sin and of human fallenness in need of inner conversion. The perspective that divine grace is a force, the property of which is to sanctify human action, may tend toward a careless form of antinomianism; if all bad works are redeemable, there would seem to be no compelling reason to avoid or prohibit them.

Considering the full counsel of Scripture, although good works are integral to faith (Matt 5:16, Jas 2:20), Christians are justified not by works but by grace (Gal 2:16), and by grace through faith are saved, "so that no one can boast" (Eph 2:8-9). Whereas restorative interventions aid the weak, enhancement technologies lift the proud, but God favors the humble (Prv 3:34, Jas 4:6).

Michael Sandel writes that, "There is something appealing, even intoxicating, about a vision of human freedom unfettered by the given."[29] By contrast, from a biblical perspective the given encompasses a dual reality of both the goodness of the created order and the toxic effects of sin and the fall. For the Christian, true freedom is not freedom from givenness but from sin. Freedom in Christ is not the release *from* all constraint but freedom *for* something so wonderful as to be worthy of perseverance and sacrifice (Matt 13:44). Freedom in Christ liberates the believer to "Pursue righteousness, godliness, faith, love, steadfastness, gentleness" (1Tim 6:11). This freedom is understood through revelation, glimpsed through hope, and received through faith in Christ who purchased it (Gal 5, Heb 11).

Furthermore, the dominion God grants humanity over creation in Genesis is not unlimited. The biblical text denotes "dominion over the fish in the sea and over the birds of the heavens and over every living thing that moves on the earth" (Gen 1:28), omitting any mention of dominion over other men and women. The special status of humans is clear from the stern warning in Genesis 9:6 not to shed innocent human blood, "for God made man in his own image." From this special status derive ethical obligations toward our neighbors (Luke 10:29), who not only are created in the image of God but are also loved by God (John 3:16-17). These principles constrain the synthesist perspective from the impulse to redesign, re-engineer or otherwise radically revise human nature.

Christ and Enhancement in Paradox

The dualist maintains a skeptical outlook toward culture, which is regarded as so thoroughly permeated by sin and sick unto death as to be incommensurate with the new life in Christ. For the dualist, history is a struggle between trust in futile human endeavors and belief in the promise of eternal life and fulfillment in Christ.

This opposition is especially evident among competing eschatologies. Some of the most zealous enhancement enthusiasts hold to the philosophy of transhumanism, which looks to biotechnological interventions as steps toward overcoming existing human limitations to make way for re-engineered humanity in a supposedly brighter "posthuman" life on Earth.[21,30] The costs entailed in realizing this utopian future are cringeworthy. Julian Savulescu, who with Nick Bostrom edited a comprehensive

volume on human enhancement, argues for enhancing moral capacity urgently through genetic, neurochemical, even surgical means. In summarizing, he calmly speculates that, "Humans may become extinct…. We might have reason to save or create such vastly superior lives, rather than continue the human line."[31]

The Christian dualist rejects such radical biotechnological projects intended to re-engineer humanity as vain attempts to attain the perfection and immortality that is possible only through the saving work of Christ (1Jn 5:12). Christ promises eternal life in which we will never again thirst (John 4:14, 6:35), but biotechnology offers a counterfeit salvation. In acknowledgement of these contrasting eschatologies and their implications for life in the present, Edmund Pellegrino writes that, "Hopes for an earthly paradise are seemingly within reach for many people who no longer believe in an after-life. For them, extracting the maximum from personal enhancement is a seductive substitute."[15]

Christianity asks not only what it means to be human but also what it means for God to have become incarnate, to have taken on human form in Jesus Christ, to have not been ashamed to become our brother (Luke 2:7, Rom 8:3, Phil 2:6-8). Jesus' priestly role rests on his being a representative of humanity (Heb 8-10).

C. Ben Mitchell asks the further question whether or at what point radical re-engineering of the human species might alter the capacity of humans to be imagers of God.[23] Whereas the image of God is an ontological reality in a category separate from physical attributes, it also manifests in cognitive functional capacities that are among the proposed targets for enhancement re-engineering projects. The consequences could be direr in the case of irreversible alterations. Extreme enhancements that alter the human form, human thought, or human emotions might widen the separation between humanity and God, not only by effacing further the image of God, but also by obliterating the features of the humanity with which Christ personally identified during his ministry on Earth.

The historical accounts of Jesus' resurrection record that he retains his humanity eternally (Acts 7:55-56; Heb 1:2-3, Rev 1:9-18). What relationship, then, would a radically re-engineered posthuman species have to Jesus Christ on his return? A Christian physician writes that the technologically upgraded version of enhanced humanity to which the transhumanist movement aspires "falls short of the glorious state that redeemed humanity will experience in eternity, as glimpsed in the earthly appearances of the risen Christ."[17] The first chapter of the Gospel of John declares that the Word became not posthuman matter, but human flesh. God thereby stamped his valuation of dignity permanently on humanity—humanity as given to us, not humanity as we might remake ourselves (Psalm 100:3). Reflecting on Christ's eternally human face, Nigel Cameron writes,

> There is no super-humanity, and every step in that direction is in fact a step toward the sub-human; not a rising, but a falling. Adam sought to rise above his humanity, and since there was nowhere he could go, he fell.[32]

Even minor enhancements from a dualist perspective may fall on the contemptible side of the divide if they are selfishly motivated (Mark 7:21-23, 1Pet 3:3-4). The dualist maintains the view that the purpose of human life is defined by God (Rom 9:20-21, 1Cor 6:19-20, Eph 2:10, Gal 2:20) and not by human beings whose desires apart from God are sinful (Isa 64:6, Mark 7:21-23, Rom 3:10). Biotechnological enhancements,

by this view, are unnecessary for human flourishing, tantamount to idolatry, and antithetical to Christian faith.

The dualist Christian perspective is open to the criticism that it leaves no room for Christ to be active in culture. Its sharp divide may also tend toward a resigned form of antinomianism; if all good works are utterly futile, there would seem to be no compelling reason to prefer them to bad works.

In regard to brain-computer interfaces, the dualist may conclude that a computer's mechanical thoughts are fundamentally unlike and hence irreconcilable with those of the human mind. How much more unlike human thoughts, then, are the thoughts of an infinite God? Referring to God's inestimable compassion, the prophet Isaiah (55:8-9) wrote, "For my thoughts are not your thoughts, neither are your ways my ways, declares the LORD."

If the temptation of synthesism is to find in culture the means to the kingdom of heaven, then the temptation of dualism is to perceive God's kingdom as never touching this world and the love that Christ demands to be a present impossibility. And yet, Christians profess that God, though infinite, humbled himself to be born in human form (Luke 2:11, Phil 2:5-8, Heb 4:15). In reconciling us to him (John 3:16-17, Rom 5:10-11, Col 1:19), God himself bridged the divide that dualism discerns. This leads to the fifth category.

Christ Transforming Enhancement

Like the dualist, the conversionist appreciates the severity of sin and distinguishes between God's deeds and human responses, but unlike the dualist maintains a hopeful attitude toward culture as an arena where God has been and continues to be active. The conversionist trusts not in human cultural progress but in divine conversion of the human spirit that shapes culture. The Christian who thinks and acts within the conversionist motif understands herself or himself as being *in*, but not *of*, the world (John 17:15-18).

In contrast to the dualist, the conversionist distinguishes more sharply between implement and implementer and may consider technology to be neutral while being more concerned with the intent of its user. The conversionist regards biotechnological enhancements in light of Paul's instruction in Romans 14:14, that such technologies are not evil of themselves, but to those who consider them so, they may be. Those who know Christ and recognize that Christ is Lord over all of culture, including the culture of biotechnology, are free to serve him while living in a culture that offers enhancing technologies without becoming a moral product of that culture.

Rather than rejecting biotechnological enhancements as being opposed to God's salvation plan, the conversionist asks how God is present in a culture that is considering or using such enhancements. Whether humanity chooses enhancements is an important question, but of far greater importance is what God is doing in the midst of it all. The dissatisfaction one ultimately experiences after using mild enhancements becomes a learning moment when one may appreciate the greater fulfillment possible through life in Christ. Even the harmful consequences of radical enhancements can, through the intervention of divine grace, turn in unexpected ways toward the good (Gen 50:20). The availability of grace does not release us from the

responsibility to discern and limit harmful applications (Rom 6:1), but it does provide reason for profound optimism (Col 1:24-27).

The Gospels present Christians with a crucial question by which to evaluate proposals intended to enhance humanity. Among all the miraculous healings that Christ performed during his earthly ministry, why did he choose not to enhance others beyond human norms? The message is that God's grace is sufficient (2Cor 12:9). Christ has shown us a more excellent way than the most advanced biotechnological enhancements could possibly offer. In Christ's kingdom, "Whoever exalts himself will be humbled, and whoever humbles himself will be exalted" (Matt 23:12).

Conclusion

Christian responses to the perplexities of biotechnological enhancement are not the final word on the matter. Niebuhr reminds the reader that "Christ's answer to the problem of human culture is one thing, Christian answers are another."[33] Each of Niebuhr's categories is but a partial ethical theory. At times they overlap, and no single approach is sufficient or complete. Rather, they complement one another and guide the reader through a series of pertinent questions that must be applied to particular contexts. All the while, Niebuhr adds, "Christ as living Lord is answering the question in the totality of history and life in a fashion which transcends the wisdom of all his interpreters yet employs their partial insights and their necessary conflicts."[33]

In all circumstances, and to the technologically enhanced and unenhanced alike, Christians are called to be salt and light (Matt 5:13-16), which is to reflect Christ's love to the surrounding culture. For no biotechnology can separate us from the love of God in Christ (Rom 8:39).

References

1. Winkler MG. Devices and desires of our own hearts. In: Parens E, editor, *Enhancing Human Traits: Ethical and Social Implications*. Washington, D.C.: Georgetown University Press, 1998, p. 249.
2. Elliott C. *Better than Well: American Medicine Meets the American Dream*. New York: W. W. Norton & Co., 2003.
3. Buchanan A. *Better than Human: The Promise and Perils of Enhancing Ourselves.* New York: Oxford University Press, 2011.
4. Chatterjee A. Cosmetic neurology: the controversy over enhancing movement, mentation, and mood. *Neurology* 2004; 63: 968-74.
5. Mitchell CB, Pellegrino ED, Elshtain JB, Kilner JF, Rae SB. *Biotechnology and the Human Good*, Washington, D.C.: Georgetown University Press, 2007, p. 111.
6. Brown HOJ. *The Sensate Culture: Western Civilization between Chaos and Transformation*. Dallas: Word Publishing, 1996.
7. Partridge BJ, Bell SK, Lucke JC, et al. Smart drugs 'as common as coffee': media hype about neuroenhancement. *PLoS One* 2011; 6(11): e28416.
8. Cheshire WP. Cognitive enhancements considered from 221-B Baker Street. *AJOB Neuroscience* 2012; 3(2): 35-36.
9. Anonymous.Adderall receives honorary degree from Harvard. *The Onion*, May 31, 2010. Accessed at: http://www.theonion.com/articles/adderall-receives-honorary-degree-from-harvard,17527/
10. Greely H, Sahakian B, Harris J, Kessler RC, Gazzaniga M, Campbell P, Farah MJ. Towards responsible use of cognitive-enhancing drugs by the healthy. *Nature* 2008; 456: 702-5.

11. Cheshire WP. The pharmacologically enhanced physician. *Virtual Mentor AMA Journal of Ethics* 2008; 10(9): 594-598.
12. Cheshire WP. Accelerated thought in the fast lane. *Ethics & Medicine* 2009; 25: 75-78.
13. The President's Council on Bioethics. *Beyond Therapy: Biotechnology and the Pursuit of Happiness*. Washington, DC: US Government Printing Office, 2003, p. xvi.
14. Hook CC. The techno sapiens are coming. Christianity Today, January 1, 2004. Accessed at: http://www.christianitytoday.com/ct/2004/january/1.36.html
15. Pellegrino E. Human enhancement and the ends of medicine. Dignitas 2004, vol. 10, no. 4. Accessed at: https://cbhd.org/content/biotechnology-human-enhancement-and-ends-medicine
16. I am not aware of any formal surveys that have attempted to address this question. This conclusion is based on my experience as the chair of the Ethics Committee of the Christian Medical & Dental Associations, which has debated the enhancement question at length, and as a guest lecturer speaking on enhancement to audiences at several Christian universities. In these roles I have had the opportunity to listen to and reflect on diverse views on enhancement expressed by Christians.
17. Cheshire WP. Bioethics and a better life. In: JF Kilner, editor, *Why the Church Needs Bioethics: A Guide to Wise Engagement with Life's Challenges*. Grand Rapids, MI: Zondervan, 2011, pp. 163-182.
18. Saint Augustine. *The City of God*. Translation by Walsh GG, Zema DB, Monaham G, Honan DJ. Edited by Bourke VJ. New York: Doubleday, Image Books, 195827.
19. H. Richard Niebuhr. *Christ and Culture*, New York: Harper & Row, 1951.
20. Bell SK, Lucke JC, Hall WD. Lessons for enhancement from the history of cocaine and amphetamine use. *AJOB Neuroscience* 2012; 3(2): 24-29.
21. Fukuyama F. *Our Posthuman Future: Consequences of the Biotechnology Revolution*. New York: Farrar, Straus and Giroux, 2002.
22. Kilner JF. *Dignity and Destiny: Humanity in the Image of God*. Grand Rapids, MI: Eerdmans, 2015, p. 327.
23. Tennant A. Define better. *Christianity Today*, January 1, 2004. Accessed at: http://www.christianitytoday.com/ct/2004/january/2.42.html
24. Ellul J. *The Technological Society*. Translation by Wilkinson J. New York: Random House Vintage Books, 1964.
25. Farah MJ. Emerging ethical issues in neuroscience. *Nature Neurosci* 2002; 5(11): 1123-1129
26. Schweitzer A. *The Quest of the Historical Jesus*, 1906, reprinted in 1998 by the Johns Hopkins University Press, cited by John G. Stackhouse, Jr., "The Jesus I'd Prefer to Know," *Christianity Today*, December 7, 1998, pp. 68-69.
27. Sententia W. Cognitive liberty and converging technologies for improving human cognition. *Ann NY Acad Sci* 2004; 1013: 221-228.
28. Kepler J. Http://www.newworldencyclopedia.org/entry/Johannes_Kepler.
29. Sandel MJ. The case against perfection: what's wrong with designer children, bionic athletes, and genetic engineering. In: Savulescu J and Bostrom N, editors, *Human Enhancement*. Oxford: Oxford University Press, 2009, p. 88.
30. Waters B. *From Human to Posthuman: Christian Theology and Technology in a Postmodern World*. Chippenham, England: Ashgate, 2006.
31. Savulescu J. The human prejudice and the moral status of enhanced beings: what do we owe the gods? in Savulescu J and Bostrom N, editors, *Human Enhancement*, Oxford: Oxford University Press, 2009, pp. 211-247.
32. Cameron N M de S. *Complete in Christ: Rediscovering Jesus and Ourselves*. London, U.K.: Paternoster Press, 1989, p. 112.
33. Niebuhr, p. 2.

Scripture quotations are taken from the *English Standard Version*, Wheaton, Illinois: Crossway Bibles, 2008.

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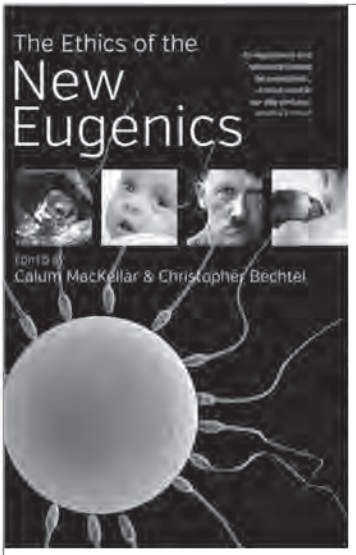

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Strategies or decisions aimed at affecting, in a manner considered to be positive, the genetic heritage of a child in the context of human reproduction are increasingly being accepted in contemporary society. As a result, unnerving similarities between earlier selection ideology so central to the discredited eugenic regimes of the 20th century and those now on offer suggest that a new era of eugenics has dawned. The time is ripe, therefore, for considering and evaluating from an ethical perspective both current and future selection practices. This inter-disciplinary volume blends research from embryology, genetics, philosophy, sociology, psychology, and history. In so doing, it constructs a thorough picture of the procedures emerging from today's reproductive developments, including a rigorous ethical argumentation concerning the possible advantages and risks related to the new eugenics.

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Theology and Technology: Mapping the Questions

JACOB SHATZER, MDIV, PHD

Introduction

Modern life is technological to a different degree—if not in another way entirely—than previous human cultures. Some may view technology as a simple issue: our tools are external to us, and we must simply decide how to use them. This stance can be especially tempting in the realm of biotechnology and biomedicine: technology can develop separately from evaluation of when or how to use it. Our world is advancing at a rapid pace technologically, and we must decide when to pick up the "hammer" and what to hit with it. Technology, some say, is neutral.

But is this really the case? Oftentimes, Christians evaluate technology based on the assumption that technology, as a tool, is a neutral device to which human agents give moral significance by the way they choose to use it. Careful analysis of theological treatments of technology, however, demonstrates that the technological question is deeper than this and that it requires a nuanced method to answer it well. A theological approach to technology must decide how exactly to ask and answer the "technological question." By "technological question" I mean a broad consideration of technology in general which then provides the foundation for evaluating particular technologies; so the "technological question" is really a way of summing up under one head various technological *questions.* Theological assessments must recognize that while different types of technology are indeed different, there are also dimensions that they share. A theologian proposing an ethics of IVF, for example, is asking and answering the technological question by thinking through a specific concern: human reproduction and how human action, via technologies, has implications for it. The question is asked by one seeking to think more broadly about the ethos of technology, or the relationship between nature and human alteration of nature. The technological question also comes up in the discussion of genetic enhancement. All of these approaches, of differing degrees of specificity, are asking and answering the technological question.

Bringing all of these discussions together can be difficult. In what follows, I attempt to draw these different treatments into conversation with one another by exploring how different thinkers ask and answer various technological questions from theological perspectives. This is not an exercise in exhaustively relaying the methodology of each individual; rather, it is an attempt to draw a map of pertinent starting points, sources, foci, and sub-questions. In addition, the thinkers mentioned are obviously not exhaustive—anyone who has explored this topic can readily add additional important people or works. Instead, I sought breadth and variety in the types of questions asked. As we will see, this breadth and variety includes social and disciplinary location, assessments of the promise of technology, general approach, the stance toward technology in general, the role of sources such as philosophy and Scripture, and dominant sub-questions in the discourse. This map provides insight

into how deep the questions of technology go and provides something of a path forward in the way technology invites theological reflection and assessment. In particular, the map will show that disciplinary location plays an influential role in the stance taken toward technology, which shapes the way the question is asked in a profound way. Then, in analyzing the way the question is answered, it will become clear that while philosophical sources are often useful for diagnostic purposes, the most promising and interesting answers come from thinkers using Scripture in an imaginative and vision-shaping way.

In the following article, I will focus on the thought of ten figures. I selected them based on several factors, including a desire for variety in subject matter (from general to specific) and diversity within bounds of theological tradition (all are generally Christian, save for one Jewish voice). Here I only briefly introduce each: Albert Borgmann is a professor of philosophy at the University of Montana and has written widely on technology. In this paper I will focus on his *Power Failure*.[1] Brian Brock is lecturer in moral and practical theology at the University of Aberdeen, and his *Christian Ethics in a Technological Age* is his first book-length treatment of technology.[2] Eric Cohen is founder and editor of *The New Atlantis*, and his *In the Shadow of Progress* treats bioethical and technological questions from a Jewish viewpoint, while also bringing Christian themes into consideration.[3] Noreen Herzfeld is a theology professor who published *Technology and Religion* in the Templeton Science and Religion Series.[4] Focusing on the thought of Hans Jonas and James Gustafson, theologian Michael Hogue addresses ecological issues in *The Tangled Bank*.[5] University of Edinburgh Episcopal ethicist Michael Northcott also focuses on the environment in *A Moral Climate*.[6] In *Changing Human Nature*, Baptist theologian and ethicist James Peterson provides an apology for genetic enhancement.[7] University of Durham theologian and ethicist Robert Song also deals with genetics in his aptly titled *Human Genetics*.[8] Duke Ethicist Allen Verhey published his 2008 Jellema Lectures at Calvin College as *Nature and Altering It*, in which he deals with technological questions.[9] Finally, Brent Waters of Garrett-Evangelical Theological Seminary gets into theology and technology in *From Human to Posthuman*[10] and *This Mortal Flesh*.[11]

Asking the Technological Question

Any theological treatment of technology must decide precisely how to ask the technological question.[12] As with any other inquiry, the way the question is asked will play a role in how it is answered, and sometimes it is the answer in view that in fact shapes the question. Four elements can be identified that shape the way the technological question is asked: the social and disciplinary location of the thinker, the description of technology in the work, which technology is the focus, and the stance toward the question. This analysis will demonstrate that the disciplinary location of each thinker plays a decisive role in how each formulates the technological question, including how each describes the promise of technology and the stance each takes toward it.

Social and Disciplinary Location: Why Do We Need to Think about Technology?

The context in which technology is assessed has an influence on the way the questions are approached. The social location influences the way the thinker answers the implicit question, "Why do we need to think about technology?" For example, in an agrarian context, questions of technology might spring up in connection with farming implements, food yield, and labor needs. The question of technology in less affluent or developing countries will certainly be asked in a different way than it is in the affluent West. Without exception, the thinkers analyzed in this paper speak out of this Western context. This was intentional, since holding this Western context in common is fruitful for drawing out nuances in argumentation. Still, further research into greater differences in social location and the way that, say, a "third world" theology of technology or a feminist theological perspective on technology would differ from those expounded here would be helpful.[13]

As noted, each of the authors is an academic in the West. However, slight differences emerge in their training and general disciplinary entry point into the question of technology. The discipline tends to influence the way the question is approached, as we will see when other elements are brought out below. Philosopher of technology Albert Borgmann teaches at the University of Montana, and his work has interacted with figures such as Heidegger. Brock was educated in the US and UK and currently teaches practical theology at the University of Aberdeen. This fits well with his interest in technology and the academic and practical focuses of his book. Eric Cohen is involved with the Ethics and Public Policy Center, which seeks to apply the Judeo-Christian moral tradition to public policy. Thus, his concerns remain broadly theological but are intentionally brought into conversation with public policymaking. Theologian and computer scientist Noreen Herzfeld's approach reflects her background in the sciences but asks deep questions of technology, refusing to allow it to claim neutrality. Michael Hogue uses a perspective of theological ethics, focused on philosophical and theological sources, to address ecological concerns; he is concerned with questions of religion and science. Ethicist Michael Northcott is an Episcopal priest and theologian who teaches ethics and has turned his attention toward climate concerns; he is concerned with practical theology. James Peterson is widely recognized for his work in theology and science; though an ethicist by training, he specifically works to connect with the concerns of science. Robert Song of Durham University has long worked at the intersection of Christian ethics and genetics, identifying theological avenues for opening up dialogue. Duke ethicist Allen Verhey enters into the technological question via concerns about nature; he is concerned with identifying human narratives through which we perceive nature and thus ecological concerns. Thus his entry point is the larger Christian narrative and how it influences these questions. Brent Waters is interested in bioethics and the question of the posthuman future, but he is primarily concerned with addressing these from a robust theological perspective that refuses to play simply an advisory or promoting role.

The social location of each writer can best be described as embedded in fairly advanced technology, some having benefited in more obvious ways than others. However, from that location each enters the conversation in a slightly different

way. The biggest differences emerge in the question of disciplinary location. As we will see, those who are primarily theologians with projects oriented more closely to ecclesial or doctrinal concerns, rather than, say, a desire to bring theology into conversation with science, will approach technology differently.

Promise of Technology: Is Technology Something to Celebrate or Fear?

In determining how Christians should think about technology, each thinker engages in explicit or implicit descriptions of technology's promise. In their description, each answers the implicit question, "Is technology something to celebrate or fear?" This description varies from thinker to thinker, in some sense depending on which specific technology is in view (a question that I will explore below). However, the description does not always follow the logic that you would assume. While several thinkers take a moderate approach to technology, others are overly optimistic or pessimistic, depending to some degree on their project.

While it would seem that thinkers more positive toward the use of technology for applications like genetic engineering would also be more optimistic about technology's potential, the opposite is sometimes the case. For example, James Peterson is arguably the most "pro-technology" of any theologian analyzed here—he argues that we are given the task of changing human nature by God. Yet he is fairly pessimistic about what technology can actually change. "Genes provide only part of our physical heritage. They do not set who future people will be. Changing genes is one factor among many, not the sole determinant of future people. Human life is more about cultural evolution than genetic evolution" (Peterson, 67–68). Peterson further states, "Chemical and genetic interventions are blunt tools" (Peterson, 76–77). The point here is not to evaluate whether Peterson is right or not (surely it is wise to recognize limitations and the complexity of human thought); instead, it should be noted that here, in a thinker whose agenda is to argue for changing human nature, technology is almost downplayed, given a minor role. It almost seems that he is trying to address worries about too much change while arguing for the need for change. One of Peterson's concerns is to bring theology into dialogue with science. In doing so, he is obviously aware of some doomsday views of technology. Part of his approach to dealing with such views is to downplay the promise of technology even as he promotes its widespread use.

On the other hand, thinkers who end up answering the question in a less enthusiastic manner are in some cases more utopian or dystopian in their description of technology. Eric Cohen speaks of "a wave of profound biotechnological advances" (Cohen, 51).[14] Albert Borgmann notes that "what is truly novel and unique is the liberation we owe modern technology—freedom from hunger, cold, disease, ignorance, and confinement. Just as remarkable is the positive counterpart to liberation, namely, enrichment—the immense prosperity of goods and service that technology has delivered. We are doing very well" (Borgmann, 7). Noreen Herzfeld glowingly describes the way technology can transform life, but she also cautions the way that it can then re-shape human thinking and being (Herzfeld, 9, 20). Northcott insists that technology is dangerous for the environment (Northcott, 273), and it cannot be used to solve the problems it brings about. The fact that we are moving

from "mere" mastery to the ability to transform with our technology is significant for Waters, who sees this promise as a potential threat to humans (Waters 2006, ix–x). These thinkers take a shock-and-awe approach, dazzling with technology's promises while also inspiring a bit of fear in their readers.

Others fit more in the middle, either promoting a measured viewpoint or not addressing the issue of promise much at all. For instance, Brian Brock is not hesitant to speak about the world's faith in the promise of technology, but he cautions against the church buying into that faith (Brock, 2). Verhey makes a similar move in identifying the role that technology can play in promising salvation, but cautioning against this (Verhey, ch. 2). Michael Hogue notes the great power that technology provides, but he sees that as a potential problem from the perspective of ecological concerns (Hogue, xv). Robert Song notes many of the complexities that would need to be solved for genetics to be used in the way some argue against (such as designer babies; see Song, 60).

It seems that, in asking the technological question, the answer sneaks into the description of the question. Some thinkers have found it advantageous to describe technology's power and potential in ways that seem to go counter to their argument. Those enthusiastic about using technology to alter human nature often diminish its capabilities in their description, while those warning against such use often trumpet the possibilities. All of this is connected to their disciplinary entry point, motivated by the way they want to answer the question.

Particular Technology Considered: "What Technology Must We Examine?"

Each thinker chooses a way to answer the basic question, "What technology must we examine?" In addressing technology, some theologians address it generally (such as Brock), while others enter the arena via a discussion of a particular type of technology (Song, genetics) or concern (Northcott, climate issues). The different points of entry lend themselves to certain methods of analysis. General approaches encourage more reflection on the depth of the question of technology and the relation between various technologies. Particular approaches have an advantage in being able to provide more consistent specific examples and concrete application.

Analyzing technology in general, as Brock does, makes it easier to ask questions of technology as a form of life and not just a group of tools to be used or not (Brock, ch. 1). Albert Borgmann, in his *Power Failure: Christianity in the Culture of Technology*, is able to move to such questions as well, developing a "device paradigm" to uncover connections and questions that can be neglected when one focuses on specific technologies (Borgmann, 18). However, such general approaches often lack in tangible application and can be difficult to understand.

Those who focus on specific technologies still often broach these "meta-topics," but not as easily. For example, Northcott, in his focus on climate change, moves from questions of global warming to questions of social ordering, political theology, and ways of being in the world.[15] However, focusing on one particular grouping of technology, such as Peterson does with genetic enhancement, can allow one to focus to such a degree on the particular level that more general questions do not come

into view as much. Song attempts to identify some salient moral issues that draw connections between various genetic technologies, and while this could be extended to other technologies as well, that is outside the scope of his work (Song, 5).

Some thinkers get closer to a balance in concerns. One example of this is Verhey's focus on modern narratives, the biblical narrative, and how it properly situates nature and ecological concerns. He begins with broad, general concerns about nature and then brings his general insights to bear on specific, ecological concerns. Herzfeld also achieves this by providing a chapter on technology in general and then subsequent chapters on specific technologies. Hogue maintains a degree of balance, using ecological concerns as his orientation but bringing Hans Jonas and James Gustafson into conversation in a way that attends to more general concerns as well. For example, he talks about the environmental crisis by drawing out the dynamic of power, which is more generally applicable to technology (Hogue, 22). Waters makes a concerted effort to balance broader issues with specific questions in both of his books, using concepts such as power, human values, and the effects of postmodernism to situate his exploration of a Christian view of bioethics. However, this approach can force an author to skim the surface of specific technologies more than a book-length specific treatment would.

The type of technology under review also seems to influence to what degree economics comes into the question. For example, in Northcott's book on global warming, economics plays an important role in analyzing the issues, because the public debate about these issues has included an economic component. On the other hand, the debate about genetic engineering has been more about the general human future, so questions about the cost of treatments, the potential profit involved for corporations, and the opportunity cost (what cheaper, more basic medical treatments are being neglected in order to focus on this more profitable one) are not addressed as clearly. For instance, Peterson actually uses it to argue *for* allowing the rich to use the technology (which would then bring the cost down for others or would lead to government provision of the service) (Peterson, 203). Cohen's general treatment of technology and progress, however, speaks of commodification's role in desacralizing things like the embryo, but he does not include a thorough analysis of the economic angle (see Cohen, ch. 6).

The different points of entry lend themselves to certain methods of analysis. General approaches encourage more reflection on the depth of the question of technology and the relation between various technologies. Particular approaches have an advantage in being able to provide more consistent specific examples and concrete application.

Stance: "What Sort of Problems Does Technology Pose?"

One of the most important determinations for a theological exploration of technology is what stance is taken toward the question: "What sort of problems does technology pose?" Is it a question of simply directing tools in a proper direction, even a direction that is theologically determined? Or has technology come to a point where it defines its own "age," its own "spirit," which requires deep theological analysis and counter formation? Does the particular thinker situate his or her thinking within the

technological complex, or does he or she stand prophetically outside of it? Where is he or she on the spectrum of calm to alarmist?[16]

The first set of thinkers address technology as a question of wisdom of use. They are toward the calm end of the spectrum. There are certain ends to which humans should strive (whether theologically construed or not), and technology can be evaluated based upon how humans utilize it toward or against said ends. These ends are still articulated and argued for and against, so this group has not necessarily fallen victim to the constriction of argument that John Evans documents in bioethics more specifically.[17] Thinkers in this group feel free to argue about particular ends, but they believe that they are able to stand outside of technology to a degree to determine and control ends. Peterson acknowledges that technology shapes us to a degree, but

> we need to, can, and should choose where it takes us…Technology shapes us but we can shape it. The technology of tower building was used to destruction at Babel. The technology of ark building saved Noah and his fellow creatures. Most technology can be directed to help or harm. We are both part of nature and responsible for it, tools and all (Peterson, 64).

Michael Hogue agrees, arguing for responsible participation in the environment, using tools to participate. This can be called a "Guns don't kill people; people do" approach to technology.[18] It is not that thinkers in this approach refuse to think about or debate about ends; rather, they do not invite technology itself as a *zeitgeist* to the table to discuss ends. Technology is about tools; it cannot dictate or lean toward certain ends according to these scholars. Both of these examples are thinkers who are explicitly trying to relate science with religion in a positive way. Because this is their concern, they tend to be more positive in their stance.

The second set of thinkers addresses technology as a question of wisdom that extends beyond use to the reality technology constructs; they are to different degrees on the more alarmist end of the spectrum. These scholars believe that technology to at least some extent dictates or leans toward its own set of ends, and any discussion must take this into account. These thinkers start from robust theological or philosophical positions that they then bring to the question of technology; they do not start with a desire to promote positive dialogue but to be faithful to their theological concerns that are prior to the technological question. The patron saint of this end of the spectrum is Jacques Ellul, who named technology, in 1964, as "a power endowed with its own peculiar force. It refracts in its own specific sense the wills which make use of it and the ends proposed for it. Indeed, independently of the objectives that man pretends to assign to any given technical means, that means always conceals in itself a finality which cannot be evaded."[19]

Most thinkers analyzed here fall in this camp. Ellul's influence can be felt in these texts though he is not always cited. Brock's *Technological Age* takes a prophetic, somewhat alarmist stance, arguing that our pretensions to self-love underlie the technological discussion (Brock, 376). Waters calls technoscience "*the* formative cultural factor" today and insists that "the challenge is… to formulate a theological discourse that assists a Christian formation of good, true and faithful lives" (Waters 2006, xi). Noreen Herzfeld notes, "The new products of modern technology do not simply 'disclose' or shape nature but *transform* and *replace* nature. In this way, modern technology gives us heretofore undreamed of power" (Herzfeld, 9; emphasis

mine). Verhey cautions against the power of technology to orient the way humans view all of life (Verhey, 22–26).

Besides pointing out how technology shapes humans, other more alarmist figures connect this to the need for the discussion of ends. Again, it is not that the "calmer" thinkers do not discuss ends but that they refuse to give technology credit for the power it wields in shaping moral agents and their understanding of ends. More alarmist thinkers recognize this and enter into this debate. This is especially true of thinkers who are trying to do bioethics. Since ends have been policed out of contemporary bioethical debate, these thinkers are more prone to force ends into the discussion overtly. Cohen, focusing on bioethics, attempts to bring ends back into the discussion (Cohen, 56).[20] Dealing with genetics, Robert Song falls into this type of approach as well, consistently calling for Christians to bring ends back into the discussion in order to faithfully evaluate choices that face the church (Song, 78, 128). From his general approach to technology, Borgmann points out an unasked question: "What kind of liberation is it that technology has promised? What sort of riches has technology produced? Do we in fact feel free? Are we truly prospering?" (Borgmann, 8). The technological question is alarming to this group of thinkers because it extends deeper than we realize and it ends up shaping our views of reality and ends.

Two other sources lead to the question being asked in an alarmist way—a turn to philosophy and theology. On the one hand, some of the thinkers rely on philosophical analysis to diagnose this problem. Brian Brock serves as a good example here, as his narrative relies heavily on the insights of Martin Heidegger, George Grant, and Michel Foucault (Brock, chs. 1–3). Borgmann was also heavily influenced by the thought of Heidegger. On the other hand, many occupying this alarmist position also draw heavily on theological sources. For example, the theological concept of the fall and sin contributes to this understanding of technology as more than simply tools to be directed. The deeper problem is a consequence of sinfulness, Northcott argues (Northcott, 152–153). Most proponents of this position utilize a combination of these sources to make the point that the technological question extends deeper than might initially be thought. The "calm" thinkers, on the other hand, do not allow such theological themes to extend deeply into the question of technology. Instead, they use theology to help them discern only how to use particular technologies in particular situations.

The question of stance is not a minor one. It influences the types of answers that can be given to the problems. For example, Michael Northcott rejects one typical answer to the problem of global warming: "There is a second kind of denial associated with global warming, and this is not that the climate is not warming, nor even that it is caused by industrial gases, but that it is possible to fix the problem without redirecting the course of industrial society" (Northcott, 275). Because technology involves not just how to use tools but how tools themselves restructure the way we view reality, its problems, and potential solutions, the stance from which the question is asked plays a very important role in the way the technological question is answered.

This analysis has shown that the disciplinary location of each thinker plays a decisive role in how each formulates the technological question, including how each describes the promise of technology and the stance each takes toward it. Those coming more clearly from theological perspectives with strong theological themes

and concerns tend to take a more alarmist stance toward technology because a calm stance can be too accommodating to deeper issues that are in play, such as how technology shapes moral agents and communities. Those who are more concerned with questions of religion and science seem more willing to give technology a more neutral position.

Answering the Technological Question

Having laid out various ways of asking the technological question, we can turn to the methods utilized in answering the question. This discussion will focus on two main aspects. First, the sources that are commonly employed will be analyzed both for content and for method of application to the question. Second, dominant "sub-questions" will be noted for the way that they function within the various arguments. This analysis will show that philosophy is more often used as a diagnostic tool, and Scripture and scriptural themes do the heavy lifting in the arguments about technology, especially when it comes to which sub-questions dominate the discussion.

Sources: "What Is the Role of Philosophy and Revelation?"

In answering the question, each thinker answers the implicit question, "What is the role of philosophy and revelation?" I will analyze two particular sources here. First, I will draw out the influence of philosophy and reason in general on the arguments. Second, and more extensively, I will give attention to the role that Christian Scripture plays. This will show that many but not all theologians find philosophy, especially Western philosophy with its Christian background, helpful in diagnosing the spirit of the age in relation to technology. A clear shift then emerges as the thinkers use Scripture in a variety of creative ways to answer the technological question and frame a faithful way of being in the world.

Philosophy. As noted above, philosophy plays a role for some thinkers in their analysis of the depth of the technological question. While Brock and others find room for philosophers in their diagnosis, such sources play less of a role in the answers that are formulated for the question of technology. In order to continue to map the types of responses and use of sources that are found, I will analyze the shift in Brock and others from philosophical diagnosis to theological prognosis and then point out other examples of the use of philosophy in answering the question.

In the first part of his book, Brock candidly focuses on laying groundwork for his theological analysis. He traces Heidegger's response to modern technology, as well as the work of two of Heidegger's interpreters, Grant and Foucault: "Their claim is that we do not simply *make* technology: it is the modern Western *way of life*" (Brock, 23). He uses this analysis to show that questions about technology go deeper than contemporary moral deliberation admits. However, for Brock, even this use of philosophy is actually theological, for Western philosophy has emerged from a culture dominated by a broadly Augustinian cosmology (Brock, 23). Thus, such analyses of modern technology yield themselves to a theological reading. This theological reading is rooted in the gospel of Jesus Christ: "This approach to Western philosophical texts is an expression of the judgment of faith that the Father of Jesus Christ has not allowed a secularizing West to succeed in erasing the heritage of centuries of divine judgment and reshaping of Western self-consciousness and

institutions" (Brock, 24). Thus, Brock can appropriate philosophical voices that testify to the difficulties of modern technological life. In the rest of his book, he seeks to "develop an account of faith's seeking to hear the claim of Christ amidst technological life" and argues that "Christian moral theology is not the purveyor of any single ethical methodology; its task is to point to its authority, the person of Jesus Christ" (Brock, 26). So philosophy, with its Christian vestiges, plays a role of highlighting the plight of modern technology in order that a theological reading focused on Christ might provide a constructive path forward.

Others use philosophy in a diagnostic way as well. Brent Waters provides a sort of intellectual history to situate his treatment of technology in *From Human to Posthuman*, drawing on both theological and philosophical resources to explain the current condition of society, especially in relation to the concept of progress (Waters 2006, 1–18). Also, Allen Verhey, in his treatment on the alteration of human nature, turns to philosophical insights in order to demonstrate the need for a Christian orienting story. Citing Aristotle, Verhey reminds his reader that discernment of human responsibilities requires a myth (Verhey, 13). This is another example of philosophy playing a diagnostic role; Verhey notes six different "myths" that compete with the Christian story to orient reality for modern people.[21] Borgmann's entire training and approach come from a philosophical standpoint, and his device paradigm (which explains that commodified elements end up displacing things that are most significant) relies on the thought of Heidegger (Borgmann, 18). Yet when he turns to what Christianity should do, he focuses on the idea of "communities of celebration" and distinctive Christian communal practices. Herzfeld also points to Heidegger in her diagnosis of the problems technology poses to religious practices (Herzfeld, 9). In Northcott's book, he looks to thinkers such as Foucault, who critique the rhetoric of scientific progress, using them to strengthen his point about the dangers of technology and the inability of technology to solve its own problems (Northcott, 107). The dominant themes of philosophical analysis are the thought of Heidegger and philosophical understandings of the theme of progress.

Michael Hogue uses philosophy more constructively in his attempt to answer the question of technology. His entire treatment of ecotheological ethics focuses on the thought of theologian James Gustafson and philosopher Hans Jonas. Hogue sees Jonas as a helpful resource because of his insight into the problem of power and the way that he constructs the ethical task as "the effort to direct power responsibly" (Hogue, 229). However, even Jonas as a philosopher draws on theological themes in his treatment, and Hogue himself seeks to complement Jonas with Gustafson (Hogue, 233); his proposal is that both thinkers together are helpful in addressing ecological questions.

Still other thinkers use philosophy more sparingly. Peterson occasionally refers to Plato or Platonism in general, but he interacts more with contemporary theological sources than with major philosophical figures. Another example of this is Cohen, who points to the story of Socrates as informative for understanding life and death (Cohen, 148–151). However, he does not interact with philosophy to the degree that Brock does. Robert Song is also not as dependent upon major philosophical figures in analyzing technology, preferring to focus on descriptions of genetic technology and bringing in theological themes to deal with them.

Thus philosophical thinking as a resource tends to be employed in service to the constructive theological projects of the various writers. Even those who do use philosophy as a constructive resource do so through a theological reading. Philosophy seems most useful in diagnosing the problems that technology and a technological age pose; there is less promise in its prognoses. This should not be surprising since we are dealing with technology from the perspective of mostly Christian theology. Still, it is helpful to note the role it plays in order to understand and situate the importance of Scripture.

Scripture. Unsurprisingly, Scripture and scriptural themes shape the way these thinkers answer the questions technology poses. However, the use of Scripture is not uniform. In fact, three general types of Scripture use can be identified.

Before laying out the three types, it must be recognized that technological questions open the door for the abuse of Scripture. One of the most prominent examples of this is used by some to argue that Scripture only leads to oppression of the environment because of the concept of dominion. For example, Lynn White Jr. famously argued that Christianity is in fact to blame for the ecological crisis because of the themes of "dominion" that, he argued, inevitably lead to abuse.[22]

Verhey identifies five potential problems regarding Scripture and these questions: 1) the silence of Scripture (it does not speak clearly to specific issues); 2) the strangeness of Scripture (Jacob's success as a herdsman achieved by having animals mate in front of striped sticks); 3) the diversity of Scripture (celebration of both nature and technology); 4) the difficulty of Scripture (what do "have dominion" and "subdue" mean?); and 5) interpretive arrogance (Verhey, 48–49). Verhey cautions that "the problem is not Scripture but the interpretative arrogance of those who would interpret Scripture…The best corrective to interpretative arrogance is frequently to read Scripture in Christian community, to listen to Scripture while listening to the voices of the marginalized and powerless. And in [the ecological] context the best corrective is to read Scripture while listening to the 'groaning' of the creation (Rom. 8:22)" (Verhey, 59–60).

With this reminder in view, we will look at three different ways of using Scripture as a source in answering the technological question. First, Scripture is used in a straightforward manner for information or direction. For example, Borgmann quotes St. Paul to remind us of our tendency to evil (Borgmann, 90). Similarly, Peterson often lists references to support points: "The earth is the Lord's (Exod. 9:29; John 1:1-3; 1 Cor. 10:26; Col. 1:16)" (Peterson, 17). He also engages in basic exegesis: "One of the most quoted sentences in the Bible is found in the third chapter of John. 'God so loved the world that he gave his only Son…' (John 3:16). The text does not say that God so loved people; rather it says that God loves the world (the cosmos), which is everything that God has made" (Peterson, 15). While not every such example would likely be judged a faithful interpretation of given texts (such an analysis merits further treatment in understanding specifically which texts are used in this way for this discussion), it is important to note that this move is used in answering the technological question. Scripture can provide straightforward information and direction that is applicable to the situation.

Second, there is a move to Scripture in order to provide support for a doctrine that is important for the discussion. Many simply point to Genesis 1:26-31 and draw

out the concept of the *imago Dei* (though this then receives further development; see below). One example of this is Brent Waters in his treatment of what it means to be God's creature (Waters 2006, 135) and the goal of Christian life: "Christians can readily agree with posthumans that humans will be transformed, but the operative goal is not self-transformation but to become transformed in and by Christ" (Waters 2009, 124). Herzfeld also develops the concept of creation, with reference to Judaism, Christianity, and Islam, but relying on various Christian texts to develop it (Herzfeld, 10–17). Brock turns to the creation narrative to develop the concept of bodiliness (Brock, 335–340). This narrative opens up a web of relationships, between humans and animals, different human generations, and humans and the earth, all under God's care. Northcott uses texts from Psalms and the prophets to bring out neglected metaphors that connect to ecological concerns. For example, he uses the example of the cedars of Lebanon in biblical texts to demonstrate a new way of looking at the importance of natural resources in the Middle East, noting that the cedars end up becoming symbols of pride and a source of stumbling to Israel (Northcott, 101–107). Song uses Scripture to develop themes of healing in the Christian tradition, of the kingdom of God, and of God's providence (Song, 10–14). Though this use of Scripture is somewhat similar to the first, I treat it separately since the purpose is to move from Scripture to a doctrinal theme that is then given great weight rather than from Scripture to a simple piece of information or direction. Also, in this type of use, more than one particular text is focused on in order to arrive at the doctrine in view.

Third, Scripture stories are employed as sympathetic analogies, meant to frame modern moral situations differently and to expand the moral imagination. Jewish theologian Eric Cohen does an exemplary job of this in treating the question of "In whose image shall we die?" He uses the story of Jacob's death surrounded by his family as an important image of death that provides peace and purpose in the act of dying rather than a continual fight against the limitations of humanity (Cohen, 145–148). He then contrasts this story with other stories: Socrates's tranquil death, Jesus' redeemed death, and modern man's opposed death (Cohen, ch. 9). Northcott, on the other hand, simply places rather long excerpts (usually from the prophets) at the start of each chapter to set the tone by connecting the chapter's theme to biblical concerns. Brock relates the story of Noah to draw out a paradigm of righteousness in connection with technology, showing how human making can rightly be related to God's purposes (Brock, 227). Waters develops the theme of resurrection to orient the Christian approach to posthuman arguments (Waters 2009, 124–130). Perhaps the strongest example of the role of this type of Scripture reading is in Verhey's work, which pivots on a robust reading of the biblical narrative as an orienting myth (Verhey, ch. 4).

Thus a spectrum of Scripture use emerges, from simple (and sometimes simplistic) use of information and commands to imaginative reframing of contemporary moral concerns with biblical concerns and stories. All interact with Scripture to some degree, with Michael Hogue being the most sparing in his use since his project is focused on bringing Jonas and Gustafson into conversation, not on constructing his own proposal. While all three types of approaches are useful when not abused, it seems that the most creative responses to technology avoid abusing the first and second use of Scripture while imaginatively using the third. Theological approaches to technology are strongest when they look not only to specific texts and specific

doctrines but also when they read Scripture imaginatively and seek to allow it to form moral vision. When all three uses are employed, Scripture becomes a worthy tool in answering some of the problems that philosophical analysis so aptly exposes.

Sub-questions

In answering the technological question, each thinker poses other significant questions, answers them, and then builds on those answers to move toward the technological question. These are "sub-questions" not because they are of less consequence than questions about technology, but because of their role in the larger arguments of the works. Three in particular will be drawn out: 1) What is human life? 2) How does care for the poor matter? 3) What is the influence of technology on community life?

What is human life? This is a complex question, and thinkers approach it with nuance.[23] Great similarity can be found in answers to this question centered on creation of humans in the *imago Dei*, but the answers diverge when it comes to analyzing what the human task is. This is an important starting point; it sets the course for how a thinker will answer certain questions.

The *imago Dei* is a dominant biblical concept that sets the tone for any Christian description of what it means to be human. While all point to this concept, the content and meaning of the image varies within our cohort. Brent Waters notes that "this symbol does not refer to any innate human attribute, but embodies a divine image in their status as free creators of meaning."[24] Peterson sees the image of God as including "capacity, calling, and relationship," and he expounds this at length, ultimately arguing that humans are called to transcend and alter nature for the better (Peterson, 18–48). Verhey, on the other hand, sees the image as communicating that humans are to be a sign of God's own care and rule (Verhey, 82). For Brock, the image of God "means that to be in God's image, properly speaking, is to be part of his body by the quickening of the Spirit who fulfills the Creator's design to create humans in his own image" (Brock, 337).

This brief overview of the concept in a few thinkers demonstrates that, while the *imago Dei* may seem to be a point of commonality, it is only a terminological commonality, as its interpretation and application lead to very different conclusions. For Peterson, it is the root of the call to remake our natures; for Verhey it holds more of a role of bearing testimony through wise rule.[25]

Another element where most of the thinkers analyzed here had similar ideas was the issue of embodiment. Being human is to be embodied; the body is important. Yet again the similarities are only skin deep. Some view embodiment as a limitation to be respected as part of the human context. Cohen articulates this well from his Jewish perspective: "Bioethics is about bodies. And bodies are capable of the most wonderful things—dancing, embracing, thinking, conceiving, laughing, giving birth. But bodies also decline and die. To be biological is to be mortal. My body is mine, but I cannot control its every movement" (Cohen, 49). For Brock, bodies are "sites of faith"; bodily practices are sites of sanctification (Brock, 329). Peterson, on the other hand, acknowledges embodiment but seems to deny accepting limits: "There is no biblical injunction that the body should never change. Jesus' resurrection body was recognizable but quite different from his original form. That transformation was not a travesty of the created order but rather a foretaste of its intended fulfillment.

Recognizing that the body can change as seen in circumcision by the command of God, and that human bodies will be transformed in the resurrection, we ask: Are genes in particular an exception, parts of the human body that are not to change?" (Peterson, 67). The importance of embodiment, while something held in common, begins to show where these surface commonalities begin to diverge.

The way that theologians answer the question about the proper task of humans created in the image of God goes a long way to determine how each will seek to answer the technological question. They all generally agree on at least one thing, however: responsibility.[26] Humans are responsible before God for how they exercise their task. Thus, it is no trivial matter what the task is. This is a key place where the paths diverge.

One group emphasizes the creaturely aspect of human life. Per Brock, "the task is to uncover the ways God's creative works present themselves as invitations for humans to live as *creatures* rather than striving to be rival gods" (Brock, 321). Co-creation is rejected in at least one sense: humans only configure materiality that is already present (Brock, 325). Northcott makes similar claims about the human task, situating human action in the context of worship: "the climate of the earth responds to human idolatry and immorality" (Northcott, 13). For Verhey, the important concept is stewardship—a stewardship that does not become mere property management, but more personal and mutually responsive than that, as God's relation to the world is (Verhey, 141–142). This general approach acknowledges that there is something special about the human task, as humans are created in the image of God, but this group draws a firmer line between the work of God and the work of humans. The human task is to exercise stewardship responsibly, and responsibility requires both appropriate action and observing appropriate limits. Humans are not to attempt to become rival gods. Humans are not making themselves into something else but are being transformed into the image of Christ by God (Waters 2009, 124).

The other group denies that seeking mastery and control is "playing God." Peterson acknowledges the warnings about usurping God's place, but he disagrees that altering nature is in any way taking God's spot: "In…warnings against the prideful taking of God's place in shaping the world, there is an assumption that God has forbidden intervention or reserved it for God alone. I am arguing that shaping the world is part of the God-given mandate for human beings to share in the redemption and development of creation. The danger is not only in an attitude of pride. Just as dangerous is sloth" (Peterson, 45). However, Peterson is reticent to use the language of "co-creator," made popular by Philip Hefner, because Peterson thinks the term can be misunderstood "as claiming human beings as relative equals with God in the ongoing process. In creation God seems to delegate genuine choice to human beings as to how creation develops, but any contribution human beings make is always that of a creature, not the one and only Creator" (Peterson, 46). Such statements draw this approach back towards the previous one; both groups hesitate to exalt humans to the same level as God. The disagreement comes in, basically, in what degree humans are called to shape the creation through their technology, through their making.[27]

Michael Hogue is more difficult to pin down on this spectrum. Using the moral anthropology of Jonas and Gustafson, he argues for "responsible participation."

Because he does not fully develop what participation might look like, it is unclear which of the previous two groups he would fit with best. He wants both:

> Joining the metaphors of responsibility and participation aims at this dialectical character of the human relation to nature…It is a constructive step to take in response to both Jonas's ultimate concern that the ambiguity of human power poses a grave threat to the future of human life and Gustafson's ultimate concern that the gravest threat is to the whole of the world's divine ordering (Hogue, 228).

The question "what is humanity?" sets the course for answering the technological question mainly because it establishes goals and limits for human action and human making. Those who see higher goals and less limitation are more enthusiastic about using whatever technology makes possible, while those who view the human task as one of living within limits and waiting expectantly on God are more likely to advise caution and limits.

What difference does economics make? The economic angle of questions can easily be overlooked, and the following analysis will demonstrate that it needs to be brought into account more often. It might seem at first glance that advances in technology would help everyone, if not immediately then eventually. This, however, is not the case. The various approaches to economic issues connected to technology demonstrate that it is more complicated than this.

The relationship between technology and poverty is complicated. In some ways technology can help the poor (see Herzfeld's example of flashlights in Africa, 3), but in other ways it exploits them. "Technology assessment," a complex process by which corporations and groups determine whether to develop a particular technology, does include elements such as effect on the environment and potential beneficial uses, but these concerns are couched within the economic: corporations do not want to do something that would hurt the poor or the environment too much not because of good will, but because such harm might bring negative publicity, hurting the profitability of the corporation. Thus even concern for the poor can become oriented in a profit framework rather than love or compassion.[28] Brock judges that technological assessment is a social grammar antithetical to the gospel. The very framework in which poverty comes into the discussion of technology development is a self-interested framework hostile to true charity.

Other thinkers view the reality of the capitalist market economy as a source of hope for the poor. Peterson's analysis focuses on genetic enhancement, including "designer babies." Some see great potential for the abuse of the poor and even a creation of a two-class human society split between the rich, genetically engineered people and the poor, genetic lottery people. Based on this, they warn against allowing the rich to use such technology in designing their children. Peterson, on the other hand, thinks that the rich should be allowed to pay to pioneer such technology. His logic is that they will work the kinks out and by paying high prices will help the technology develop for cheaper options. In fact, if it works really well, he sees the government as stepping in to provide the engineering for all: "If they can spend such funds on college tuition, a personal trainer, or gambling in Las Vegas, why not spend them to increase their physical capacity? This also means that relatively high start-up risks fall on volunteers who pay for the interventions development. When it becomes clear that it is safe and advantageous, government will probably be called upon to

provide it for all" (Peterson, 203). Economic analysis then becomes not a gauge to warn against abuse but a way to allow the rich to do what they want because of their own greed and self-interest, hoping that the results of their actions will trickle down to benefit the have-nots.

One element that deserves more careful thought in the theological assessment of technology is opportunity cost. What is not being developed because resources are focused on advanced technology? Because the process of technological assessment is so profit-driven, simpler technologies that would benefit a great number of people are not developed as aggressively as technologies that would benefit the rich and make corporations a larger profit.[29] Every choice to pursue one avenue of technological development means that those resources, both monetary and personnel, cannot be used elsewhere for other problems. Thus you end up with the phenomenon of Botox while malaria still devastates. The economic question itself is absolutely crucial to determining how we answer the technological question, not only the development of specific technologies but the rationality that technology pushes, which is often profit-centered and not value-centered.

What role does the community play in answering the question? For those who see technology as a deep temptation, the community plays an important role in the answer to the question. This is not because answers are relative but because answers are particular and located and because the resources needed for answering the question (scripturally formed thought and practice) are at their best when they are evidenced in a community of faithful individuals. The main way that community discernment is done in a Christian way is by recognizing the temptations that technology poses and developing counter practices to maintain Christian identity and being in the world. "Technologies are not neutral; they have inducements in them. We must assess these inducements and develop counter practices."[30] For Albert Borgmann, the answer is "communities of celebration," which are simply defined as meeting face-to-face with something *real* at the center.[31]

For Northcott, Verhey, Herzfeld, and Brock, community-centered Christian practices are key to confronting technology. Northcott "suggest[s] that traditional moral and spiritual practices, emanating from the prioritisation of being over having, and of love over justice, hold great potential for recovering less disordered forms of making in a globally warmed world, and for the recovery of a politics and an economy which train citizens and corporations to treat the physical cosmos with greater reverence" (Northcott, 187). Verhey insists that the struggle to live out the Christian story requires the Christian community to be engaged in certain practices and performances, as well as in other forms of discourse such as wise analysis (Verhey, 119). Herzfeld points to the Amish practice of discernment as an example of the community making decisions together (Herzfeld, 18) and notes, "Most choices about technology are corporate ones, made by a community rather than by individuals. And this community is increasingly global in scope" (Herzfeld, 19). For Brock,

> In both personal and corporate realms the experimental quality of the life of grace can be sustained only by lived and practical inquiries. The most important revolt against the depredations of technological life is simply to explore ways of life that were once common but are now scorned as absurd, such as doing without a car or experimenting with locally grown food…The aim of such inquiries is not moral but

> in the first instance epistemic and diagnostic, not the displacement of technology, but the recovery of a sense of the cultural connectedness of work, making, and use, through the discovery of small but fecund insights (Brock, 386).

One of the most promising takes on the role of the community is that of Robert Song. He insists that questions about genetic technology such as behavioral genetics, use of genetic information by insurers, and gene patenting be considered in the rubric of justice and community life (Song, 79). Additionally, he reminds Christians that the role of the community in answering the technological question is one of witness: "This is a symbolic resistance, witnessing to the kind of life Christ makes possible, one which is learning to be freed from the compulsions and desires that make genetic engineering seem inevitable" (Song, 127–128). And "the first task of the church, therefore, is not so much to 'make a contribution to the public debate' as to start living the difference… Of course, this does not mean that the church should say nothing in the public realm… But it does suggest that the self-knowledge which the wider culture gains might turn out to be the occasion for penitence as much as for self-congratulation" (Song, 128).

All of these thinkers recognize the importance of community in responding to the technological question. Because the technological question for them is more than simply one of which tools to use and how but also how technology shapes us and our communities, their response demands counter formation. If individuals are to be formed into Christian moral agents and not capitalistic moral agents or technological moral agents, the temptations that technology poses must be recognized and community resources utilized to shape people to resist them.[32]

Focusing on the way these thinkers have answered their various technological questions has focused on two main aspects: the sources that are commonly employed and dominant "sub-questions." This analysis has demonstrated that philosophy is more often used as a diagnostic tool, and Scripture and scriptural themes do the heavy lifting in the arguments about technology, especially when it comes to which sub-questions dominate the discussion. These sub-questions in turn often dictate to a large degree how the technological question is answered, whether it is notions of humanity imposing or removing limits on technology to economic concerns influencing development to community-centered responses to technology's temptations.

Conclusion

Bringing all of these discussions together can be difficult. In some ways, it can be easier to focus one's technological interest on a particular field, such as biomedicine. However, doing so limits the chance to see the broader methodological issues in play in any single analysis. I have drawn these different treatments into conversation with one another by exploring how different thinkers ask and answer technological questions from a theological perspective. Social and disciplinary location, assessments of the promise of technology, general approach, the stance toward technology in general, the role of sources such as philosophy and Scripture, and dominant sub-questions in the discourse all help shape an understanding of the technological question as seen from theological vantage points.

This map provides insight into how deep the questions of technology go and provides something of a way forward in the way technology invites theological

reflection and assessment. In particular, the map demonstrates that disciplinary location plays a big role in the stance taken toward technology, which shapes the way the question is asked in a profound way. Those coming with more obvious theological concerns and entry points tended to take a more alarmist stance toward technology, while those concerned with fitting science and religion together were calmer. Then, in analyzing the way the question is answered, it became clear that while philosophical sources are often useful for diagnostic purposes, the most promising and interesting answers come from thinkers using Scripture in imaginative and vision-shaping ways. While this is not surprising coming from theological sources, it is important to note that the most convincing and creative approaches to technology used Scripture in a complex way, not merely citing a few texts but allowing Scripture's stories to shape the moral imagination.

The challenging thing about the technological question is that it always needs asking and it continually evades a final answer. Humans make things, and the making has consequences even for our very perception of reality. This making shapes us especially in the realm of biotechnology and biomedicine, as it is our very bodies that are the object of technological manipulation, modification, and change. As technology marches on at an increasingly rapid pace, this question will remain for the church to answer, and by God's grace we will continue to seek wisdom to answer faithfully.

Appendix

Chart of Key Thinkers

Name	*Location*[33]	*Promise*	*Approach*	*Stance*[34]	*Philosophy*[35]	*Scripture*[36]	*Dominant Sub-questions*
Borgmann	Philosophy	Optimistic	General	Alarmist	Diagnostic; Hiedegger	Mostly 1	Role of community
Brock	Practical theology	Moderate	General	Alarmist	Diagnostic; Heidegger	1, 2, and 3	Human life and role of community
Cohen	Bioethics and public policy	Optimistic	General	Alarmist	Sparingly	Mostly 3	What is human life?
Herzfeld	Religion and science	Optimistic	General to specific	Alarmist	Diagnostic; Heidegger	Mostly 2	Human life and role of community
Hogue	Religion and science	Moderate	Ecological	Calm	Constructive; Jonas	Sparingly	What is human life?
Northcott	Practical theology	Pessimistic	Ecological	Alarmist	Diagnostic	2 and 3	Human life and role of community
Peterson	Religion and science	Cautious	Genetics	Calm	Sparingly	1 and 2	What is human life?
Song	Bioethics and theology	Moderate	Genetics	Alarmist	Sparingly	Mostly 2	Role of community?
Verhey	Ethics	Moderate	General to ecological	Alarmist	Diagnostic	Mostly 3	Role of community?
Waters	Bioethics and theology	Optimistic	General to specific	Alarmist	Diagnostic	2 and 3	What is human life?

Notes

1. Albert Borgmann, *Power Failure: Christianity in the Culture of Technology* (Grand Rapids, Mich.: Brazos, 2003).
2. Brian Brock, *Christian Ethics in a Technological Age* (Grand Rapids, Mich.: Eerdmans, 2010).
3. Eric Cohen, *In the Shadow of Progress: Being Human in the Age of Technology*, 1st ed.(New York: Encounter Books, 2008).
4. Noreen Herzfeld, *Technology and Religion: Remaining Human in a Co-created World* (West Conshohocken, PA: Templeton Press, 2009).
5. Michael S. Hogue, *The Tangled Bank: Toward an Ecotheological Ethics of Responsible Participation* (Cambridge, U.K.: James Clarke & Co., 2010).
6. Michael S. Northcott, *A Moral Climate: The Ethics of Global Warming* (Maryknoll, N.Y.: Orbis Books, 2007).
7. James C. Peterson, *Changing Human Nature: Ecology, Ethics, Genes, and God* (Grand Rapids, Mich.: Eerdmans, 2010).
8. Robert Song, *Human Genetics: Fabricating the Future* (Cleveland, Ohio: Pilgrim Press, 2002).
9. Allen Verhey, *Nature and Altering It* (Grand Rapids, Mich.: Eerdmans, 2010).
10. Brent Waters, *From Human to Posthuman: Christian Theology and Technology in a Postmodern World* (Burlington, VT: Ashgate, 2006).
11. Brent Waters, *This Mortal Flesh: Incarnation and Bioethics* (Grand Rapids, Mich.: Brazos, 2009).
12. One way of approaching this topic would be to attempt a specific definition of technology, and then only evaluate thinkers that agree with my definition. While doing so would shed light on more similarities, my point in this exploration is to show how broadly conceived this question is, and how the conception of the question impacts the results. Narrowing my treatment to a more defined understanding of technology would be counterproductive to this purpose.
13. For example, Karen Peterson-Iyer, *Designer Children: Reconciling Genetic Technology, Feminism, and Christian Faith* (Cleveland, Ohio: Pilgrim Press, 2004).
14. Interestingly, Michael Sandel, a government scholar addressing genetic engineering from a secular perspective, paints a *Gattaca*-esque picture of enhanced athletes and designer babies in order to set up his "ethic of giftedness" against taking such great control over human life. See Michael J. Sandel, *The Case against Perfection: Ethics in the Age of Genetic Engineering* (Cambridge, Mass.: Belknap, 2007).
15. See especially the concept of "politics of speed" in Northcott, *Moral Climate*, 229-31.
16. This could also be cast as calm versus prophetic; however, I hesitate to use the word "prophetic" since it can quickly communicate that one group is superior, since in Christian thought "prophetic" can often become synonymous with "heroic" and "good guys." I realize that "alarmist" may be considered pejorative, as one reviewer noted, but I think most of these thinkers would be comfortable with the term because they do seek to sound an alarm—to call attention to something they consider dangerous.
17. John Hyde Evans, *Playing God?: Human Genetic Engineering and the Rationalization of Public Bioethical Debate* (Chicago: University of Chicago Press, 2002).
18. I must credit Noreen Herzfeld for utilizing the National Rifle Association's slogan in this brilliant manner. See Herzfeld, *Technology and Religion*, 6.
19. Jacques Ellul, *The Technological Society* (New York: Knopf, 1964), 141. I have intentionally kept Ellul out of this exploration since he wrote so long ago and serves as an influence appropriated in different ways by many thinkers. It would be interesting to sift through evidence of his influence in the contemporary debate, and some of that can be read between the lines here.
20. Cohen, as a bioethicist, is most obviously concerned with the dynamic brought out by Evans.
21. See Verhey, *Nature and Altering It*, chapter 2. The six myths are: gene myth, Baconian myth, myth of the project of liberal society, myth of the project of capitalism, the "dominant social matrix," and the myth of romanticism.
22. See Lynn White, Jr., "The Historical Roots of Our Ecological Crisis," *Science* 155 (1967): 1203-07.
23. One interesting approach is that of Michael Sandel. He argues, from a secular perspective, for an "ethics of giftedness" that identifies life as a gift and refuses to seek mastery or control over

it. While several of the theologians mentioned with agree with this, they would develop it on different foundations. See Sandel, *Case against Perfection*.

24. Waters, *From Human to Posthuman*, 92. See also Waters, *This Mortal Flesh*, 176. Herzfeld agrees that the image of God means humans are also "creators just as our God is a creator." Herzfeld, *Technology and Religion*, 11.
25. Also, it can be noted that each thinker would benefit from considering what the Trinity means for the *imago Dei*. All of the approaches seem to emphasize the image of the Father, neglecting for instance the suffering of Christ.
26. For example of various typologies of the relation of nature and humanity, see Verhey, *Nature and Altering It*, appendix B.
27. Another avenue of potential inquiry would be into the role of suffering in relation to the human task. Technology can be employed to confront suffering. However, this practice can also change compassion: what was once a stance of "being with" someone suffering has now become an attitude of fixing. For further discussion of this, see ibid., 114.
28. For a helpful discussion of technological assessment, see Brock, *Christian Ethics in a Technological Age*, 15-21.
29. For just one example, the very simple technology of mosquito nets helps with the spread of disease in Africa. Yet the proliferation of such technology is left to charities because of the lack of profitability. Technologies are often developed simply because they will cater to the rich and therefore be profitable for corporations. Economics is part of "technology assessment," which as Brock notes determines the way technologies are developed (Brock, 10–14), and it needs to play a larger role in theological assessment of technology.
30. Albert Borgmann, "Unpublished Interview with Albert Borgmann on March 24, 2011," (Milwaukee, Wisc.: Marquette University, 2011).
31. Ibid. See also Borgmann, *Power Failure*, chapter 3.
32. Unfortunately, some of the temptations of technology in fact fracture the very community that provides the most promise for being human in the face of technology. For example, the automobile has led to fracturing local intergenerational communities. Other technologies can help remedy this, as communications technology can help foster some semblance of connection, even if mediated.
33. For location in this table I chose to focus exclusively on the question of disciplinary location, since this indicated the greatest variety.
34. Just a reminder that stance reflects a spectrum, not two camps. "Calm" and "alarmist" are the two poles, and the designation in the chart reflects which pole I think the particular thinker is closest to.
35. Here I noted the dominant philosopher in the analysis if the person was indebted in particular to one figure.
36. The numbers in this column refer to the three general types of use of Scripture I described. First, Scripture is used in a straightforward manner for information or direction. Second, there is a move to Scripture in order to provide support for a doctrine that is important for the discussion. Third, Scripture stories are employed as sympathetic analogies, meant to frame modern moral situations differently and to expand the moral imagination.

References

Borgmann, Albert. *Power Failure: Christianity in the Culture of Technology.* Grand Rapids, Mich.: Brazos, 2003.

———. "Unpublished Interview with Albert Borgmann on March 24, 2011." Milwaukee, Wisc.: Marquette University, 2011.

Brock, Brian. *Christian Ethics in a Technological Age.* Grand Rapids, Mich.: Eerdmans, 2010.

Cohen, Eric. *In the Shadow of Progress: Being Human in the Age of Technology.* 1st ed. New York: Encounter Books, 2008.

Ellul, Jacques. *The Technological Society.* New York: Knopf, 1964.

Evans, John Hyde. *Playing God?: Human Genetic Engineering and the Rationalization of Public Bioethical Debate.* Chicago: University of Chicago Press, 2002.

Herzfeld, Noreen. *Technology and Religion: Remaining Human in a Co-Created World.* West Conshohocken, PA: Templeton Press, 2009.

Hogue, Michael S. *The Tangled Bank: Toward an Ecotheological Ethics of Responsible Participation.* Cambridge, U.K.: James Clarke & Co., 2010.

Northcott, Michael S. *A Moral Climate: The Ethics of Global Warming.* Maryknoll, N.Y.: Orbis Books, 2007.

Peterson, James C. *Changing Human Nature: Ecology, Ethics, Genes, and God.* Grand Rapids, Mich.: Eerdmans, 2010.

Peterson-Iyer, Karen. *Designer Children: Reconciling Genetic Technology, Feminism, and Christian Faith.* Cleveland, Ohio: Pilgrim Press, 2004.

Sandel, Michael J. *The Case against Perfection: Ethics in the Age of Genetic Engineering.* Cambridge, Mass.: Belknap, 2007.

Song, Robert. *Human Genetics: Fabricating the Future.* Cleveland, Ohio: Pilgrim Press, 2002.

Verhey, Allen. *Nature and Altering It.* Grand Rapids, Mich.: Eerdmans, 2010.

Waters, Brent. *From Human to Posthuman: Christian Theology and Technology in a Postmodern World.* Burlington, VT: Ashgate, 2006.

———. *This Mortal Flesh: Incarnation and Bioethics.* Grand Rapids, Mich.: Brazos, 2009.

White, Lynn, Jr. "The Historical Roots of Our Ecological Crisis." *Science* 155 (1967): 1203–07.

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Autonomy vs. Selflessness at the End of Life

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Abstract

Autonomy is the preeminent right in contemporary medical ethics. However, a closer examination of autonomy reveals that it is a flawed principle upon which to base medical decisions, particularly those at the end of life where mutually autonomous patients, physicians, and family members may come into conflict. On the one hand, autonomy may fuel a patient's desperate desire to extend his or her life by every technological means available. This exaggerates life's sanctity at the cost of its dignity. On the other hand, autonomy may prompt another patient to renounce the sanctity of life and choose "death with dignity" via physician-assisted suicide. Should the same principle be able to explain such opposite conclusions? Must medical ethics be so easily swayed by cultural preferences? We propose an alternative principle—based solidly and exclusively on Scripture—to aid in making ethical decisions, especially at the end of life: selflessness. Being Christ-like—sacrificing oneself for the benefit of others, in submission to God the Sovereign Father—is always the ethical choice, founded upon the knowledge that "the opposite of death is not physical life, but eternal life."[1]

Introduction

"Like sailors fighting with a Leak / We fought Mortality –" (Emily Dickinson, poem 1130).

Despite attempts to localize the dying process to remote institutions, the reality of human mortality is inescapable. Death will come to each person and will often be accompanied by painful and difficult choices. The process of dying in all its varied forms marks the close of our earthly consciousness and our entrance into an eternal experience.

A cursory examination of current end-of-life care and policy in the United States indicates a profound de-emphasis of death's inescapability. The historical progression in American medical policy and practice has tended towards the sterile and impersonal localization of death. According to Dr. Elisabeth Kübler-Ross, Swiss-American psychiatrist and the author of *On Death and Dying*, "dying nowadays [in and after 1969] is more gruesome in many ways, namely more lonely, mechanical, and dehumanized; at times it is even difficult to determine technically when the time of death has occurred" (7). Our experience in the twenty-first century with its additional technological progressions validates Kübler-Ross's concerns.[2] Former physician Ken Murray maintains that the dominant attitude of medicine wrongfully emphasizes quantity over quality, prompting fearful patients to fall prey to unwise, expensive, and uncomfortable heroics as they approach their own end-of-life care. According to the concerns of medical practitioners themselves, implies Murray, there is a common lack of healthy limitation in the expectations and policies surrounding

end-of-life care. This paper investigates potential reasons for this deficit and proposes a more biblical perspective.

Death not only threatens our pride, but also threatens our sense of control. According to Abigail Rian Evans, Professor Emerita of Practical Theology at Princeton Theological Seminary and scholar-in-residence at the Center for Clinical Bioethics at Georgetown University Medical Center, death is "considered un-American because we cannot control it" (17). Yet the reality of death has lingered as the great existential dilemma throughout human existence. It violates our sense of control, our feelings of personal autonomy. Given the continual and universal impact of death, its examination is necessarily an interdisciplinary concern. Although it is impossible to obtain direct quantitative data on the dying process, an examination of current policies and their relationship to biblical, normative ethics is nevertheless highly appropriate for cultural understanding and personal consideration.

When examining American medical ethics, it is essential to define autonomy and to examine its implications, as the principle is often cited in popular policy but rarely explained. Autonomy is vital for our consideration because much of Western thought—and subsequently medical ethics—elevates personal autonomy above any other principle in medical policy. According to the dominant understanding and application of the principle, autonomy is commonly regarded as the sovereign right that must be upheld by medical ethics and practice. For the purpose of this analysis, the term autonomy will be used in its general sense to refer to the belief that individuals should be able to exercise their exclusive right to choose what is done to them and by them.

The extreme elevation of personal autonomy reveals a disturbing discrepancy in the common regard of life's sanctity and dignity, a discrepancy which leads to a denial of human finitude, a dismissal of redemptive suffering, and unrealistic expectations about the abilities of modern medicine to prolong life while erasing fear and pain. The increasing reliance on medical technology and the elevation of personal autonomy in end-of-life care have eclipsed other considerations that are vital to the complexity involved in this final season of life.

An Empty Promise

Autonomy has trumped all other principles largely because it capitalizes on Western individualism to deliver a faulty yet alluring hope in medical immortality. In both medical ethics and the legal policies that support their practice, the principle of autonomy has reached extraordinary status. Charles Foster, barrister and instructor of medical law and ethics at the University of Oxford, proposes that autonomy's current elevation cannot be intellectually or ethically justified, and that thoughtful discrimination regarding other balancing principles is greatly needed to avoid dangerous consequences for patients and medical practitioners. Foster acknowledges that while there may be a lukewarm debate over autonomy in medicine in some academic literature, the debate does not reflect the "dominant and dominating mindset" in the practice of the medical profession currently, one which is policed with terrifying vigor in support of its "orthodoxy" (3, 4). "Once within the body of the law," says Foster, "autonomy shapes the law to make itself comfortable. There is an increasing tendency to view the whole of the law as simply a framework in which

autonomy can be exercised" (6). To answer the pervasive reliance upon autonomy as the chief tenet of medical ethics, it is therefore useful and necessary to examine its assumptions to better understand its appropriate application and potential limitations.

There are four primary ways in which the label of autonomy is used, proposes Foster. The first is the philosophy espoused by Immanuel Kant, which assumes the following: given the innate rational capacity of humans to distinguish between the sensible (phenomenal) and the intellectual (noumenal) world, proper autonomy is to act "in accordance with the universal moral law" (Foster, 6). The dilemma, however, lies in vague definition. Specifically, what determines moral obligation? For Kant and most in the West, moral law was equated with Christian morality, which imposes some limitation on exercising autonomy. For example, autonomous expression is no longer valid when it strays into "counter-moral territory such as suicide or extra-marital sex," explains Foster (7). Kant's philosophy presumes that human worth is dependent on "[resisting] the blandishments of the sensual world" and making right choices (Foster, 8). This modernistic tendency is impossible to perform in the reality of a fallen world, however, since our rational abilities are hindered from any perfect exercise by the effects of sin.

Perhaps the second use of autonomy noted by Foster will enlighten us. Autonomy as the primary psychological ideal, explains Foster, supposes that an autonomous person lives a "self-directed life," which is the foremost exercise of liberty and should therefore be applauded (7). To be autonomous according to this perspective is to have and to exercise "an ability to reflect critically upon" and to "accept or reject consciously and critically" one's personal preferences, desires, and wishes (Foster, 8). Here, however, we encounter further logical confusion: this form of autonomy is only affirmed by the identification of autonomous acts, which contradicts the emphasis on self-direction by only validating such direction in vague hindsight. Because law and policy must articulate clear constraints on future actions, founding such laws and policies on a principle that defines appropriate future action retrospectively is both logically ludicrous and pragmatically impossible.

The third assumed use of autonomy regards the principle as essentially a reason for constraint on action—"'X's autonomy' is invoked as a reason why Y should not do something to her," explains Foster, who also proposes that this perspective is perhaps the most common use of autonomy in law (8). Yet regarding autonomy as constraint on action begs questions that cannot be answered by law alone, and so this view is limited to an oversimplification that constrains action because the appropriate consent, perceived as a right, has not been given. This type of analysis (or non-analysis, argues Foster) fails to locate the right to consent in any particular theory of rights beyond a nebulous invocation that such rights must exist because someone wishes them to.

The final use of autonomy reduces the principle to an evaluative function, says Foster. According to this view, when we say that X is autonomous, "we are saying nothing at all about what it is to be autonomous," but are simply affirming that "X or her decision deserves respect" (Foster, 9). The flaw in this explanation of autonomy, however, is that this usage is only possible "if the consensus about the primacy of autonomy is complete" (9). According to this view, if someone behaves autonomously, then his or her decision is to be respected; it may arguably be inferred, however, that

if one does not behave autonomously, then neither he nor she is ultimately deserving of respect in decision-making. This inference highlights the limitations of elevating autonomy to not only a right, but also a virtue. At some point, autonomies will clash—a situation especially likely in end-of-life decision-making, as the physician's autonomy in following his or her conscience may cross the patient's autonomy in demanding (or refusing) treatment. Consequently, this explanation of autonomy as a validation of virtue cannot be consistent, as who can say in examples of conflict whose autonomy is the more virtuous in expression?

These objections to dominant usages of autonomy are certainly not limited to the theoretical; each has brutally practical corollaries. However, exploring autonomy's extensive demands and pervasive presence in medical ethics is all the more challenging because the principle is—in part—rightfully foundational to policy and conduct. Autonomy is "a crucial principle," one which the consequences of abandoning are "nightmarish," acknowledges Foster (9). Yet in light of the several concerns explored previously, autonomy cannot be the only standard for law and ethics: "Law should be the servant of reality, not its master," maintains Foster (10). Individuals in law or medicine should not be daunted to take on the "multi-facetedness of life" (10). To do this properly, however, requires a variety of weapons in the form of foundational principles. "Law should be as nuanced as it needs to be," maintains Foster—a formidable task for the policy maker and medical professional alike, but a task that surpasses the formidable, illogical alternative of exclusive autonomy in both its feasibility and its ethical validity (10).

Certainly, there are other contenders in medical ethics and medico-legal debates. These contenders include the following three main principles, all of which are in practicality "more or less ignored . . . at great cost," despite universal nods to the moral theories they each espouse (17). Some of these principles are commonly attributed to the Hippocratic Oath while others also include dominant virtues according to the Judeo-Christian framework of moral conduct.

The first primary principle often cited in discussions of medical ethics, albeit subordinately to autonomy, is that of non-maleficence or *Primum Non Nocere* ("Above all, do no harm"). This charge, as many will recognize, hails from the historic legacy of the Hippocratic Oath. The pledge of non-maleficence is generally interpreted as not doing potential harm to another unless such an action is outweighed by good consequences. Non-maleficence, however, cannot regulate medical conduct alone for two main reasons. First, it "imposes no positive obligations at all," only the absence of negative actions, and therefore supplies a slippery standard at best, says Foster (18). Second, the reference to harm is highly subjective, as "one man's harm might be another man's wish" (18). Clearly non-maleficence, like autonomy, cannot solely dictate ethical policy and conduct. Other considerations—justice in potential consequences, for example—are needed to define harm to satisfy the principle fully.

Additionally, beneficence is frequently referenced in conjunction with non-maleficence. Beneficence may be regarded as essentially the individual requirement to do good; it is therefore the positive, active counterpart to non-maleficence. Like non-maleficence, however, the dilemma of defining "good" arises. Good by whose standards? The doctor's, the patient's, the society's? Again, other principles are necessary to balance this standard.

Turning next to justice, we encounter a useful yet similarly problematic standard. The principle of justice refers to the belief that like cases should be treated alike, as suggested by both the Judeo-Christian moral framework and the Hippocratic Oath. Justice is clearly an essential component of determining biomedical and ethical standards, yet it tends to dangerously pragmatize situations to the point of "various shades of utilitarianism," explains Foster, which has contributed substantially to the "highly variegated ethical tapestry that we call medical law" (18). Apparently, even justice itself cannot function solely as an exclusive ethical standard, but, like non-maleficence and beneficence, it requires additional checks and balances.

Lastly, individual rights and duties are sometimes cited as standards of ethical policy and action. Rights and duties are commonly understood as one's individual entitlements and obligations, both generally (in the form of fundamental human rights) and specifically (in unique, variable occupations and roles). This idea is simultaneously loathed by and vital to autonomy, claims Foster. He provides a helpful, albeit colorful, analogy to illustrate this paradox regarding autonomy's relationship to rights and duties: "Autonomy therefore tolerates duties in the same way that swagger-stick-brandishing colonials tolerated the natives. Ideally you don't want them in the house, and you certainly wouldn't dream of inviting them to dinner, but in fact they do all the work" (19). In other words, autonomy presupposes the enacting of individual rights and duties, yet by its very nature it also disparages adhering to standards that would involve the restriction of one's personal liberty.

As examination of these principles—autonomy as well as non-maleficence, beneficence, justice, and individual rights and duties—illustrates, no single standard may reign supremely in medical ethics. This is particularly important in end-of-life considerations. To be clear, there must be some consideration of personal autonomy in ethical policy and decision-making; in Foster's words, "autonomy, which has had a legitimately prominent place in decision-making throughout life, should not be elbowed out towards the end" (151). However, the end of life also demands a greater level of care than that provided by autonomy alone, and therefore policy must prevent the elevation of autonomy to such an absolute. This, says Foster, is for the obvious and brutally practical reason that in an end of life setting, "autonomy will all too often, in a moment of relievable depression, despair or pain, ablate itself for good" (152). That is, times of great stress and potential suffering are possibly the worst circumstances to discover autonomy's limitations and to witness its effects on loved ones.

Exclusive autonomy ultimately provides a flat—and therefore flawed— standard for complex end-of-life decisions made by the patient, the family, or the physician. In the words of Foster, "autonomy lacks perspective" in that it "does not take into account how people's views change when faced with the challenges they have always feared most" (161). Although it can potentially present useful considerations in the remote future, autonomy "lives in a cowardly and blinkered way in the present," maintains Foster (161). As soon as the once-remote future becomes our present, autonomy's shaky foundations leave us vulnerable and ill equipped to deal with end-of-life concerns.

Autonomy in Living

One chief problem with current end-of-life policy is the elevation of autonomy in living, which wrongfully prioritizes life's sanctity over its dignity. In other words, the perceived sanctity of human life demands its preservation, but this idea can also be elevated over moral concerns in a manner seemingly excused by the patient's imminent death. This is commonly seen in the use of extensive medical efforts in an attempt to do "everything" possible. Unfortunately, these attempts at prolonging life can quickly turn into dragging out an inevitable death. Intensive-care nurse Karen Wallace says she rarely goes a week without having someone insist she "do everything" to keep a patient alive, regardless of if extreme measures would likely be helpful; often, adds Wallace, extreme measures are actually to the detriment of the patient: "We add to the suffering of people constantly and often needlessly by giving futile intensive care to elderly patients."[3] When death seems the alternative, we will often spend immense amounts of money and resources to buy time at the end of life for ourselves or for our loved ones.

Many with similar concerns invest in various efforts to improve medical technology so as to buy time for the patient. While this may seem a virtuous component of medical research, trust in technology can quickly turn into an attempt to forestall death as long as possible for those who can pay. Google's Ray Kurzweil predicts that within his lifetime, modern medical technology will have developed a full remedy to dying, effectively creating the possibility of technological immortality; as the subtitle of one of his books on health maintains, "Live long enough to live forever" (Jenkins, 96). The appeal of this promise lies in its modernistic implication that death may be potentially avoided via human ability, rendering nature finally surmountable. As Kurzweil's proposal illustrates, our fear of death—or rather the "fear of human limitation," according to Stanley Hauerwas, professor of theological ethics at Duke University—greatly impacts medical ethics, particularly in areas such as end-of-life care and treatment allocation. The result of regarding medical technology as savior, says Hauerwas, is tragic. When patients are encouraged to believe they have the right to any procedure that may prolong their lives, even marginally, we have corrupted "ourselves as well as the character of medicine by trying to make it do more than it is capable" (Hauerwas, 331). Because medical care is neither unlimited in its availability or perfect in its efficacy, these limitations to exercising our autonomy force us to retain some sense of the sanctity of life, which "with beneficence and non-maleficence at its shoulder, continues, however tenuously," to be upheld in modern law (Foster, 161). Yet this sense of sanctity is incomplete because it is amputated from a moral framework, and therefore reduces the waning of human life to personal preference in the timing and degree of its preservation. Consequently, the advent of any cultural shifts in medical practice could soon put this tenuous advantage of life's sanctity at great risk.

As these attitudes towards the allure of extreme medical intervention at the end of life illustrate, we often direct our fear of death towards avoiding its messiness entirely instead of attempting to weather the challenges it poses. However, in the words of physician Tristram Engelhardt Jr. and bioethicist Ana Iltis in *By Faith* magazine, "The Christian pursuit of holiness prohibits using medicine in an all-consuming pursuit of health and postponement of death; the attempt to save life at all costs is

thus forbidden" (53). The sanctity of life may therefore not be elevated over moral concerns in terminal illness. While still a key factor in ethical decision-making, life's sanctity must also be understood in light of biblical principles and accompanied by respect for life's dignity as well.

Autonomy in Dying

A second problem with the elevation of autonomy in end-of-life ethics is its exclusive voice in dying and terminal illness, a voice that wrongfully prioritizes life's dignity over its sanctity by prompting the patient to determine the time and manner of death. That is, the individual right to choose—often in an attempt to exert some measure of control in response to overwhelming circumstances—can be elevated over the patient's current treatment needs or potential for possible recovery. This tendency fundamentally denies any objective standard, thereby defaulting to the patient's preferences as the definitive measure of appropriate action. Scripture emphasizes, however, that no one may have ultimate control over death: "Since no one knows the future, who can tell someone else what is to come? As no one has power over the wind to contain it, so no one has power over the time of their death" (Eccles. 8:7-8, NIV). Often, however, the desire to feel in control of our circumstances can prompt us to seek to bend even death to our preferences in an effort to alleviate our fears.

The Oregon Death with Dignity Act is a key example of a legal policy implemented to supposedly ensure patient autonomy in the dying process. The act began as the pursuit of patient empowerment in end-of-life conditions, but soon dissolved into merely an attempt to end suffering quickly and to avoid challenging circumstances that would not necessarily lead to immediate death. Courtney S. Campbell, professor of philosophy at Oregon State University, critiques the Oregon Death with Dignity Act by maintaining that it—and the "right to death" argument in general—neglects concerns like the insidious coercion of patients through "financial indigency" while also negating the fundamental standards of the Hippocratic Oath (Moreno, 161). This act, called Measure 16, was ultimately an affirmation "of the ideology of patient control and self-determination," explains Campbell (162). This autonomic ideology was conveyed "not through erudite philosophical argumentation," however, but instead "through poignant narratives of dying related by patients and their families" (162). Ergo, says Campbell, the ultimate persuasive appeal of Measure 16 "resided in the response of empathy to the stories of identified persons," or, to put it another way, "the response elicited was primarily that of empathy and identification with the sufferer and projection of one's own life story into the scenario of the sufferer" (162). In cases like the passing of Measure 16—where no clear standard of morality or ethics was overtly appealed to—"the patients" and their preferences become "the moral authorities" (162). The passing of Measure 16 in Oregon is largely due, therefore, to its vivid personalization. The act reminds us that "the moral choices of the human self are both rational and emotional in nature," says Campbell, yet neither may be exclusively upheld at the expense of the other, and both must be somehow subordinated to biblical standards of justice and mercy (162). The implications of Measure 16 in Oregon echo in modern medical consciousness even while currently limited in actual practice: in the future, the ethical ramifications will certainly not be localized to Oregon and a handful of other states.

The desire to feel in control in end-of-life situations—ultimately as an attempt to preserve our quickly fleeting human dignity—is particularly manifested in the physician-assisted suicide debate. Leon R. Kass, chair of President George W. Bush's Council on Bioethics and professor at the University of Chicago, maintains that the questions raised by the collective zeal for autonomy in medicine have deeper implications than those of general academic queries, as the physician-assisted suicide debate so powerfully illustrates. The desire to feel in control battles constantly against human limitation, even when it meets with little success: "While many look forward to further triumphs in the war against mortality, others here and now want to exercise greater control over the end of life, by electing death to avoid the burdens of lingering on. The failures resulting from the fight against fate are to be resolved by taking fate still farther into our own hands" (Moreno, 211). That is, this expression of autonomy manifests in the views of those who demand a "'right to die,' grounded not in objective conditions regarding prognosis or the uselessness of treatment, but in the supremacy of choice itself" (213). In the name of choice, people essentially claim the paradoxical right to choose to cease to be choosing beings.

This supposed right to exercise choice—even to the point of negating one's existence as a choosing being—ultimately polarizes two powerful ideas: death with dignity is poised threateningly against the sanctity of life. Yet this is an inaccurate polarization. Kass maintains that death with dignity and the sanctity of life are "not only compatible, but, if rightly understood, go hand in hand" (Moreno, 215). The sanctity-and-dignity of life is fully compatible with allowing imminent death to take its course, but it is in no way compatible with deliberate killing, even at the patient's wish. By way of emphasis, sanctity and dignity are not divorced in biblical understanding; in fact, the relationship between the two is inherent by virtue of our creation in the image of God as creator. Scripture maintains that "Whoever sheds the blood of man, by man shall his blood be shed, for God made man in his own image" (Gen. 9:6, ESV). Because we are made in God's image, life is sacred; because we reflect the image of God in creation, we must also conduct ourselves in a manner that illustrates the dignity of our creator and our role as stewards of our bodies and souls.

If we really are seeking a death that respects some degree of personal autonomy while affirming the sanctity-and-dignity relationship, we must think in human and not merely technical terms while subordinating both to biblical principle. Life can and should be revered "not only in its preservation, but also in the manner in which we allow a given life to reach its terminus" (Moreno, 230). The significant danger of denying this respect for life's preservation and appropriate conclusion can be seen most obviously in the various proposed forms of euthanasia, a practice which claims to promote dignity as aggressively as possible yet neglects to deliver on several key counts.

Both active euthanasia (directly prompting the death of someone who is not yet dying or not dying at a preferred speed) and physician-assisted suicide (the request for assistance in dying) demonstrate the pervasiveness of fear and the potentially tragic fate of pride. Kass poetically explains that "any attempt to gain the tree of life by means of the tree of knowledge leads inevitably also to the hemlock," that is, "the utter rationalization of life under the banner of the will gives rise to a world in which the victors live long enough to finish demented and without choice. The human curse is to discover only too late the evils latent in acquiring the goods we wish for"

(Moreno, 236). Pursuing medical or technological success can often be a wonderful tool for ministering to the needs of others. Against the historical background of great medical success, however, terminal illness and incurable disease appear as failures or "as affronts to human pride. We refuse to be caught resourceless" (236). Thus, having adopted a largely technical approach to preserving human life, we now are willing to contemplate "a final technical solution for the evil of human finitude and for our own technical (but unavoidable) 'failure,' as well as for the degradations of life that are the unintended consequences of our technical successes" (236). In other words, pursuing autonomy by trying to medically ensure personal dignity in every step of the dying process is doomed to failure from its own repercussions of dehumanizing the very dignity it sought to guarantee. The pervasiveness of autonomy renders this dehumanization quite possible, if not implicitly likely, in end-of-life care that looks to autonomy as its chief savior.

Although human beings are given substantial liberty to shape their conduct in this world, they may only pursue this liberty under definite constraints instituted by God. By divine ordination, there are physical and metaphysical limits to our policymaking: "we make free moral decisions," says Christian bioethicist David Vandrunen, but it is "futile to lust after moral autonomy liberated from divine sovereignty" (66). Because God is both fully good and fully sovereign, he is also to be trusted above the benefits sought by our grasps at autonomy alone. In other words, the Christian "does not fear death, but he never hopes for it. He hopes for the one who has delivered him from death" (Evans, 392).[4]

Sanctity & Dignity as Interdependent

In answer to these two problems, we propose the inalienable reality of human sanctity and dignity is one that cannot be merely conferred, ascribed, or removed by human agreement or decision. The complementary sanctity-and-dignity of human life is ultimately bestowed by God alone and is not imparted through any human attribution, neither is it denied by any human renunciation. As a result, the demand for definitively ensuring death with dignity, even at the expense of sanctity and in violation of true human dignity, generally stems from a secular-humanistic worldview of autonomy that leaves little room for embracing God's grace, acting with courage, or pursuing wholeness.

An autonomous death is often demanded reactively "because more and more people are encountering in others and fearing for themselves or their loved ones the deaths of the less dignified sort," says Kass (Moreno, 225). This fearful reaction is generally in response to impediments associated with modern medicine that increasingly arouse indignation. The "demand for death with dignity pleads for the removal of these 'unnatural' obstacles" that render us more dependent" and therefore "less autonomous" (225). "For the autonomist," says Foster, "the ability to plan ahead and ensure that the life-plan is fulfilled is everything. It trumps mere agonizing distress every time" (152). Autonomy, however, ultimately ventures a pledge of dignity-protection that, at least in the context of end-of-life concerns, it cannot fulfill satisfactorily. As a result, autonomy cannot be the principal virtue in end-of-life medical care and policy, as it cannot ensure dignity and fails to appropriately consider dignity in a balanced relationship with life's sanctity.

The Answer of Biblical Ethics

A third perspective is therefore needed to reconcile these problematic poles of absolutizing life's sanctity by claiming autonomy in life and of absolutizing life's dignity by grasping at autonomy in death. Neither form of autonomy may exercise supremacy, particularly in end-of-life care. Consequently, our fears and expectations must be reoriented by a greater principle. Our pursuit is not the choice between the either/or of popular medical ethics, but rather to find a godly balance between two divergent extremes that share the common foundation of idealized autonomy. According to C.S. Lewis in *Mere Christianity*, this either/or dilemma is solvable, yet only by a third perspective:

> I feel a strong desire to tell you—and I expect you feel a strong desire to tell me—which of these two errors is the worse. That is the devil getting at us. He always sends errors into the world in pairs—pairs of opposites. And he always encourages us to spend a lot of time thinking which is the worse. You see why, of course? He relies on your extra dislike of the one error to draw you gradually into the opposite one. But do not let us be fooled. We have to keep our eyes on the goal and go straight through between both errors. We have no other concern than that with either of them.[5]

This essential third perspective, we propose, is that of Biblical love, agape, selflessness. Selflessness is epitomized by God the Father, "For God so loved the world that he gave his one and only Son, that whoever believes in him shall not perish but have eternal life" (John 3:16, NIV). Selflessness is exhibited by God the Son, "Who, being in very nature God, did not consider equality with God something to be used to his own advantage," but instead, Christ "made himself nothing by taking the very nature of a servant, being made in human likeness. And being found in appearance as a man, he humbled himself by becoming obedient to death—even death on a cross!" (Phil. 2:6-8). Love is the first fruit of the Holy Spirit that is identified by St. Paul: "the fruit of the Spirit is love, joy, peace, forbearance, kindness, goodness, faithfulness, gentleness and self-control" (Gal. 5:22). Biblical love shows the kind of self-sacrifice demonstrated by God himself. Saint Paul identifies love expressed in selflessness as the ultimate Biblical virtue among faith, hope, and love: "the greatest of these is love" (I Cor. 13:13).

Christian ethics is founded upon obedience to the law—specifically the Ten Commandments—given by God in scripture. Love, however, is not only "the fulfillment of the law" (Rom.13:10), but it is also the entire law "fulfilled in keeping this one command: 'Love your neighbor as yourself'" (Gal. 5:14). Surely it is self-interest—autonomy—that drives a person to commit murder, to commit adultery, to steal, to give false witness, or to covet. Selflessness would never violate God's commands. Biblical ethics would also require that the consequences of an action are distributed justly. Yet biblically, love trumps even justice. Where "eye for eye, and tooth for tooth" would be just, Jesus maintains that "If anyone slaps you on the right cheek, turn to them the other cheek also" (Matt. 5:39). Such is the depth of biblical selflessness. The highest principle of Christian ethics, as demonstrated by Christ himself, is love for God and love for others.

How does selfless love apply to end-of-life care? Once all facts of a patient's condition and the likely effectiveness of treatments are known, acting in selflessness can provide a more accurate compass for decision making than making decisions

based on selfish autonomy. Love for God would involve sacrificing one's own desires and plans for God's often-mysterious goals. Deference to God's goals and plans could require the family of a terminally ill patient to forego extreme and likely painful measures to attempt to prolong the life of their loved one. Similarly, humble acceptance of God's sovereign plans would require a terminally ill patient to sacrifice illusory autonomy and courageously resist the temptation of physician-assisted suicide. In this way, selflessness would not cling desperately to life regardless of the ethical cost. Love for neighbor would involve sacrificing one's own happiness for the benefit of others. Love for family members might prompt a terminally ill patient to forego expensive treatment options that would bankrupt the family. On the other hand, love for a terminally ill patient would encourage family members to eschew the cost-cutting course of physician-assisted suicide. Although deciding whose needs take priority can be challenging, seldom is there too much love present among sinful human beings. Courageously deferring one's own wishes to the Lord's direction and the needs of others not only provides a clearer standard than autonomy, but also frees us from the burden of demanding our selfish desires in futility. God assures us that he will make our way clear—not free from trial, but sustained by grace—if we trust in him: "Trust in the Lord with all your heart and lean not on your own understanding; in all your ways submit to him, and he will make your paths straight" (Prov. 3:5-6).

Yet at the end of life especially, our paths rarely seem straight. In times of trial or physical pain, proposes Jill Carattini of Ravi Zacharias International Ministries, believers must actively remember God's faithfulness and the need for a balance of courage and humility in end-of-life situations:

> There is some truth to the idea that the ethics we truly live by are best discovered when they are enacted over the highest precipices—those thresholds of life, death, and weighted decision—or else the very lowest precipices, those places where comfort lures boredom and indifference. In the spaces where it is hardest to remember doctrine, standards, and philosophy, there we discover where the battle of moral decision is truly waged. In other words, it is far easier to secure our ethical moorings at the university or in church than it is in the turbulent hallways of the Emergency Room or the consuming distraction of affluence.

Carattini suggests that if we fail to actively remember the biblical metanarrative in which we are participants, then in times of trial we may forget God's sovereign goodness and the ethical constraints this imposes on our actions. Stewardship of our bodies in submission to God's provision compels us to remember "the hope we had long professed but altogether misplaced in the halls of medicine," says Carattini. Circumstances, then, are not determiners of ethical decisions regarding treatment and care, but must be viewed in light of existing biblical principles.

In contrast to the pseudo-sovereignty sought by autonomy, God is fully sovereign over his creation, exercising his omnipotence for his glory and our good. "The freedom of God," says Lewis, "consists in the fact that no cause other than Himself produces His acts and no external obstacle impedes them—that His own goodness is the root from which they all grow and His own omnipotence the air in which they all flower" (27). Because we are fallen, and our understanding finite, we only rarely perceive God's aims in our betterment—yet our perceptions cannot negate the powerful good of God's superior purposes. When do we realize our own frailty and heed God's

voice more readily than when we suffer? Pain has a way of grabbing our attention and reorienting our priorities. As Lewis puts it, "God whispers to us in our pleasures, speaks in our conscience, but shouts in our pain: it is His megaphone to rouse a deaf world" (91). Far from sensational tactics, the use of pain to rouse our awareness is profound in purpose. Self-surrender is completely contrary to our fallen being, yet God is not hindered by our fallen nature: Lewis explains that "God, who has made us, knows what we are and that our happiness lies in Him. Yet we will not seek it in him as long as He leaves us any other resort where it can even plausibly be looked for. While what we call 'our own life' remains agreeable, we will not surrender it to Him" (94). Because he loves us, God removes our false happiness to grant us clearer understanding of our constant need for him.

Conclusions

How then shall we seek to live and act in end-of-life situations? As a reflection of the treasure in heaven promised us, and as stewards of the earthly means provided us, we pray. Christian theory must be translated into Christian practice or it is reduced to hypocrisy. For those who believe that Christ died and was raised to provide redemption and a future hope beyond death, "the opposite of death is not physical life, but eternal life" (Evans, 412). Faith does not erase trials, but it will sustain those of us who suffer through the terrible fears and challenging circumstances that can arise at the end of life. St. Paul affirms that "our present sufferings are not worth comparing with the glory that will be revealed in us" (Rom. 8:18). The hope of glory yet to be revealed cannot fully erase our experience of suffering, but it can provide a holistic perspective by assuring us that trials like those experienced at the end of life are temporary, though acute for a time.

The Christian must seek to live a life worthy of the gospel, even at life's closing. Saint Paul emphasizes the tension between the sanctifying work in us while we live and the future hope we have of glorious union with Christ:

> I eagerly expect and hope that I will in no way be ashamed, but will have sufficient courage so that now as always Christ will be exalted in my body, whether by life or by death. For to me, to live is Christ and to die is gain. If I am to go on living in the body, this will mean fruitful labor for me. Yet what shall I choose? I do not know! I am torn between the two: I desire to depart and be with Christ, which is better by far; but it is more necessary for you that I remain in the body. (Phil. 1:20-26)

As this passage illustrates, our earthly experience contains opportunities for us to minister to others even while it intensifies our desire to be present with the Lord. Despite the good yet fallen creation that God has provided for us to steward, and despite the mixed blessing of our physical bodies, we innately recognize our design for the eternal—we were made to be in communion with the Lord, and therefore we hunger for heaven even as we inhabit his physical creation. Thankfully, our condition is not dependent on our conflicted wishes alone, but on God's foreordaining of our lives and timing of our deaths. St. Paul's example of practicing selflessness by submitting to God's direction and by seeking the betterment of others demonstrates how we are to live until God calls us to himself through death. Above all, we are to trust in God's greater wisdom and loving providence, heeding St. Paul's charge to act

faithfully in all circumstances, whether living or dying: "Whatever happens, conduct yourselves in a manner worthy of the gospel of Christ" (Phil. 1:27).

The complex experience of dealing with death presents weighty implications for our living now. First and foremost, Christ's resurrection reinterprets our earthly reality, providing context, assurance, and stability through a potentially traumatic experience. Death is not our final destiny, only a necessary door through which we each must pass. Faith is therefore crucial to maintain in the face of immense cultural pressures that prioritize personal independence and autonomy (Vandrunen, 181). Full autonomy is not possible, given our limited ability to impose our will on our circumstances. Kübler-Ross highlights the need for faith and fortitude at the end of life especially:

> In the course of a terminal illness, we can give up, we can demand attention, we can scream, we can become total invalids long before it is necessary. We can displace our anger and sense of unfairness onto others and make their life miserable. Or we have the choice to complete our work, to function in whatever way we are capable and thereby touch many lives by our valiant struggle and our own sense of purpose in our own existence.[6]

Kübler-Ross's statement may romanticize human effort in the face of suffering and trial, but it nevertheless highlights the need for a stronger purpose and greater principles to govern our attitudes and actions in times of suffering. For the Christian, these principles are of the utmost importance to promoting godly selflessness. Navigating the balance between fighting the physical effects of sin and accepting one's approaching death requires great humility of patient, physician, and family members. Selflessness is not weakness, but a courageous response in end-of-life challenges.

These challenges are compounded by our general obliviousness to death's reality. We are never "ready for death," and life's concerns are almost mercifully absorbing (Evans, 33). "One thing is clear," says Evans: at some point we each must "face this mystery alone" (33). No one may experience our physical death for us. Even aided with appropriate medical care, the comforts of hospice, and supportive loved ones, we each encounter death uniquely. Death is, as scripture tells us, the "last enemy to be destroyed" (1 Cor. 15:26). But we follow in the footsteps of One who went before us, One who knew the same fear acutely and experienced immense physical and spiritual suffering in the ultimate act of selflessness. We follow Christ who destroyed death, even as we also experience his comforting presence in what may likely be our greatest need.

Jesus tells us to "come, [selflessly] take up the cross, and follow me" (Mark 10:21). Christ bore the burden of sin, suffering, and death alone so we would not have to be crushed under its lonely weight. Even with the knowledge of this truth, however, maintaining faith and acting selflessly at the end of life is likely our hardest task. Dying to self at the end of life is only feasible when ingrained in conscience and conduct before terminal illness. Yet this is the only thing that can enable us to look beyond immediate pain to joyful relief when the trial of death is past. Christ illustrates this transition from horrific pain to joy and peace through the trials of childbirth: "A woman giving birth to a child has pain because her time has come; but when her baby is born she forgets the anguish because of her joy that a child is born

into the world. So with you: Now is your time of grief, but I will see you again and you will rejoice, and no one will take away your joy" (John 16:21-22). Similarly, the great challenges we encounter at the end of life involve significant anguish, whether physical or emotional or psychological, yet only as a transition to a lasting condition of immortality. This reality may not alleviate end-of-life suffering fully, but it is still an essential truth that we cling to in dark hours, trusting in the sustaining might of our loving Savior.

Charles Spurgeon powerfully illustrates perseverance in times of trial, maintaining that autonomy is never fully possible, as "you have not the making of your own cross," nor are "you permitted to choose your own cross," even though "self-will would fain be lord and master" (71). Instead, says Spurgeon:

> You are to take up the cross as your chosen badge and burden, and not to stand caviling at it. This night Jesus bids you submit your shoulder to his easy yoke. Do not kick at it in petulance, or trample on it in vain-glory, or fall under it in despair, or run away from it in fear, but take it up like a true follower of Jesus. Jesus was a cross-bearer; he leads the way in the path of sorrow. Surely you could not desire a better guide! And if he carried a cross, what nobler burden would you desire? The Via Crucis is the way of safety; fear not to tread its thorny paths . . . Beloved, the cross is not made of feathers, or lined with velvet, it is heavy and galling to disobedient shoulders; but it is not an iron cross, though your fears have painted it with iron colours, it is a wooden cross, and a man can carry it, for the Man of Sorrows tried the load.

In every trial, particularly those connected with the end of life, we are assured divine aid, for Christ led the way through suffering by example in humility and selflessness. We are not promised easy circumstances at the end of life, but protection and provision through its challenges. Where Christ walked, therefore, we may boldly follow. Necessary provisions such as medical care and hospice, or celebrated principles like autonomy, or wise protections like those afforded by advance directives—all these must be regarded as subordinate to the need for selfless humility and faithful courage when coming to terms with the end of life.

Great trial demands a greater deliverer than autonomy. Even the best plans and policies can only supply a partial remedy at the end of life. Much of death may be beyond our limited control, but it is certainly not beyond the control of our sovereign God. "Who shall separate us from the love of Christ?" asks St. Paul, "Shall trouble or hardship or persecution or famine or nakedness or danger or sword? . . . No, in all these things we are more than conquerors through him who loved us. For I am convinced that neither death nor life, neither angels nor demons, neither the present nor the future, nor any powers, neither height nor depth, nor anything else in all creation, will be able to separate us from the love of God that is in Christ Jesus our Lord" (Rom. 8:35-39). At the end of life, we are "more than conquerors" when we face death, the conquered, accompanied by Christ the Conqueror.

Endnotes

1. Abigail Rian Evans, Is God Still at the Bedside?. Grand Rapids, MI: Eerdmans Publishing Company, 2011: 412. Print.
2. Agresti, James D. "Spending Age." Healthcare Facts (2012). Just Facts. Web. 14 Sep 2013. <http://

www.justfacts.com/healthcare.asp#spending-age>.

3. Letter to the Editor, World Magazine, 2013.
4. Evans quotes Karl Barth in Church Dogmatics, ed. and trans. T.F. Torrance and G.W. Bromiley, vol. III, pt. 2. London, UK: T. & T. Clark, 1960. p. 640.
5. C.S. Lewis, The Complete C.S. Lewis Signature Classics. New York, NY: HarperOne, 2002.
6. Elizabeth Kübler-Ross, To Live Until We Say Goodbye. Upper Saddle River, NJ: Prentice Hall, 1978: 14. Print.

References

Belz, Joel. "Freedom from fear." *World Magazine*. 18 Jul 2009: 5. Print.

Carattini, Jill. "Memory and Mortality." Ravi Zacharias International Ministries. (2013): Web. 12 Sep. 2013. <http://www.rzim.org/a-slice-of-infinity/memory-and-mortality>.

Dowd, Alan. "A Time to Die." *By Faith*. 3.13.41 (2013): 50-53. Print.

Evans, Abigail Rian. *Is God Still at the Bedside?*. Grand Rapids, MI: Eerdmans Publishing Company, 2011. Print.

Foster, Charles. *Choosing Life, Choosing Death: The Tyranny of Autonomy in Medical Ethics and Law.* 1st ed. Portland, OR: Hart Publishing, 2009. Print.

Hauerwas, Stanley. "Finite Care in a World of Infinite Need." *Christian Scholar's Review.* 38.3 (2009): 327-333. Print.

Jenkins, Holman W. Jr. "The Case for Immortality." *Saturday Evening Post*. Sep 2013: 14, 16, 96. Print.

Kübler-Ross, Elisabeth. *On Death and Dying.* 1st ed. Toronto, Ontario: The Macmillian Company, 1969. Print.

Lewis, C.S. *The Problem of Pain*. New York, NY: The Macmillian Company, 1959. Print.

Moreno, Jonathan D. *Arguing Euthanasia: The Controversy over Mercy Killing, Assisted Suicide, and the "Right to Die."* New York, NY: Simon & Schuster, 1995. Print.

Murray, Ken. "How Doctors Die." *Zocalo Public Square*. (2011). Web. 14 Sep. 2013. <http://www.zocalopublicsquare.org/2011/11/30/how-doctors-die/ideas/nexus>.

Sas, Daryl. "Principles of Christian Biomedical Ethics." Biomedical Ethics Class. Geneva College. Pennsylvania, Beaver Falls. 12 Jan 2013. Lecture.

Spurgeon, Charles H. *Morning and Evening: Daily Readings.* Blacksburg, VA: Wilder Publications. 2008. 71-72. Print.

Vandrunen, David. *Bioethics and the Christian Life: A Guide to Making Difficult Decisions.* Wheaton, IL: Crossway Books, 2009. Print.

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Book Reviews

Renaissance, the Power of the Gospel However Dark the Times

Os Guinness. Downers Grove, IL: IVP Books, 2014.

ISBN 978-0-8308-3671-0 (electronic: 978-0-8308-9657-4), 187 pages, paper, $11.99.

"In, but not of." "Not conformed, but transformed." "Yes to their gold, no to their golden calf." "Against the world, for the world." "No longer, but not yet." (86) Os Guinness tackles the question that has troubled worshippers of God individually and collectively since long before Job, Joseph, or David… how do we lead lives that are physically immersed in this present reality, as we attempt to retain our full devotion to Christ and maintain the evidence of this for others to see, so that with God's indwelling power we transform our world for God?

In a Christian sub-culture that continually laments the moral depths to which our world has sunk, Guinness brings light and hope. He realistically depicts our current depravity, but reminds us of the sovereignty of God and of God's work in willing believers. Setting the tone for his determined optimism, he quotes (14) G. K. Chesterton, "At least five times the Faith has to all appearances gone to the dogs. In each of these five cases, it was the dog that died." (G. K. Chesterton, *The Everlasting Man*, Garden City, NY: Image Books, 1955, 260-61)

Peppering his book heavily with pithy ideas and quotes from almost 80 secular and Christian thinkers covering a time span longer than two thousand years, Guinness examines our current state of affairs, area by area, and contrasts it to the ideal. As I read, I found myself frequently stopping to savor his and his sources' punch lines such as, "The corruption of the best makes for the worst corruption." (127) This is followed immediately by, "Lilies that fester smell far worse than weeds." (William Shakespeare, *Sonnet* 94, line 14) "The worldly church is not only corrupt but cowardly, for much contemporary worldliness is a voluntary capitulation to the spirit and system of the age." (119) "Times of the greatest success often carry the seeds of the greatest failure." (125) Perhaps my favorite realistic yet hopeful quote from Guinness was, "Under God and after the resurrection of Jesus, our work is never in vain. Our endeavors are worthy and solid… [but]… [n]one of our endeavors will meet with unalloyed and lasting success. Few of them will be complete…[t]ruly there is always more to come and the best is yet to be." (95)

Guinness gives the last twenty-seven pages to introducing and quoting in its entirety *An Evangelical Manifesto* (www.anevangelicalmanifesto.com). Emphasizing the true meaning of "evangelical," it clearly delineates the core components of our common faith. To add to the already widespread dissemination of this manifesto would be reason enough for this book. It serves an appropriate final chapter to a well-constructed, fun to read, challenging, and hopeful book. I highly recommend it.

Reviewed by Robert E. Cranston, MD, MA, FAAN, who is an associate clinical professor (Neurology) at University of Illinois College of Medicine, a hospital ethicist at Carle Foundation Hospital in Urbana-Champaign, and is medical director for medical subspecialties at Carle Clinic in Urbana, Illinois, USA.

Disaster Bioethics: Normative Issues When Nothing Is Normal (Public Health Ethics Analysis, Vol. 2)

Dónal P. O'Mathúna, Bert Gordijn, and Mike Clarke (Eds). Dordrecht: Springer, 2013.

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Ebola and other infections, hurricanes, earthquakes, tsunamis, plane crashes, and masses of displaced people are frequent topics in the media. But limited resources and sometimes limited infrastructure in the face of these unexpected and very complex emergencies raise ethical questions for caregivers. While best thought through in advance, these issues must be faced, "ready-or-not," when they occur. Where do we find the guidance needed in such times?

Disaster bioethics, like the field of public health, has until recently been largely neglected in the plethora of book-length treatments in bioethics. The goal of *Disaster Bioethics: Normative Issues When Nothing Is Normal***,** second in the series on Public Health Ethics Analysis, is meant to fill this gap. Disasters are a public health emergency, and a public health perspective differs, in many respects, from that typical of the individual healthcare practitioner. Public health, and therefore the ethics involved, require different considerations and emphases than the ethics of direct patient care because the population or community level perspective dictates that its practitioners consider more than the individual. For instance, distributive justice plays an important role in the choices that need to be made about the best use of available resources.

This collection discusses a wide range of disaster-related considerations and ethical issues—prevention, triage, resource allocation, training, communications, and disaster-related research. It identifies disaster victims as a vulnerable population that must be protected from exploitation and identifies informed consent as something that could easily be overlooked in an effort at expediency. Nearly half of the text focuses on issues and tensions pertinent to disaster-related research and sets a high bar for those who plan and conduct such research.

Two chapters deal with topics not usually addressed in publications in this field. Chapter two, on "macro-triage," introduces the concept of "the moral geography" of disasters and humanitarian relief. The author focuses attention on the military background underlying the bulk of publications on triage and the paternalism which often underlies military decisions. This could subordinate individual human rights to the "public good." In addition, preventable disasters frequently recur in the same areas repeatedly. Unfortunately, post-disaster efforts often fail to rectify the factors responsible, such as the long-term effects of colonialism or the lack of available funds to adequately prepare the population or build infrastructure able to withstand recurrent weather systems or natural events such as earthquakes. Even when these underlying factors are evident, political, international, and financial problems as well as culture often stymie change. Critical and innovative thinking is warranted to identify new and executable ways to correct or ameliorate these issues.

Chapter seven, on the importance of evidence-based disaster response, points out the problem of frequent reliance on "expert" opinion, myths and fallacies rather than on evidence in post-disaster decision making, and gives some examples where evidence contradicts common public and responder assumptions. This chapter also brings attention, almost in passing, to a widely neglected problem in response to disasters and many other situations--unthinkingly applying practices from one culture or setting to another without adequate knowledge of local practice and needs. Examples included are differences in psychological responses/needs in different settings, failing to take into account the resources of survivors and local society which can be employed in their own recovery from the disaster, and the unintended but real harm often done by treating survivors as dependent victims, undermining the resilience they would otherwise

demonstrate. These themes are reminiscent of those discussed in the recent book *When Healthcare Hurts.*

Disaster Bioethics is a compilation of diverse views and topics presented at a 2011 symposium funded by the Brocher Foundation (http://www.brocher.ch). The gathering's focus was on bioethical issues related to natural, human-related/caused, and complex disasters. Presenters represented international organizations such as Medecins Sans Frontieres, and many internationally recognized experts on ethics and medical disaster response. Like all such volumes, its thirteen chapters do not cover all relevant issues. But what is covered is presented thoughtfully and clearly. Chapter references should prove helpful to those new to the field or seeking background on a chapter's topic. The appendices helpfully include the *Code of Conduct for the International Red Cross and Red Crescent Movement and NGOs' in Disaster Relief*, which articulates 10 principles that warrant consideration, and the *World Medical Association Statement on Medical Ethics in the Event of Disasters*, which deals with several of the issues mentioned above. Unfortunately, this helpful volume is likely too costly to be widely read or widely used in preparing the healthcare personnel who will deal with the human side of disaster response.

Reviewed by Sharon A. Falkenheimer, MD (Aerospace Medicine), MPH, MA (Bioethics), who has taught bioethics at the University of Texas Health Sciences Center in San Antonio, TX, Trinity College in Trinity International University in Deerfield, IL, and in 11 nations. She has served in the US Air Force for over 26 years, where her responsibilities included training for and medical planning for disasters as well as responding to disasters. She is an Academician of the International Academy of Aviation and Space Medicine, a Fellow of the Aerospace Medical Association, and an Associate Fellow at the Center for Bioethics and Human Dignity at Trinity International University, Deerfield, IL, USA.

Disconnected: Youth, New Media, and the Ethics Gap

Carrie James. Cambridge: MIT Press, 2014.

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"Emerging adults," the newly minted idiom positively defining the period of adolescence, has captured the attention and concerns of "ripened adults" as reflected in several recently published books. Christian Smith examined the "dark side of emerging adulthood" in his book *Lost in Transition*, which focused in particular on the lack of moral grounding found among today's emerging adults. Here, in *Disconnected: Youth, New Media, and the Ethics Gap*, Carrie James focuses her study of "emerging adults" and "tweens" more narrowly upon the on-line life of this extended group, evaluating their comprehension of the moral and ethical issues involved in their disembodied interactions.

The study began as part of the Good Play Project, originally formed to evaluate young peoples' ethical sensibility with regard to on-line media. Conclusions were drawn from extensive interviews with youth aged 10-25 conducted over a six-year period of time, using open-ended questioning, directive questioning, and case studies that simulated on-line ethical dilemmas and stimulated reflective responses. While the original research identified five "faultlines" that were considered morally and ethically relevant to the digital age, this book concentrates on three: privacy, property, and participation.

There is no question that the pervasive technological disposition of our age has had a tremendous impact on those who are most encompassed by its presence and use, namely "emerging adults." James' conclusions therefore are not surprising, affirming what many already intuitively know and echoing what others, such as Smith, have discovered: there is a significant lack of ethical sensitivity and sensibility among youth today especially concerning on-line life. Furthermore, the ethical sensitivity that does exist is largely confined to consequence-driven individualistic thinking. Her analyses of the kinds

of ethical thinking that need to be cultivated are very informative but the means of cultivation she advocates—through society-wide efforts on the part of technological companies, educators, parents, and peers to stimulate and motivate such thinking—ignores the conclusion reached by Smith: that the problems of "emerging adults" are problems of our culture generally. Therefore, while her recommendations concerning the need for mentorship are optimistically logical, they are unrealistic, consisting in essence, of the "blind leading the blind."

As with other sociological studies, the book was tedious to read, consisting largely of verbatim responses from adolescents obtained during interviews. The essence of her findings, analyses, and conclusions are easily found, however, by simply reading the concluding sections of each chapter and the final chapter of the book.

That being said, the book is itself an effective vehicle for opening eyes and correcting the blind spots we all possess apropos the subterranean ethical dilemmas of this burgeoning digital age--even for those of us not wholly immersed in on-line life. Therefore, it is valuable reading for anyone engaged with digital media.

Reviewed by Susan M. Haack, MD, MA (Bioethics), MDiv, FACOG, recently retired from consultative gynecology at Hess Memorial Hospital and Mile Bluff Medical Center in Mauston, Wisconsin, USA.

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