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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.”

C. Everett Koop, Former US Surgeon General

“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

WE'RE ALL IN THIS TOGETHER

C. BEN MITCHELL, PHD

In his recent volume, *Human Dignity* (Belknap, 2011), George Kateb has proposed an account of human dignity that emphasizes the equal dignity of every person as the basis for human rights. He insists that “the dignity of every individual is equal to that of every other” and that “no other species is equal to humanity” (Kateb 2011: 5-6). He argues from a self-avowed, non-theistic point of view that the human species “is the only animal species that is not only animal, the only species that is partly not natural, and that is therefore unpredictable in its conduct despite its genetic sameness from one generation to the next” (*Ibid.*: 11). Kateb asserts that

All other species are more alike than humanity is like any of them; a chimpanzee is more like an earthworm than a human being, despite the close biological relation of chimpanzees to human beings. The small genetic difference between humanity and its closest relatives is actually a difference in capacity and potentiality that is indefinitely large, which actually means that it can *never* be fully measured. Only the human species is, in the most important existential respects, a break with nature and significantly not natural. It is unique among species in not being only natural (*Ibid.*: 17, emphasis original).

Furthermore, he maintains,

There is no species like humanity. It is capable of doing not just a few remarkable things that no other species can—the same is true of many other species—but an indefinitely large number of remarkable things that no other species can. . . . Only humanity can perform the three indispensable functions: keep the record of nature, understand nature, and appreciate it. The human species, alone among species on earth, can perform these services to nature on earth and beyond, and do so in part not only for its own sake but for the sake of what is not itself (*Ibid.*: 113-114).

Despite his several references to genetics, Kateb rejects reductionistic anthropologies. His view of human dignity is a kind of phenomenological perspective that is framed by his appeal to what he calls “human stature” (*Ibid.*: 122 and *passim*). By “human stature” he means the great achievements of the human species found in the human record that rise above the achievements of any one individual. As he admits, “Perhaps the very notion of human nature is mistaken: the human species is not only natural. Being non only natural, the human species is boundless . . . because human cultural activity is indefinitely various, just as human creativity is so to speak infinite” (*Ibid.*: 131). At the same time, he worries about what attempts to enhance human capacities by genetic manipulation might mean for the future. “How such efforts would affect the idea of dignity I do not know. Whether the work would enhance the whole species or just some members or groups of it is purely speculative. Many of the efforts could well be incompatible with human dignity . . .” (*Ibid.*: 132). Those uniquely human characteristics that constitute the basis for human dignity and that, presumably, should be inviolable include:

the use of spoken language; the use of written language, and other notional systems; from language comes the ability to think (including memory, the glue of thinking); from thinking, the ability both to accumulate knowledge and become self-conscious; from all these comes the capacity for agency; from agency comes what Rousseau call “perfectability,” a synonym for which is “potentiality”; from potentiality comes unpredictability and creativity; necessary to unpredictability and creativity is imagination, which is interwoven with language but conceptually separate from it. Imagination shows itself in many ways, but one that deserves mention here is the ability to represent or reproduce the world, through verisimilitude or consciously repudiated verisimilitude, as in drawing and stories (*Ibid.*: 133).

But what of those who cannot exercise these traits? “Yes,” affirms Kateb, “they remain human beings in the most important respect. If they cannot actively exercise many or any of their rights they nevertheless retain the right to life . . . they must be treated as human beings, not as subhuman or as animals or lumps of matter” (*Ibid.*: 19). So I take it that human dignity is a characteristic of the human community and thus attributable to all individuals within that community. Although there are certainly other ways of conceptualizing human dignity, Kateb offers an important reminder that we’re all in this together. **E&M**

GREY MATTERS

THE SUM OF ALL THOUGHTS: PROSPECTS OF UPLOADING THE MIND TO A COMPUTER

WILLIAM P. CHESHIRE, JR., MD

I think the brain is like a program in the mind, which is like a computer. So it's theoretically possible to copy the brain on to a computer and so provide a form of life after death. – Stephen Hawking¹

Abstract

Beginning with the premise that the human mind is fundamentally a computer, and extrapolating from the history of computer technology, which has yielded ever-increasing processing speeds, some futurists forecast a time when it may become possible to upload the human brain to a computer and thereby attain enhanced powers and a sort of immortality. Such predictions add new meaning to the idiom of having one's mind in a cloud. They also raise profound ethical questions. The suggestion that brain uploading could be achieved safely suggests unbridled hubris. The belief that human identity could be faithfully replicated in a machine is possible only within a reductionistic, hence inadequate, understanding of the human person. A hypothetical post-neuron future in silicon could never be more than a collection of inauthentic human representations.

Introduction

The last several decades have seen an explosion of information technology. The formalization of data in the language of computer programming combined with exponential increases in microelectronic processing speed have yielded computational machines that rival some of the cognitive capacities of the human brain. Regardless of whether the field of artificial intelligence succeeds in building machines that mimic or even surpass human cognition, its hypothetical basis already has implications for how people think about human intelligence.

One implication is that many people today view the brain as being essentially a computer. The analogy is increasingly evident in common language. The verb “to process,” for example, which denotes a series of mechanical operations, is sometimes used to refer to reasoning or gaining an understanding of something. Whereas computers run on software, some say the brain thinks with “wetware.”² After all, quipped a fictional neurosurgeon on the television drama *Three Pounds*, the brain is just “wires in a box.”³

Assuming for the moment that brains and computers are functionally equivalent information processors that happen to utilize different hardware, then at every level the design of the brain would be a useful model for building better computers. In principle, it might be possible to translate neural signals into electronic currents and, by joining dendrites with nanofibers, to connect neural networks with silicon chips. No longer would there be a meaningful distinction between neuroscience and

computer engineering. Brain and machine would coalesce in their material unity. Accordingly, the futurist Ray Kurzweil predicts a day when computers will exceed human intelligence. He writes, “There are no inherent barriers to our being able to reverse engineer the operating principles of human intelligence that will become available in the decades ahead. . . . Once a computer achieves a human level of intelligence, it will necessarily soar past it.”⁴

As computer technology has already profoundly shaped life in the 21st century, its future promises to be a source of both exhilaration and apprehension. Its grand achievements will ever be a fascinating subject for technical expertise as well as ethical reflection.

Assistant or Replacement

A further implication of the premise that brains and computers are identical is that, given a sufficiently robust computer chip and biomechanical interfacing, a computer might substitute for the brain. If the only meaningful difference between the two were seen as a choice of hardware, then a failing or aging brain might seek a more durable home within the circuits of the latest computer. Personal identity, memories, likes and dislikes, loves and fears, beliefs and aspirations—consciousness itself—would be reframed in a substrate of silicon, copper, plastic, and glass, enclosed perhaps in a polished aluminum pseudocranium.

The hypothetical procedure of transferring the mind to a computer is known as “uploading,” which in computer engineering denotes the transfer of data from one computer system to a higher level computer. Uploading a human brain to a computer, writes Kurzweil, would mean “scanning all of its salient details and then reinstantiating those details into a suitably powerful computational substrate. This process would capture a person’s entire personality, memory, skills, and history.”⁵ The aspect of such technology that he considers “the most compelling” would involve “the gradual but inexorable progression of humans themselves from biological to nonbiological.”⁶

Joining the chorus of would-be robots is Nick Bostrom, who asserts that “Substrate is morally irrelevant, assuming it doesn’t affect functionality or consciousness. It doesn’t matter, from a moral point of view, whether somebody runs on silicon or biological neurons (just as it doesn’t matter whether you have dark or pale skin). On the same grounds, that we reject racism and speciesism, we should also reject carbon-chauvinism, or bioism.”⁷

The Failed Comic Upload

Novel experiments seldom go precisely as planned, as I learned during my own first experiment with uploading, which was an experience that frames my evaluation of proposals to transfer a human mind into the silicon substrate of a computer circuitboard. I was seven years old—too young to know much about the exciting subjects that laid years ahead, like mathematics, science, medicine, and ethics, and long before the arrival of personal computers, cable television, or the Internet, but old enough to enjoy cartoons. That summer while visiting my grandmother in South Hill, Virginia, I noticed that some of the animated children’s programs on her television

station were more interesting than the familiar ones I was used to watching back home in Charleston, South Carolina. So I devised a plan to persuade our local television station to carry them.

My writing skills at the time were rudimentary. I was incapable of advancing a cogent argument, had no contacts in the cartoon industry and no idea where cartoon animators practiced their craft, but I could draw. On the largest sheet of paper I could find, with meticulous ballpoint pen strokes and delicate crayon shading, I sketched each of the cartoon characters that appeared in the afternoon programs on the Virginia station, complete with block sequences telling captioned stories. My grandmother helped me to spell the names of the characters correctly. As television in those days was broadcast in black and white, I took creative license in adding color to the scenes. Once my mother and I returned to Charleston, at my insistence she took me to the WCSC television station on East Bay Street so that I could complete my mission, which was to convince the executives at the station to put those cartoon characters on the Charleston station so that my friends and I could tune in and watch them on a regular basis. With my pictures in hand, surely they would be able to find the corresponding programs, wherever one gets cartoon programs, and upload them to their broadcasts.

As the son of a newspaper editorial writer, and as a boy who regularly watched the evening news with my father, the media seemed as available to me as our own back yard. From my perspective, my father was head of it all, and whoever was in charge at the television station would certainly know that and agree to meet with me. We arrived at the television station without an appointment, and my mother pulled open the great glass doors as I ambled in, my little hands carefully holding the Crayola portfolio. For some reason the receptionist seemed puzzled, but after a short wait we were escorted back, and I was given a private audience with the host of the station's daily community affairs program. I entrusted him with my drawings, and he assured me that he would put them on television. I was elated. Getting things done in the real world, so it seemed, was easier than I had expected.

That afternoon when his daily program aired, my mother and I watched at home as he held my drawing before the camera, which zoomed in as he praised the youthful artwork. In less than a minute it was all over. That was it. I was dumbfounded. The problem was, by "putting my cartoons on television," we meant very different things.

The television host was extremely generous to air my sketch, but he misunderstood what I was unable to express in words, which was that I wanted the station to show the same programs that I enjoyed watching in Virginia. My drawing was merely a snapshot representation and not the actual animated cartoons that I hoped to see broadcast. It contained bits of information but was not the real thing. My drawings were only representations of animated cartoons, just as cartoons are only representations of living persons. To confuse one for the other leads to outcomes that at best are disappointing and at worst absurd.

To Upload or Not to Upload

The prospect of uploading a mind to a computer raises profound questions. Among them, at the level of engineering, is feasibility. The structural and functional complexities of the human brain pose an enormous challenge to proposals to transfer

its information content and internal networking to a machine. Each of the brain's hundred billion neurons connects with thousands of other neurons.⁸ Kurzweil estimates that the brain comprises 10^{14} neural connections, which translates to some 10^{16} synaptic transactions per second.⁹ And that estimate is just for neurons; it does not include the role of glial cells in shaping cognitive processes.¹⁰

Between neuroscience and computer science lies a huge chasm of incomplete knowledge. Stanley L. Jaki asserts that "No pronouncement on the identity of brain and computer should be paid serious attention when it is evident from the context that the gravity and extent of unsolved questions in brain research are systematically underplayed or simply overlooked."¹¹ Among the unresolved questions is that "The nervous system appears to be using a radically different system of notation from the ones we are familiar with in ordinary arithmetic and mathematics," for which reason "the mechanisms of the brain underlying the handling of information must be in principle unobservable to mechanistic investigation,"¹¹ if not also untranslatable into computer code.

Kurzweil attempts to resolve the complexity conundrum by appealing to Moore's Law, according to which historically computational speed has doubled approximately every two years. For Kurzweil, all practical objections based on current engineering limitations seem to vanish once Moore's Law is invoked. Extrapolated onto a historical graph that has risen exponentially, at first glance anything seems possible.

There is, however, more than Moore's law to consider. The claim that an exponential increase in computational power will continue in an unending trajectory, ultimately to surpass human intelligence, presupposes that there are no upper limits to the speed at which information can be transmitted. In reality, however, the laws of physics do impose physical constraints on signaling. With increasing miniaturization, physical and chemical interactions behave differently, because it is the quirky laws of quantum mechanics that govern the interactions of matter at the nanoscale.

The appeal to Moore's law as an engine that inevitably will merge human with computer intelligence also presupposes that human thought is fully reducible to mechanical processes. The assertion of reductionism, however, is not a scientific claim but a metaphysical one. The methodology of science, which considers only what can be known through empirical investigation of material phenomena, cannot prove through empirical investigation that there is nothing more to the human mind than science can measure in the brain.¹² Science, therefore, lacks the philosophical basis for assuring those who would consider uploading their brains that the process would retain their true selves.

Aside from such limits, another feature that is often overlooked is that dendritic connections between neurons are extraordinarily tiny and fragile. No current or foreseeable technology could capture an individual's entire neuronal architecture, let alone information stored deep inside neurons within the molecular configuration of nucleic acids, without destroying every detail of the brain, if not also the desired information itself, in the extraction process. Kurzweil's prediction that someone will invent nanobots that will somehow solve that problem¹³ finds no plausible support in engineering theory. These would be the nanobots not of science but of comic strips.

Another interesting problem of mind uploading is that it challenges concepts of personal identity. Copying one's brain onto a silicon substrate would seem to create

an additional person having the same identity. The paradox would not be resolved by technology that in its course destroys the original brain, because once one's complete identity were to exist within a computer, it could be copied and recopied into a limitless number of other computers. Ray Kurzweil imagines such a scenario: "You could even scan and copy me while I was sleeping. If you come to me in the morning and say, 'Good news, Ray, we've successfully reinstantiated you into a more durable substrate, so we won't be needing your old body and brain anymore,' I may beg to differ."¹⁴

In a further examination of this paradox of multiple exact replicas laying claim to the same identity, Donald MacKay argues that it would seem "absurd to suggest that what identifies you is simply the information-flow pattern in your nervous system."¹⁵ MacKay reasons that "conscious experience is *embodied in* our brain activity: neither on the one hand identical with it, nor on the other hand quasi-physically interactive with it."¹⁵ For MacKay, to copy the brain to a computer would be to create a correlation, not a translation.

Even if mind uploading is never attempted, the belief that, given sufficient advances in technology, in principle it could be done has subtle implications for neuroethics now. The view that the human mind is equivalent to a computer is possible, as C. Ben Mitchell and colleagues have argued, "only on the assumptions of the scientific materialist, which reduce human persons to their biological parts and biotechnological enhancements."¹⁶ In the overvaluing of computer technology, proponents of mind uploading undervalue human dignity.

There is still a great deal about how the brain works that neuroscience has not deciphered. Although neuroscience has shed considerable light on the functions of the brain, it lacks the ability to explain the phenomena of consciousness, personal agency, conscience, moral responsibility, the continuity of identity over time, or human purpose. Of these, consciousness seems the most elusive, if not irreducibly subjective. If consciousness were reducible to neural activity, then, writes Jaki, "it should be subject, like any other physical process, to cybernetical analysis. But evidently, the phenomenon of consciousness slips through the sieves of cybernetics no less swiftly than it keeps eluding the anatomist's scalpel or the neurophysiologist's electrodes."¹⁷

Until such time as these unknowns can be explained in scientific terms, which seems doubtful because they transcend materialistic descriptions, projects intended to upload a human mind to a computer would risk leaving behind essential aspects of what makes one human.

A One-Way Port

Before departing one's body and—assuming for the sake of argument that it is even possible—uploading one's mind to the realm of cyberspace, one ought to pause to consider what kind of world that might become for those who choose to dwell within it. Once uploaded, there is no going back. In a reversal of the choice faced by Lot's wife, going forward into the realm of mind uploading would turn one's fleshly brain to solid matter.

At a recent conference at Oxford University, Bostrom told his academic audience, "I personally believe that once human equivalence is reached, it will not

be long before machines become superintelligent . . . our future is likely to be shaped by them, for the better or the worse. Superintelligence . . . could be an extremely powerful ally that could help us solve a number of other problems that we face,” but he added that superintelligence could also be “extremely dangerous,” even to threaten our extinction.¹⁸

In his novel *The Transhumanist Wager*, Zoltan Istvan’s transhumanist protagonist argues,

Our biology severely limits us. . . . The transhumanist believes we should immediately work to improve ourselves via enhancing the human body and eliminating its weak points. This means ridding ourselves of flesh and bones, and upgrading to new cybernetic tissues, alloys, and other synthetic materials, including ones that make us cyborglike and robotic. It also means further merging the human brain with the microchip and the impending digital frontier. Biology is for beasts, not future transhumanists. . . . If you’re not necessary and do not serve a transhuman purpose, and you also destroy resources for those who are necessary and serve transhuman purposes, you may not be allowed to exist.¹⁹

There is no guarantee that existing as computational entities liberated from organic bodies would ensure autonomy or happiness, and every reason to think not. Posthuman entities existing as data clouds might find themselves at the mercy of vastly more powerful computational forces. Distinctions between uploaded human intelligences and artificial intelligences might disappear as both further evolve and contend for resources. Bereft of human programmers, such a world might know no ethical boundaries. Absent human persons, one might also ask whether that would matter.

One More Experiment

Arthur C. Clark imagined a possible future of artificial intelligence in the 1968 MGM movie *2001: A Space Odyssey*. In a now famous line, the film’s antagonist, a sentient computer named HAL 9000, takes life-threatening action against astronaut Dave Bowman when he attempts to shut it down. Bowman asks, “Open the pod bay doors, HAL.” HAL calmly replies, “I’m sorry, Dave. I’m afraid I can’t do that.”

When I did my own experiment using Apple’s voice recognition program that is built into the iPhone, life imitated art. With playful intent, I spoke into my phone, “Open the pod bay doors, Siri.” Without a blink in its screen, the phone replied, “Sorry, William. I don’t do pod bay doors.”

The iPhone was, of course, only generating text according to its programming, treating words not as parcels of meaning to convey intent but as bits of neutral data to be shuffled in the mechanical process of input and output. My iPhone was not actually thinking. Or was it?

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THE PRINCIPLE OF TOTALITY AND THE LIMITS OF ENHANCEMENT

JOSHUA W. SCHULZ, PHD

As for the patient, he is not absolute master of himself, of his body or of his soul. He cannot, therefore, freely dispose of himself as he pleases. Even the reason for which he acts is of itself neither sufficient nor determining. The patient is bound to the immanent teleology laid down by nature. He has the right of use, limited by a natural finality, of the faculties and powers of his human nature. Because he is a user and not a proprietor, he does not have unlimited power to destroy or mutilate his body and its functions. Nevertheless, by virtue of the principle of totality, by virtue of his right to use the services of his organism as a whole, the patient can allow individual parts to be destroyed or mutilated when and to the extent necessary for the good of his being as a whole. He may do so to ensure his being's existence and to avoid or, naturally, to repair serious or lasting damage which cannot otherwise be avoided or repaired.¹

—Pope Pius XII, 1952

Introduction

Within the Thomistic tradition, the Principle of Totality (*TPoT*) articulates a secondary principle of natural law guiding the exercise of human ownership or *dominium* over creation.² In its general signification, *TPoT* is a principle of distributive justice determining the right ordering of wholes to their parts.³ In the medical field it is traditionally understood as entailing an absolute prohibition of bodily mutilation as irrational and immoral, and an imperfect obligation to use the parts of one's body for the perfection of the bodily whole.⁴ *TPoT* is thus a key element of the system of principles within which an individual exercises her right to life; it helps specify the nature, scope, and limits of those actions by which an agent permissibly acts in order to preserve her life. While the Thomistic tradition and the Catholic Church have drawn clear conclusions from the principle regarding, for example, direct sterilization and non-therapeutic experimentation on human subjects,⁵ less attention has been given to the implications of *TPoT* for non-therapeutic procedures that may positively impact biological functioning or supra-biological goals—that is, for human “enhancement.” While increasing the efficiency with which we pursue biological and social goals might sometimes be permissible—*TPoT* does *not* entail that all non-therapeutic bodily alterations are illicit—modern popes have argued that such changes nevertheless often corrupt the super-personal *meanings* of the human body by leading us to devalue what is intrinsically valuable and so violate *TPoT*.

As Pope Pius XII suggests, correctly applying *TPoT* requires us to first establish that the objects to which the principle is applied in fact stand in the relation of whole to part.⁶ This was the most pressing issue of Pius's time, an age when totalitarian states claimed the right to dispose of their citizens in whatever manner was most beneficial either to the state or to the species as a whole. Pius forcefully denounced such claims as falsely assuming that the participation of individuals in social life for

the sake of the common good made those individuals constitutive parts of a state, thereby making the good of the individual wholly subordinate to the greater whole.⁷

Secondly, Pius argues, if a part-whole relationship has been established, we must also clarify “the nature, extension, and limitation of this relationship” in order to correctly apply *TPoT*.⁸ This is the most important task for our time. Proponents of the “Principle of Autonomy” in secular bioethics claim that individuals have limitless authority to dispose of their bodies as they wish, including the right to mutilate and destroy their bodies as well as enhance them. They argue that such acts are licit so long as the patient requesting them satisfies several purely procedural criteria: the procedure must be requested intentionally, with an understanding of the procedure and its consequences, and the request must be free of compromising extrinsic influences.⁹ Critics of this view often argue that the Principle of Autonomy ascribes a purely instrumental value to the body more appropriate to machines than to human beings.¹⁰

Following the example of Pope Pius XII, we will explore the degree to which *TPoT* non-univocally guides our use of both artifacts and bodies. We will argue that a careful analysis of these distinct *kinds* of totalities suggests that the application of *TPoT* to artifacts and bodies is strongly isomorphic, which is what tempts advocates of the Principle of Autonomy to invalidly infer the absolute *dominium* of the individual over her body. The inference is invalid because this isomorphism also includes a principle of intrinsic value whose function is to resist the instrumentalization of *both* artifacts *and* bodies in some contexts; we are not even related to artifacts as advocates of absolute autonomy believe we are, let alone to our bodies. Rather, the limits of human *dominium* are determined by the nature and finalities, inherent or acquired, of the objects in question, and it will be argued that articulating these limits raises important, understudied, and fascinating questions about the permissibility of various kinds of human enhancement.

Artifacts and the Principle of Totality

Imagine, if you will, a motorized hairbrush with at least three parts: a brush, a handle, and a motor which cycles the brush through the long and tangled locks of a princess. Artifacts of this sort are not substantial beings in the strict sense. They are only unified to the degree that the parts are ordered to the single activity of brushing hair.¹¹ Artifacts are *composed* of essentially unified substances such as plastic and metal, but the motorized hairbrush does not itself act so as to preserve its integrity and activity as a hairbrush without assistance from motorized hairbrush mechanics who maintain them as such. Nevertheless, there are several senses in which the whole artificial being we call a “motorized hairbrush” has an end *qua* artifact analogous to the natural ends of substantial beings.

First, the artifact has *ontological priority* over its parts. A brush is only a brush when it serves the purpose of brushing hair, and the motor is only a hairbrush motor insofar as it is put to work moving brushes. Separate these parts from the machine and one has potential or former motorized hairbrush parts; completely separate them from their instrumental context and they will revert back to their natural status as hunks of plastic and metal.

Second, the artifact has *causal priority* over its parts. The goal of having one's hair brushed can be achieved independently of both the *form* and *matter* of its parts so long as some other parts are capable of doing what they do. Functionally equivalent parts are *fungible* in relation to the whole: a brush with metal rather than plastic tines, or perhaps a chemical conditioner, might do the same work. Motorized hairbrushes therefore have flexible formal identities: one can replace most of the functional parts of a motorized hairbrush with fungible equivalents without assailing its artifactual identity.

Third, the good of the motorized hairbrush as a whole has priority over the good of its parts, which are therefore subordinate to the good of the hairbrush itself. This follows from the fact that the hairbrush does not require the existence of any particular part in order to smooth someone's hair. Sometimes this end is frustrated by a defective part, such as a broken handle, and can be better achieved by replacing the part. At other times, the normal functioning of a non-defective part constitutes a structural condition for the defective functioning of other non-defective parts. A powerful industrial motor may be too strong for the wooden arm of the hairbrush or the delicate hair of a princess, either of which may snap and break as a result. Here there is a lack of functional harmony between the otherwise normally operating parts, as well as a lack of functional fitness between the part and the artifact's purpose. One should replace the offending parts with parts more suitable for princesses and for each other.

We can even construct scenarios in which the goal of the hairbrush can only be achieved through the sacrifice of one or more of its parts. Imagine an earthquake striking the salon in which a princess is being prepared for a masquerade ball. Caught by the hair, she is slowly dragged toward a gaping crevice in the floor by the miraculously still functioning motorized hairbrush. A quick-thinking hairdresser would do well to use a handy curling iron to smash the arm of the machine, thereby saving the princess, the brush, and her hair for the ball.

In sum, *TPoT* entails that the good of the parts is wholly subordinate to the good of an artifactual whole, insofar as it is manifestly good to use them *for* the whole, in three specific circumstances: when the parts are defective, when they are ill-fitted to one another or to the artifact's end, and in extraordinary circumstances when their normal functioning is a hindrance rather than a help.

The issue of enhancement raises a new issue about the *intrinsic* value of parts and wholes. In most cases, replacing the parts of an artifact—or even the whole artifact—for the sake of the more efficient or qualitatively better accomplishment of the artifact's end is *prima facie* reasonable. Speaking in an unqualified manner, this is so because artifacts and their parts possess merely *instrumental* value. Thus we can reduce questions of enhancement to questions of usefulness, to the ability of an artifact and its parts to achieve the instrumental ends to which they are directed. Just as the fungibility of an artifact's parts derive from their contribution to the work of the whole artifact, so too does the value of an artifact derive from its contribution to the achievement of some human purpose. The value of an artifact is extrinsic to its existence *as* an artifact: useless artifacts are worthless.

In a secondary and qualified sense, however, some artifacts are valuable for non-instrumental reasons. Some artifacts are so beautiful that it would be a shame

to destroy them (think of a *gilded* motorized hairbrush); others have historical or cultural value independent of their usefulness (think of the *first* motorized hairbrush). Some artifacts have *moral* value (or disvalue) due to their intransitive effects on those who use them.¹² A computer might be very good for viewing pornography and writing offensive political screeds without either of these activities contributing to the flourishing of human beings. Finally, some things can be invested with truly *intrinsic* value by grace: the priestly stole one wears around the neck to signify Christian ordination and the chalice which holds the Eucharistic Blood of Christ are *holy*.

While all such values derive from a finality *extrinsic* to something's status as an artifact, not all extrinsic values are equal. The distinction and difference is this: the value of aesthetic, historical, and cultural objects constitutes a considerable but defeasible reason against their destruction, replacement, sacrifice, or enhancement. One might sacrifice, re-use, or enhance them in extraordinary circumstances, such as a zombie apocalypse, but not otherwise. To do so would be to act contrary to their status and value as aesthetic, historical, or cultural objects. In contrast, the wanton destruction, replacement, sacrifice, or enhancement of a sacred object would constitute what Michael Sandel calls a "corruption" of its divine rather than human source of value, a profanation of the value of the thing.¹³ To make a sacred object more suitable merely for human purposes would make an idol of it, as the point of sacred things is to give glory to God rather than pleasure to man. What is holy stands forth from the mundane, having been set aside and removed from the legitimate sphere of human *dominium*.

Given the analysis above, the Principle of Totality allows us to make several normative distinctions. The first is between the *employment* and *misuse* of artifacts. To *employ* an artifact properly is to use it in accord with its artifactual end rather than otherwise. Thus one properly employs a computer to compute, and misuses a computer as a doorstop, a task which could be better accomplished with a more suitably designed artifact. Likewise, *TPoT* allows us to distinguish between *beneficial* and *abusive* uses of an artifact. To *abuse* an artifact is to use it contrary to its finality *qua* artifact, that is, as contrary to human flourishing, whereas to use an artifact *beneficially* is to use it in ways which actually contribute to human flourishing. Obviously, beneficial and abusive uses of artifacts do admit of moral evaluation. However, we should emphasize the difference between *technical* and *moral* evaluation. One can *misuse* artifacts in ways that are either *beneficial* or *abusive*: one can misuse a computer as a doorstop to help occupants flee a burning building or to conceal homemade bombs as part of a terrorist plot. Likewise, one can *employ* artifacts beneficially or abusively: one can employ a knife to cut steak or to permanently silence one's shrewish mother-in-law.

Third, *TPoT* allows us to distinguish between *repairing* and *vandalizing* an artifact. Both actions involve affecting the functional integrity of the artifact, that is, the ability of its parts to contribute to the finality of the whole artifact. *Repairing* an artifact restores and optimizes the functional integrity of its parts for the sake of the whole. *Vandalism* destroys an artifact's functional integrity. As with all technical evaluations, neither repair nor vandalism is morally good or bad *per se*. It would be *prima facie* permissible to sabotage the weapon systems of a murderous robot like the "Terminator," but *prima facie* permissible to repair a broken coke machine.¹⁴

Finally, *TPoT* allows us to distinguish between *honoring* an artifact on the one hand and *committing sacrilege* with an artifact on the other. To *honor* an artifact is to acknowledge and respect its historical, aesthetic, or cultural value. This entails *prima facie* obligations to protect the material integrity of such objects and to communicate their value to others, as we do by creating public museums to house such objects. Insofar as these objects are excluded from the instrumental schema with which we evaluate other artifacts, we profane them to the extent that we ignore their resistance to purely technological evaluation. The worst kind of profanity is sacrilege, for sacred objects are those which have truly assumed, and do not merely approach, intrinsic value. To use them for purposes contrary to their assumed nature is to act contrary to their very meaning as supermundane objects. For instance, sacred objects are fitting or unfitting for God. Such evaluation is *analogical* rather than *technical*, assessing the degree to which such-and-such *represents* or *conveys* God's glory. One *contemplates* a stole by asking how its hue limns repentance and royalty; one *profanes* it by asking whether it is good for keeping necks warm; and one commits sacrilege by *misusing* it, say, as a dish rag.

The Social Whole

The ontological situation changes when we turn to the relation between society and its citizens, which the recent experience of world war made Pius XII and his predecessor keen to emphasize. Human beings are parts of society as members and cooperators rather than as integral parts.¹⁵ In contrast to the substantial unity possessed by natural substances, Pius contends, society "has no unity subsisting in itself, but [is] a simple unity of finality and action. In the community individuals are merely collaborators and instruments for the realization of the common end."¹⁶

Consider the consequences for the three kinds of whole-to-part priority we identified in the case of artifacts. First, as a moral rather than physical unity, the State does not have ontological priority over individual human beings. This is so, on the one hand, because human beings have ends independent of their participation in civic society (such as familial and religious ends), and on the other hand, because social relations supervene on persons and have no existence apart from them. As Aristotle argued, one does not make a people by drawing lines on maps: only a common aim brings a community of action into existence.

Second, as Pius notes, while things possessing substantial unities "can dispose directly and immediately of integral parts," this is not the case with societies and their members. Societies do not have absolute causal priority over their members. Insofar as we can talk about societies or States moving their members, their ability to do so is both indirect and remote. Societies provide individuals with reasons for action through the creation and enforcement of law and the communication of culture, but no such reasons are sufficient for action. Indeed, it is precisely because such reasons are *not* sufficient that we require both judicial systems and liberal arts institutions to motivate people to act for the common good.

The point to emphasize, however, is that societies cannot achieve the common good independently of achieving the good of their members, since society's members are not fungible in relation to society as a whole. What motivates this conclusion is the premise that individual human beings themselves have intrinsic worth (or dignity),

and as such cannot be purely subordinated to the good of larger wholes in which they participate. A society which imprisons its inner-city poor and replaces them with harder-working immigrants, or which kills its elderly and its young so as to eliminate their retarding effect on the liberty and pocketbooks of those who remain, has not thereby made progress in achieving the common good.

This thought brings us to our last contrast with artifacts: whereas a tool has anterior and asymmetric value relative to its constituent parts, the opposite is true of man's relation to society, whose purpose is to serve individuals by "regulat[ing] the exchange of mutual needs and to aid each man to develop his personality fully according to his individual and social abilities."¹⁷ It is for this reason that the Thomistic tradition has always held that while public authorities can make demands upon individuals so as to better coordinate and direct them to the human good, "in no case can it dispose of [their] physical being."¹⁸ Rather, the opposite is the case: there are times "when in the course of human events it becomes necessary for a people to dissolve the political bands which have connected them and to assume among the powers of the earth the separate and equal station" to which natural law and nature's God entitles them.¹⁹

In short, the Principle of Totality does not strictly apply to a purely moral entity such as the state, whose good is not realized by the subordination of its members to the whole but instead by the increased ability of each member to achieve his own finality by his participation in the whole.²⁰

Isomorphic Application of Totality to the Body and Artifacts

There are significant similarities between the part-whole relations constitutive of individual human beings and those of artifacts. As Aristotle famously argued, the bodily whole is *ontologically prior* to the nature of bodily parts; a hand is properly a hand only when it possesses the active potentiality (first actuality) for the work of a hand.²¹ Lab-grown or amputated hands are possible (passively potential) or former hands; separated too far from its teleological context, a hand loses its substantial unity and decomposes into more basic component substances. Likewise, the biological whole is in important ways *causally prior* to its parts: the end of *life* is accomplished independently of the matter of individual parts. This is true of any living thing, which must metabolize matter-energy from its environment in order to sustain its substantial integrity. Whereas the causal priority of the artifactual whole entails that artifacts can retain their identity *despite* the replacement of their fungible parts, we find that living things retain their substantial identities *because* they are capable of replacing their material parts, of animating non-living substances by subordinating them to the activities of the living whole.

Indeed, precisely because the failure to subordinate parts to the whole entails the destruction of living things, the active subordination of parts *to* the whole *by* the whole is both the essence and good of living organisms *per se*.²² In the human being alone do we find a being capable of understanding this principle and directing his actions in accord with it for the sake of life. Insofar as the Principle of Totality just is the rational articulation of the finality of life—a principle which makes known the proper participation of practical reason in the providential ordering of nature we

call *natural law*—the principle is normative for human beings.²³ It is the rational expression of the *entelechy* of the body-person to the full actualization of her nature.

Traditional applications of *TPoT* to individuals are isomorphic with its application to artifacts.²⁴ For instance, *TPoT* allows individuals to repair injured body parts, as when we suture a wound, and to replace malfunctioning bodily parts, as in knee-replacement surgery. Likewise, *TPoT* allows us to adjust the functioning of some parts in order to harmonize their effects with the operations of other bodily systems, whether through something as simple as physical therapy, or through complex hormone-supplementation regimens for menopausal women. It even allows us to sacrifice otherwise healthy body parts when this is necessary to preserve one's life—for example, when one's foot is caught in a railroad track as a train fast approaches.²⁵

Moreover, we commonly express our approbation or disapprobation of various uses of the body using terms which mirror similar judgments about the uses of artifacts. The art of the physical therapist, strength coach, or dance instructor requires him to distinguish between proper and improper body mechanics (or *employment*). We can likewise distinguish *beneficial* from *abusive* uses of the body on the basis of their contribution to or frustration of human flourishing, as we do when we advocate exercise and discourage someone from smoking crack-cocaine.

As we saw in the case of artifacts, we must beware of confusing these technical categories with one another and with moral evaluation. One may misuse one's body beneficially or abusively—one may *misuse* one's head to stop a door from slamming shut on a child, with or without injury to oneself, just as one may *employ* one's body beneficially or abusively: moderate jogging is healthy, but running marathons not so much (ask Phillipides).

The most famous medical application of the Principle of Totality distinguishes between *healing* and *mutilitating* the body according to the same standard utilized to distinguish *repairing* and *vandalizing* artifacts.²⁶ *Healing* the body optimizes the functional integrity of bodily parts for the sake of their contribution to bodily health, whereas *mutilation* destroys it.²⁷ Because *healing* is partly defined according to its finality, it includes procedures, such as amputations, which would be mutilating if they were done for some other purpose. Ethicists must therefore define specific actions according to the standard determinants of human action (i.e., *object*, *intention*, and *circumstances*) rather than by simply describing the physical changes a procedure brings about in a body. In particular, the moral object of the action must include the understood effect the procedure will have on the ability of the part to contribute to the continued health of the physical organism.

A more contentious isomorphism occurs in our distinctions between *honoring* and *profaning* the secondary value of artifacts and *respecting* vs. *violating* the dignity of persons. Just as honoring an artifact requires both acknowledging its value as a historical, aesthetic, or religious object and protecting its material integrity for that reason, so too does respecting the dignity of a person require acknowledging the value of the body as the "site" of rational agency, of personhood, and protecting the material integrity of the body for that reason. The point of attributing dignity to the body is to remove it from the instrumental schema with which we value artifacts, for as in the case of sacred objects, dignity refers to the intrinsic rather than instrumental value of the body.²⁸ It is for this reason that Catholic bioethics, which requires respect

for the dignity of the body-person, is so often at odds with secular thought directing us to respect absolute personal autonomy—that is, the desires of competent patients, whatever these may be—since by ascribing purely instrumental value to the body, advocates of autonomy deny its exclusion from technocratic reasoning and assert our total, limitless *dominium* over our bodies.

Defending the Inherent Dignity of the Body-Person

Given the strongly isomorphic subordination of part to whole in artifacts and human persons, coupled with the strongly isomorphic application of *TPoT* to each, it is reasonable to ask how we are to justify the claim that the human body possesses intrinsic value which resists instrumentalization. For instance, some critics of *TPoT* allege that it irrationally requires respect for what are assumed to be the static (Platonic) essences of natural beings—*respect nature!*—which they take to be inconsistent with Darwinian accounts of the evolution of species, the advances of nominalist science, and the technological imperatives of political liberalism, all of which are taken to support the absolute dominion of the person over her body.²⁹

Our response is two-fold. First, *TPoT* limits the subordination of some beings to human purposes insofar as *those beings*—and not something so abstract and meaningless as “nature” or “substance” as such—possess intrinsic value.³⁰ Second, as we argued above, some artifacts can acquire value of an aesthetic, cultural, or religious sort, and for this reason resist purely instrumental reasoning. This value is *intrinsic* insofar as it renders the object in question *unique* and *non-fungible*. Advocates of absolute autonomy thus misunderstand our relationship to artifacts if they assume that being an artifact precludes possession of intrinsic value. Even if it were true that our relationship to our bodies were primarily instrumental, this would not preclude the attribution of dignity to some bodies or their parts (perhaps celebrity bodies would be especially valuable). Our claim that human beings possess *inherent* intrinsic value called *dignity*, and as such are incapable of being subject to technocratic reasoning, is therefore not fundamentally at odds with our claims about the intrinsic value of some artifacts. In both cases, something’s intrinsic value is grounded in its *ecstatic* properties, its participation in a super-substantial finality like culture, history, or beauty; some things mean more than themselves. The difference is that while the acquisition of ecstatic meaning is contingent in the case of artifacts—not every motor-driven hairbrush will be valued as an aesthetic, cultural, or religious object—human beings are inherently (non-contingently) ecstatic in at least three ways.

First, by reason of her rational essence, the human person is a participant in the moral order of the world. Her possession of the faculties of intelligence and will actively order her to moral and intellectual virtues which are themselves intrinsically rather than instrumentally valuable. She is capacitated for virtue from the first moment of her existence, and is therefore inherently possessed of a kind of value no other created being is capable of. Indeed, one could argue that this capacitation for virtue is the correct way to interpret what contemporary philosophers call “autonomy”—not as the active exercise of freedom for any end whatsoever, but as the first, intrinsically valuable actuality of a moral agent *constituting* her as a being capable of achieving moral excellence.³¹

Second, we are genealogically ordered to social life.³² Insofar as every body-person is descended from parents and sexually capacitated for reproduction, every person is intrinsically ordered to filial, nuptial, and familial relationships. Everyone is someone's son or daughter and a potential husband or wife, mother or father. Moreover, it is through the body's gestures, expressions, and ultimately speech that we are capacitated for communion with others, that is, are capable of constituting ourselves as a community of persons bound by shared ideas, values, experiences, and purposes.³³

Finally, this "from and for" relationality profoundly describes the supernatural origin and destiny of the human person. Ontologically, Aquinas argues, God *creates* each person at every moment of her existence; we are anteriorly related to God and related to other created beings only in a posterior and secondary manner. Even more suggestively, Aquinas argues that the very subjectivity by which we are diverse as individuals is itself an *exitus* or going forth of the more fundamental Personal relations within the Trinity, and insofar as what is sent is also given, this dynamic image resides in persons as sanctifying grace leading the saints to *beatitudo* (*reditus*).³⁴ Because the economy of the Trinity involves creation and salvation, the human being is the always-created site of God's redemptive activity. The human person is *sacred*, then, not insofar as she exercises her distinctive activities as a knowing and choosing being, but rather, first, as the being who is capacitated by and for grace.³⁵

Insofar as these super-biological and super-personal realities or *meanings* are inherent in every human being *per se*, and because of the intrinsic—unique and non-fungible—value they confer upon the person, they are relevant to the determination of fact which must precede every application of the Principle of Totality: we may only alter the body with these finalities in mind.

The Principle of Totality therefore requires us to distinguish between those parts of the body whose value is wholly functional and those which are not. The normal operation of the kidneys and the heart, for example, do not of themselves entail the participation of the person in any whole greater than her own continued biological existence. We can therefore apply *TPoT* to such parts in a straightforward manner: they may be repaired, replaced, sacrificed, and perhaps even functionally enhanced insofar as such operations contribute to the overall good of the person.³⁶

Other parts, in contrast, possess super-functional value insofar as their normal operation does entail our participation in finalities which transcend the substantial integrity of the individual. These capacities limit the degree to which we can instrumentalize the person or her parts insofar as they express the *a priori* dignity of the person as a relational being. One powerful line of argument to this effect is St. Pope John Paul II's teaching that contraception and sterilization violate the "language of the body." He argues that it is precisely through the marital act that husbands and wives both become "one complete organism capable of generating human life" and capacitate themselves "to cooperate with God in bringing new human persons into existence in a way that responds to the dignity of persons," that is, with fathers and mothers in a stable family environment committed to the material and spiritual welfare of their children.³⁷ Just as a friend you have to pay for companionship is no friend at all—the means chosen to achieve friendship undermine the disinterested basis of friendship—so too do contraception and sterilization corrupt the nuptial and

sacramental significance of the sexual powers by acting as if their value were private, instrumental, and non-relational.³⁸

Much less attention has been given to the intrapersonal and sacramental significance of the non-sexual powers and parts of the human person. Nevertheless, one could make a strong case against the mutilation and enhancement of those parts necessary for the communication of one's self as a *social* being, such as the face and the hands. The profound psychological trauma suffered by people with severe facial and (to some extent) limb injuries, and their subsequent difficulty forming deep interpersonal relationships, points to this insight.³⁹ *TPoT* might well deny the permissibility, say, of extensive facial tattoos or cosmetic restructuring which inhibit the ability of the face to express the full range and nuance of human emotion.

Nor has much attention been given to the consequences of potential enhancements to the brain on the meaning of the essentially "human." The *prima facie* acceptability of both physical and pharmacological interventions on the brain to achieve normal psychological function imply that we can ascribe a functional meaning to at least some of its operations. However, aside from the gushing of the transhumanists, there has been little discussion to date of how to identify alterations of the brain (ranging from increased memory and processing power to changed emotional sensitivities) as either mutilations or legitimate enhancements. Would manipulating the neural circuits responsible for cognitive biases of various sorts corrupt or enhance the meaning of rationality, and what would be the impact on human relationships?

Finally, our analysis has implications for applying the Principle of Totality to *accidental* enhancements, that is, changes which do not alter the essential functionality of bodily parts, such as breast enlargement and non-disfiguring piercings and tattoos. Our interpretation of *TPoT* would require such alterations to respect both the functional integrity of bodily parts as well the super-personal *meaning* of the parts in light of the dignity of the human person. Here, as in the case of sacred objects, we must speak of what is *fitting* or *unfitting* for the body-person.

Consider two examples. First, one could reasonably argue that a secondary purpose of breasts is the delight of one's spouse.⁴⁰ However, undergoing surgery solely for that purpose would require one to instrumentalize the body of a person by subjecting it to a criterion of evaluation—hedonic efficiency—unfitting for a person whose worth is non-instrumentally grounded. (Evidence of this is that there is no rational limit to *how much* one should increase the size of someone's breasts beyond the arbitrary preferences of the patient or spouse.) In contrast, post-injury cosmetic restructuring that is not able to repair the primary functionality of breasts (to nourish infants) would pass the "fittingness" test if it is done in such a way so as to restore a woman's sense of modest self-worth (and avoid social and psychological trauma). Likewise, the practice of tattooing can either enhance or degrade the body's natural communication of its transcendent worth—just as clothes can. Few would argue that the Hindu *bindi* or the Maori *moko* degrades the body like a topless zombie on the forearm of a barkeep. Just as modesty is a rule of prudence in regard to clothing, so too is *fittingness* the rule of tattoos.

Does this interpretation of the Principle of Totality allow the enhancement of everything but the face, brain, hands, and sexual organs? Does it allow us to become cyborgs to the exclusion of these (or other such) parts? This question poses a challenge

to our interpretation of *TPoT* insofar as a negative answer would seem to commit us to the “respect for nature” interpretation of *TPoT* we earlier rejected. Does the limiting principle that enhancing alterations to the body must exhibit *fittingness with super-personal meaning* intelligibly apply to the whole person as well as to her parts?

Three reasons can be adduced for the claim that this limiting principle does apply to the whole person, reasons which correspond to the moral, social, and sacramental meanings of the body-person defended above. Hans Jonas, Leon Kass, and Gilbert Meilander have provided fertile grounds for thinking of life as a *narrative arc* from natality to mortality.⁴¹ Greatly extended artificial youth followed by extended insentience or sudden death, as well as endless life, would empty this arc of meaning; the elderly would either lose or live in the past, living as foreigners in their own country, as Jonathan Swift says of the Struldbrugs.⁴² While an evolutionary account of life suggests that it is good for one generation to make way for the next, there are specific virtues proper to old age whose acquisition would be frustrated by endless youth, such as the determination to labor for goods which will bear fruit only after one’s death, or the willingness to voluntarily set aside power for the sake of the autonomy of one’s children.

Likewise, in our social dimension, many thinkers have discussed the problems of distributive injustice which would likely accompany uneven human enhancement. Even supposing the *prima facie* permissibility of the enhancements in question, non-germ-line alterations would be distributively unjust to unenhanced peers, as depicted in the film *Gattaca*, while germ-line level enhancements would be unjust to future generations by subordinating them to the whims of present generations.⁴³

Finally, the Catholic tradition suggests that the elimination of bodily dependency would emaciate its prophetic and evangelical witness to the supernatural destiny of the person. Insofar as suffering is “inseparable from man’s earthly existence,” says John Paul II, it expresses the mystery of the body-person whose capacity for suffering is a witness to the Christian claim that God conquers suffering with love.⁴⁴ A cyborg would ultimately reject the soteriological meaning of the corpse, the empty and defeated body unable to sustain its own existence. Who among us would choose the glory of a resurrected body she had previously rejected as ugly, inefficient, boring and cruel? Who saw suffering more akin to damnation than to the desire of a bride who has bought but not yet possessed the mansion of love?

In sum, whether significant enhancement is permissible depends on *moral* and theological claims about the degree to which the *sacramental witness* of the body depends upon its material integrity, as do the Eucharist, the rite of baptism, and marriage.

Conclusion

We have argued that the Principle of Totality is normative for human beings insofar as it articulates, as a principle of practical reason, the *entelechy* of the body-person to the full actualization of her nature. The application of the principle to the human person is strongly isomorphic with analogous applications of the principle to artifacts, and strongly anisomorphic with respect to society. However, just as the subordination of artifactual parts to wholes and to human purposes is truly but defeasibly limited by an artifact’s acquisition of intrinsic value by virtue of its super-substantial participation

in a greater whole, so too is the subordination of organic parts to the bodily whole and to human desires limited by the intrinsic dignity of the person by virtue of her inherent participation in (and capacitation for) moral, social, and supernatural finalities. These super-substantial meanings are relevant to our ongoing debates about human enhancement, since the Principle of Totality requires that procedures affecting the body respect *both* its functional integrity *and* its ecstatic meaning.

Endnotes

1. "Address to the First International Congress on the Histopathology of the Nervous System," Sept. 13, 1952; AAS 44 (1952) 779-89. Aquinas articulated *TPoT* in *Summa Theologica* (*ST*) II-II.65.1 (2nd ed., trans. Fathers of the English Dominican Province, 1920), and the principle was reaffirmed virtually unchanged by Catholic theologians until the 20th century. Pius XII is credited with actually naming the principle.
2. This essay will not give an extended defense of the Principle of Totality. One could briefly defend the principle as follows. Human *dominium* is the natural expression of finality in a rational mode of being, as Aquinas argues (*ST* I-II.1.2; I-II.16.1). *Life* refers to the natural capacity of an organism for self-perfective immanent activity, as David Oderberg argues: a living thing acts *for itself* in order to *perfect* itself, i.e., acts so as to produce, conserve, and repair its functioning as the kind of thing it is (*Real Essentialism*. [New York: Routledge, 2007], 180). Therefore, the rational (participative) exercise of *dominium* over one's life must aim at the perfection of one's functioning as the kind of thing one is, i.e., the adaptation of one's body to one's internal and external environments for the sake of continued living. Since this definition of the rational use of one's body for the sake of life *simply is* the Principle of Totality, it follows that the Principle of Totality is a moral law of human nature specifying what constitutes permissible (rational) action for the sake of life.
3. St. Thomas Aquinas, *ST* II-II.61.1: "There is the order of the whole towards the parts, to which corresponds the order of that which belongs to the community in relation to each single person. This order is directed by distributive justice, which distributes common goods proportionately."
4. That is, while *TPoT* prohibits all bodily mutilation, as a principle of prudence, it does not require one to undergo every beneficial and available medical procedure. One may refuse burdensome medical treatment while acting consistently with *TPoT* when such omissions are consistent with the demands of achieving *beatitudo*. See the *Vatican Declaration on Euthanasia* and Pope Pius XII's "Address to an International Congress of Anesthesiologists," *L'Osservatore Romano*, November 25-26, 1957.
5. See Pope Paul VI, *Humanae vitae*, no. 14; National Conference of Catholic Bishops, *Ethical and Religious Directives for Catholic Health Care Services* (Washington, D.C.: United States Catholic Conference, 1995), no. 53.
6. Pope Pius XII, AAS 44 (1952), 786-88.
7. In "the moral community ... the whole has no unity subsisting in itself, but a simple unity of finality and action. In the community individuals are merely collaborators and instruments for the realization of a common end. ... [Thus] the public authority doubtlessly holds direct authority and the right to make demands upon the activities of the parts, but in no case can it dispose of its physical being. Indeed, every direct attempt upon its essence constitutes an abuse of the power of authority." AAS 44 (1952) 779-89
8. *Ibid.*
9. Beauchamp and Childress, *Principles of Biomedical Ethics*, 7th ed. (Oxford: Oxford UP, 2013), 104-5.
10. See e.g., Leon R. Kass, *Life, Liberty and the Defense of Dignity: The Challenge for Bioethics* (San Francisco: Encounter Books, 2002), 17; William E. May, *Catholic Bioethics and the Gift of Human Life*, 3rd ed. (Huntington, IN: Our Sunday Visitor, 2013), 262-67.
11. Aquinas discusses the difference between natural unities (*simpliciter unum*) and multiplicities which are unified *secundum quid* in *Summa contra gentiles*, IV.35.7. See Martin Nolan for discussion: "The Positive Doctrine of Pope Pius XII on the Principle of Totality," *Augustinianum*

- 3 (1) 1963: 29-44.
12. See Neil Postman, *Technopoly: The Surrender of Culture to Technology* (NY: Vintage, 1993).
13. Sandel argues that “To corrupt a good or a social practice is to degrade it, to treat it according to a lower mode of valuation than is appropriate to it” in *What Money Can't Buy: The Moral Limits of Markets* (New York: Farrar, Straus and Giroux, 2012), 34.
14. While one might imagine a few circumstances in which vandalizing artifacts has some beneficial effect on human flourishing—e.g., the stress relief achieved by smashing obsolete computers with sledge-hammers—in general, vandalism would seem to be motivated by malice, and so encourage the acquisition of associated vices, such as envy and slander.
15. “Considered as a whole the community is not a physical unity subsisting in itself and its individual members are not integral parts of it.” AAS 44 (1952) 786-88.
16. *Ibid.*
17. *Ibid.*
18. *Ibid.* Even the occasional *sacrifice* of some individuals for the sake of society, as sometimes occurs in the extraordinary circumstances of war or quarantine, is not done for the sake of preserving the society, but for the preservation of the individuals who comprise it.
19. *The Declaration of Independence*, July 4, 1776.
20. So argues Gerald Kelly, S.J., “Pope Pius XII and the Principle of Totality,” *Theological Studies* 16 (1955), 373-96.
21. Aristotle, *Politics* 1.2, 1253a 19-22.
22. See David Oderberg’s attack on the brain-death criterion of bodily death on the grounds that only whole-body putrefaction is a certain sign of death in *Applied Ethics: A Non-Consequentialist Approach* (Malden, MA: Blackwell, 2000), 86. Also see his *Real Essentialism* (2007), chapter 8 on “Life.”
23. See Aquinas, *ST II-II*.93.3 and 5.
24. Indeed, it’s analogously applied to artifacts, but *per se* appropriate for human beings.
25. See Pope Pius XII, “Allocution to the Twenty-Sixth Congress of the Italian Society of Urologists,” AAS 45 (1953), 673-79.
26. See Aquinas, *ST II-II*.65.1
27. Constructivist accounts of health share this *formal* definition of health but differ about *which* finality medical procedures are said to aim at, namely, the satisfaction of human desire rather than optimal organismic functioning. This allows constructivists to describe mutilating procedures as “healthy” so long as they satisfy a patient’s desire to be mutilated, e.g., sterile. One devastating problem with the constructivist account is that it entails no procedure is mutilating *per se*—up to and including deliberately killing a patient—and thus the account is both *conceptually too broad* as a definition of ‘health,’ and *practically useless* insofar as it in principle eliminates the possibility of making the limiting distinctions the Principle of Totality is intended to draw. While opponents of the Principle of Totality see this as a *reductio ad absurdum* of the Principle, it should be clear that such arguments attack a straw man insofar as they misconstrue the nature of the whole in relation to which bodily parts are rightly subordinated. More importantly, as I argue below, such accounts apply reasoning appropriate to artifacts inappropriately to human beings—that is, insofar as they turn a moral analogy into a category mistake.
28. For discussion, see David Oderberg, *Moral Theory: A Non-Consequentialist Approach* (Malden, MA: 2000), chapter 4 on the Doctrine of the Sanctity of Life, and Christopher Kaczor, *A Defense of Dignity: Creating Life, Destroying Life, and Protecting the Rights of Conscience* (Notre Dame: University of Notre Dame Press, 2013).
29. Ronald Munson argues thus in *Intervention and Reflection: Basic Issues in Bioethics*, 9th ed. (Boston, MA: Wadsworth Cengage Learning, 2012): “Contemporary evolutionary theory shows that the apparent purposive character of evolutionary change can be accounted for by the operation of natural selection on random mutations. Also, the development and growth of organisms can be explained by the presence of genetic information that controls the processes. ... Thus, no adequate grounds seem to exist for asserting that the teleological organization of nature is anything more than apparent” (890-91). Munson here ignores Neo-Aristotelian and contemporary work on functions (teleological and otherwise), e.g., in *Functions: New Essays in the Philosophy of*

- Psychology and Biology*, edited by Ariew, Cummins and Perlman (Oxford: Oxford UP, 2002).
30. See Oderberg, *Real Essentialism* (2007), chapter 9.
 31. See Servais Pinkaers, *The Sources of Christian Ethics*, translated by Sr. Mary Thomas Noble, O.P. (Washington, D.C.: Catholic University of America Press, 1995), 357-58.
 32. The phrase “genealogical person” is taken from St. Pope John Paul II, *Gratissimam Sane* (Letter to Families), no. 12. For discussion, see Carl Anderson and Jose Granados, “The Nuptial Mystery: From the Original Gift to the Gift of Self,” in *Called to Love: Approaching John Paul II’s Theology of the Body* (New York: Doubleday, 2009), 61-79.
 33. Just as the “physical laws of sound” grant the musician “the very possibility of expressing himself musically and so enable him to achieve communion with the rest of the world through his art,” so too, argue Anderson and Granados, is the human body “like an artist’s medium ... [a] capacity for creative communication” that “opens us to participation in reality” (*Ibid.*, 35). Cf. Aristotle, *Politics* 1.3.
 34. *ST* I.45.7: “In rational creatures, possessing intellect and will, there is found the representation of the Trinity by way of image, inasmuch as there is found in them the word conceived, and the love proceeding. But in all creatures there is found the trace of the Trinity, inasmuch as in every creature are found some things which are necessarily reduced to the divine Persons as to their cause.” See also I.43.6: “mission as regards the one to whom it is sent implies two things, the indwelling of grace, and a certain renewal by grace.”
 35. See *Evangelium Vitae*, no. 38-39.
 36. We say “perhaps” because, as any sports fan knows, the enhancement of what may appear to be a tissue of purely functional significance, such as the musculature of the body by illegal steroid use, may have interpersonal consequences on the justice of one’s relationships with others.
 37. William E. May, *Catholic Bioethics and the Gift of Human Life*, 3rd ed. (Huntington, IN: Our Sunday Visitor, 2013), 85. May’s sources include John Paul II’s “Analysis of Knowledge and Procreation,” General Audience of March 5, 1980, Original Unity of Man and Woman, nos. 4-5, pp. 149-50.
 38. For discussion, see Joshua Schulz, “Chastity’s Children: Sexual Reality, Procreation & the Wisdom of Virtuous Love,” *Touchstone: A Journal of Mere Christianity*. January/February (2014), 25-29. Prominent Protestant Christians have reached similar conclusions, though disagreeing about whether each and every sexual act must be open to procreation. See, for instance, Gilbert Meilaender, “Sweet Necessities: Food, Sex, and Saint Augustine,” *Journal of Religious Ethics*, 29 (1) 2001: 3-18.
 39. See Avinash De Sousa, “Psychological issues in acquired facial trauma,” in *Indian Journal of Plastic Surgery: Official Publication of the Association of Plastic Surgeons of India* 43 (2) 2010: 200-205; M.E.P. van den Elzen et al., “Adults with congenital or acquired facial disfigurement: Impact of appearance on social functioning,” *Journal of Craniomaxillofacial Surgery*, 40 (8), 777 – 782; and Deirdre M. Desmond, “Coping, affective distress, and psychosocial adjustment among people with traumatic upper limb amputations,” *Journal of Psychosomatic Research* 62 (1) 2007: 15-21.
 40. See *Proverbs* 5: 18-19: “May your fountain be blessed, / and may you rejoice in the wife of your youth. / A loving doe, a graceful deer— / may her breasts satisfy you always, / may you ever be intoxicated with her love.”
 41. Hans Jonas, “The Burden and Blessing of Morality,” in *The Hastings Center Report*, 22 (1) 1992: 34-40. Leon Kass, “*L’Chaim* and Its Limits: Why Not Immortality?” in *Life, Liberty, and the Defense of Dignity: The Challenge for Bioethics* (San Francisco: Encounter Books, 2002), 257-74. Gilbert Meilaender, “*Terra es anima*: On Having a Life,” in *The Hastings Center Report*, 23 (4) 1993: 25-32, and “Death” in *Neither Beast Nor God: The Dignity of the Human Person* (New York: New Atlantis Books, 2009), 67-76.
 42. Jonathan Swift, *Gulliver’s Travels* (1726), chapter 10. Swift also writes that the mostly childless, immortal Struldbrugs cannot contract sacramental marriages, for “the law thinks ... that those who are condemned ... to a perpetual continuance in the world should not have their misery doubled by the burden of a wife.”
 43. See the excellent discussion of this and the previous point by Yuval Levin, *Imagining the Future: Science and American Democracy* (New York: New Atlantis Books, 2008), 54-81.

44. See St. Pope John Paul II, *Salvifici Doloris*, “On Salvific Suffering,” (1994), no. 3, 14-15.

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ASSISTED REPRODUCTION, THE LOGIC OF LIBERALIZATION, AND FIVE CHRISTIAN RESPONSES

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Abstract

The trend among Western liberal democracies is for increasing liberalization of assisted reproduction, gamete donation, and gestational surrogacy. The article argues that a logic of liberalization is widespread and provides a main impetus for liberalization. We analyze the logic of liberalization and find that it consists of four widely held premises. Thereafter, five main lines of arguments available to the Christian who is critical of such liberalization are presented and assessed. The arguments pertain to (1) the value of embryos; (2) the commodification of the child and gestation; (3) children's welfare; (4) children's rights; and (5) unacceptable consequences of the logic of liberalization. The article ends with an evaluation of how these arguments are likely to fare in public debate.

Introduction

A growing number of children are born from assisted reproductive techniques (ARTs). Sometimes *reproductive donation*, involving either the donation of gametes (sperm or eggs) or gestational surrogacy, is employed. In the case of reproductive donation, the resulting children lack a gestational and/or genetic relationship with one or both parents.

The legal regulation of these practices varies among Western countries, but the trend is for increasing liberalization. How far the process of liberalization has advanced differs among liberal democracies. For instance, in the United States of America, assisted reproduction and gamete donation are largely unregulated (Glennon 2012). Most states allow surrogacy and some also enforce surrogacy contracts. In the United Kingdom, legislation and guidance on reproductive donation is much more detailed, yet practices are quite liberal when compared to many other Western countries (Glennon 2012). The Human Fertilisation and Embryology Authority (established by the Human Fertilisation and Embryology Act) allows for gamete donation in conjunction with assisted reproduction, including for single women and lesbian couples. The law does not recognize commercial surrogacy. However, altruistic surrogacy in which the gestational mother has expenses covered but does not receive payment is allowed.

In this article, we will not be presenting any new arguments either for or against assisted reproduction, gamete donation, or gestational surrogacy. Rather, this essay will attempt to treat the ethical issues pertaining to these practices as a “case study” for exploring Christian participation in public debates in liberal democracies. In order to pursue this aim, we will begin by identifying four main premises that advocates of liberalization are typically committed to, and which together constitute what we

will call a *logic of liberalization*. We will seek to demonstrate that this logic pushes towards ever new steps of liberalization. The main contribution of this essay lies in the discussion of whether this logic of liberalization can be interrupted if one stays within the boundaries of a Rawlsian conception of public reason. Our contention is that this is an exceedingly difficult undertaking. We have chosen to relate our discussion to a Rawlsian conception of public reason because we believe that it is in fact highly influential on the political sphere, notwithstanding the fact that it has received critique within the philosophical and theological guilds (see, e.g., Biggar, 2011). We will also demonstrate that even if the Christian articulates his or her arguments without reference to explicit religious premises, those arguments will still be seen as highly problematic by adherents of a Rawlsian conception of public reason, since those arguments tend to presuppose a “thick” vision of the human good and/or human nature.¹

In order to illustrate the issues, ideologies, and dilemmas involved in this enterprise, examples from the Norwegian debate will be used throughout, sometimes complemented with other sources. Norway is, we contend, an interesting “case study.” Until recently, assisted reproduction and sperm donation were offered in Norway only to heterosexual couples. Lesbian couples have been given access to these services only since 2009. Three political parties currently advocate the legalization of egg and embryo donation, and donor conception for single women. No parties advocate altruistic or commercial surrogacy.² Until recently, Norway has imposed restrictive regulation on the field of donor conception, resisting the path of liberalization that many Western counterparts have chosen. The fundamental restrictive attitude has often been grounded in a “precautionary principle”—that is, that the total consequences of liberalization may be impossible to predict, and that this calls for a restrictive approach (Melhuus 2012). However, recent efforts at liberalization of donor conception have involved striking and transparent argumentation that we analyze in the following—argumentation that we contend characterizes a *logic of liberalization* that explains several of the moral, social, and legislative developments that are currently taking place, not only in Norway, but in liberal Western democracies as such.

The remainder of the article has three parts. In the first part it is claimed, with reference to the Norwegian debate, that advocates of liberalization typically are committed to four crucial but problematic premises. Next, five lines of Christian potential responses and counter-arguments to the logic of liberalization and its premises are discussed and assessed. In particular, the responses are evaluated in terms of whether they could be efficacious in the public square. In conclusion, we offer a prognosis and some advice for Christian participation in public debates on reproductive donation.

Four Typical Premises that Support Liberalization

The logic of liberalization, as we analyze it, is made up of the following four interrelated premises: respect for individual autonomy (A); government neutrality towards individual preferences (B); the contention that different parental constellations are equally able to give children quality care and upbringing (C); and the view that

biological bonds between parents and children are of subordinate importance in the debate (D).

A. Individual Autonomy

In a liberal bioethics, *respect for individual autonomy* is given priority. The notion that individuals have a right to their own views on what constitutes *the good life*, as well as to make choices that are in line with their preferences, is the key premise in a liberal bioethics (Beauchamp & Childress 2013). The respect for individual autonomy does not only imply that persons have a positive right to shape their lives according to their own desires, it also entails a strong sense of scepticism towards all things that constrain human liberty—be it government coercion, religious and cultural traditions, or biology.

B. Government Neutrality

The principle of respect for individual autonomy leads naturally to the principle of governmental neutrality, which is a core tenet of political liberalism as a philosophical position (Rawls 1999; Rawls 1996). Political liberalism claims that, in order for citizens to coexist peacefully in a pluralist society, the state should remain neutral on questions pertaining to the good life. As H. Tristram Engelhardt Jr. points out, the bioethics that follows logically from political liberalism and government neutrality is a bioethics for “moral strangers” who hold disparate views on the good life (Engelhardt 2000; Engelhardt 1996). In order to accommodate these differing moral conceptions, liberal bioethics has become *content-thin* and *procedural*, declining to pronounce substantive moral judgments and instead being more narrowly occupied with shaping the processes through which decisions are to be made.

The only instances of political constraints on individuals’ right to exercise their autonomy that tend to be regarded as legitimate are those which are aimed at preventing harm. As long as a given lifestyle or preference is not believed to be harmful to others, it must be treated by the state as equally good and valid as other preferences. The requirement that the preference should not be harmful to others is epitomized in John Stuart Mill’s famous “harm principle”: “The only purpose for which power can be rightfully exercised over any member of a civilized community against his will, is to prevent harm to others Over himself, over his body and mind, the individual is sovereign” (Mill, *On Liberty*, 6).

When coupled with a comprehensive welfare state of the Nordic kind, the principles of governmental neutrality can lead to rather striking consequences. For instance, in 2008, a sado-masochism interest group lobbied to have sado-masochism removed from the Norwegian version of the international list of diseases, ICD-10. By granting this request, sado-masochism was “normalized” in the sense that it is now a *preference* equal to other preferences, and thus equally entitled to state support. In 2012 the group acquired state funding to develop an information pamphlet about sado-masochism, which was to be distributed in health clinics for adolescents age 13 and up.³ This story highlights how the principle of governmental neutrality tends to deflate the traditional category of the legal-but-morally-problematic for political purposes: as long as a given practice is legal and cannot be established as unequivocally harmful, it must be given equal treatment with other practices. Such

equal treatment may, as in the example, include state funding, which by implication will be perceived as legitimisation of the practice.

The Ethics Committee of the American Society for Reproductive Medicine's (ASRM) reasoning in their consensus statement on fertility treatment for homosexuals and unmarried persons is completely in line with the paradigm of government neutrality. They state that "Single individuals, unmarried heterosexual couples, and gay and lesbian couples have interests in having and rearing children." Further, since "There is no persuasive evidence that children are harmed or disadvantaged solely by being raised" in these family constellations, and that "Moral condemnation of homosexuality or single parenthood is not itself an acceptable basis for limiting child rearing or reproduction." then it follows that fertility treatment programs "should treat all requests for assisted reproduction equally without regard to marital status or sexual orientation" (The Ethics Committee of the American Society for Reproductive Medicine, 2009, 1190-1193). In the parlance of political liberalism, the *preferences* of homosexual and unmarried persons for having children through assisted reproduction are *legitimate* in that they have not been shown empirically to cause harm, and not to treat these preferences equally with other preferences would thus constitute unjustified differential treatment, that is, *discrimination*.

In a similar vein, a Norwegian politician (of the party Venstre) stated:

As long as the life and well-being of others are not compromised, I think the individual citizen must be allowed to choose their own direction in ethical questions to the largest possible extent The question of how one brings one's own children into this world, is so personal and close for most of us that I think that the ethical decisions must come from ourselves, and not from a political majority in Parliament. Then the law must give us room. And the politicians must show us trust (Melby, 2012).

According to this politician, she and her colleagues should refuse to take a stand on the ethics of the diverse practices of reproductive donation. Government neutrality should prevail.

C. Equally Good Parenting

If Mill's "harm principle" is accepted, it follows that it is crucial for the proponents of reproductive liberalization to demonstrate that non-traditional parental constellations—male and female homosexual couples and single men and women—are equally adept as parents as are married heterosexual couples, and that *no harm* is inflicted on a child who is raised outside of married heterosexual relations.

How could this claim be assessed? What sources of evidence are considered acceptable? In the paradigm of political liberalism, acceptable sources must conform to the requirements of *public reason* (Rawls, 1997). In a pluralist society citizens hold differing moral worldviews or "comprehensive doctrines." However, as differing worldviews are not fully compatible, mutual agreement and understanding often cannot be reached through arguments based in particular views. The Rawlsian theory of public reason thus demands that arguments in the public square must be made without reference to religious or moral ideals that are not shared by all. This requirement gives a special place of prominence to empirical science, for it produces

knowledge of correlations, causes, and effects that claim validity for all citizens regardless of their particular worldviews and ideologies.

In the absence of empirical evidence that unambiguously demonstrates that children are harmed by being raised by others than their biological parents, it follows that politicians tend to argue that different family constellations provide equally good parenting. One Norwegian Labour politician stated simply, “We think that single parents can be good caregivers as well. Therefore, assisted reproduction should be available for singles” (Thomas Breen, quoted in Arbeiderpartiet, 2012).

D. The Subordinate Importance of Biological Parent-Child Bonds

The three premises discussed so far need to be supplemented by a fourth, closely related one: that biological bonds between parents and children are of no more than moderate importance. Even if premise C is accepted, one could hold that a child still loses something of considerable value when it is deprived of biological bonds. The present premise denies that such a loss of a parent-child bond is significant or decisive. As biological bonds are given rather than chosen, they tend to restrict the autonomous choices available to individuals. When biological bonds are given subordinate importance, this radically increases the range of preferences that may legitimately be pursued and satisfied. According to premise A, such an increase is in itself good.

Proponents of donor conception do not necessarily give explicit assent to the present premise; rather, it often remains implicit. In neither the ASRM Ethics Committee statement nor the Norwegian Labour Party statements referred to are biological bonds mentioned. This omission is, it seems, telling. We take it to mean that whatever importance biological bonds may have, they are in principle trumped by the other considerations—notably, the importance of fulfilling preferences for having children (A).

How Might a Christian Argue in Order to Interrupt the Logic of Liberalization?

We now turn to the question of how a Christian, critical of reproductive donation, might respond for the purpose of interrupting the logic of liberalization. Five major counter-arguments to the premises and logic of liberalization are identified. The arguments are discussed with a view to whether they are able to rationally rebut the logic of liberalization, and whether they can be made within the boundaries of a Rawlsian public reason, or whether they demand that the premises of such reasoning be challenged. We are here concerned with how the arguments would fare in an idealized public square where the logic and coherence of arguments and premises rather than extra-rational influences decide the outcome.

The Moral Value of Embryos

Some argue that the human embryo is not only a human being, but is bestowed with the same moral value as children and adults (George and Tollefsen, 2008; Beckwith, 2007; Kaczor, 2011). This makes reproductive techniques in which embryos are destroyed morally problematic. *In vitro* fertilization (IVF) often involves the production of

multiple embryos, one or two of which are inserted into the uterus.⁴ “Spare” embryos are either frozen for future use in reproduction, employed in stem cell research (where the extraction of the stem cells destroys the embryo), or destroyed.

If embryos have high moral value, then IVF is morally problematic when it involves the creation of spare embryos that are later destroyed. However, it is also the case that the practice of IVF has developed through experimentation on—and destruction of—vast numbers of embryos. The improvement of techniques and the training of new technicians are also dependent on the creation and destruction of embryos. Therefore, it can be argued that IVF is tightly linked with the destruction of embryos; one could not have the former without the latter.

These lines of argument would lead some to reject IVF altogether, whereas others would accept IVF in the special case where “spare” embryos are not created. Additionally, some would accept IVF also when any “spare” embryos are frozen and *intended* for future reproductive use. Artificial insemination, on the other hand, obviously does not lead to the creation of “spare” embryos, and thus escapes the criticism considered here.

These lines of arguments fare badly in a political climate dominated by political liberalism. Theories of the moral value of unborn human life are just such theories of the good that liberalism demands are kept out of public deliberation. Therefore, Christian concern for the moral value of embryos is unable to make a dent in the liberal view of assisted reproduction.

Commodification of Children and Reproduction

A common and intuitively powerful objection to reproductive donation is that the process itself tends to treat the fetus and the subsequent child as a mere commodity or artifact. Although some would argue that this critique pertains to *all* instances of assisted reproduction, also those where the commissioning party is a married couple who use their own gametes, we will confine this line of argumentation to instances of assisted reproduction where at least one third party is involved in the process of reproduction. The charge that such processes of reproduction tend to treat the resulting child as a mere commodity, and that they therefore implicitly disrespect that child’s status as a moral subject and person, could be grounded in several ways.

One could start by observing that the process of reproduction itself takes the shape of a planned, calculated, depersonalized, and highly technical enterprise with no intrinsic moral worth attached to it, rather than a spontaneous act of love, the moral worth of which transcends its potential result (see, e.g., O’Donovan, 1984). The initial reserve one could feel with detaching reproduction from its place in the relational life of men and women is only strengthened when a “third party” enters the scene, either as donor of gametes or as a surrogate, because that third party has no intrinsic moral bond with the child whom he or she contributes in making. In fact, any emotional attachment that person might experience towards the child in question would tend to be a problem rather than something valuable. The child is thus relationally detached from those who “made” it, by virtue of the very process through which the child was “made.” Indeed, one might argue, the very fact that one can speak of “making” a child, instead of begetting him or her, is a subtle indication to suggest that the child is treated as something less than a person. This implies that even if the caretakers of

the child which results from an assisted act of reproduction, where a third party is involved, were in fact subsequently to treat the child as the person it irreducibly is (as they no doubt typically do), this act of respect towards the child, however heartfelt and sincere, would nonetheless demand an attitude which goes “against the grain” of the process through which the child came into being.

The charge that assisted reproduction which involves a third party tends to depersonalize the child, in that the child is treated *as if* it were a commodity, thus *precedes* the question of whether or not someone is making money in the process. The key observation is rather that the reproductive process in question—planned, technical, and to some extent depersonalized—is precisely of the kind that we normally do accept that people make money off of. When surrogacy is turned into business, the implicit moral problems intrinsic to this kind of reproduction only become explicit. The perceived problem at hand is thus not “solved” by allowing only for altruistic surrogacy or gamete donation.

This line of reasoning presupposes through and through the premise that there is a morally relevant bond between the fetus and the child, and that even the fetus deserves to be treated in a way which respects the personhood of the child which it is in the process of becoming. The fetus has an intrinsic right to such treatment, whether or not it could be proven empirically that children who result from an allegedly depersonalizing process of reproduction suffer harm later. Moreover, the argument assumes that there is a certain degree of moral worth intrinsic to the kind of activities in which we engage, and that it does make sense to ask for the symbolic moral implications of a given activity. To engage in marital intercourse in the context of interpersonal affection and love is thus not a human activity which is morally equivalent to inserting an anonymous person’s gametes into the womb of a detached surrogate mother for the purpose of making a child which is to be raised by someone else. Finally, it is also implicitly assumed that the biological bond between child and parent is morally relevant, and demands respect. In sum, it is therefore quite clear that this line of argument rests on assumptions which belong in a “thick” moral vision, quite likely to be rejected by those who opt for a minimalist version of public reasoning, even if there is reason to assume that many intuitively do feel that there is something problematic in treating a fetus in a way similar to how other *things*, say, commodities and artifacts, are treated.

The political liberalist might still respond to such intuitions by claiming either that the child is not treated as if it were a commodity when brought about through surrogacy and/or gamete donation; or, perhaps even more likely, by claiming that a “transient commodification” of the child is morally irrelevant as long as no harm is inflicted. A Christian might respond, in turn, to such objections by an argument like the following. Very few would accept that there is absolutely no moral relevance entailed in the symbolic and communicative side of our human activities and relationships, and very few would accept that each and every side of human life is made subject to the rules and principles of markets. If it is possible to establish that *some* limits are required when it comes to emptying social activities of their communicative and symbolic moral worth, and that there is at least on *some* occasions reason to call for reserve before subjecting human activities to the logic and principles of markets, then it might plausibly be argued that if there is *one* instance where such limits and reserve are called for, then it must be the process whereby we enter this world, receive the gift

of life, and are provided with our most fundamental relational context. If there is one occasion where humans should pause before turning an activity into an act of *making something*, then it must be the process of procreation.

Children's Welfare

Everyone would agree that practices of assisted reproduction must be compatible with the interests of the children thereby produced. However, how is the concept of the child's best interests to be parsed? There are, we think, two main interpretations of this core concept. The child's best interests can be interpreted, first, in terms of *welfare*, and second, in terms of *rights*. The former interpretation is discussed presently, and the latter in the subsection to follow.

In the first section it was argued that in the climate of political liberalism and public reason, empirical science is typically called upon to provide guidance on contentious questions. So too regarding the present questions: what is the quality of the care and upbringing that a child will receive from single parents, same-sex parents, or parents who are not both biologically related to the child? Is the child's welfare compromised by facilitating such arrangements through liberalizing artificial reproduction? Such questions may seem suited for empirical investigations.

What do the studies show? Individual studies have sometimes found correlations between donor conception and negative outcomes, but such findings are not consistent (Graham & Braverman, 2012; Appleby, Jennings & Statham, 2012). As the evidence is summed up in one recent review by a leading researcher in the field, "Overall, findings suggest that the absence of a genetic or gestational connection between parents and children does not have an adverse effect on the quality of parent-child relationships or children's adjustment" (Golombok, 2013).

One may attempt to evade the discussion of the empirical studies and the conception of harm employed therein and simply state that the child born from donor conception is deprived of an important and basic *good*: care from and upbringing with both biological parents. How can a decision to deprive a child of one or both biological parents from the outset ever be compatible with the child's best interests? A problem with this move is that the supporter of donor conception may redirect focus towards the empirical findings: whether care from both biological parents is truly an important and basic good is, it may be argued, a question that empirical science can answer for us. If the findings are that the welfare of children born from donor conception is well preserved, it becomes doubtful whether these children really have been deprived of an important good.

As long as the child's best interest is conceived of in terms of welfare and the avoidance of harm, then, the discussion will gravitate towards the findings of empirical studies. However, there are two sets of objections to the construal of the question as answerable by empirical studies. First, that the available studies *in fact* have methodological shortcomings that make them inadequate for answering the questions at stake. Second, that empirical methodologies are *inherently unable* to answer questions of the kind currently under consideration.

The first criticism will point to commonly made charges of methodological inadequacy of the studies to date—for example, biased selection of participants (e.g., self-selection), the respondents' self-interest in a positive self-presentation, too few

participants to provide reliable results, unclear hypotheses, and too short a time for follow-up (Lerner & Nagai, 2001). However, it may be countered that even with the many methodological shortcomings, if there truly were significant harms to being born from donor conception then the studies should, in sum, have been able to give some indication of this. Yet, as discussed, leading researchers in the field state that no such indication is found. In addition, even if future and methodologically more rigorous research were to discover *small* or *moderate* disadvantages for the donor conception group, it may be argued that this is not a decisive reason to prohibit donor conception. No set of parents is perfect—no potential conception, care, and upbringing are without “disadvantages.” In addition, any disadvantage (e.g., from having only one parent, or parents of the same sex) may well be argued to be outweighed by greater advantages in other areas, such that children born from assisted reproduction typically are highly wanted.

The second criticism claims that empirical research is inherently unable to assess factors that are vital for the child’s best interest. Are there deep psychological structures relating to psychological attachment and self-image that cannot be assessed by quantitative or qualitative methodologies? Attachment and a robust feeling of personal identity remain important throughout life; are the studies really capable of discovering any negative impact to these subtle and complex phenomena? What kind of weight should we accord to the fact that familial links—not only to biological parents, but to the extended family, ancestral lines, and the narratives and meanings connected therewith—are severed from the start? (Velleman, 2005) It may be argued, therefore, that the question of whether donor conception is compatible with the child’s best interest is more or less unanswerable by social and psychological science, but instead has been—problematically—operationalized as questions that *can* be assessed empirically. For several reasons, then, a discussion of the welfare of children born from donor conception quickly turns into a discussion of empirical findings. Critics of donor conception then have the two main ways outlined of attempting to undermine the weight given to the studies.

Children’s Rights

The second of the two interpretations of a child’s best interest depicts it in terms of rights. Children may be said to have a *right* to be raised by both biological parents (when circumstances allow). This right is violated in donor conception, although not in surrogacy when the gametes of the social parents are used.

One objection to this argument is that since the decision to bring the child into being through donor conception is made *before* the child’s existence begins, then no individual’s rights are being infringed (the “non-identity problem”—see Parfit, 2004; Hope, 2004, 42-57). However, it is still the case that a child is brought into being with the explicit intention that it is not to be raised by both biological parents. Ascriptions of rights to individuals who do not yet exist typically have corresponding formulations that apply to the decision-makers: it may be argued that no one has a right to deprive a child of the care of its biological parents from the outset. This corresponds to a duty to only practice assisted reproduction in ways which let resulting children receive care from both biological parents.

The argument from the child's right attacks two of the four premises central to liberalization. If the child truly has this right, then biological parent-child bonds cannot be of merely subordinate importance (D). In addition, the child's right is hard to square with the insistence that different constellations provide an upbringing of equally good quality (C). If the latter premise is true, and non-biological parents provide equally good parenting as biological parents, the defender of the child's alleged right will naturally be charged with providing a rationale or justification for such a right. And so a child's right to be brought up by both biological parents appears to be incompatible with two of the four premises crucial to the proponent of liberalization.

The child's right may be construed as God-given, natural, or posited. If the child's right is indeed *given by God*, this turns into a powerful argument against donor conception. However, this argument fares badly when judged in the light of political liberalism's requirement of public reason, according to which all arguments in the public square must be severed from any moral worldview or comprehensive doctrine. As state decisions must be justified for all citizens, arguments that all citizens in principle could understand, evaluate, and accept are needed, and one cannot rely on arguments rooted in moral conceptions that are not shared by every citizen. On this criterion, any explicit reference to religion ("content religiosity") or implicit reliance on religious presuppositions ("epistemic religiosity") are ruled out (Audi, 1993). An appeal to a God-given right, then, will not hold rational appeal for a supporter of political liberalism and thus neither for the typical proponent of liberalization of assisted reproduction.

A *natural* right appears to fare no better. Arguably, a belief in natural and inherent rights presupposes metaphysical assumptions of just the controversial kind that is ruled out by the principle of public reason: a natural right seems to presuppose a transcendent legislator. Classical natural law reasoning, for instance, based on reflection on man's normative nature, would be *doubly forbidden* on the liberalist paradigm here discussed. For, first, this reasoning may appear to be epistemically religious and thus incompatible with the concept of public reason. Second, it leads to a particular, non-neutral conception of the good life, which again is incompatible with political liberalism. Even contentions that the biological parent-child relation is *natural, good, fulfilling, or fundamental* for the child may be taken to fall afoul of the requirements of public reason, because they appear to rely on "thick descriptions" of the-good-for-man which are not shared by all, and thus cannot be relied upon in public debate.

Finally, the child's right may be *posited*. The United Nations Convention on the Rights of the Child § 7.1 states that "The child shall (...) [have], as far as possible, the right to know and be cared for by his or her parents." Of course, questions as to how the provision should be interpreted then arise. What is a "parent" in this context? The Convention does not specify that the parents must be the genetic parents; on the contrary, in the implementation handbook "parents" include "genetic parents," "birth parents," and "psychological parents" (UNICEF, 2007, 105-109). The Convention was not designed to take a stand on whether donor conception is compatible with the child's right. The Convention, therefore, does not give decisive support to a right to care from one's biological parents.

The invocation of a right to receive care from one's biological parents is rhetorically powerful. Rights—in particular “human rights”—are often trumps in today's debates. However, when the foundations of this alleged right are enquired into, they may be found to be unacceptable for the political liberalist within the paradigm of public reason.

Reductio Arguments from the Slope of Liberalization

A final strategy for Christian critics of donor conception is to construct a *reductio ad absurdum* argument from one or more of the consequences to which the logic of liberalization leads. The common strategy for such *reductio* arguments is to show how unpalatable consequences are more or less logically entailed by the premises of the logic of liberalization. In general, if our premises inexorably entail a conclusion we find unacceptable, then one or more of the premises must be discarded, modified, or replaced if one is to avoid self-contradiction or the unacceptable conclusion. The following is an attempt at teasing out the *logical* consequences entailed in the logic of liberalization.⁵

We have attempted to show that the “logic of liberalization” is able to repel many counter-arguments to liberalization. Indeed, we would argue that this logic pushes so powerfully in the direction of liberalization that it offers no natural stopping points. When assisted reproduction is established as an option for heterosexual married couples, then each subsequent liberalising step on its own is small. More importantly, each step appears to be a good thing, an improvement—even obviously so—for someone who accepts the four premises of liberalization.

The slope of liberalization and its major milestones can be sketched in this way: if assisted reproduction is a good for heterosexual married couples, then it is a good for unmarried couples as well. It turns out that for some heterosexual couples the male is unable to produce viable sperm. In this case, third-party sperm donation overcomes the problem. The offspring is then genetically not fully the couple's own, but if this is problematic (which it is not, according to premise D above) it is compensated for by the great good of having a child to raise as one's own. In addition, the process is technically facile.⁶

However, if sperm donation is an option, then equality demands that egg donation must be as well. There are greater technical obstacles and slight medical risks for egg donation, but these can be overcome and do not appear to be of moral import. Some have pointed to an allegedly morally relevant difference between the two forms of gamete donation: egg donation, unlike sperm donation, separates gestation from genetics. But this consequence can have no force to deter the proponents of liberalization (premise D), for, crucially, no harm in separating gestation from genetics has been established through empirical research.

If both sperm and egg donation are acceptable, then so must be the combination—that is, embryo donation. In this case, neither of the social parents are genetically related to the child. However, as constellations wherein *one* parent is unrelated have already been accepted, it is hard to see how this further step can be morally decisive (again, premise D). Gamete or embryo donation should also be offered to homosexual couples or single men or women, as their preferences for having children are equally

worthy (premises A and B), and as they are equally capable of bringing up a child (premise C).

However, one significant group is still uncatered to. Women may be unable to gestate due to uterine malformations or disease. Their hope for a child is surrogacy. In altruistic surrogacy the surrogate has her expenses covered but receives no further payment. If the woman has a friend or family member who acts as the surrogate and the couple's own gametes are used, then only the gestation is performed by a third party; in all other respects, the child is the couple's own. There can hardly be significant moral objections to this arrangement if we have already accepted the varieties of donor conception detailed above. Altruistic surrogacy may appear less, not more, controversial than practices in which gametes are provided by third parties. Some have pointed to health risks associated with pregnancies. However, the surrogate voluntarily assumes this risk, which can also be minimized by close medical supervision of the pregnancy. The logic of liberalization must thus lead to the acceptance of altruistic surrogacy.

Altruistic surrogacy, however, will not be an option for all. Few will be fortunate enough to find a willing surrogate. In order for the remaining couples and singles to have their preferences for having a child fulfilled (premise A), the state would need to allow commercial surrogacy. There are of course many concerns about the current international surrogacy business, which is often charged with the exploitation of underprivileged women (see, e.g., Panitch, 2013). However, there is arguably nothing in commercial surrogacy as such which makes it exploitative by nature and necessity. For instance, the Californian system is often referred to as an example of a well-regulated and non-exploitative system. The premises inherent in the logic of liberalization, then, lead to an acceptance of non-exploitative commercial surrogacy: all preferences for a child may be satisfied (premise A) and treated equally (premise B), the resulting parental constellations are all adequate (C), and the biological bonds severed are of only little or moderate importance (D).

This, then, is an outline of the slope of liberalization if its logic is pursued to commercial surrogacy. Once one accepts the four premises A-D detailed in section 1, the logic of liberalization implies that there is no principled way to halt the "sliding" at any point down the slope. The arguments outlined in section 2 above, with the possible exception of the argument concerning the welfare of children, tend to imply a content-thick description of the human good, and will therefore conflict with the principle of government neutrality (B). It is therefore highly questionable whether any of these arguments will be able to halt the liberalization for which the logic of liberalization provides the impetus.

Moreover, there is reason to think that the train of liberalization does not stop at surrogacy; indeed, it may turn out to have no natural terminus. The four premises of liberalization seem to condone further practices, three of which will be noted here. First, scientists are hard at work on the process of deriving gametes from somatic cells (Sparrow, 2013). If this turns out to be feasible, persons who do not produce viable gametes can have gametes for IVF produced in this way. Conceivably, embryos can be created from gametes from same-sex couples, for example, producing children who would be the genetic offspring of two men. Viewed in light of the premises of the logic of liberalization, these developments must be whole-heartedly welcomed.

Indeed, in an article on the ethics of synthetic gametes for heterosexual couples, two bioethicists opined that “All decent people will celebrate this possibility” (Testa & Harris, 2005, 164).

Second, if an artificial womb were ever to be successfully constructed, it would do away with the need for surrogate gestation. This would greatly simplify the begetting of children for male couples and single males.

Third, IVF can be combined with preimplantation genetic diagnosis (PGD) and other means of prenatal screening for abnormalities and/or positive selection for desired attributes. The logic of liberalization does not lead inexorably to the acceptance of such practices; for this, supplemental premises—for example, about the (lacking) moral status of early human life—are needed. However, the logic of liberalization does provide a push in this direction through its justification of extensive instrumental and technical approaches to the creation of human life. When the language and logic of *production* is imported into the creation of new life, it may seem a matter of course that the “product” should undergo the *quality control* of prenatal screening. Indeed, it may seem irrational and even immoral *not* to subject one’s “product” to such screening.

The contention in this section has been that there is a very powerful logic of liberalization at work in public debates and political processes concerning artificial reproduction. It has been sketched how acceptance of the four premises at the core of this logic paves the way for a slide down the slope of liberalization, a slope which has no natural ending point.

If we have outlined the logical consequences of the logic of liberalization correctly, this could form the basis of a *reductio ad absurdum* argument against the logic of liberalization. If the premises of this logic lead to consequences judged to be unacceptable, and if current notions of what counts as public reason rule out all possible counter-arguments as irrelevant and inappropriate, this indicates that there is something fundamentally unsound about both the logic of liberalization and the rules that allegedly should govern public reasoning in liberal democracies. However, the success of this argumentative strategy crucially depends on widespread rejection of the new “liberal” practices in question. With time and consideration, such opposition may wither away amongst supporters of liberalization.

How Will Christians’ Responses Fare in the Public Square?

We have attempted to present some crucial premises and lines of argument in the debate on assisted reproduction and reproductive donation, and some logical relations between these premises and lines of argument. As we now sum up our discussion with some thoughts on how the arguments may fare in the public square, we keep in mind that public debate and political decision-making always, obviously, contain other ingredients and take their shape from other influences. A rejection of Christian lines of argument may be rational in light of one’s fundamental premises; it may also be more or less irrational.

Still, we have found it worthwhile to examine the logical structure of the debates on assisted reproduction in liberal democracies. Given the four premises of the logic of liberalization, some lines of argument seem more promising than others.

The momentous importance given to empirical studies was indicated. Accordingly, attempts to question the methodological soundness of studies that are taken to support liberalization—pointing either to the shortcomings of existing studies, or to the inherent inability of such studies to answer the most important questions—may have significant impact in the debate. Such criticisms must be taken seriously by the liberalization advocate, since they operate on premises that he or she accepts.

The argument from the child's right to receive care from both biological parents and the *reductio* argument from the slope of liberalization, on the other hand, attack the premises inherent in support for liberalization. These arguments demand that the liberalization advocate rethink his or her allegiance to the four premises. Thus, the liberalization advocate may turn out to stick to his or her premises and reject the challenges. The appeal to alleged rights could then be seen as empty rhetoric with no ultimate justification, and the specter of the slippery slope developments could be seen simply as novelties to be welcomed or at least tolerated.

The concerns about the commodification of the child inherent in donor conception and surrogacy articulate, we believe, deep and prevalent intuitions. However, as noted, such concerns seem to spring from a thick moral vision of the kind that political liberalism will tend to dismiss as inappropriate for the public square. However, this observation may fuel a deep objection to content-thin neutrality. It seems that the liberal paradigm just does not allow us to articulate, or is unable to accord weight to, certain objections to new biotechnological conquests of nature, even when these are, arguably, obviously morally relevant, such as in the present case (Fox, 2010). This observation should be cause for concern for liberals: if their recipe for reconciling disparate moral views necessitates declaring morally relevant points vacuous and irrelevant, then it may come at too heavy a price. Some Christian ethicists propose alternatives to the Rawlsian principle of public reason that, while still liberal, are more inclusive (see, e.g., Biggar 2011).

To what extent are the five lines of arguments discussed “Christian”? In fact, as presented they all have versions that are fully secular, in the sense of having no explicitly religious content. This is a striking observation: the Christian's main arguments against liberalization of reproductive donation may cogently be made on secular terms. However, as has been argued, this fact is not sufficient to secure a hearing for the arguments in a public climate in which political liberalism dictates the rules. Underlying many of the arguments is a thick moral vision of, for example, life, gestation, and kinship, a vision compatible with a Christian worldview, anthropology, and traditional ethics, but incompatible with liberalism's insistence on neutrality.

Some central Christian arguments in this case, then, invoke thick moral visions. Even though arguments may be made in neutral terms, when made by a Christian they are underpinned by a Christian anthropology and worldview. Given the fact that Christian argumentation seems often to be ruled out as inappropriate even though it is formulated in religiously neutral terms, one might legitimately ask if Christians should instead use their allotted time in the public square to present explicitly Christian arguments that are clearly anchored in a rich and full Christian worldview. Even though this blatantly violates the dogma of public reason and thus will be rejected by some out of hand, it will appear attractive to some.

Thus, our contention is that the Western liberal democracies can each be located at a stage on the slippery slope of liberalization, and that there is a certain conjunction of premises—a logic of liberalization—that fuels a further slide. We hope to have shown that it is both possible and illuminating to analyze the public debate in these terms. We have pointed to possible Christian responses, some of which will have a hard time as long as the powerful premises of the logic of liberalization remain widely held.

Endnotes

1. To be sure, Christians respond differently to reproductive donation. One cannot therefore speak of *the Christian stance* towards reproductive donation. It is still the case that many Christians do tend to take a critical stance toward such practices, and that a critical attitude may be considered the traditional Christian attitude. Among those who are critical of reproductive donation, some would still accept assisted reproduction for married heterosexual couples, whereas some would reject all assisted reproduction (e.g., the official stance of the Catholic Church).
2. Arbeiderpartiet (the Labour party), Sosialistisk venstreparti (the Socialist Left party), and Venstre (the Left party) advocate donor conception for single women, and egg and embryo donation for heterosexual and lesbian couples; the Left party discussed backing altruistic surrogacy, but in 2013 decided not to.
3. “Statstøttet brosjyre lærer ungdommer sadomasochisme.” *VG Nett*, 27.07.2012. <http://www.vg.no/nyheter/innenriks/artikkel.php?artid=10059434>.
4. With “natural cycle” techniques, only one egg is extracted and fertilized.
5. However, in practical politics there will be mechanisms that will counteract or at least slow the sliding: no legislative debate will take *all* its cues from these premises and this logic. Furthermore, political actors will need to draw the logical inferences — and accept them — for the logic to have effect.
6. Some of the affected males are cancer survivors which the treatment have rendered infertile. This is a group that will invoke sympathy; withholding the offer of sperm donation from this group may appear particularly cruel and unjustified.

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ETHICAL TENSIONS INVOLVED IN MANDATORY IMMUNIZATION PROGRAMS: A COMMUNITARIAN RESPONSE

DENNIS L. SANSOM, PHD

Introduction

The recent news in the United States of an outbreak of measles among unvaccinated children has raised again the public debate over mandatory immunization programs.¹ Do parents who deliberately reject vaccinations have the right to put the health of others at risk? How much coercive authority do governmental agencies have, acting on behalf of the public welfare, to require parents, even dissenters, to vaccinate their children?

This paper addresses the ethical assumptions of this debate and provides a philosophical basis, shaped by a communitarian account of ethical formation, to assess the ethical issues involved in mandatory immunization programs. The conclusion shows that dissenting parents misuse the moral force of what they may think is their social right when they put others at health risks, but also that coercing governmental agencies still must recognize the ethical duties owed the parents.

The Apparent Ethical Issue Involved in Mandatory Immunization Programs

We often depict the ethical showdown in mandated immunization programs as the autonomy of individuals versus not harming public health. On one side, libertarians emphasize individual rights, that the freedom to refrain from unwanted coercion from the state is more politically and ethically compelling in the decision than the role of the government to regulate people's decisions about their own health. Behind this libertarian-individualistic stance is the broad philosophical position that the best society maximizes people's efforts to express and materialize their own sense of self-determination and purpose. Thus, for this side, individuals' autonomy takes precedence in this issue.

On the other side, conservatives insist that in matters pertaining to all citizens, especially in areas of health, each citizen must conform to the regulations aimed to protect its citizens from unnecessary harm. To this conservative-collectivist approach, when there is the risk of harming others, the "will of the people" morally trumps the individual's autonomy. The philosophical underpinning to this position is that the best society promotes a collective identity shaped by common goals and desires. Hence, the government's responsibility to enforce policies to protect the health of society outweighs in social importance the right of individuals to decide whether they should be immunized.

There is truth on both sides. That is, one of the bedrock ethical principles of Western society is the respect we owe to people's autonomy, to their right of self-

determination in matters of morality and life's meaning. Also, it is self-evident to our cultural self-understanding that we should not unnecessarily harm other people, that we should protect people from injury; this is the principle of nonmaleficence.

That being said, however, the fault of the two sides in this debate lies not in their allegiance to their ethical principles of autonomy and nonmaleficence but to their conceptual separation of the two principles. Because the former sees society based on the sovereignty of individuals to forge their own self-determinations and purposes, and the latter envisions a society ordered to assure the best possible rule of justice and fairness, they fail to see that the ethical principles upon which their arguments rest grow from a common social experience. Consequently, though in tension, the ethical principles are inseparable in theory and ought to be inseparable in practice. It is because we recognize people's responsibility for their own self-determination that we accept the obligation not to harm them unnecessarily. And, our commitment not to harm others compels us to recognize in others the responsibility to determine their own sense of inviolable purpose and selfhood.

Furthermore, even though these two ethical principles at first sight seem to be distinct in meaning, it would be wrong, according to their formation in society, to think that they would also justify two contrasting and competing notions of rights—that is, autonomy entitles individuals the right to determine whether they should submit to mandatory vaccines versus the principle of nonmaleficence entitling the public to demand conformity in this issue. Consequently, in the debate over mandatory immunization programs, we seem to have a log jam of contrasting rights. This contrast is based on a confusion of rights (i.e., *liberty rights* versus *claim rights*), and a proper understanding of rights, conceived according to the evolution of the public good, removes the confusion and the contrast.

The Source of Our Moral Commitments and Rights—A Communitarian Explanation

Communitarianism provides constructive insights in the effort to account for the moral force of the public good upon our social ethical formation.² Although in a paper of this size the inadequacies of other views of ethical formation (for example, utilitarianism and duty-based ethics) in comparison with communitarianism cannot be sufficiently addressed, the following analysis shows that the communitarian position clarifies what is ethically at stake with mandatory immunization programs and provides a way to reason to plausible ethical positions.

Because we are concerned with the moral force of the public good to determine the proper actions on the issue, we should first ask, "What is the public good?" Admittedly, people understand the issue of the public good in different ways. Generally, there are three groups—conservative, libertarian, and communitarian. For the conservative, society experiences the public good in a consensus of moral order stabilized—often coercively through laws and mostly through the weight of moral traditions—in various institutions as the family, government, and businesses. Although it is true that institutions are necessary to form a society in which people experience a common good, this view does not recognize that often consensus is not a dependable criterion to determine the public good. Often, the collective expression

of a moral order can sometimes harm minority groups, unique individuals, and stifle the needed human creativity to make institutions more relevant and applicable.

The libertarian maintains that the public good occurs when society promotes the self-expression and self-determination of her members. People should form their own moral codes, designed to maximize their own happiness. The structure and lived-experiences of institutions must adjust to the needs and expectations of autonomous persons, who must balance their drive toward greater expression of autonomy with others but also primarily join with others in social institutions, because they experience autonomous fulfillment in similar ways in such associations. Even though the human drive for greater and more authentic ways to realize autonomy persists through every generation, libertarianism does not account for the cultural preparation that makes the drive and need for autonomy possible and desirable. Society is never a *tabula rasa* on which individuals fashion their own idiosyncratic sense of autonomy. It is a result of a moral order that makes desirable and plausible the possibility of self-determination. Thus, the biggest limitation to libertarianism is that it does not factor into its account of the public good this reliance upon a moral tradition.

Communitarianism offers a more plausible account of the public good. It recognizes that the choice is not between the consensus of society and the autonomous individual but for how the social institutions and individuals shape and define each other. The well-known proponent of communitarianism, Amitai Etzioni, gives a good account of this balance.

The challenge for those who aspire to a good society is to form and sustain—or, if it has been lost, to regenerate—a social order that is considered legitimate by its members, not merely when it is established (as contract libertarians would have it) but continuously. The new golden rule requires that the tension between one's preferences and one's social commitments be reduced by increasing the realm of duties one affirms as moral responsibilities—not the realm of duties that are forcibly imposed but the realm of responsibilities one believes one should discharge and that one believes one is fairly called upon to assume.³

It is because people learn “moral responsibilities” that they realize their experiences of self-making necessarily involve having the opportunity to contribute to social institutions such as families, schools, and businesses. People are never only responsible to themselves or only to institutions. The responsibility involves finding the ways to experience human flourishing within established and continuous social relationships. As societies learn to find these ways, they establish a moral order that provides the frameworks by which they and subsequent generations determine which aims and behaviors actually lead to human well-being. The social good emerges not from an imposed order but from the innate sociability of people, who in community seek to establish the habits, social relationships, and organizations that enable human happiness. Thus, we can say, the public good is the moral order forged and shared by a community aimed toward human well-being.⁴

This sense of the public good does not necessitate that we define exactly how that would look, as though it were a Utopia, Garden of Eden, or Classless Society. In fact, if we tried, we would undermine the evolutionary development of the public good. The public good evolves according to how individuals and organizations attempt to fulfill their innate sociability. This evolution is teleological in the sense that a plant is.

That is, it grows according to its innate characteristics toward its natural flourishing. These characteristics would be the virtues (i.e., the human dispositions and practices) which, forged in people's personal and organizational relationships, contribute to the experience of human flourishing. For example, the traditional Aristotelian virtues of wisdom, justice, temperance, friendship, and generosity engender productive and lasting relationships (both personal and organizational) because they enable people to form the kinds of relationships that fulfill the desire individuals innately have to form relationships completing their social nature.

The vices, on the other hand, erode social relationships and thereby erode the efforts of individuals to obtain fulfillment according to their innate sociability. For instance, a society of foolish, unjust, immoderate, garrulous, and stingy persons would obstruct efforts to form relationships and organizations that would lead to more satisfying and long lasting human endeavors. Thus a well-ordered society is one continuously embodying ways that enable individuals and the society as a whole to believe that it is giving the best possible opportunities for people to experience what they would believe and know is their purpose in society. Such a society has a sense of vocation toward the good in its ethical activity. Although this good is not conclusively described, it is realized in the occasions when people and organizations contribute to a societal purpose greater than their own endeavors.

Furthermore, the public good is organic in that people realize they are integrated into a societal purpose experienced in their interactions and interdependencies. This purpose serves as a kind of language in which people and organizations express to each other what satisfies being the kind of people they are in their pursuits for human well-being. And, as a language, this purpose is never purely private or purely formal. A private language is impossible (that is, one has to use an accepted language to think one is privately communicating to oneself), and a formal language built on following algorithms cannot adjust to the needs and idiosyncrasies of social evolution. The public good incorporates people into satisfying ways built upon the lessons learned from their predecessors and compels society to formulate new ways to experience both individual and organizational fulfillment. In the realization of the public good, it is never the individual versus the whole and never the whole swallowing up the individual. It is the individual and the organizations and institutions of society finding ways to fulfill their purpose in the whole.

With this understanding of the public good, we can now account for (what Roger Scruton calls) the "calculus of rights, responsibilities, and duties."⁵ There is a way of sorting out basic obligations in society dependent upon their contributions to the making of a shared public order aimed at human well-being. The most basic obligation is the *liberty right*—a recognition that a person or group is inherently essential for the moral maturation of a community, that the realization of the public good depends on the persons and groups experiencing, in Scruton's words, their "life, limb, and happiness" (that is, experiencing the public good). These rights are so fundamental to the success of a society that they should not be invaded or violated. If they were, the social fabric of people bound together toward the common aim of human flourishing would deteriorate. They are the boundaries everyone recognizes should not be encroached.

Also this way of calculating the kinds of obligations necessary for a well-functioning society delineates another right—*claim rights*.⁶ These have to do with contractual and tort obligations in which people can impose duties upon others either to honor a negotiation and contract or to compensate for a harm or wrong experienced. These rights settle disputes by making others responsible, and hence subject to duties owed, to satisfy the claims placed upon them by others.

Although both senses of right emerge out of the search for the public good, we must keep them distinct. *Liberty rights* cannot be invaded in that they represent the fundamental basis of people living in community and sharing a common social evolution, but a *claim right* entitles one to invade the life and property of another. Everyone shares *liberty rights* and shares them in the same way, but not everyone in all occasions can assert *claim rights*. However, when a *claim right* is asserted, it is always idiosyncratic to the context.

Furthermore, since it is inherent to the concept of a right that a corresponding duty follows, we can say that everyone in a society that shares *liberty rights* has the duty not to invade other person's "life, limb, and happiness," and that those against whom a *claim right* is issued have the corresponding obligation to be imposed upon by those of the *claim right*. *Claim rights* have a legitimate place in society only because society is committed to the *liberty rights* everyone shares and values. We may make mistakes about specific *claim rights* (that is, the laws of contracts and torts may not in all cases be consistently applied), but society cannot trust its own basic social bond if *liberty rights* are denied or ignored. Thus, we could say that *liberty rights* are the genus of which *claim rights* are a particular species.

However, a serious confusion of the public good occurs when in the name of *liberty rights*, some people's *claim rights* are prohibited, as well as when some people rely upon their *claim rights* to harm the *liberty rights* of others. For instance, if dissenters to immunization programs put society's health at risk, they misuse their *claim rights* to reject such programs, because in rejecting them they in fact invade the *liberty rights* of others to their "life, limb, and happiness." A *claim right* cannot violate a *liberty right*.

Even though a thorough explanation of the public good and rights from the point of view of communitarianism has not been given at this point, enough has been shown to recognize that the two ethical principles involved in mandatory immunizations are both distinct and interdependent. That is, it is because they arise together out of the teleological and organic evolution of society toward the public good that they thus must be held in tension with each other in any ethical deliberation about mandatory immunizations programs.

The Interconnection of the Moral Principles of Autonomy and Nonmaleficence to the Public Good

Although the moral force of the evolution of the public good is the same for the two ethical principles, their interconnection now needs explanation. Since our nature is to form social units (that is, relationships essential to fulfill our innate socializability) rather than to try to thrive alone, the aim of these units is to produce the good of being human. We desire a life of happiness in which we experience constructive

relationships and a sense of purpose greater than our immediate tasks and demands. Furthermore, because we are social beings aimed toward fulfillment, we know intuitively and experientially that some intentional behaviors are counterproductive to the human good—cruelty, oppressive discrimination, lying, narcissism, disregard of human life, hatred, and greed. It is true that the human good supersedes all goals, and, thus, it is difficult to describe what the state of the human good would look like. We could say that it is a necessary work in progress. Nonetheless, we seek it and judge the appropriateness and success of our social experiments and configurations by their contribution to human well-being.

In our efforts to experience this happiness, we form relationships and institutions to aid us in this overriding pursuit for the human good, such as families, civic organizations, economies, governing agencies, and places of worship. They become indispensable for our social nature in the quest to experience as much of the human good as possible. To form and maintain these mediating social formations, we develop moral obligations designed to maintain them. This is so because we realize that we cannot find fulfillment and happiness without them. As we think about the power of these obligations upon us, we articulate them into ethical principles. We affirm these principles not because they satisfy a formal, rational principle of what a rule should be and do, but because they express our efforts to form a moral culture in which individuals are united through the mediating social formations toward achieving as best as possible the human good. The ethical principles are thus interconnected in the common social endeavor to realize as much human flourishing as possible. For instance, we cannot practice nonmaleficence without also recognizing the right of self-determination to others. We cannot practice our autonomous decisions to live our life—the life which we think best expresses our own sense of who we are and who we should be in life—without recognizing that the pursuit should not harm and limit others in their own acts of moral self-determination. So much of the practical wisdom required in living in a moral community is learning the right ways to balance our ethical principles.

Neither principle has precedence over the other. Autonomy is not ethically more important than nonmaleficence to public health, and vice versa. These ethical principles are obligatory upon us because they are both necessary for our moral culture. That is, in that we are not a libertarian society of a loose confederation of individuals, our sense of self-determination requires us to recognize the right of the public not to be harmed by our actions. Also, in that we are not a collectivist society where everyone's place and role in society is defined by a representative or external authority, our commitment to the public good must recognize that there are limits to what we can expect and demand certain people to do. It is because the tension between autonomy and nonmaleficence expresses the formation of a moral culture that we must try to balance them.

A peculiar feature of the concern over mandatory immunization programs is that children up to a certain age are traditionally viewed as an extension of their parent's right of self-determination. That is, parents decide for the rearing of their children, except when criminal intent and action harm the children. This is an ambiguous state of affairs. At what age do children gain their own right of self-determination and can parent's noncriminal autonomous decisions be so aberrant from the norms of proper childrearing that they forfeit their right to act on behalf of their children?

Regardless of what answers we might give these questions, with all things being equal, we typically think children are extensions of their parent's autonomy. Even though the focus is on the role of parents, the argument encompasses all people for whom immunization is mandated by the government.

In summary, there is the moral culture formed by seeking the human good, and the two ethical principles of autonomy and nonmaleficence to the public health are integral to it. Hence, we should be neither libertarian nor conservative about the social order, and we must balance the two principles in ways which best express and promote the public good. In other words, we cannot experience the public good and also reject the proper balancing of the two principles. Therefore, the following guidelines logically result from this balance and hence reflect society's moral order.

Ways to Respect the Autonomy of Individuals in Mandatory Immunization Programs

Because the autonomy of individuals—including parents of children acting as their parental guardians—is essential to the experience of the public good, governmental agencies should acknowledge that even dissenters have the right of self-determination in the matter of immunization programs. Of course, dissenters would be wrong if they argue that their autonomy gives them a *claim right* against the agencies, consequently, putting at risk the public health (their “life, limb, and happiness”). That would be a misuse of a *claim right*. However, it is still ethically incumbent on the agencies to find the proper ways to balance the right of society not to be harmed by its citizens with the right of individuals to express their own self-determination. In situations where people are asking for exemptions for medical, religious, and/or philosophical reasons, here are four ways the dissenters' autonomy can be acknowledged and factored into the agencies' decisions.

First, the government agency must explain why the mandate serves the public good and not just the agenda of a government agency or the interests of medical research. The government should disseminate this information through mailed brochures, TV. announcements, appropriate social-media, and information distributed through health care providers. The government's main premise must be that immunizations are necessary for public health, and therefore local citizens are obligated in this issue not to harm the public good.

Second, the treatment does serve public health by actually curtailing or eliminating the harmful, infectious disease. The argument should be based on established data or the scientific judgment of established medical agencies that it would be the best possible care. The effectiveness of the mandate should be evident, so that if the agency is challenged, it can rely on a scientific consensus to support its claim that the mandate serves the public good.

Third, the agency should indemnify its work, assuring the public that if its actions cause harm on individuals and groups, the government will pay the required medical treatments and damages. This would require notifying the public of the known and potential harmful side effects of the mandate and specifying the degree of responsibility the agency bears. Furthermore, the agency should offer periodic follow-ups to determine if the immunization has created unexpected side effects.

All this is to assure the public that the government agency seeks to maximize its responsibility and minimize the possible harmful consequences.

Fourth, the agency should assure the public that it is not incorrigible to dissent, that it would consider granting exemptions if the individuals met at least two conditions: the individuals can prove as best as possible that they will not harm others or their children, as the case may be, and that their request is a sincere and defensible decision of conscience reflective of their sense of moral self-determination.⁷ Just as society entitles the criminally accused to offer their best defense in a court-of-law so that society believes a fair trial has been conducted, the government should allow dissenters to make their best case to excuse themselves or their family from the vaccines. By offering this right-of-defense, the agency shows that it tries to be fair toward all citizens, indicating its trustworthiness.

In fact, allowing dissenters the right-of-defense is consistent with the moral motives behind requiring *informed consent* of patients before commencing medical procedures or research. Ever since the Belmont Report of 1979, medicine has tried, especially with the requirement of obtaining informed consent, to keep the patient's interests and autonomy paramount in its actions. Mandatory immunization policies in some cases pressure individuals to conform to agenda not of their own determinations. Moreover, these people's right of autonomy should be acknowledged and factored into the decision process, just as patients who are enrolled in a research protocol or are undertaking a medical procedure are given the choice of signing an informed consent document. A way to reflect this commitment to the patient's autonomy is by allowing the right-of-dissent. Of course, the individuals (especially the dissenting parents who resist vaccinations) still must demonstrate that their actions will not invade the *liberty rights* of the public. Yet, all that is asked with this fourth condition is what Ross Silverman calls the process of "informed refusal," by which dissenters are given the opportunity to make their argument for exemption from the mandatory program.⁸

It is pertinent here to discuss several unique features related to the use of religious exemptions.⁹ Those who appeal to religious reasons for exemptions create special conditions in the ethics of mandatory vaccine programs, especially in the United States. Although the issue is fraught with debate and complexities, it is a matter of constitutional authority that the government can neither establish religion nor prevent the free exercise of religion. Because the purpose of a government is to promote the good of society, it must limit the free exercise of a religion that could possibly harm society. Thus when considering religious exemption, the right balance must be found between protecting the herd immunity and respecting the free exercise of religion in society.

This issue lies at the heart of the core beliefs of traditional Jewish and Christian teachings on love. The sum of the Law and Prophets is found in the command to love God with all one's heart, soul, and mind and to love one's neighbor as oneself (see Deuteronomy 6:4-5, Leviticus 19:18, and Matthew 22:36-40). This twofold command compels the faithful not only to live consistently with their religious convictions about God but also to find proper and relative ways to love the neighbor, regardless of who the neighbor is. Thus religious communities seek to find ways to balance their faithfulness to their doctrines and practices with actual loving acts toward neighbors.

Pertaining to immunization programs, this balance is delicate. On one hand, religious people cannot jeopardize the herd immunity or their own children's health by refusing to take vaccines. Such action would clearly contradict the religious command to love one's neighbor. However, on the other hand, as a matter of "free exercise," governments must allow exemptions for religious reasons, if they do not bring harm to society. A case in point is the opposition that some Roman Catholics and Protestants/Evangelicals have to vaccines composed of aborted fetal cell line tissues, for example Varivax, Varilrix for chicken pox, Vaqta, Havrix Avaxim, Epaxal for Hepatitis A, Twinrix Vivaxim for Hepatitis A&B, Hepatitis A, and Typhoid, and MMR, Priorix for Measles/Mumps/Rubella.¹⁰ It is not that they oppose vaccinations per se; they oppose contributing (even if indirectly) to abortions, because by taking these vaccines they would justify the abortions that led to the creation of the vaccines. Because these vaccines come from cell lines from previous aborted fetuses (WI-38 is from a 1971 aborted fetus), they do not contain specific human fetal material, though they contain human DNA.¹¹ For this reason the Pontifical Academy for Life has counseled that using these vaccines is ethically ambiguous and that people can in good conscience refuse to use them, but also, because of the concern for public health, people could use them until better vaccines can be made.¹² Their opposition is based on a deeply held religious belief, and whether a majority of people or government agents agree with them is irrelevant to the legitimacy of their belief. If they were legally mandated to take these particular vaccines, then the government would be hindering the free exercise of their religion.

Just as it is incumbent on religious people to join necessary immunization programs so as not to undermine the herd immunity of society, it is also incumbent on the government to find alternative vaccines for those who think the vaccines contradict the exercise of their religion.¹³ Although this accommodation to religious belief may not be popular to those who do not agree or share the opposition to the particular vaccines, allowing accommodations for unpopular or dubious practices is a common feature in our social experience.

For instance, even though most people do not think it is wrong to eat meat or animal byproducts, society accepts and gives recognition to vegetarians and vegans' demands and expectations for acceptable menus.¹⁴ The same can be said for those who for moral reasons reject using GMO's in the public food supply.¹⁵ Moreover, in some cases, Muslim and Jewish prison inmates are given non-pork diets as a way of compensating their religious prohibitions against eating pork.¹⁶ The point is that it is a valued social custom to allow conscientious objectors to find ways to express their particular deeply held beliefs and still function in society. Thus it is consistent with our social values to allow religious exemptions as long as they do not harm the public health.

To summarize, if these four conditions are met, the government agency shows its responsibility to assure public trust of its motives and actions, and in this case, it must show its trustworthiness. It is likely that lack of trust in the motives and competences of governmental agencies is a primary reason parents are reluctant to join immunization programs. This comes from a recent study conducted by Brendan Nyhan et al., who questioned 1,759 parents while trying to determine which of four interventions would most likely persuade them to participate in a vaccine program.¹⁷ The four were 1) information detailing that autism does not result from vaccines, 2)

information about the danger of the possible diseases, 3) images of diseased children, and 4) a dramatic narrative about an infant nearly dying with measles. None increased parental intent to join the program, and some in fact may have had counterproductive consequences for the pro-vaccine messaging. Although Nyhan et al. did not ask if the parents mistrust the government, their mistrust of the government would account for their reluctance. It would follow that if society trusts the government more, more people would be willing to participate in its programs.

An agency may have compelling reasons to persuade dissenting individuals to participate in the immunization programs, but the agency must still respect the *liberty rights* of the individuals to experience their own sense of “life, limb, and happiness.” By showing that its actions actually contribute to the *liberty rights* of all, even the dissenters, the agency shows its trustworthiness to all persons in its commitment to the public good. In meeting the four conditions above, the agency undergirds its role in fostering the public good for all.

Ways to Promote Nonmaleficence in Mandatory Immunization Programs

On the other hand, dissenting individuals also have a responsibility towards the public good. Even if they appeal to their right of self-determination, they still must demonstrate a moral responsibility to the public good, and this can be done if they meet three conditions.

First, the individuals must publicly articulate their commitment to public health and not to bring harm on others. Their reasons for exemption must not be willy-nilly. They should explain that their objections come from sincerely held beliefs, which, though not shared by all, are not intended to harm others or the public good. Just as the public expects from conscientious objectors in other areas (e.g., military draft) defensible reasons for their desire to be removed from the particular obligation, so should dissenters to mandated immunization programs bear the same responsibility. This could be done in writing or in person before a panel of government agents and professionals acting on behalf of the public good.

Second, dissenters must attend an educational program detailing the seriousness of the reason for mandatory immunization and the possible harm they could cause to the public or their children. By agreeing to this condition, dissenters show that they are not incorrigible to the demands of the public good, that they are willing to change their minds. They would be required after attending the educational program to defend their position by explaining in what way their right of autonomous self-determination in the particular situation is more morally compelling to them than possibly harming public health.

Third, to assure the government agency that they respect the demands of the public good, dissenters should pledge, if necessary, self-imposed quarantine measures to protect their children or others if they refuse to accept the immunizations.¹⁸ Because all individuals are accountable to the public good, and to show that they bear this accountability as well, those asking for exemptions must be willing to separate themselves from the public to the degree necessary to safeguard society or their children. There is precedent to this practice. Society allows for those who, because of

idiosyncratic beliefs and practices, want to remain separate from society as a whole to form sectarian communities. Dissenters to necessary immunizations programs show their ethical responsibility not to harm society by willing to become separate from others. This may seem draconian, but it reflects the tension between and balance of the ethical principles of self-determination and no harm to others. And, although dissenters seek exemptions, they still must maintain this tension and balance.

To summarize, if these three conditions are met, individuals objecting to mandatory immunization programs show their responsibility and accountability to protect public health and remain committed to the public good. However, if individuals refuse to comply in this way and their actions do in fact bring harm to public health, they nullify their moral argument in that they are not willing to balance their right of self-determination with the principle of no-harm.

Furthermore, if dissenting parents appeal to their *claim right* (that is, a right that imposes a duty on others) to reject the vaccines, they would in fact invade the *liberty rights* of others by risking their “life, limb, and happiness.” And, as was explained above, a *claim right* does not entitle persons to invade the right to “life, limb, and happiness” (that is, the public health) of society, and, hence, cannot be used ethically to justify actions that harm public health. When government agencies coerce dissenters to adhere to the immunization programs, they are in fact not denying the person’s *liberty rights* by rejecting the supposed *claim right*. In fact, they strengthen the *liberty rights* of all and thereby undergird the public good.

Conclusion

It may be the case that the above seven recommendations are not necessarily novel or exhaustive of the ways to handle the issue, but the point is to see the moral force behind them. They reflect the moral order of society trying to experience the public good through (in part) finding the proper balance between seemingly competing ethical principles. Our social and individual moral self-understanding, developed through the efforts to realize the public good, depends on the proper balancing of the two principles. Individuals cannot infringe on the *liberty right* of the necessity for public health, and those acting on behalf of the public good must find ways to allow dissenting individuals to follow their own self-determination without harming public health. In keeping this balance, the public good is realized. This struggle reveals the seriousness and complexity of our social lives together and the institutions we form to foster our society. And, consequently, we should not deny, skirt, or eliminate the tensions involved in mandatory immunizations. They reveal the evolution and reality of the public good.

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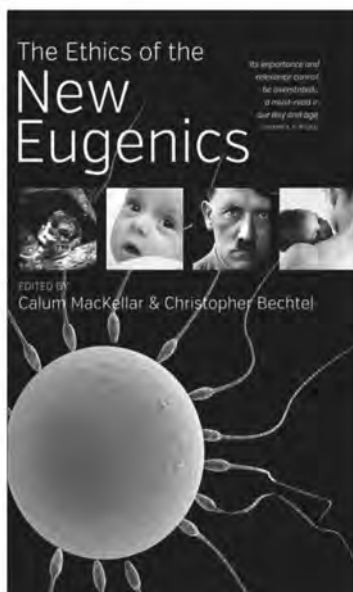
Endnotes

1. For example see newspaper articles, "U.S. Measles Cases for 2015 Rise 18.6% Over Past Week CDC Says 121 Measles Cases Reported this Year in U.S.," *Wall Street Journal*, February 9, 2015; "Measles Cases Linked to Disneyland Rise, and Debate Over Vaccinations Intensifies," *New York Times*, January 21, 2015; "Immune Deficiency: Why a Measles Vaccine Has Presidential Wannabies Talking in Code," *Time*, February 16, 2015, p. 12.
2. For a good discussion on the conflict between personal autonomy and the overriding right of public health see Lantos, J. D., Jackson, M. A., and Christopher J. H., Christopher J. (2012). *Journal of Health Politics, Policy and Law*, 37(1), and Opel, D. J. and Diekema D. S. (2012). *Journal of Health Politics Policy and Law*, 37(1).
3. Etzioni, A. (1996). *The New Golden Rule: Community and Morality in a Democratic Society*. New York: BasicBooks, pp. 12-13.
4. The reader should recognize here the influence of the ideas of Charles Taylor (*Sources of The Self: The Making of the Modern Identity*), Michael J. Sandel (*Liberalism and the Limits of Justice*), and James Q. Wilson (*The Moral Sense*).
5. Scruton, R. (2014). *The Soul of the World*. Princeton: Princeton University Press, p. 81. Scruton mentions that he relies on the insights of Wesley Newcomb Hohfeld, who explains these distinctions based upon what he says is the difference between multital and paucital rights, for this discussion; in particular see *Fundamental Legal Conceptions As Applied in Judicial Reasoning and Other Legal Essays* (1923). New Haven: Yale University Press, pp. 65-154.
6. Also see Scruton, pp. 82-95.
7. For a similar argument, which delineates the conditions when the need of public health overrules individual rights, see Childress, J. F., Faden, R. R., Gaare, R. D., Gostin, L. O., Kahn, J. B., Kass, R. J., Mastroianni, N. E., Moreno, A. C., Jonathan D., and Nieburg, P. (2002). "Public Health Ethics: Mapping the Terrain," *Journal of Law, Medicine & Ethics*, 30: 170-178; also see Kiss, N. E. (2001). "An Ethics Framework for Public Health." *American Journal of Public Health*. 91: 1776-1782, in which she proposes six steps to assure public trust of public health officials.
8. Ross, S. D. (2003). "No More Kidding Around: Restructuring Non-Medical Childhood Immunization Exemptions to Ensure Public Health Protection." *Annals of Health Law*. 12: 294.
9. The recent California law SB277, which denies any religious or personal exemptions other than medical, raises a concern about the "free exercise" of religion with this issue. The law is consistent with the role of government to protect the "herd immunity" of society, but by denying any appeal to religious exemption, the law too summarily dismisses the place that religion has in not only forming people's conscience but also influencing social behavior. Of course, religious conscience does not have an absolute veto over the ethical requirements to protect all citizen's *liberty rights*, but the government also does not have the ethical authority to disavow the legitimacy of a religious exemption before considering and understanding what it may be. It is possible not to harm the herd immunity and still allow exemptions based on religious objection to vaccines.
10. See Matthew D. Staver, *Compulsory Vaccinations Threaten Religious Freedom*, Liberty Council, 2002. These vaccines do not come from newly aborted fetuses but from cell lines (WI-39 and MRC-5) of aborted fetus.
11. See Meredith Wadman, "Medical Research: Cell Division," *Nature: International Weekly Journal of Science*, 498, 422-426 (27 June 2013).
12. See "A Statement from the Pontifical Academy for Life," Vatican City, June 9, 2005. "To summarize, it must be confirmed that:
 - there is a grave responsibility to use alternative vaccines and to make a conscientious objection with regard to those which have moral problems;
 - as regards the vaccines without an alternative, the need to contest so that others may be prepared must be reaffirmed, as should be the lawfulness of using the former in the meantime insomuch as is necessary in order to avoid a serious risk not only for one's own children but also, and perhaps more specifically, for the health conditions of the population as a whole—especially for pregnant women."
13. Staver, "An alternative for Polio is a vaccine known by the name IPOL, which is not derived from aborted tissue. The alternative for Mumps is Mumpsvax, for rabies is RabAvert and for measles

is Attenuvax. The vaccines under these names are produced either from monkey kidney cells or chicken embryos. There are also vaccine alternatives available in the United Kingdom, which are not available in the United States because they are not FDA approved. The Rubella vaccine available in the United Kingdom known as Takahashi Strain and the Hepatitis-A vaccine with the brand name of Aimmugen are derived from rabbit and monkey kidney tissue respectively. However, these are not available in the United States." Ibid.

14. Many appeal to Title VII of the Civil Rights Act to appeal to special accommodations and even claim that veganism is a religion and thus is protected; see *Chenzira v. Children's Hospital Medical Center* (S.D. Ohio 12/27/12); see Katy Loehrke, "Employer May Need to Make Religious Accommodations for Vegans," *IBInBusiness*, August 26, 2013.
15. For instance, Vermont passed a law going into effect July 2016 requiring labels on food designating GMOs; in a similar case Proposition 37 in California was proposed to do the same but was defeated in 2012.
16. See cases *Barnes v. Virgin Islands*, *Barnett v. Rogers* discussed in Yvonne Yazbeck Haddad, *The Muslims of American* (Oxford: Oxford University Press, 1991), p. 145; also see Kent Greenawalt, *Religion and the Constitution: Volume 1: Free Exercise and Fairness* (Princeton: Princeton University Press, 2006), p. 166ff.
17. Nyhan, B., Reifler, J., Richey, S., and Freed, G. (2014). "Effective Messages in Vaccine Promotion: A Randomized Trial." *Pediatrics*, 133(4) e835-e842.
18. For a similar argument, which delineates the condition when vaccination requirements should not deny individual's conscientious objections, see Salmon, D. A. and Siegel, A. W. (2001). "Religious and Philosophical Exemptions from Vaccination Requirements and Lessons Learned from Conscientious Objectors from Conscription." *Public Health Reports*, 116: 289-295; also see Verweij, M. J. (2008). "Ethics of Immunization," *International Encyclopedia of Health*, 2: 482-486.

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THE ETHICS OF THE NEW EUGENICS

Edited by Calum MacKellar and Christopher Bechtel

"The book is clearly written, easy to follow, well-structured, and well-researched. A lay audience will easily access and understand the debate and realize what is at stake with the new eugenics. Medical procedures and technical concepts are well explained ... [Its] importance and relevance cannot be overstated ... a must-read in our day and age, especially when biotechnology and the new eugenics can be a threat to all of humanity." • Johann A. R. Roduit, Institute of Biomedical Ethics, University of Zurich

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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.

Calum MacKellar is Director of Research of the Scottish Council on Human Bioethics, Edinburgh, and Visiting Professor of Bioethics at St Mary's University College, London, UK.

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BOOK REVIEWS

Patient Care and Professionalism

Catherine D. DeAngelis, editor. Oxford: Oxford University Press, 2014.

ISBN 978-0-19-992625-1, 219 PAGES, CLOTH, \$45.00

The concept of professionalism, once distinctly defined and clearly understood has, in recent decades, been democratized and, in the process, become formless and void. In her book, *Patient Care and Professionalism*, editor Catherine D. DeAngelis (former editor of JAMA) optimistically attempts to resurrect and restore the concept to its former position in health care. Unfortunately, the book lacks the depth required for the undertaking.

After proclaiming in the “Foreword” that most literature on professionalism is too often “introspective and usually defensive,” this book, through a series of essays by various authors, attempts a positive appraisal of present-day professionalism from a variety of perspectives. Revealingly, it begins its exploration of professionalism not from the perspective of the profession itself, but with a discussion of advocacy from the perspective of the patient. From there, it explores the history of professionalism, nursing as a distinct profession, and the roles of politics, specialty boards, public health, and law in shaping the profession as it exists today. The centerpiece of the book is an essay by DeAngelis herself, promoting a professionalism for twenty-first century health care that consists of thinly-described behaviors rather than thickly-defined meaningful virtues.

This book is not an academic work. Many chapters begin with “definitions” of terms often taken from questionably reliable on-line sources. Furthermore, inconsistencies exist, the most problematic of which is the source of the definition of “profession.” For some essays, professionalism is defined by the profession itself, and for others by society at large. Such inconsistencies diminish the effectiveness of the book in ascribing meaning to a nebulous concept. Finally, the topic is addressed too superficially to have significant meaning, relying on practical and redundant examples of what a professional “looks like” rather than naming, defining, and discussing the virtues and characteristics that comprise a profession and a professional.

The final chapter of the book, however, warrants reading. In an enlightening essay entitled “Professionalism: the Science of Care and the Art of Medicine,” the author examines the neurophysiologic and scientific basis of the physician-patient relationship. This chapter affirms that “therapeutic listening” is a scientifically demonstrable fact and an essential tool in a physician’s armamentarium. It even briefly notes the evidential conclusion: EMR, in precluding eye contact and therapeutic listening, is detrimental to this crucial aspect of health care. But since this evidence is inconsistent with the technological imperative governing health care, this conclusion is quickly abandoned and not explored to any greater depth.

Ultimately, the book attempts to argue that the term “profession” is still applicable to health care today in its new industrialized form and function. But the book is merely an overview that touches too superficially on an historically rich concept to be meaningful; the professionalism that it conjures is but a mere shadow of its former self. The book may be marginally acceptable as a practical introduction to professionalism for incoming students of health care, but is highly insufficient. Any consequential development of the concept of professionalism will require a return to that “introspective” literature alluded to and rejected in the Foreword.

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.

An Introduction to Biblical Ethics: Walking in the Way of Wisdom

Robertson McQuilkin and Paul Copan. Downers Grove, IL: InterVarsity Press Academic, 2014.

ISBN 978-0-8308-2818-0, 667 PAGES, HARDCOVER, \$45.00.

This is a third edition of Robertson McQuilkin's volume, first published in 1984, according to the official trade specification (1989, according to the Preface). This time it is co-authored. Its title must not mislead us into thinking that it is an exercise only in description: biblical ethics are normative and the authors apply them to the contemporary situation, especially in the US.

It is divided into two "books." The first or shorter one deals with "Foundational Considerations," covering love, law, sin, virtue and ethical theories. The second deploys the Ten Commandments as a framework, organising its material under four main topics: (a) sex, marriage and family; (b) life issues; (c) integrity, property and truth; (d) Christians and society, but only after setting out the priority of the first four commandments. A final chapter treats "Ethical Questions on Which Christians Differ" and "Knowing God's Will in Matters Not Revealed in Scripture."

There is much to commend in this volume. It is very attentive, not just in principle but also in practice, to Scripture. Its spirit is admirable, the authors expressing strong conviction without personal hostility towards protagonists and proceeding charitably without compromising their beliefs. We are challenged to examine our lives in their detail and turn over those lives to the Lord. Very occasionally, the two authors disagree on a particular issue and they write separate sections setting out their respective positions in a firm but respectful manner.

At the same time, one is bound to record some criticisms.

1. The coverage of ethical material seems to be determined by the authors' interests as much as by Scripture or the nature of the issues. For instance, there is a 130-page discussion under the rubric of the commandments to honour our parents and not commit adultery that actually bestows negligible space to the former commandment tucked away right at the end of the discussion. This section of the volume contains six pages and a half on dating, whereas the later treatment of the morality of nuclear warfare (the authors refuse to declare Hiroshima and Nagasaki wrong) comes to less than half of that.

2. The principles on which the Old Testament is applied in contemporary ethics are unclear. On the one hand, the authors appeal to Pentateuchal law to validate self-defense (380). On the other, they do not appeal to the absence of prisons in Israel to invalidate imprisonment as a form of punishment. (437) How exactly does this logic work?

3. New Testament ethics, like theology, is focussed on Jesus Christ and the Spirit. Yet, heedful of the closing paragraph of the "Introduction," this is not adequately reflected in this volume. "One can love...without liking" (35): is the concrete humanity of Jesus Christ not our decisive criterion here? The Spirit, which is the animating principle of Christian life and the guide to conduct in the New Testament is, at one point, simply one more resource, along with prayer, Scripture, the Christian community and spiritual disciplines (258).

Thus, the volume falls short of being a satisfactory comprehensive introduction to biblical and applied ethics. However, much of its substance is so biblically and practically good that it can certainly be recommended, albeit with qualification.

Reviewed by Stephen N. Williams, MA, PhD, who serves on the Editorial Board of *Ethics & Medicine* and is a Professor of Systematic Theology at Union Theological College in Belfast, Northern Ireland, UK.

The Therapeutic Cloning Debate: Global Science and Journalism in the Public Sphere

Eric A. Jensen. Ashgate: England and Vermont, 2014.

ISBN 978-1-4094-2982-1, 240 PAGES, CLOTH, \$119.95.

The key emphasis of *The Therapeutic Cloning Debate* is on exploring the role of the news media in the communication of scientific developments with regard to controversial bioethical issues. Jensen provides a systematic exploration of news coverage, especially regarding therapeutic cloning in both the US and the UK from 1997-2013, with a goal of addressing methodological limitations in previous studies. This book explores topics as diverse as the sources of news media coverage, changes in the process of cloning over time, differences between perspectives on the issue in the US and the UK, involvement of NGOs in the debate, and the role of science fiction. However, its conclusion that the media protects and mediates for powerful interest groups is rather sobering. For those uninitiated to the world of journalism, this book offers insight into decisions about how and what news get covered.

The Therapeutic Cloning Debate would be of most interest to journalists and students of journalism since it focuses on the origin, players, and presentation in media coverage rather than with the pros and cons of the ethical debate (although those are indirectly addressed along the way). One of the most interesting features of the book is its analysis of the sources of science news, which include diverse groups such as scientists, celebrities, professional ethicists, NGOs, patient advocates, and anti-abortionists. Another interesting result of the study is the different approaches utilized in media within the two countries, with the US coverage vacillating between utopian and dystopian views, and the UK providing more deference to science.

There are a few weaknesses with the book. Those interested in a more reasoned ethical analysis of the issue of therapeutic cloning will be disappointed, and the title is thereby a bit misleading. Some of the chapters are very short, giving the book a choppy feel at times. In addition, it will shortly be outdated. However, these are minor compared to the strengths of the book, which include its breadth and scope, its considerable detail regarding analysis (with numerous examples cited), its insight into how the field of journalism works with regard to a particular issue, and the exploration of how news is presented differently in the two countries. It is a very well researched volume, providing a concrete snapshot for a particular controversial medical issue.

Reviewed by Donna Yarri, PhD (Religious Studies), who is an Associate Professor of Theology at Alvernia University in Reading, Pennsylvania, USA.

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