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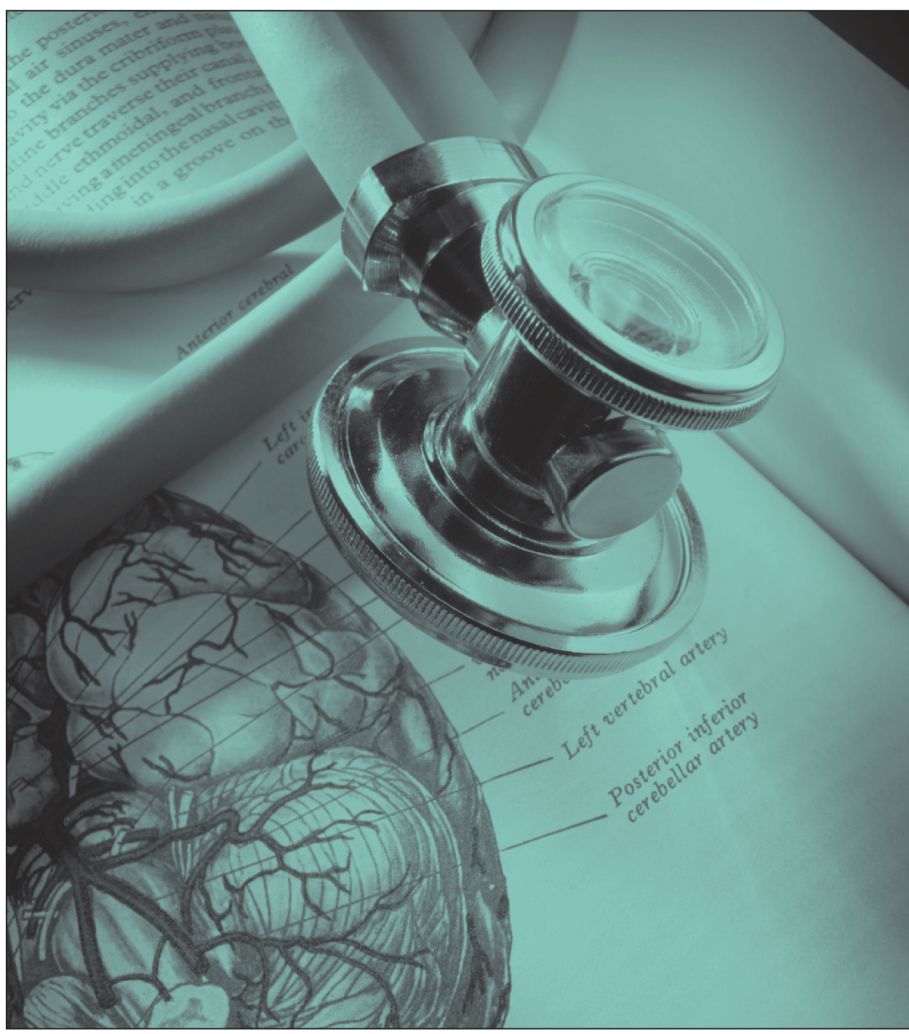
An International Journal of Bioethics



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EDITORIAL

IN MEMORIAM: HAROLD O. J. BROWN (1933-2007)

C. BEN MITCHELL, PHD

Many readers of this journal will have known Harold O. J. (Joe) Brown. His passing after a long fight with cancer, on July 8, 2007, at the age of 74, leaves a chasm not only in the hearts of those who loved him, but also in the work of bioethics.

At the time of his death, Harold O. J. Brown was professor emeritus of biblical and systematic theology at Trinity Evangelical Divinity School in Deerfield, Illinois, where he taught the ethics of biomedicine long before the neologism 'bioethics' had taken root in the culture. He taught at Trinity as a visiting professor in 1971 and 1975 and served as associate professor of systematic theology from 1976 to 1983. After four years as a pastor in Switzerland, Brown returned to the Trinity faculty in 1987, where he taught full-time until 1999. While at Trinity, he helped to found the Center for Bioethics & Human Dignity and served on the editorial advisory board of *Ethics & Medicine* for many years.

Brown earned his four degrees from Harvard University and Harvard Divinity School. He received the Bachelor of Arts in Germanic languages and biochemical sciences, the Bachelor of Divinity in theology, the Master of Theology in church history, and the Doctor of Philosophy in Reformation studies. He also studied at the University of Marburg, Germany, and the University of Vienna, Austria, and taught courses in Basel, Switzerland, and Yeotmal, India.

With former United States Surgeon General C. Everett Koop, Brown co-founded the Christian Action Council, a leading evangelical pro-life action group and an educational/service ministry. He was also director of the Center on Religion and Society at the Rockford Institute and taught in the International Seminar on Jurisprudence and Human Rights in Strasbourg, France.

Brown's areas of expertise included systematic theology; beginning of life issues; ethics, especially medical and family values; journalism; public affairs; and political philosophy. He was a member of the Stewards' Enclosure of the Henley Royal Regatta, the Harvard Club of New York City, the American Theological Society, and the Turnerschaft Saxonia Marburg. He received Fulbright and Danforth awards and was voted Faculty Member of the Year at Trinity Evangelical Divinity School in 1989.

Brown served on the editorial staff of *Human Life Review* and *Christianity Today* and as contributing editor for *Christianity Today* and *Chronicles: A Magazine of American Culture*. He was also editor of *The Religion and Society Report*. Brown wrote numerous articles over his 40 year career. He published

in such venues as *National Review, Eternity, Themelios,* and *Human Life Review* and was published in Germany, Austria, and London. Brown's books include *The Protest of a Troubled Protestant* (Zondervan 1969), *Christianity and the Class Struggle* (Arlington House 1970), *Death before Birth* (Thomas Nelson 1977), *The Reconstruction of the Republic* (Arlington House 1977), *Heresies: The Image of Christ in the Mirror of Heresy and Orthodoxy from the Apostles to the Present*, and *Sensate Culture* (Word, 1996).

Nigel Cameron, founder of this journal, said of Joe Brown, "Joe had a sort of gregarious intellectual imagination," and describes Joe's books as "a series of boreholes which he has drilled into the intellectual questions confronting Christians in the 20th century. When one stands back, he has been alone in almost all of these enterprises."

Joe is survived by his wife, Grace, and two grown children.

Harold O. J. Brown will be sorely missed.

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GREY MATTERS

CAN GREY VOXELS RESOLVE NEUROETHICAL DILEMMAS?

WILLIAM P. CHESHIRE, JR., MD

Advances in noninvasive medical imaging have opened new windows into the living brain.Like observatories pointed inward, modern brain scanners routinely capture breathtaking images of the gyral swirls and neuronal clusters that underlie human cerebral nature. These brain portraits are composed of three-dimensional *voxels*, or volume picture elements, digitally displayed in shades of grey.

Knowledge in neuroscience can be measured in degrees of resolution. Greater neuroimaging resolving power means more finely detailed representations of the human brain. As the brain is the physical correlate of the mind, its grey matter and intricate interconnections are subject to scientific investigation. Neuroimaging methods increasingly are able to map out, voxel by voxel, the neurobiological pathways underlying all aspects of thought and behavior, including those involved in moral judgment and ethical reasoning.[1-3]

Whether clarity in neuroimaging might help to resolve, not only clinical questions, but also ethical grey matters, is a prime question for neuroethics. The repertoire of voxels has so multiplied that it is now possible to speculate whether, from a science of the brain, one can derive a coherent and valid system of ethics. Psychologist Michael Gazzaniga has proposed that, "there could be a universal set of biological responses to moral dilemmas, a sort of ethics, built into our brains."[4] Images have always profoundly influenced cultural perceptions of human nature. To the extent that neuroimaging informs a brain-based model of ethics, its fundamental unit of significance is the voxel.

To begin to explore the implications of a voxel-based paradigm for ethical theory, it is helpful to examine, not just the quality of images, but also the methods and presuppositions of neuroimaging. Implicit in every voxelous reconstruction of the brain is the idea that the brain is virtually, if not essentially, reducible to matter. Reductionism can clarify, but it can also mislead. Vibrant voxels may elucidate pertinent facts. Exclusive attention to them may overlook important truths.

Neuroimaging is a product of the last hundred or so years, with the greatest progress having occurred in the last three decades. Following Röntgen's invention of the x-ray machine in 1895, for much of the 20th century, visualization of the diseased brain was possible only through pneumoencephalography, a painful procedure in which air was injected into the spine and allowed to rise to

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outline the contours of the brain as seen on a skull x-ray. The first computed tomography (CT) scan in clinical use at Mayo Clinic in 1973 supplanted pneumoencephalography with a hundred-fold increase in the resolution of brain imaging. Presenting anatomic images slice by slice, its spatial resolution was coarse by today's standards with a field of view of 13 mm per voxel. By contrast, current CT technology achieves sharp spatial resolution with typical fields of view of 0.7 mm, and emerging methods of multidetector row high resolution CT achieve 0.4 mm per voxel. CT angiography now achieves resolution of the major intracranial blood vessels about as clearly as early CT resolved such larger structures as the brain's lobes and ventricles.

Whereas CT utilizes ionizing radiation to measure tissue density, magnetic resonance imaging (MRI) utilizes radiofrequency pulses to define soft tissue molecular composition at resolutions of 1-3 mm per voxel. More powerful 8 Tesla research magnets can achieve high resolution images with voxels corresponding to just 0.2 mm. This level of imaging detail compares to the 0.01-0.05 mm size of most neurons.

Ever sharper shades of spatial resolution seem at first to suggest that, if only the brain were to be imaged in sufficient detail, then all the brain is and does might be explained. The *structure* of matter, however, is not all there is. Exact knowledge of the brain's shape, its configuration, its density and spatial orientation, even the atoms that make up its grey matter, while necessary for accurate neuroscience, yet are insufficient. Also to be considered is what the brain does. As regards *function*, too, neuroimaging is yielding astonishing details. Anatomical correlations to specific neurological capacities are possible through functional MRI (fMRI), which takes advantage of the paramagnetic properties of oxygenated hemoglobin to detect real time changes in regional blood flow in response to increased neural metabolic activity. Other current methods of functional imaging technologies include electroencephalography (EEG), single photon emission computer tomography (SPECT), positron emission tomography (PET), and magnetoencephalography (MEG). The terminology at times appears to lengthen in inverse proportion to shrinking voxel size.

Voxels, which correspond to changing units of tissue volume, are represented mathematically in the four dimensions of height, width, depth, and time. Voxels corresponding to units of nature can also be viewed philosophically as the product of four independent causal categories. In the language of Aristotle, voxels have material, formal, efficient, and final cause. Each category has its proper sphere of explanation as well as its epistemological limits.

At the level of *material cause*, voxels represent units of matter. Voxels have material cause in the electrons or flickering light-emitting diodes that display brain images. Voxels correspond to material cause in the physical elements, molecules and cytoplasm that make up the brain probed by the scanner. Because voxels are arranged uniformly accordingly to an arbitrary grid, they only approximate the actual arrangements of matter. Material cause tells something of what the brain is without supplying an understanding of what the brain is doing, how the brain came to be, or why it exists. Voxels at the level of material cause are correlations of matter to matter. CT can distinguish

blood from water within the brain, but analysis of material cause alone cannot distinguish life from inanimate mass.

At the level of *formal cause*, voxels represent shape and spatial relationships. While voxels themselves do not interact with one another, their corresponding molecular configurations have formal cause in such spatial arrangements as the DNA's elegant double helix, neurons' arborizing dendrites, and the cerebral cortex's convoluted gyri. Analysis of formal cause leads from correlation to identification. Recognition of formal cause allows microscopic imaging to distinguish neurons from other types of cells. Recognition of formal cause allows neuroimaging to distinguish the specific cortical and subcortical brain regions involved in discrete cognitive functions.[1-3]

Exact knowledge of formal cause can never be exhaustive. There are physical limits to how much information about reality voxels can reveal. Imaging the submicroscopic realm, for example, is fraught with loss of detail because, with greater spatial resolutions come lower signal-to-noise ratios. Efforts to obtain extremely fine views of molecular structure encounter fuzziness as the resolution of the imaging modality approaches the wavelength of the light or other energy source used to obtain the image. Indeterminacy at the quantum level also imposes limits on what can be known about the position or behavior of a given molecule.

Nor does more detail necessarily lead to greater knowledge. One rightly suspects that there is more to the story of the ceiling of the Sistine Chapel than patterns painted. The mission of interpretation must look beyond the flecks, forms and symmetries of its frescos to the thoughts and imagination of the artist and to the source of his inspiration.

At the level of *efficient cause*, voxels represent mechanisms of action and reaction. *Causation* in the ordinary sense of the word usually refers to efficient causation. Voxels themselves have efficient cause in the human actions and machine processes that generate brain images. From scanner design to construction and operation, from magnetic field flux to software data processing and digital image reconstruction, voxels are the product of highly organized streams of efficient causation. Efficient causation is the very language of voxels. Their brilliance is the direct outcome of antecedent electromagnetic pulses. Consistently obedient to digital command, their obligatory arrays reconstruct reality in approximate black and white.

The brains that voxels represent consist of streams of efficient causation of exceedingly greater complexity. A cubic millimeter of cerebral cortex contains as many as a billion synapses by which neurons signal one another.[5] Accordingly, the brain must be understood at many levels of organization. Deciphering efficient causes and their effects leads to progressively coherent explanations of overall brain function. These explanations portray cerebral activity in digital brush strokes from a palette of scintillating voxels. Any one brain image, like a single frame from a movie, captures just a slice of meaning.

Available mathematics and computer software are, for the time being, remarkably inadequate to the task of tracing out the totality of neuronal paths

of efficient causation underlying human thought. Whether Raymond Kurzweil is correct or not in predicting that computer processing power will one day surpass human cognitive capacity,[6] the belief among some forecasters that the evolutionary trajectory of artificial intelligence can, given sufficient time, approximate human intelligence already challenges traditional notions of free will. Computer-generated structural and functional images of the brain tend to reinforce the idea that the brain is much like a computer. A computer may be a complex machine, but it is essentially a mechanism. Deterministic models of the brain that regard conscious will as illusory seek to explain moral agency exclusively in terms of material efficient cause.[7,8]

Conscious will may, perhaps, act from somewhere in between the voxels. Whatever lies outside or above efficient material causative connections remains undetectable to empirical investigation. What science can learn of brain behavior is, in fact, limited to the reproducible. Science is interested in events that repeat themselves predictably. Scientific method, therefore, is not well suited to the systematic study of unique phenomena, which may include diverse sorts of human thoughts, judgments and decisions.

At the level of *final cause*, voxels have aims. Voxels find their final cause in the purpose for which they were made, which for neuroimaging is primarily diagnosis. Voxels find their ultimate meaning in relation to something beyond the immediate chain of efficient causation. Their existence presupposes a motivated inventor of the neuroimaging equipment, an interpreter who reads the images with a goal in mind, all for a patient in need of medical attention.

Analysis of final cause in neuroscience leads from coherence to unifying explanations. The quest for understanding encounters in the domain of final cause signs pointing to purpose and destiny. The desire to explain phenomena at one level and then to predict phenomena at another level, the yearning to understand, and the belief that cerebral behavior is discoverable all are comprehensible within a framework of final cause. That brains can ponder their own depictions implies self-consciousness and a purpose to human thought. That purposeful brains exist and possess awesome intricacy inexplicable by any theory of origin based on blind chance implies an intelligent Designer. These are inferences that voxels cannot definitively spell out in the language of material, formal, or efficient cause, yet their truth is accessible to the mind that considers relationships of final cause.

Only by recognizing final causes can one judge whether it is good to image the brain. The neurologist who, like the fictional detective Sherlock Holmes, has a "passion for definite and exact knowledge,"[9] appreciates well what neuroimaging contributes to medical care and neuroscience research. The physician values brain images because, above all, they benefit the patient. The patient is the starting point for making sense out of grey voxels and the focal point for exploring the meaning of human nature. For, as Holmes elaborates, "One's ideas must be as broad as Nature if they are to interpret Nature."[10] Brain images and the neural arrangements they represent are not, after all, a complete portrait of the human being. The encounter at the bedside is a compelling

reminder that the suffering patient is no mere collage of voxels. The patient, who comes to the physician in a state of illness or distress, is the central reason for pursuing more accurate, detailed, fast, and noninvasive methods of neuroimaging. All causal categories converge in attending to the interests of the patient, who experiences and chooses, who feels pain and welcomes comfort, who needs and is needed, all in ways that voxels cannot adequately capture and that caregivers cannot fully know.

Voxels in formation convey volumes of information. While precise and useful, voxels are an imperfect medium by which to resolve questions of neuroethics. Voxels can supply needed facts, and deductions drawn from their patterns can help to project potential consequences, but they cannot supply formulae to complete the ethical analysis. Vacuous voxels cannot by themselves reach a valid moral decision how to treat the patient. The reason is that voxels represent the shape of what *is*. There is simply no voxel the shape of an *ought*.

Imaging the realm of *is* differs from perceiving the realm of *ought*. The two are so incommensurable as to be invisible to one another. Questions framed in terms of *should* and *should not* elude the most penetrating neuroimaging methods. X-rays, for example, cannot fathom the dimensions of moral reality any more than they can outline a whispered breath. The mind, aware of other persons and oriented to purpose, is able to perceive what the x-ray cannot, even though the eye cannot directly perceive the x-ray. Analogously, Wilhelm Röntgen observed that, "The retina of the eye is not sensitive to these rays. Even if the eye is brought close to the discharge tube, it observes nothing."[11]

Finer precision of anatomic resolution and tests that trace out the brain's functions have afforded remarkable improvements in diagnostic certainty. At the bedside, classical approaches to eliciting historical clues and interpreting uncertain physical signs are yielding some of their former prominence to the power of sophisticated neuroimaging. Clear pictures of brain activity provide rapid, relevant information to assist timely clinical decision-making. A brain scan, of course, is not all there is to a healing encounter. The physician's knowledge, skills, experience, judgment, and human touch remain essential to framing the proper clinical question, reaching a diagnosis, interpreting and explaining test results, and implementing a treatment plan tailored to the individual patient. It is important not to lose sight of the person for the voxels. Likewise, depending on one's perspective, a brain-based theory of ethics written in the language of voxels might supersede, or it might complement, traditional approaches to discerning the moral dimensions of medicine.

There is, finally, no color of voxel to signify awe. The sense of wonder that the study of the brain arouses suggests that there is meaning to the contents of the human cranium that surpasses what voxels can outline and more to human thought than be traced out by the ostensibly necessary paths of efficient causation. Sherlock Holmes considered it a matter of deduction that in the design of the rose rests the highest assurance of providential goodness transcending sheer necessity:

> All other things, our powers, our desires, our food, are all really necessary for our existence in the first instance. But this rose is an extra. Its smell and its colour are an embellishment of life, not a condition of it. It is only goodness which gives extras, and so I say again that we have much to hope from the flowers.[12]

As regards the brain, we have much to learn from visible voxels, and much to hope from unseen superfluities. E&M

References

1. Moll J, de Oliveira-Souza R, Eslinger PJ. Morals and the human brain: a working model. Neuroreport 2003;14(3):299-305.
2. Greene J, Nystrom LE, Engell AD, Darley JM, Cohen JD. The neural bases of cognitive conflict and control in moral judgment. Neuron 2004;44(2):389-400.
3. Borg JS, Hynes C, Van Horn J, Grafton S, Sinnott-Armstrong W. Consequences, action, and intention as factors in moral judgments: an fMRI investigation. J Cogn Neurosci 2006;18(5):803-817.
4. Gazzaniga MS. The Ethical Brain. Dana 2005, p. xix.
5. Cheshire WP. Glimpsing the grey marble. Ethics & Medicine 2007;23(2):119-121.
6. Kurzweil R. The Singularity is Near: When Humans Transcend Biology. New York: Viking, 2005, p. 138.
7. Wegner DM. The Illusion of Conscious Will. Cambridge, MA: Massachusetts Institute of Technology, 2002.
8. Peterson GR. Minding God: Theology and the Cognitive Sciences. Minneapolis, MN: Augsburg Fortress Press, 2003, pp. 95-98.
9. Doyle AC. A Study in Scarlet. In: *The Complete Sherlock Holmes*. New York: Gramercy, 2002, p. 10.
10. Doyle, A Study in Scarlet, p. 18.
11. Wilhelm Conrad Roentgen. On a New Kind of Rays. Eine Neue Art von Strahlen. Würzburg, 1895. In: Logan Clendening, Source Book of Medical History, New York: Dover, 1960, p. 670.
12. Doyle AC. The Adventure of the Naval Treaty. In: *The Complete Sherlock Holmes*. New York: Gramercy, 2002, p. 194.

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CLINICAL ETHICS DILEMMAS

PERMISSIBILITY TO STOP OFF-LABEL USE OF EXPENSIVE DRUG TREATMENT FOR CHILD?

DANIEL A. BEALS, MD

Editor's Note: *The following consultation report is based on a real clinical dilemma that led to a request for an ethics consultation. Some details have been changed to preserve patient privacy. The goal of this column is to address ethical dilemmas faced by patients, families and healthcare professionals, offering careful analysis and recommendations that are consistent with biblical standards. The format and length are intended to simulate an actual consultation report that might appear in a clinical record and are not intended to be an exhaustive discussion of the issues raised.*

Column editor: Robert D. Orr, MD, CM, Consultant in Clinical Ethics, CBHD.

Question

Is it ethically permissible to stop the off-label use[1] of an expensive drug in this child with Gaucher's disease since it is likely not working and she may be suffering because of its continued use?

Case

Jessica is a 2 ½ year old girl who was evaluated at 7 months of age for failure to thrive and enlargement of her liver and spleen. She was found to have Gaucher's disease, a genetic (recessive) lipid storage disease, the manifestations of which are due to the absence of an enzyme. She was seen in consultation at a Pediatric Research Center. It was not known which of three types of this disease she has. She was begun 19 months ago on a 6-month trial of a replacement enzyme which is approved for and effective in preventing the manifestations of the disease in two of the three types of Gaucher's disease. The family was unable to return to the Research Center for the 6-month follow-up visit. The treatment has been continued, and, at her parents' urging, her dosage has been increased to higher than normal. She has had frequent long hospital admissions (infections and seizures) and she has developed problems suggestive of progressive disease (including respiratory failure; she has been on a ventilator at home for several months) strongly suggesting to her physicians that she has the more severe type of this disease that does not benefit from enzyme replacement.

On the other hand, her liver and spleen have decreased in size, she has survived longer than the average for patients with the more severe type

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(typically, death before age two), her parents point out that she has grown some, and they are convinced that she shows signs of neurologic development while at home. However, during her frequent hospitalizations, she has shown minimal awareness; at best she smiles, responds to her parents, and follows simple commands. She is currently at home and receives total parental nutrition, home mechanical ventilation, a morphine drip (for bone pain) and the intravenous enzyme every 14 days.

Her overall therapy is very expensive (to date > $1.4 million); the enzyme alone costs several thousand dollars per month. Both Dr. Burgess, Jessica's primary pediatrician, and the research consultant believe the enzyme is no longer medically indicated. The medical director of her managed care organization is denying payment for the enzyme until he can be convinced there is a valid medical indication to continue; she is now 9 days late in getting her injection. In addition, Dr. Burgess is concerned that progressive disease and invasive treatments are causing her sufficient suffering that continued treatment may be inappropriate if it is merely postponing her inevitable death.

Jessica's parents are her caregivers at home, and they have declined assistance from home nursing. They have no other children. Her mother no longer works outside the home so is able to be home full time, and her father has reduced his work as an accountant to part time in order to help. Friends from their church are supportive and help the family in many ways.

Assessment

This case involves a child with a chronic and ultimately fatal disease who is being treated with an expensive medication. Her physicians believe the treatment is not effective, is merely prolonging her suffering, and thus is no longer appropriate. Her parents believe it is working and request that it be continued.

Discussion

The first issue involves communication of information between the physician and family. Many times miscommunication occurs because we treat medicine as a science, as if outcomes can be known with logical certainty. This is not always true. Medicine can be messy. It is frequently difficult in the early treatment of a disease to predict severity or impact on the child's life. In our 'scientifically minded' physician role, we try to place the patient in categories to give the patient's family information to prepare for the future. In doing so, however, we make subconscious assumptions which lead the families to misunderstand the goals of therapy and their limitations. There may also be miscommunication as to what the therapy actually is. Is it research, or treatment?

In this case, the child was not placed on a clinical trial but was started on enzyme replacement therapy which had shown promise in ongoing clinical research studies. It is not clear in this case whether the indications and risks of therapy, as well as the endpoints of therapy, were clearly discussed with her family. After nineteen months, she is still receiving the medicine

which was started as a six month trial, now at a higher dose than is used in research trials.

The second dilemma involves the withdrawal of inappropriate or marginally effective therapy. By necessity, this is a physician driven decision, though it depends on information from patient or family.

Jessica's parents almost certainly order their lives and decisions based on what they feel is best for their child's quality of life. Although the primary care physician is concerned about suffering on the part of the child, the final decision about the child's quality of life rests with the parents. It is ethically permissible to override such parental quality of life decisions only when those decisions are clearly detrimental to the child. It is in this mode that we interact as physicians: our duty is to assess Jessica's therapies (not just her enzyme replacement) as to their medical appropriateness. In reference to replacement enzyme therapy, the primary benefit of halting neurologic degeneration has not been effective, though she has probably had some secondary benefit from the therapy. This benefit will not influence her overall prognosis or well-being.

Both of these dilemmas highlight the difficulty for physicians to properly communicate what is known and unknown. Clear discussions regarding the indications for therapy and the end point for those therapies might have prevented the present dilemma. Practically speaking, a formal discussion regarding prognosis, reasons for starting or discontinuing therapy, and alternatives if therapy does not work should be initiated at the beginning of treatment. Periodic interim discussion should be planned throughout the course of treatment so that the parents can have realistic goals and expectations. These discussions should also include an acknowledgement of what we don't know: the effectiveness of off-label use of the enzyme, how the disease might progress without the therapy or even how the therapy would be paid for if not covered by insurance.

Recommendations

Whether or not this ideal of discussion was followed in this case, we must deal with the problem at hand. It is never too late to have an honest, transparent conversation with the family, including openness about how misperceptions and miscommunications may have clouded the issue. The physician should specifically take responsibility for failing to outline the treatment goals. He or she can then ask the family to reconsider their position. This reconsideration will only be effective, however, if the professional caregivers are also willing to reconsider their position. They should reconsider the parents' claim that neurologic improvement has occurred with the therapy, using objective measures as much as possible. They should also reassess the amount of suffering the child is subjected to in treatment. This may make it easier for the parents to reach a compromise position about the goals of treatment and overall care of their child.

Follow-up (editor)

Four months later, Dr. Burgess reported that the patient was still receiving the enzyme, paid for by the insurance company. After more discussion, her mother had become more realistic about the outcome. In addition, her professional caregivers were more convinced that she had actually improved (videos of her motor function at home showed considerably better function than they had observed at the hospital). There was no further discussion about discontinuing the enzyme at that time.

Nine months after the consultation, Jessica developed uncontrollable seizures. Her parents consented to both a Do Not Resuscitate order and to withdrawal of the ventilator. She died in about 35 minutes. E&M

Endnote

1 Use of a drug for a condition for which it has not been approved by the FDA.

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ORDINARY AND EXTRAORDINARY MEANS OF TREATMENT

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Abstract

There are times when life-sustaining treatments can be legitimately withheld or withdrawn. Traditionally, in the Roman Catholic Church, but in other Christian denominations as well, the distinction between ordinary (proportionate) and extraordinary (disproportionate) means of treatment has been regarded as a reliable method for deciding end–of–life issues. Today, this distinction plays still a major role in many medical decisions. In this paper I analyse the definitions of ordinary (proportionate) and extraordinary (disproportionate) treatments in order to decide whether the frequent application of this distinction in medical decision-making is ethically justified. I begin with some remarks about formal requirements of defining these terms and then proceed to assess the definitions by drawing conclusions from them. I will argue that this time-honoured distinction does not provide a reliable guide for ethical decision-making.

Key Words: Ordinary means of treatment, extraordinary means of treatment, proportionate means of treatment, disproportionate means of treatment, ethical decision-making.

Introduction

Most writers in the field of medical ethics agree that there are times when life-sustaining treatments can be withheld or withdrawn. However, holding this view implies that we need a criterion to distinguish between permissible and impermissible omissions of such treatments. In traditional Roman Catholic theology, this criterion was the distinction between so-called ordinary and extraordinary means of treatment. Already in the sixteenth century, prior to the discovery of antisepsis and anaesthesia, the Spanish theologian Domingo Báñez dealt with the problem of when people are required to conserve their lives. On his view, refusal of "ordinary" treatment was considered suicide and hence not allowed, but he considered refusal of "extraordinary" treatments as ethically permissible. Likewise, physicians did not commit homicide if they withheld or withdrew "extraordinary" means.

Although contemporary authors have criticised this well-used distinction as question begging, vague, and ambiguous,1 it is still widely regarded as a valuable guide for decision-making in medical ethics, and the magisterium of the Roman Catholic Church has several times confirmed that it still holds good.2 Today, this distinction plays a major role in the ongoing debate about euthanasia and in decision-making on severely handicapped infants (e.g., cases of anencephaly), the right of the elderly to deny aggressive life-extending treatment, end-of-life care of patients in a persistent vegetative state, and other

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life-and-death issues. The need for a valid criterion that guides decisions when life-sustaining treatments can legitimately be forgone has certainly increased in recent years. Physicians now have available new and powerful medical technologies, which allow them to sustain the lives of many patients who, only some decades ago, would have died because the means were not available to prevent death.

There is thus no doubt about the importance of the distinction between ordinary and extraordinary (or proportionate and disproportionate) treatments. However, this distinction is not only marred by terminological confusions, but its ethical consequences are also not quite grasped, I think, by many authors and decision-makers, who apply it to problems of medical ethics. The primary aim of this paper is to scrutinize this distinction and to decide whether its frequent application in medical decision-making is ethically justified. In order to achieve this, I begin with some remarks about formal requirements for defining ordinary and extraordinary treatments. Much of this essay will then be devoted to stating the definitions in a sufficiently precise way and testing them by drawing conclusions from them. I will argue that this time-honoured distinction does not provide a reliable guide for ethical decision-making.

Some Preliminaries

As I have already indicated, the distinction between ordinary and extraordinary treatments allows deciding between treatments that are morally obligatory and those that are not. On the traditional view, there is a moral obligation to use ordinary treatments, but it is not mandatory to employ extraordinary treatments. It will be helpful to make this more precise by stating a pair of principles, which I shall call the 'principle of ordinary treatment' (*PO*) and the 'principle of extraordinary treatment' (*PE*):

(*PO*) The use of ordinary means of treatment is morally obligatory.
(*PE*) The use of extraordinary means of treatment is morally optional.

Now I have two comments to make regarding these principles: (i) The distinction between ordinary and extraordinary treatments has been applied in different contexts. It has been used by health professionals to decide when they must employ treatments and when they are free to withhold or withdraw them. But it also guides deliberations of patients, e.g., whether they are obligated to accept a treatment or can justifiably refuse it as well as practical reflections of proxy decision-makers such as families who, for instance, have to decide when they can legitimately agree not to treat a comatose relative any longer; and it has also been applied to a variety of other cases. Strictly speaking, we need to state principles for each of these cases. For the sake of simplicity, however, I will restrict my attention here to the *use* of treatments by health professionals. (ii) By 'morally obligatory' I mean that a physician (if he/she is the decision-maker) has a moral duty to employ ordinary means and that it is morally impermissible (or forbidden) not to use them. By 'morally optional' I mean that this physician is neither obligated nor forbidden to use such treatments. I think this is in accordance with the intention of most proponents of this distinction.

Unfortunately, their explanations are often ambiguous. Some hold, for instance, that extraordinary treatments are "not obligatory".[3] But this can mean that they are *optional* or that they are *impermissible*. It seems to me obvious, however, that these authors do not hold that it is forbidden to use extraordinary means. What they want to say, albeit in different terminologies, is that these means *can* be employed but their use is neither obligatory nor forbidden.[4] However, one unfortunate consequence of this is that no means of treatment are *impermissible*. I shall argue below that this poses a serious problem for the traditional view.

Whether *PO* and *PE* are a reliable guide to ethical decision-making depends, of course, on what exactly we are to mean by *ordinary* and *extraordinary* treatments. Much of the next section is devoted to this definitional problem, but first a few words of explanation about some requirements of these definitions will be helpful.

If we define ordinary and extraordinary means of treatment, we should get a pair of definitions which guarantees that any treatment is either ordinary or extraordinary but none is both. Although authors do usually not explicitly stipulate this, it is nevertheless clear that they tacitly assume it. To satisfy this condition, the definitions must meet two formal requirements: (i) 'Extraordinary means of treatment' must be defined by the negation of 'ordinary means of treatment'. More precisely, the *definientia* (what does the defining) of the definitions must contradict each other. Most authors are aware of this and their definitions do indeed meet this requirement. (ii) Furthermore, the definitions must be *equivalences*, that is, they must have the logical form of (material) biconditionals. Not all definitions have this form. It is possible to define terms only *partially*, that is, the definientia are only necessary or sufficient conditions for the *definienda* (what is to be defined). But partial definitions do not guarantee that any treatment is either ordinary or extraordinary and none is both. If the definiens is only a sufficient condition for the definiendum, we can consistently say that a treatment is both ordinary and extraordinary; and if the definiens is only a necessary condition, we can hold that a means of treatment is neither ordinary nor extraordinary. Only if the definitions meet both formal requirements can we get what we need: All means of treatment are divided into two jointly exhaustive and mutually exclusive classes.

Some definitions can be shown to be inadequate because they do not satisfy these formal conditions. Penner (2006), for instance, defines 'ordinary means' as "medicines, treatments, and operations that offer a reasonable hope of benefit without undue burden on the patient" and explains 'extraordinary means' as treatments "that involve excessive burden on the patient and don't offer reasonable hope of benefit." Since the definientia do not contradict each other (which can easily be shown by symbolizing the definitions), some treatments are neither ordinary nor extraordinary - for instance, treatments that offer reasonable hope but involve excessive burdens. Other definitions are strictly speaking defective because they seem to define treatments only partially or because they blur their form.[5] I shall, however, charitably suppose here that these authors intended to give an equivalence definition even though they did not make this explicit.

Ordinary vs. Extraordinary Means of Treatment

Definitions of ordinary and extraordinary means of treatment consist of two main components, which I shall call the 'reasonable hope of benefit clause' and the 'excessive burden clause', following Kelly's (1951) much quoted definition. Some writers connect these two components *conjunctively* but others *disjunctively*, which gives two logically very different kinds of definitions. In addition, 'excessive burden' is an umbrella term for a variety of different conditions, and authors are also not agreed on *whose* burdens need to be taken into account. Some consider only the burden on the patient (e.g., Shannon and Walter 1993, 192). This view is certainly too narrow and I shall not discuss here this exclusive interpretation. Most writers, however, consider also burdens on others, but they do not agree whether these burdens are to be considered *conjunctively* (e.g., burdens on the patient *and* his family) or *disjunctively* (burdens on the patient *or* his family). To get this perplexing variety of viewpoints into some kind of order, it will be helpful to organize the definientia of treatments into four groups: (i) conjunctions with a conjunctive burden clause, (ii) conjunctions with a disjunctive burden clause, (iii) disjunctions with a conjunctive burden clause, and (iv) disjunctions with a disjunctive burden clause. Let it be noted that this classification is based on *ordinary* means of treatment. In what follows, I shall discuss these different ways of defining ordinary and extraordinary treatments in turn.

1. The paradigm of the first group is Kelly's (1951) definition, which has been extensively quoted and can be regarded as the standard account of ordinary and extraordinary treatments:[6]

> Ordinary means are all medicines, treatments, and operations, which offer a reasonable hope of benefit and which can be obtained and used without excessive expense, pain, or other inconveniences. Extraordinary means are all medicines, treatments, and operations, which cannot be obtained or used without excessive expense, pain or other inconvenience, or which if used, would not offer a reasonable hope of benefit. (p. 550)

A word of explanation may be in order. Kelly distinguishes here between medicines, treatments, and operations. I shall use the term 'means of treatment' in a broad sense, including these and other kinds of medical procedures. Kelly also distinguishes between *obtaining* and *using* treatments, apparently referring by the former term to patients and by the latter to health professionals. As noted, in this essay I focus on the viewpoint of health professionals, but my reasoning can easily be applied to patients and proxy decision makers. According to Kelly's definition, ordinary means of treatment must offer a reasonable hope of benefit and their use must neither impose excessive expense (not specified on whom), nor pain, nor other inconvenience (also not specified to whom). Kelly then defines 'extraordinary means' correctly by negating the definiens of 'ordinary means'.

Obviously, these definitions need elucidation, and other writers have extensively discussed the meaning of the terms used.[7] However, I am not concerned here with these semantic problems. My aim is rather to reveal the logical form of the proposed definitions (assuming that the terms are sufficiently

clear at an intuitive level) and to draw conclusions from them to test whether these definitions, in combination with the two principles *PO* and *PE,* entail ethically acceptable conclusions. To make my reasoning more transparent, it will be helpful to formalize the proposed definitions. Letting the domain be all means of treatment[8] and writing '*Ox*' for '*x* is an ordinary means of treatment', '*Ex*' for '*x* is an extraordinary means of treatment', '*Hx*' for '*x* offers a reasonable hope for benefit to the patient', '*Cx*' for 'the costs (expenses) of *x* are excessive', '*Px*' for '*x* causes excessive pain to the patient', and '*Ix*' for '*x* causes other inconveniences', Kelly's definitions can be symbolized as follows:

$$(\forall x)\ [Ox \leftrightarrow Hx \wedge (\neg Cx \wedge (\neg Px \wedge \neg Ix))]$$

$$(\forall x)\ [Ex \leftrightarrow \neg Hx \vee (Cx \vee (Px \vee Ix))]$$

Other definitions of this group differ from Kelly's mainly because their excessive burden clause comprises other elements. For instance, Gillon (1985, 145) includes the burden on the patient's family, and other authors include even the burden on society. On the other hand, some definitions exclude some elements from Kelly's list, e.g. the inconvenience of a treatment. However, these differences are not essential. In what follows, I will argue that all definitions of this group entail consequences that are ethically not acceptable.

(i) Some problems in Kelly's definitions result from the fact that the definiens of 'ordinary treatment' is a *conjunction*. Let us suppose that treatment of a certain disease offers no reasonable hope, although it is neither expensive nor painful and it does not involve any other inconveniences. From Kelly's definitions, it follows that this treatment is *extraordinary*. According to the principle of extraordinary treatment (*PE*), it is therefore *optional* and this means that it does not need to be employed. I think, however, that in such cases, withdrawing or withholding treatment is morally impermissible. To take a very ordinary case, it is certainly unjustified not to administer medication as long as there is *any* hope and as long as treating a patient does not impose any burdens.

(ii) Other objections are based on the conjunctive burden clause. Even if only one conjunct of this clause is false, treatments become necessarily extraordinary. Suppose there is a very good chance that a poor patient could be cured from a disease, the treatment is not painful and causes no other inconveniences, but it is beyond the means of this person. Since the costs are excessive (at least for this patient), it follows from Kelly's definitions that the treatment is extraordinary and hence optional. Even though I am aware that letting poor patients die because they cannot pay for their treatment is standard practice in many hospitals (at least in developing countries), I nonetheless hold that this consequence is unacceptable from a moral point of view.

I think it is fair to say that this kind of definition is defective because it renders too many treatments optional. This judgement, be it noted, applies to other definitions of this group also. For each of them, it is possible to find a combination of conditions that renders a treatment optional even though we are convinced that it should not be so.

2. The excessive burden clause of conjunctive definientia is sometimes a *disjunction*. An example of this way of defining ordinary and extraordinary means can be found in Pope John Paul II's encyclical letter *Evangelium Vitae*. Writing about euthanasia, he holds that euthanasia must be distinguished from the decision to forego "aggressive medical treatment" by which he means procedures which "no longer correspond to the real situation of the patient, either because they are by now disproportionate to any expected results or because they impose an excessive burden on the patient and his family" (n.65). In situations like this, according to the Pope, it is allowed to refuse forms of treatment that would only secure a precarious and burdensome prolongation of life.

Using the terminology adopted in this paper, the late Pope holds that extraordinary treatments are those that do not offer reasonable hope or impose excessive burdens on patients and their families. Given the two formal requirements that the definientia must contradict each other and that the definitions must be biconditionals, it follows from this explanation that ordinary treatments offer a reasonable hope of benefit and do not impose excessive burdens on the patient or his family. Let '$B^p x$' be 'x imposes an excessive burden on the patient' and '$B^f x$' be 'x imposes an excessive burden on the patient's family', the definitions are symbolized as:

$$(\forall x)\ [Ox \leftrightarrow Hx \wedge (\neg B^p x \vee \neg B^f x)]$$

$$(\forall x)\ [Ex \leftrightarrow \neg Hx \vee (B^p x \wedge B^f x)]$$

This way of defining treatments seems to be more promising, but there are nonetheless shortcomings: (i) Since the definiens is still a *conjunction*, the objection that a treatment which does not offer reasonable hope of benefit is *ipso facto* extraordinary, holds good for this kind of definition also. That is, letting patients die because they cannot pay for their treatment can be morally acceptable also on this account. (ii) Even though the disjunctive burden clause is more adequate than a conjunctive one, it is nevertheless defective because treatments can still be extraordinary even if they offer a very good hope of benefit. This is the case if they impose an excessive burden on patients and their families, as can easily be seen from the formalized definitions. However, should we really say that physicians can withhold a treatment that offers an almost 100 per cent chance of recovery just because it is burdensome to the patient and his/her family? In my view, doctors have in such a situation an obligation to employ available treatments, and patients and their families have a duty to shoulder their burden. Let a single example serve to illustrate this. In developing countries, malaria treatment can be financially burdensome to people. But since it offers a good chance of benefit, health professionals have, I think, a duty to employ it (and patients and their families have a duty to accept it). As these two kinds of objections make sufficiently clear, this way of defining ordinary and extraordinary treatments is also not adequate.

3. Since conjunctive definientia obviously yield inadequate definitions, *disjunctive* ones could be more promising. Let us first consider definitions that also have a disjunctive burden clause. The United States National Conference

of Catholic Bishops has put forward an example of such a definition in 1976. The bishops held that "people have a right to refuse treatment which offers no reasonable hope of recovery and imposes excessive burdens on them and perhaps their families" (quoted from McCarthy and Bayer 1993, 150). Ordinary means of treatment are hence those which offer a reasonable hope of benefit or do not impose excessive burdens on the patient or (perhaps) their families.[9] Using the familiar abbreviations, the formalization of these definitions is:

$(\forall x)\ [Ox \leftrightarrow Hx \vee (\neg B^p x \vee \neg B^f x)]$

$(\forall x)\ [Ex \leftrightarrow \neg Hx \wedge (B^p x \wedge B^f x)]$

The main problem of conjunctive definientia was that they render too many treatments optional. Disjunctive definientia tend to have the opposite effect. Suppose a patient is in a persistent vegetative state. There is no hope of recovery and his treatment imposes excessive emotional and financial burdens on his family, but it is not burdensome to the patient himself (as we can plausibly assume). From the definitions under consideration and the principle (*PO*), it follows that treatment is nevertheless obligatory. In general, *any* treatment that does *not* impose a burden on anyone affected becomes *ipso facto* obligatory, no matter whether there is hope for the patient or how burdensome it may be to others. This kind of definition is thus certainly too strict. One of the reasons for introducing the distinction between ordinary and extraordinary means was to allow withholding or withdrawing treatment in such hopeless situations. I think all authoritative sources are agreed on this.

4. However, disjunctive definitions can have a *conjunctive* burden clause and it may be expected that this account fares better than the definitions discussed thus far. According to one view, ordinary means are those that are beneficial or are "not unreasonably burdensome (physically or psychologically) to the patient" (Ordinary and Extraordinary Means, 1995). Let me paraphrase this: A means of treatment is ordinary if and only if it offers a reasonable hope of benefit or does neither impose excessive physical nor excessive psychological burdens on the patient. By inference, extraordinary treatments are those that do not offer a reasonable hope of benefit and impose excessive physical or psychological burdens on the patient. By letting '*Bx*' be '*x* imposes excessive physical burdens on the patient' and '*Bx*' be '*x* imposes excessive psychological burdens on the patient', we can symbolize this definition as follows:

$(\forall x)\ [Ox \leftrightarrow Hx \vee (\neg Bx \wedge \neg Bx)]$

$(\forall x)\ [Ex \leftrightarrow \neg Hx \wedge (Bx\ \ Bx)]$

Definitions of this group are not open to some of the objections raised against conjunctive definitions and they do not create the problems that result from disjunctive burden clauses. Although there are specific problems with this kind of definition, I will not discuss them here. I wish rather to draw attention to a problem that affects *all* definitions discussed thus far. Consider the case of a worker who was repairing an oil tank. When he struck an arc to weld the seam, the tank caught fire. Most of the worker's body was covered with severe burns, and his lungs were damaged from breathing in the fire and smoke. The physicians treated him with plasma, saline solutions, and antibiotics, but they

knew very well that the man did not have a chance and that he was in great pain. In other words, there was no hope for the patient and the burdens on him and his family were excessive.[10]

According to all definitions considered so far in this paper, treating this patient is extraordinary and hence optional. As I have already mentioned, however, 'optional' means that the physicians do not act morally wrong whether they employ all available life-sustaining means or whether they decide withholding such treatments. But, as I see it, treatment in such hopeless situations should *not* be optional. It should rather be *impermissible*. There are times when it is a moral duty of physicians to let a patient die.[11] But the distinction between ordinary and extraordinary means of treatment allows only a *twofold* classification of treatments: they are obligatory or optional. What is needed, however, is a threefold classification into obligatory, optional, and impermissible treatments.[12] (I shall return to this problem in the last section.)

At first sight, distinguishing between ordinary and extraordinary means of treatment and holding that ordinary treatments are obligatory, while extraordinary means are optional may seem a convenient method of deciding problems in medical ethics. Closer examination, however, shows that it is ridden with problems and cannot provide a morally valid guide for deciding life-and-death issues.

Proportionate vs. Disproportionate Means of Treatment

Some authors feel that the distinction between ordinary and extraordinary treatments is misleading because there is also a medical use of these terms. Physicians tend to define 'ordinary means' as procedures that have become standard medical practice and regard as 'extraordinary means' unusual or uncustomary treatments such as liver transplantations. For this and other reasons, these writers prefer the distinction between *proportionate* and *disproportionate* means of treatment. The basic idea behind this distinction is that whether a treatment is proportionate or disproportionate depends on the relation between the hope of benefit and the burdens imposed by the treatment, in short, on the *benefit-burden ratio*. Since it is generally held that the use of proportionate treatments is obligatory while using disproportionate means is optional, we can state the following two principles of proportionate means (*PP*) and disproportionate means (*PD*):

(*PP*) The use of proportionate means of treatment is morally obligatory.

(*PD*) The use of disproportionate means of treatment is morally optional.

As we shall see, the logic of this distinction is quite different from the one between ordinary and extraordinary means, which, however, has not been understood by a number of writers. The proposed definitions can, somewhat schematically, be organized into two groups. I call them definitions of *pseudo proportionality* and *outweighing definitions* respectively and shall consider them in turn.

1. A number of authors have only changed the terminology. Some use in their definitions either both terms (e.g. 'ordinary' and 'proportionate'), while others use only 'proportionate' but define this term in the same way as *ordinary* means of treatment. For instance, Wilton (1997) explains proportionate means as treatments "that offer a reasonable hope of benefit and do not involve an excessive burden."[13] Even though the definiendum is here 'proportionate means', the definiens does not express any proportionality between benefits and burdens. What has been defined here can aptly be called *pseudo* proportionality since the difference between it and the definitions in the previous section is purely verbal. There is thus no need to discuss these definitions because all objections raised against the ordinary/extraordinary distinction holds good against this group also.

2. The *outweigh-interpretation* of the proportionate/disproportionate distinction takes the notion of proportionality more seriously. However, we need to distinguish here between two types:

(i) Some authors have combined the idea of balancing benefits and burdens with the way ordinary and extraordinary means were traditionally defined. An example of such a *hybrid* form is Childress' (2001) account, which regards treatments that "offer no reasonable chance of benefit or that create burdens for the patient or others that outweigh these benefits" as *disproportionate* (p. 269).[14] By inference, then, *proportionate* means offer a reasonable chance of benefit and do not create burdens that outweigh these benefits.

The problem with such hybrid definitions is that the definiens (of proportionate treatments) is still a *conjunction* and from this it follows that any treatment that does not offer a reasonable chance of benefit is disproportionate, and according to (*PD*) therefore optional - even if the treatment does not involve any burden, and the burden cannot therefore outweigh the benefits. I have already argued in the previous section that this is an ethically unacceptable consequence.

(ii) There are, however, definitions that avoid this mistake. They apply the idea of a benefit-burden ratio more straightforwardly. According to this view, treatments are *proportionate* if and only if their benefit outweighs their burden, and medical procedures are *disproportionate* if "their burden outweighs whatever benefit they provide" (Catholic Bishops of Ohio 2000, n.6)[15] It is indeed plausible to hold that treatments have expected benefits as well as expected burdens and to assume that these can be balanced against each other. If such a weighing procedure shows that the expected benefits outweigh the expected burdens, a treatment is regarded as proportionate and hence obligatory. If, on the other hand, the burdens outweigh the benefits (or more precisely, the benefits do not outweigh the burdens), treatments are disproportionate and hence optional.

This account may seem plausible, but it raises a number of questions. For instance, such a balancing procedure requires measurement of benefits and burdens and it is well known that this is not at all a clear-cut problem. However, since discussing these problems is beyond the scope of this paper, I will focus

here on four problems of proportionate and disproportionate means of treatment that seem to me sufficient to demonstrate the problems with this account.

First, we are still faced with the problem of a *twofold* classification of treatments. We have now either proportionate treatments that are obligatory or disproportionate means that are optional. Treatment of the badly burnt worker in the previous section is certainly disproportionate (no matter what definition we use) and therefore optional. I have already explained that this allows the physicians to use all life-sustaining means even though they know that this will only draw out the man's misery, and I have argued that this consequence is ethically inadequate.

The second problem can be dubbed the "arbitrariness problem". According to the account under consideration, we need to balance burdens and benefits. But *who* should be included in the burden clause and *what* should count as a burden? As already noted, some writers include only the patients, others their families also and some feel that even the burdens on the hospital staff and society in general need to be considered. Among the things that are burdensome is certainly the patient's pain but many have included also expenses and inconveniences, by which different authors mean again different things. What gets included or excluded seems to be arbitrary depending only on the author's personal preferences. Certainly, valid ethical principles need a more objective basis.

A third problem is that more than one treatment can be proportionate and in such cases the distinction between proportionate and disproportionate treatments entails absurd consequences. Suppose that a person's kidneys have ceased to function. Obviously, medical intervention is urgent because if kidney failure is not treated, death will result in a couple of weeks. Let us further assume that the physicians can choose between haemodialysis (using a 'kidney machine'), peritoneal dialysis (use of a natural membrane in the patient's body, the *peritoneum*, to remove waste materials), and kidney transplantation. The patient would benefit from haemodialysis and peritoneal dialysis and their benefits would outweigh the burdens. However, since the patient would not benefit much from a transplant, the burdens of kidney transplantation would outweigh its benefits. Transplantation is thus disproportionate, but both forms of dialysis are proportionate. According to the principle of proportionate treatment, both dialyses are therefore obligatory. From this it follows that the physicians have an obligation to employ *both* forms of dialysis and they would do something morally wrong if they employed only one of them. This consequence is obviously absurd and I think there is no doubt that the physicians are obligated to find out which kind of dialysis is, all things considered, better and to employ this one.

The fourth problem is analogous to the previous one. Suppose there is only one treatment available, say haemodialysis for a patient with ceased kidney function, and this treatment offers only little hope for the patient while the burdens involved outweigh the expected benefits. The treatment is thus disproportionate and optional. On the other hand, *not* treating the patient

causes even greater burdens and will hasten his death. It seems to me that in cases like this, the physicians are obligated to put the patient on a 'kidney machine', despite the fact that this is *disproportionate* treatment. According to the distinction between proportionate and disproportionate means, however, they have no such obligation, and this suggests again that the distinction under consideration produces ethically inadequate consequences and should therefore be replaced.[16]

Improving on the Traditional Distinctions?

I think it is fair to say that neither the distinction between ordinary and extraordinary treatments nor the distinction between proportionate and disproportionate means provides a reliable guide for ethical decision-making. Both entail ethically unacceptable consequences. One could now try to improve on these traditional distinctions. In what follows, I shall propose three definitions, which, in my view, capture the basic intuitions of the proponents of these distinctions, but do not entail the ethically problematic consequences discussed in the previous sections.

> A treatment is *obligatory* if and only if it is expected to provide a greater balance of benefits over burdens than any other available alternative.
>
> A treatment is *impermissible* if and only if it is expected to produce a smaller balance of benefits over burdens than at least one available alternative.
>
> A treatment is *optional* if and only if it is neither obligatory nor impermissible.

Application of these definitions to the problems discussed in this paper shows that they do not entail the criticised consequences. All objections raised in the section on ordinary and extraordinary treatments and the third and fourth problems in the section on proportionate and disproportionate means result basically from the fact that the traditional distinctions do not consider alternatives. The proposed definitions avoid this mistake. Furthermore, they provide the required *threefold* classification of treatments, and there are no arbitrary decisions about who or what needs to be taken into account in ethical decisions.

While I think that these definitions are an improvement on the traditional ones, nevertheless I do *not* hold that they can provide a reliable guide for ethical decision-making. To illustrate this, let us reconsider the case of the badly burnt man. According to the traditional distinctions, his treatment is optional, which I have already criticised. According to the proposed three definitions, the right decision depends on the context. We do not know what options were open to the physicians, but it is plausible to assume that nutrition and hydration together with relief from suffering may have provided a greater balance of benefits over burdens than any other available alternative and would therefore have been *obligatory*. So far the definitions seem to yield correct solutions. But let us now

suppose that the poor welder was able to indicate that he wanted to fight for his life. This would change the situation, even though the benefits and burdens are still the same. The fact that the man wants to linger on adds a new element to the situation, which cannot be taken into account by the definitions. Among the factors that need to be considered - besides benefits and burdens - are justice, the dignity of patients and their rights. None of these factors has been recognized by the traditional distinctions or the definitions I have proposed. This shows that even applying the improved definitions to the often excruciatingly complex problems in medical ethics can produce simplistic solutions.

The question I have been addressing in this paper was the distinction between ordinary (proportionate) and extraordinary (disproportionate) treatments. I think this study has shown that the traditional distinctions cannot reliably guide our ethical decision-making in medical ethics. Furthermore, this essay suggests that there will be no handy set of ethical principles that can provide reliable guidance. Even though many question this, I think that applying a comprehensive ethical theory provides a better guide to ethical decision-making than any convenient set of principles. However, discussing just what theory this could be is certainly far beyond the scope of this essay. E&M

Endnotes

1 See Beauchamp and Childress (1994, 200), Skegg (1988, 145), Kluge (1992), or Tulloch (2005).

2 See, for instance, Pope John Paul II (2004) and the Sacred Congregation for the Doctrine of the Faith (1980).

3 See, for instance, Pope John Paul II (1995) and the Sacred Congregation for the Doctrine of the Faith (1980), which holds that one is never *obligated* to use "extraordinary" means.

4 See Childress (2001, 269) who holds that extraordinary treatment "may be forgone, withheld or withdrawn without incurring a moral judgement of suicide or euthanasia."

5 See, for instance, Munson (1996, 29) or Kuhse's (1993) definition "A means is 'proportionate' if it offers a reasonable hope of benefit to the patient …" (p. 299).

6 See, for instance, Beauchamp and Childress (1994, 201), Munson (1996, 29), or Skegg (1988, 144). However, not all definitions of this kind follow Kelly. The United States Conference of Catholic Bishops (2001) defines ordinary means as "those that … offer a reasonable hope of benefit and do not entail an excessive burden or impose excessive expense on the family or the community"; and it defines extraordinary means consequently as "those that … do not offer a reasonable hope of benefit or entail an excessive burden, or impose excessive expense on the family or the community" (§§ 56, 57).

7 For instance, the notion of a *reasonable hope* is elusive, and there are highly varying accounts of what a reasonable hope is. Some claim that there must be a *reasonable hope of recovery*, while most writers hold that a *reasonable hope of benefit* is sufficient. Authors have also debated what chances count as 'reasonable'. According to McCarthy and Bayer (1993, 152), a 40% chance of a successful kidney transplant would not qualify as 'reasonable' hope. It was also criticised that the notion of *excessive costs* is ambiguous because what is excessive for some persons need not be so for others; and the Church magisterium has not only considered the costs on the patient but has included the patient's family and the costs on the community (Sacred Congregation for the Doctrine of the Faith [1980, n.4]). *Excessive pain* is certainly a factor that needs to be considered. But who decides whether the pain is excessive? It is usually assumed that it is the patient, but sometimes, e.g. in cases of newborn infants, proxy decision will have to be taken. 'Inconvenience' can mean many things. For instance, intense dislike of certain food or a woman's experienced intense

embarrassment being examined by a male physician.

8 Throughout this paper, the domain of quantification is the set of all means of treatment. The variable '*x*' *is* hence a place-holder for a means of treatment (e.g. heart transplantation or resuscitation).

9 I do not make here the distinction between 'reasonable recovery' and 'reasonable hope of benefit', and I ignore the 'perhaps' because what I say here does not depend on these distinctions.

10 The example is taken from Munson (1996, 198).

11 Even though most writers hold that extraordinary treatments are optional or 'not obligatory', there are some who seem to agree with this view. The United States Catholic Bishops hold that people have a right to refuse extraordinary treatments (see McCarthy and Bayer 1993, 150). According to one meaning of 'having a right', this means that others have an obligation *not* to use such means, at least if the patient does not want to be treated. Pope John Paul II (2004) writes that withdrawing or withholding of extraordinary means 'will be deemed ethically correct'; the Church of England and Roman Catholic Bishops (2004) calls withholding or withdrawing of extraordinary means 'moral'; Skegg (1988, 143) holds that doctors are sometimes required to allow a patient to die; and Kuhse (1993) obviously agrees with those writers who think "that there are times when life-sustaining treatment should be withheld and a patient allowed to die" (p. 298).

12 It has been suggested that the category of impermissible treatments is redundant if we add the so-called *principle of nonmaleficence* ("above all, do no harm") to the principles *PE* and *PO*. If we interpret this principle broadly, we could hold that treating the welder has harmed him, and nonmaleficence requires therefore letting him die. I think, however, that adding this principle does not resolve the problems created by the dichotomy between obligatory and optional treatments. We would not only add a third principle to the traditional ones (and why not the *principle of beneficence* also?), more importantly, we do *not* harm patients in a persistent vegetative state or anencephalic infants by keeping them alive. Nonetheless, there is broad agreement among moralists that in many such cases the right thing to do is to allow these unfortunate patients to die.

13 Among the authors who tend to blur the distinction between ordinary/extraordinary and proportionate/disproportionate are also Childress (2001, 269), Kuhse (1993, 299), and the United States Conference of Catholic Bishops (2001).

14 A similar definition has been given by Pope John Paul II (2004).

15 See also the definitions proposed by the Sacred Congregation for the Doctrine of the Faith (2000, n.4), Gillon (1985) or Penner (2006).

16 I should mention that the distinction between ordinary and extraordinary treatments is also faced with the four problems considered here.

References

Beauchamp, T. L. and Childress, J. F. (1994). *Principles of biomedical ethics* (4th ed.). New York: Oxford University Press.

Catholic Bishops of Ohio, (2000). *Death and life issues*. http://www.ohiocathconf.org/ statements/ deathandlifeissues.pdf.

Childress, J. F. (2001). Christian ethics, medicine and genetics. In R. Gill (Ed.). *The Cambridge companion to Christian ethics* (pp. 261- 276). Cambridge: Cambridge University Press.

Church of England and Roman Catholic Bishops (2004), *Bishops oppose 'misguided and unnecessary' euthanasia bill*. http://www.cofe.anglican.org/news/news.

Gillon, R. (1985). *Philosophical medical ethics*. Chichester: John Wiley & Sons.

Kelly, G. (1951). The duty to preserve life. *Theological Studies, 12*.

Kluge, E. H. W. (1992). *Biomedical ethics in a Canadian context*. Scarborough, Ontario: Prentice-Hall.

Kuhse, H. (1993). Euthanasia. In P. Singer, (Ed.), *A companion to ethics* (pp. 294-302). Oxford: Blackwell.

McCarthy, D. G. and Bayer, E. (Eds.). (1993). *Handbook on critical life issues.* Bangalore: Theological Publications in India.

Munson, R. (1996). *Intervention and reflection: Basic issues in medical ethics*. Belmont: Wadsworth.

Ordinary and Extraordinary Means (1995). *Ethics and Medics*, 20(4). http://www.-lifeissue.net/writers.

Penner, M. (2006). *Is a feeding tube extraordinary means*? http://www.lifeway.com.

Pope John Paul II. (1995). *Evangelium Vitae*. Times Books.

Pope John Paul II. (2004). Address of John Paul II to the Participants in the 19th International Conference of the Pontifical Council for Health Care. *Osservatore Romano*, 24 November.

Sacred Congregation for the Doctrine of the Faith (1980). Declaration on Euthanasia. *72 Acta Apostolicae Sedis 542-52*.

Shannon, T. A. and Walter J. J. (1993). The PVS patient and the forgoing/withdrawing of medical nutrition and hydration. In T. A. Shannon (Ed.). *Bioethics* (4th ed., pp. 173-198). Mahwah: Paulist Press.

Skegg, P. D. G. (1988). *Law, ethics, and medicine*. Oxford: Clarendon Press.

Tulloch, G. (2005). A feminist utilitarian perspective on euthanasia: From Nancy Crick to Terri Schiavo. *Nursing Inquiry, 12*(2), 155-160.

United States Conference of Catholic Bishops (2001). *Ethical and religious directives for catholic health care services* (4th ed.). Washington, D. C. http://www.nccbuscc.-org/bishops/directives.shtml.

Wilton, D. G. (1997). Why the Church opposes assisted suicide. *Catholic Update*. http://www.americancatholic.org.

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THE MEANING OF HUMAN SEXUALITY ACCORDING TO KAROL WOJTYLA AND SIGMUND FREUD

MARGARET SEALEY, MD

Abstract

In answering the question 'What is human sexuality all about?' the article presents the secular ideas of Sigmund Freud and the religious ideal of John Paul II as published in his book, The Theology of the Body: Human Love in the Divine Plan. *It discusses the origins of their thought and the social consequences of their different views.*

Introduction

In the present day we are faced with a crisis in the meaning of human sexuality. Traditional moral values have been challenged resulting in a breakdown in traditional family life to the detriment of society and the happiness of individuals.[1] What has caused this crisis and what is the answer to it? These are the questions I intend to cover in this thesis, presenting evidence from the work of two great thinkers from the last two centuries, Karol Wojtyla and Sigmund Freud. Every person is to some extent the product of the times in which he or she lives and is affected by its ideas. Great thinkers challenge or build on these ideas. Accordingly I will try to trace the background to their thoughts. Since ideas change the world, in comparing them, I will try to demonstrate the power and consequences of the ideas of Karol Wojtyla and Sigmund Freud.

Karol Wojtyla: the Background to his Thought

Karol Wojtyla was born on May 18, 1920, in Wadowice, Poland. In 1942 he asked to be accepted as a candidate for the priesthood and was ordained on November 1, 1946. Subsequently he began doctoral studies in theology at the Dominican 'Angelicum' university in Rome, a centre in which Thomist philosophy held sway.[2] His doctoral thesis was on the subject 'The Doctrine of Faith According to Saint John of the Cross'. In this work his approach was at variance with that of his director, Garrigou-Lagrange, whose Thomism allowed him only an 'objective' understanding of God, that is, according to intellectual categories; but Wojtyla had progressed to the idea that God cannot be known only rationally as we know objects. Through faith we must encounter God personally, and our mystical communion with Him is an utterly transcendent 'being-with'. His thesis led him also to conclusions about the dignity and freedom of the human person whose mystery, analogously, cannot be known objectively but only through encounter.[3]

Ethics & Medicine, 23:3 (2007): 159-168.

Wojtyla became interested in Max Scheler's phenomenology and philosophy of the person.[4] Through Thomist philosophy it is possible to investigate the reality of 'things as they are', but Wojtyla was interested also in exploring Scheler's 'things as they are experienced'. The problem with Scheler's philosophy was that it was too subjective and emotional and allowed for no objective morality. The topic of his second doctoral thesis, his *Habilitationschrift*, was 'An Evaluation of the Possibility of Constructing a Christian Ethics on the Basis of the System of Max Scheler', to which his answer was 'No'. Thus Wojtyla developed his own brand of phenomenology, in which subjective experience is completely in accord with objective truth. Wojtyla became Professor of Ethics at Lublin University, a post which he held for twenty-two years, and which he combined with health-care and student chaplaincies.[5]

In 1960, in response to pastoral concerns, Wojtyla wrote *Love and Responsibility*.[6] He saw the need to affirm the gift of sexuality in marriage, a gift that since Saint Augustine's time suffered in the Church from Manichaean[7] overtones. Also, there was a perception that procreation was considered the primary function of marriage[8] and the personal needs of the spouses secondary.[9] These views and a legalistic manner of conveying them, which seemed to objectify human sexuality and fail to appreciate its subjective dimensions, were not helpful for young people faced with the sexual revolution. He was to treat his ideas on sexuality in a much more detailed fashion in his catechesis on the theology of the body, which he gave when he became Pope. In the meantime controversy had been raging in the Church over the legitimacy of the contraceptive pill. Pope Paul VI in his encyclical *Humanae Vitae*,[10] using his mandate to confirm his brethren in the faith (Luke 22:32) and affirming the constant teaching of the Church (good reasons for Catholics to believe that a particular teaching is infallible),[11] declared contraception to be immoral. Moreover he developed doctrine by declaring that there is an 'inseparable connection, established by God, which man on his own initiative may not break, between the unitive significance and the procreative significance which are both inherent to the marriage act.'[12] It is unfair to say that the Holy Father did not consider the subjective aspects of human sexuality in this short encyclical; but that this particular sentence sounded legalistic is attested to by the fact that one of my fellow students at the time commented, 'This Marriage Act sounds like some Act of Parliament!' The storm of protest, which broke out after the publication of the encyclical, Weigel attributes in part to this failure to emphasise the experiential and personal effects of human sexuality.[13] Addressing the crisis of disobedience in the Church ensuing on the encyclical was one of the first tasks of John Paul II on his succession, which he did in his catechesis on the theology of the body.

The Nuptial Meaning of the Body

The Vatican Council reminded us, and John Paul II continually reiterated, that man is 'one in body and spirit'.

> 'As an incarnate spirit, that is a soul which expresses itself in a body and a body informed by an immortal spirit, man is called to love in his unified totality. Love includes the human body, and the body is made a sharer in spiritual love.'
>
> 'Body and soul are inseparable: in the person, in the willing agent and in the deliberate act, they stand or fall together.'

A human being's body is an integral part of his/her person and moral acts.[14] The basic oneness of body and soul, it seems, is all too easily forgotten when problems concerning the human person are being considered. The problem that is being considered here is human sexuality. Christopher West in his introduction to *Theology of the Body for Beginners*,[15] quotes from *Time* magazine (January 2004) from an article expressing bemusement and confusion over the 'splendidly ridiculous' activity of sex: just what is it all about? We ask: in the Creator's plan, what is His intention for human sexuality? Like Paul VI, John Paul insists that this can be done only according to a total vision of man that includes both his temporal and eternal dimensions.[16] John Paul uses what he calls the 'keywords of Christ' that open for us an adequate anthropology. These words are: 'in the beginning' (Matthew 19:3-9); 'in the heart' (5:27-28), concerning lust and adultery; and 'like the angels' (22:23-33), regarding the state of the body in the Resurrection:[17]

'In the Beginning'

John Paul first observes that there are two different Biblical accounts of Creation: the first, the so-called 'Elohist', and the second 'Yahwist'. The first concerns the nature of things (that is, it is open to metaphysical interpretation). In this there is a statement about man: he is created male and female in the image and likeness of God. The second describes man's experience of creation (thus it is open to phenomenological interpretation), his 'waking up' or growing awareness of the kind of being that he is. These two accounts are aspects of the same anthropology.

John Paul then describes man in his state of innocence, before his sin and his need of redemption. *Man's experience of creation exactly corresponds to his being made in the image and likeness of God.* What, then, is man's experience? Man has an experience of *solitude*; he finds he is different from the animals because he is a person made in God's image. He has a unique relationship to God: he is responsible to Him, and his obedience to God is a life and death decision. The next experience of man is that of *unity*. John Paul refers to the 'myth', in the sense of a story that contains a deep truth, and he marvels at the economy of language in which this truth is conveyed, of the creation of Eve from the rib of Adam. Waking from sleep, as it were from the definitive creation of mankind, Adam finds, with exultant joy, another self, a suitable helpmate, one to whom he can be united by the gift of himself. They both see with a purity of vision that

fallen man has difficulty in comprehending, that their bodies allow the gift of their persons, one to the other. A gift can only be given freely. Acceptance of the gift leads to affirmation and a communion of persons. This is the nuptial meaning of the body: it indicates to man that he is made for communion, and it is a sign of the ultimate reality for which he is destined, communion with God. God made man in His image and likeness both in his solitude, as a person, and in his capacity to form a communion. As the communion of Persons in the Holy Trinity creates, and God made man in the likeness of Himself, so this complete faithful gift of two human persons to each other in their body/spirits is creative, life giving, and holy. Their third experience is of their *nakedness, without shame*, since there is as yet no possible violation of the gift of their persons by lust, which came as the result of sin.

'In the Heart'

When Christ refers to adultery in the heart, He is bringing our attention to the state of lust existing in man as a result of original sin. God gave creation, which included man himself, as a gift to man to rule over rightly as one made in the image of God. Adam broke his covenant of love with God. Not believing in the Fatherhood of God but in the Tempter's suggestion that God's gift was insufficient, Adam, greedily wanting more, disobeyed God. Nakedness without shame denotes Adam's serene original acceptance of his place as body-person ruler in creation. Shame denotes the disquiet resultant upon *lust*, the triple disordered desire (1 John 2:16) that strips man of right rule in creation, particularly the rule over his body, his person, his own self. Here John Paul notes that shame is not necessarily a negative experience: as modesty it has value in protecting the gift of the body from violation. Our Saviour teaches us that it is one's lustful desires that defile man (Matthew 15:11) and that it is the pure of heart who will see God (5:8). Christ came to restore humanity broken by sin and to give us the means to live our lives and sexuality as God originally intended through life in the Spirit. For freedom Christ has set us free (Galatians 5:1).

'Like the Angels'

We have noted above that human sexuality is a sign that man is made for communion. It is a sign leading him to eternity. The on-going analogy that God gives us of the relationship that He desires with us, throughout the Old and New Testaments, is that of husband, spouse. At the end of time, Christ will be married to His Bride, the Church (Revelation 19:7-9; 21:3,9,10). Saint Paul tells us that the union of spouses in marriage, resembling the communion of the Persons of the Trinity (he quotes Genesis 2:24) and the relationship between Christ and His Church, is a very great mystery (Ephesians 5:31,32). Christ prayed for such communion at His Last Supper (John 17:21). We must understand that there is no union of the sexes in heaven: it is a sign for us while we are living on earth. John Paul observes that those who are given the gift of celibacy 'for the sake of the kingdom of heaven' (Matthew 19:12) already begin to live the heavenly reality to which the sign of marriage points.

Sigmund Freud: the Background to his Thought

Sigmund Freud was born in Freiberg, now Pribor in the Czech Republic, on May 6, 1856.[18] When he was a small child, his parents moved to Vienna, where he spent most of the rest of his life until 1938, when he was obliged under Nazi persecution to seek refuge in England. He died in London of cancer in 1939, just after the outbreak of war. In his autobiography, which mainly concerns the progress of his thought and his career, Freud tells us that he was born of Jewish parents and remained a Jew himself. He was not a believing Jew since, except for a very brief time in his university career, he was a convinced atheist.[19] He was much influenced in his atheism by Ludwig Feuerbach (1804-1872),[20] who took the position that nature was the totality of reality and that man invented God in order to fulfil his own needs.[21] Freud was very attracted to the theories of Charles Darwin[22], who died in 1882, when the young Freud was researching the nervous system under the famous Ernst Brücke. It was Darwin who paved the way for the development of a psychology based on animal instinct. Thus, instead of conscience being a spiritual knowledge of God's objective moral law,[23] it became merely an awareness of a dissatisfied instinct that had been honed by the environment.[24] We can note that this doctrine eased the path to moral relativism. Freud also felt himself very much indebted to Gustav Theodore Fechner (1801-1887)[25]. Fechner is credited with pioneering 'psychophysics'.[26] This is the branch of psychology that, being concerned with the material, bodily aspect of man, lends itself to physical measurement. For materialists, Fechner's discoveries promised the hope of making psychology an *unspiritual,* empirical and exact science.

Storr observes that while he was a university student, Freud belonged for five years to a Reading Society that regularly discussed the ideas of Schopenhauer and Nietzsche,[27] but Freud did not consider that these two philosophers had influenced his thought, although admitting that his ideas were astonishingly similar to theirs.[28] Schopenhauer was an atheist, and his philosophy was materialistic. According to him the material world, including our bodies, are manifestations of a blind, brutal Will that subjugates reason. Desire is an aspect of this Will in us and is always destined to be unsatisfied. Our ultimate way out of this unsatisfied desire is death. Could not these ideas have helped Freud to form his theory of the effect of unconscious chaotic desires—which he termed the *id*—on our behaviour, and to form his later speculations on the ultimate desire of living matter for death? Nietzsche, very much influenced by Schopenhauer, also believed in this Will. To him, Dionysius characterised the pleasure loving, frenzied and passionate aspects of Will, Apollo the intellectual and temperate. Storr sees the 'primary' and 'secondary' processes of Freud's psychology to be closely related to Nietzsche's concepts of Dionysius and Apollo.[29]

Sigmund Freud's Theory

The Ego and the Id, which dealt also with the 'superego', was published in 1923. Here we find Freud's fully developed ideas on the structure of the mind.[30] The 'id' is the most primitive and chaotic part, containing the instincts: it is

illogical and bent on satisfying instinctual needs in order to achieve pleasure or, more commonly, to avoid 'unpleasure'. The 'ego', a less primitive part of the mind, which has developed from the id, is the seat of consciousness, memory and voluntary action, receiving stimuli from the external world and within from the id. It is concerned primarily with self-preservation. The ego is trained to monitor itself in order to achieve the 'ego ideal'. The 'superego' is the name given to this monitoring system that is induced and set up in the ego by societal pressures: in the child, by parental training and in the adult by society's standards and rules. It causes the ego to consider the advisability of responding without censure to the id, repressing drives to untimely or socially unacceptable behaviour. Conscience is the subjective awareness of the ego not measuring up to the ego ideal. Storr observes that in Freud's scheme the superego could be seen as a composite of Pavlovian conditioning.[31,32] The id uses what Freud called 'primary process': this is governed by wish-fulfilment and the pleasure principle. The ego uses 'secondary process', which is governed by conscious planning and the reality principle.[33] There is not infrequently conflict between these processes. The organism always seeks to diminish the tension caused by the conflict: this is called the 'nirvana principle'. If the organism may not give way to the demands of the id because the superego threatens punishment, it may diminish the tension it thus experiences through various devious means (including dreams) that are unconscious and therefore acceptable to the ego.

Freud maintained that it is instinct that motivates man in everything and at first he recognised *only one instinct, the sexual or survival instinct*. Later on, when his ideas were more a result of speculation than observation, he considered that there must be a second instinct, which he termed the death instinct.[34] The sexual instinct is foundational to the formation of personality. Personality traits depend upon how, during its development, the sexual instinct has been beaten into shape. The organism's aim is to rid itself of tension, thus it has need for sexual satisfaction. Behaviour depends upon the individual's managing the demands of the sexual instinct balanced against the superego and the ego ideal. It is noticeable that Freud dubs the means of sexual satisfaction, whether human or otherwise, 'objects'.[35] There seems to be a very reductive view of interpersonal relationship here! Ultimately the only way of relieving tension is through death, and so finally the organism wants death.

Comparison and Commentary

From the start Freud's vision of man was not holistic like Wojtyla's, but materialistic. John Paul II in his encyclical *Evangelium Vitae* observes that atheism can result only in a very faulty anthropology, '*the eclipse of the sense of God and man*'.[36] Storr admits that Freud's approach to his science is typically reductive.[37] Freud seems to have had no insight as to philosophy's power: 'philosophy has no direct influence on the great mass of mankind'.[38] As well as not noticing the effect of philosophical ideas on himself, he did not foresee that his 'science' of psychoanalysis would provide a philosophy that would change the world.[39]

John Paul II was very aware of the power of ideas to influence society in deciding its values and making its judgements. He termed the very materialistic view of mankind, which admitted only measurable facts in its investigation into the nature of man, as 'scientism',[40] and deplored its effect on ethics. Freud subscribed fully to scientism and promoted it, using it to explain everything. He applied it to the field of human sexuality, which both he and Karol Wojtyla recognised as being quite fundamental to every aspect of human life.

One may observe that the theory of human sexuality that Freud developed based on the necessity of satisfying sensual demands does not encourage respect for the human person, loyalty and communion, but exploitation of the other and a short-sighted, selfish hedonism. Sexual partners use each other to satisfy their instincts, and if there is incompatibility, a new partner must be found. Children are seen not so much as a gift and blessing of marital union, but a side effect that may or may not be convenient or desirable. A merely sexual relationship that does not remain stable does not provide a secure, safe and loving background for the upbringing of children. With such a mindset in society how can there be any hope for the stability and survival of the family, the basic building block of society? Society stands or falls with the family where human beings first learn commitment, love, loyalty, responsibility and a sense of their own worth.[41] With the ruination of the family comes the ruination of society. There is no doubt that Freud made significant contributions to the science of psychology and our understanding of our animal nature. He challenged Victorian prudery and, by postulating that there are factors that can distort psychological development, encouraged a more compassionate attitude to individuals showing sexually or socially aberrant behaviour. It may be said that today's confused sexual morality is to some extent the result of a reaction to Victorian prudishness and, in the Church, to a certain pervading Manichaeism.[42] John Paul, seeing an urgent pastoral need, responded to the confusion about human sexuality that Freud had helped to bring about with his materialistic anthropology. In his writings John Paul, too, is astonishingly (to make 'one gasp and stretch one's eyes', as Hillaire Belloc would say[43]) non-prudish in his approach[44] because he understood human sexuality to be at the basis of our ability to relate as persons. Used in accordance with God's plan it binds human society together. It is a sign pointing to life in the Trinity and represents mysteriously how mankind is made in the image of God. He is not saying that God is a sexual being(!) but that sexuality is the way in spiritual-material persons that God has imaged Himself and in which He has signified that we are made for communion.

Conclusion: Healing the Culture

Philosophical distortions can mutilate faith and morals. The Church had experience of this in her early centuries when the foundational doctrines of the Christian faith contained in Revelation were at risk of being deformed by the inadequate philosophical structures of the time that were applied to them. In our own time an anthropology based on scientism, which Sigmund Freud embraced and which has been widely promulgated, has seriously distorted our

moral view, leading to human unhappiness. Karol Wojtyla, aware of the serious deficiencies in modern philosophy and the damage that scientism was doing to moral vision, strove to call attention to a realist-phenomenalist philosophy that admitted a holistic view of mankind. This is the view of the human person as a unity of body and soul, where sexual union is a gift to be used in marriage to express the soul's capacity for communion. Through faithful self-giving love in marriage, the first community of mankind, the family, is formed. In the school of the family, the human person learns self-sacrificing love and is directed towards his/her ultimate destiny to share communion with God. This holistic anthropology not only points mankind towards its eternal happy destiny, but also ensures its happiness and fulfilment in the present transient world.[45] E&M

Endnotes

1 FC, *Familiaris Consortio,* 1981, nn. 1,3.

2 Weigel, 1999, p. 84.

3 The progress of Karol Wojtyla's thought has been traced by Rocco Buttiglione in *Karol Wojtyla: The Thought of the Man Who Became John Paul II* (Grand Rapids: Eerdmans, 1997). Buttiglione's book has been reviewed very well by Thomas Guarino in *First Things* 82 (April 1998):39-41, and is cited by Professor Weigel.

4 Weigel, 1999, p. 128.

5 Ibid., p. 136.

6 Ibid., p. 140.

7 Manichaean: In accordance with the doctrines of Mani (c. 216-276). St. Augustine was greatly influence by these teachings before his conversion. Mani held that the material universe, marriage and childbearing were evil. This type of heresy, that matter and sex are bad, is hard to eradicate and keeps resurfacing.

8 Neuner and Dupuis, 1996, p. 712.

9 For the history of Christian marriage as partnership, see Charles, R., S.J. *Christian Social Witness and Teaching*, published by Gracewing, 1998.

10 HV, *Humanae Vitae*, 1968. Like all Church documents, there are several publishers. Church documents can be found on the Vatican website by entering the name of the document at www.google.com.

11 LG, *Lumen Gentium,* 1964, n. 25.

12 HV, 1968, nn. 6, 10,12.

13 Weigel, 1999, p. 209.

14 GS, *Gaudium et Spes,* 1965, n.14; FC, *Familiaris Consortio,* 1981, n.11; VS, *Veritatis Splendor,* 1993, nn. 49,50.

15 West, 2004, p. v.

16 HV, 1968, n. 7; John Paul II, 1997, pp. 87, 365.

17 West, 2003, p. 51.

18 Gay, 1995, p. 3. Sigmund Freud wrote an autobiographical study, large sections of which Peter Gay presents in his *Reader*, pp. 3-41.

19 Ibid., p. 685.

20 Brown, et al, 1995, p. 392.

21 M.J. Inwood in: Honderich, 1995, p. 277.

22 Gay, 1995, p. 4.

23 CCC, 1994, n. 1778.

24 De Marco and Wiker, 2004, p. 78.

25 Gay, 1995, pp. 38, 88, 650.

26 Gross, 1997, p.186.

27 Storr, 2001, pp. 144-5.

28 Gay, 1995, p. 38.

29 Storr, 2001, p. 144.

30 Gay, 1995, p. 628.

31 Storr, 2001, p.63.

32 Pavlov researched animal behaviour. He discovered that where a particular stimulus was followed by a particular response, if, over a period of time, another stimulus was applied simultaneously, the animal's behaviour could be modified, a process known as conditioning.

33 Storr, 2001, p. 102.

34 Gay, 1995, p. 36.

35 Storr, 2001, p. 135.

36 EV, *Evangelium Vitae,* 1995, n. 21.

37 Storr, 2001, pp. 146, 147.

38 Gay, 1995, p. 785.

39 Ibid., Freud's lecture *Weltanschauung*, on whether psychoanalysis was a theory that explained everything, pp. 783- 796, and Introduction, p. xiii.

40 FR, *Fides et Ratio,* 1998, n. 88.

41 FC, 1981, n. 42.

42 Woodall, 2003, p. 53.

43 I think that it was Hillaire Belloc who wrote the poem about Matilda, except that in this case the astonishment was because Matilda told such dreadful lies.

44 West, 2004, p. 82.

45 My thanks are due to Dr. Andrew Beards, Director of the Philosophy Course at the Maryvale Institute, Birmingham, and to Dr. Patricia Daymond. They read the manuscript and made helpful comments.

References

NJB: *The New Jerusalem Bible.* Standard Edition. London: Darton, Longman & Todd Ltd., 1985.

CCC: *Catechism of the Catholic Church.* London: Geoffrey Chapman, 1994.

FC: *Familiaris Consortio.* The Christian Family in the Modern World. JOHN PAUL II. Rome, 22-11-1981.

EV: *Evangelium Vitae.* The Gospel of Life. JOHN PAUL II. Rome, 25-03-1995.

FR: *Fides et Ratio.* Faith and Reason. JOHN PAUL II. Rome, 14-09-1998.

GS: *Gaudium et Spes.* 'Pastoral Constitution on The Church in the Modern World' of the Second Vatican Council. Rome, 7-12-1965.

HV: *Humanae Vitae.* The Right Ordering of the Procreation of Children. PAUL VI. Rome, 25-07-1968.

LG: *Lumen Gentium.* 'Dogmatic Constitution on the Church' of the Second Vatican Council. Rome, 21-11-1964.

VS: *Veritatis Splendor.* The Splendour of Truth. JOHN PAUL II. Rome, 6-08-1993.

BROWN, Hunter, HUDECKI, Dennis L., KENNEDY, Leonard A., SNYDER, John J. Editors. *Images of the Human. The Philosophy of the Human Person in a Religious Context.* Chicago: Loyola Press, 1995.

CHARLES, Rodger, S.J. *Christian Social Witness and Teaching: The Catholic Tradition from Genesis to Centesimus Annus. Vols. I and II.* Leominster: Gracewing, 1998.

DeMARCO, Donald, and WIKER, Benjamin. *Architects of the Culture of Death.* San Francisco: Ignatius Press, 2004.

FREUD, Sigmund. *Introductory Lectures on Psychoanalysis.* London: Penguin Books, 1991.

GAY, Peter, Editor. *The Freud Reader.* London: Vintage, 1995.

GROSS, Richard. *The Science of Mind and Behaviour.* London: Hodder and Stoughton, 1997.

HONDERICH, Ted, Editor. *The Oxford Companion to Philosophy.* Oxford: The University Press, 1995.

JOHN PAUL II. *The Theology of the Body: Human Love in the Divine Plan.* Boston: Pauline Books and Media, 1997

NEUNER, J., S.J., and DUPUIS, J., S.J. *The Christian Faith in the Doctrinal Documents of the Catholic Church.* 6th Edition. New York: Alba House. 1996.

OSBORNE, Richard. *Philosophy for Beginners.* New York: Writers and Readers, 1992.

STORR, Anthony. *Freud: A Very Short Introduction.* Oxford: The University Press, 2001.

WEIGEL, George. *Witness to Hope: The Biography of John Paul II.* New York: Harper Collins, 1999.

WEST, Christopher. *Theology of the Body Explained: A Commentary on John Paul II's 'Gospel of the Body'.* Leominster, Herefordshire: Gracewing, 2003.

WEST, Christopher. *Theology of the Body for Beginners: A Basic Introduction to Pope John Paul's Sexual Revolution.* West Chester, Pennsylvania: Ascension Press, 2004.

WOODALL, George. *Special Moral Theology.* Birmingham: The Maryvale Institute, 2003.

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BIOETHICS IN LIBERAL REGIMES: A REVIEW OF THE PRESIDENT'S COUNCIL

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Abstract

On August 9, 2001, President George W. Bush announced his much anticipated decision on the use of federal funds for research involving embryonic stem cells.[1] *At the same time the President also announced the creation of the President's Council on Bioethics, which would study issues related to bioethics and report findings and recommendations to him and the public. In forming such a commission, the President was following a well established tradition. Since the early 1970s there have been three other major U.S. national commissions established to study a variety of issues in bioethics and make recommendations about policy to the federal government and the states.*[2] *This essay is meant to consider the work of the President's Council to date, with five reports and one "white paper" issued and one work containing classic pieces of literature that encourage reflection on important themes in biomedical ethics.*[3] *I will describe the work of the Council in the context of the three other commissions, explicate the key work of the Council, and argue that the work of the Council shows us much about the possibilities and limitations of bioethics as a public enterprise in liberal regimes.*[4]

I

National Commission: 1974-78

The first commission relevant to our discussion is the National Commission for the Protection of Human Subjects in Biomedical and Behavioral Research, which began work in 1974 and produced its final report five years later. This commission had its genesis in revelations of the later part of the 1960s concerning what appeared to be serious violations of simple moral standards that should govern biomedical research: coerced participation, failure to inform patients or research subjects of the nature and risks associated with the specific study, research on the aged and infirm that might be lethal, etc. To these lapses were added a series of emerging issues raised by serious thinkers such as the late Paul Ramsey. One question raised by Ramsey was the morality of non-therapeutic research involving children. By definition such research cannot benefit the child/patient. On what grounds then could a responsible parent consent to such research? In his seminal work, *The Patient as Person*, Ramsey disputed the moral standing of research in children from which they cannot benefit. He thus began a discussion that the National Commission resolved in favor of such research.

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The Commission and its resulting *Belmont Report* are excellent examples of what we might call a process-oriented bioethics. The Commission did not question any specific sorts of studies unless they could only be conducted in violation of the Commission's guidelines. What the Commission was interested in were policies or rules that would enhance the prospects of "informed consent" to participation in research by individuals. Regarding the "informed" side: *Was the patient adequately informed about the nature of the research (i.e., the goal, the method, the actual procedures such as blood tests, the time frame, etc.)?* Regarding the "consent" side, issues of the voluntary nature of the consent dominated the discussion: *Can prisoners or members of the military ever give completely voluntary consent?*, *Can parents consent for children?*, or more pointedly, *Can parents give consent to research that may not benefit their child (so called non-therapeutic research)?* The National Commission thus had a limited mission. It was not set up to examine any or all issues that might arise in the broad field of bioethics. Though even at that time many areas of concern were under serious discussion—treatment of handicapped newborns, living wills, brain death, etc.—the National Commission had no mandate to engage these questions, and it did not do so. In these very limits of the National Commission, however, we can see the nature of official or semi-official bioethics in liberal regimes. Liberal regimes are preeminently regimes of process not "product". "Informed consent" is a fundamental principal that liberal regimes take as basic. Law in liberalism cannot give instruction about what goals one's life should be dedicated towards. Law cannot give us guidance in the right or proper way of life. The focus is on the pursuit of happiness not happiness itself. Liberalism surely is concerned that the person making the choice about how to live is free from coercion and in possession of the information necessary to make a sound choice, given his or her individual life goals. Thus the work of the National Commission accepted the general consensus about the importance of informed consent in medical research and sought to develop rules and policies that would best apply the principle to developing research methods. In its formation, then, the Commission was given a mandate that was consistent with and even *demanded by* the core principles of the liberal regime. Its focus was practical and pragmatic: how to apply the principles to cases or types of cases.

President's Commission: 1979-83

As the National Commission's work finished in 1978 another commission emerged in 1979 with a much broader mandate. This was the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavior Research. This Commission released a number of reports from 1979 to 1983. This group also commissioned several studies of the actual process of informed consent in medical settings as well as studies of specific topics or issues. The Commission's reports are a useful benchmark of the state of bioethical reflection into the early '80s. They had a marked tendency to engage in discussion on topics that were either "safe" or which could not be ignored by any political order. In the first camp were studies of the process of informed consent in ordinary hospital and office medial care (as distinct from the previous Commission's focus on research settings), genetic engineering,

genetic counseling, etc. In the second group, the studies of issues that even liberal regimes could not ignore were reports on the concept of brain death and a report on issues related to living wills and the discontinuing of treatment for the terminally or gravely ill. Conspicuously absent was any discussion of emerging reproductive technology such as in vitro fertilization or, especially, abortion.

The Commission tended to produce pragmatic policy recommendations and accompanying reports that carefully reviewed the debate on specific issues as it had developed in the standard bioethics literature of the era. The Commission represented this community of physicians, lawyers, and bioethicists. Though medical ethics began with theologians like Ramsey and Arthur Dyck at Harvard as well as hospital chaplains, theologians were noticeably absent from this commission; its members symbolized both the possibilities of and limits to the discussion that had developed to that point. For example, the Commission's report on the definition of death followed from a discussion that had been going on since the 1960s. As respirator technology developed, which could keep a heart beating indefinitely, was there any meaning left in the common and statutory laws' traditional definition of death as the permanent cessation of "vital signs," i.e., heart beat and respiration? Suppose a person shot someone who was then placed on a respirator and kept mechanically breathing and pumping blood. When the family perhaps decides that they want to remove the respirator, can the shooter be charged with murder? On the traditional definition it seems *no*. The shooter did not actually leave the victim without heartbeat and respiration. "Brain death" was a concept that emerged in the 1960s and was enacted in some state laws in the early to mid 1970s to respond to this problem. Under this new definition, one could be declared dead if there was compelling evidence of the irreversible cessation of all brain activity, including that of the brain stem. The Commission's report surveyed the history of the concept, laws enacted in the states, and model legislation proposed by other groups. The Commission argued for its general concept of whole brain death and developed its own specific legal proposal. While such reports are useful, they do not raise the deepest questions that might emerge from contemporary bioethics. The Commission dealt with specific, carefully circumscribed issues that might be "solved" within the confines of the foundational principles of liberal individualism.

The other Commission reports were equally limited either by the pragmatic nature of the bioethics field or by the process questions that dominated the discussion. Of the nine reports produced by the Commission, five dealt with questions of process: protecting research subjects, compensating research subjects for injuries, health care decision-making, genetic screening and counseling, and implementing research regulations. To this may be added *Securing Access to Health Care*, which started from an assumed consensus that all Americans should have access to quality healthcare. Within its limits the Commission produced useful results. The policy recommendations were helpful in shaping future law and regulation in a manner that was probably more thoughtful than otherwise would have been the case. The Commission, however, was limited in the questions that it chose to consider. The reports are confined to a range of topics on which there are few if any serious disputes of principle. Everyone desires to protect research subjects from coercion or

duplicity and to enhance the ability of patients to make clear knowledgeable decisions about health care. Likewise, it was almost universally admitted that some concept of brain death had become a necessity as technology advanced. The questions were thus limited to the debate over higher brain or whole brain formulations and the precise wording of the legal and policy proposals that the Commission would put forward. The fundamental debate was whether in order to be declared dead, one had to have complete and permanent loss of all functioning of the brain, including the brainstem. The alternative was to hold that one is dead when "higher" brain functions like memory, cognition, and consciousness are lost. The Commission opted for the "whole brain" formulation and drafted a legal proposal that reflected this choice.

National Bioethics Advisory Commission: 1995-2001

A little more than a decade after the work of the President's Commission, the executive branch waded into these waters again. This time the vehicle was called the National Bioethics Advisory Commission (NBAC), which operated from 1995 to 2001. NBAC issued six reports, which—with the exception of two of them—all dealt with issues concerning the conduct of research. They treated again research involving human subjects, examining the questions of consent and benefit that the two previous commissions had reviewed. To this was added a separate consideration of international research in less developed countries where the regulatory process was less adequate, research involving biological materials, and research involving persons with mental disorders.[5] Two of NBAC's reports, however, dealt with more substantive topics: human cloning and stem cell research. In the aftermath of Dolly in February 1997, the Commission considered the ethics of human cloning over the ensuing months at the specific request of President Clinton. The Commission considered many cloning issues; yet, for a recommendation the Commission took the easy route. First, they concluded that at that time (1997) cloning was *too unsafe* to consider for humans. In the case of Dolly there were 277 fertilized eggs used to produce one sheep. In many cases the pregnancies miscarried, but a number were born with severe abnormalities. The "not yet because of safety" conclusion about cloning was obvious. Second, the commission called for a moratorium on any cloning attempts while a vigorous public debate ensued. The debate supposedly would clarify the issues and help to resolve public sentiment on the question. Regarding stem cell research, the Commission firmly supported research even using specifically created stem cell lines, not just embryos left over from fertility clinics (as is now proposed by bills in Congress).

A review of these three commissions reveals the limited nature of public bioethics in liberal regimes. Liberal regimes are preeminently ones in which the open, pluralistic nature of policy making is highlighted. Citizens have an aversion to making law or policy that would limit the liberty of others. They do not like to compel others to believe or act as they do on grave moral questions such as abortion or euthanasia, however much they as individuals they are committed to their own beliefs in these issues. Law and policy, in this respect, seem to follow from a well developed consensus that already exists.

The assumption is that on passionate issues—such as capital punishment—no national commission will change public attitudes, while on other issues no consensus exists, so policies are unlikely to be clear or definitive. For these reasons, the three commissions that preceded the President's Council on Bioethics largely, and in the first case wholly, considered questions of process regarding consent to research participation or care itself. Regulations were scrutinized, changes called for, and policies carefully stated. But on the most important questions that touch upon the meaning of human life, the possible limits of human aspirations, and the dignity that must be accorded human life in any of its forms or stages, these commissions took a pass. At the fundamental level this may be because liberal societies lack a public moral vocabulary with which to discuss these sorts of questions and especially to reach any resolution on them. Individual liberty and a concern for physical harm to others are bedrock beliefs in liberal societies. Other principles are highly contested and the issues they touch upon perhaps cannot be resolved in these terms. To oppose cloning, for example, it is far easier to appeal to the limited rate of success and the serious likelihood of abnormal births than it is to argue that cloning is wrong because it represents asexual reproduction that severs the natural connection between sexual expression and reproduction. In the case of activities of those such as the notorious Jack Kevorkian, it is far easier to consider the possibility of error or the fact that gravely ill or depressed persons are not in the best position to make good decisions than it is to argue that assisting suicide or putting patients to death represents an assault on the dignity of persons and a perversion of the proper aims of medicine, or even the rejection of a Divine gift of life.

II

The current Council represents a break with the three previous Commissions disussed above. A few observations may be made in this regard. First is simply the make up of the Council and its staff. The previous Commissions had included members of the scientific and medical communities, as it would only be fitting to do. Their non-medical and scientific members, however, were almost wholly drawn from what we can refer to as the conventional bioethics community, made up of bioethicists and lawyers. These were thinkers deeply immersed in a way of thinking about bioethics as a series of issues involving primarily a tradeoff between principles of individual autonomy on the one hand and benefit to the patient on the other. The legacies of Kant and Mill dominate these debates. The same was true of the staff members of these Commissions, which were dominated by experts in bioethics as it had developed as a distinctive field. While the current Council has its share of medical and scientific experts, its other members represent a departure from tradition. Whatever their personal views on specific issues, only one member might be thought of as part of the traditional bioethics community. Leon Kass, the chairman, is one of the deepest thinkers on bioethics, yet with few exceptions his work has not been published in traditional bioethics forums. Perhaps by not being committed to specific positions in traditional bioethics, these more diverse members at least can take a fresh look at issues in the field. Second, the topics discussed so far by the

Council as well as those it lists as matters of its concern are different, and in a way broader than those of the previous Commissions. With the exception of its consideration of cloning and stem cell research, none of the topics it has so far treated were matters considered by any of the previous groups. Precisely what is this difference? The Council has not only considered matters of practice or procedure, but rather, the Council has concentrated on issues that fundamentally derive from our increasing ability to use biomedical science to alter the ways and forms of life that nature and/or God has given us as human beings. The Council has announced that research ethics and end of life issues are matters of its concern, but to date cloning, stem cell research, assisted reproduction, and human enhancement have been the focus of discussion. Third, the Council has been, in general, less interested in reaching specific policy conclusions than in fostering rich, thoughtful discussions about fundamental questions. We might note in this regard that the Council has appended to three of its reports personal statements by Council members either individually or as groups of Council members. These function sometimes like a "minority report" and other times as a vehicle for individual members to explain precisely how they understand conclusions that the Council has reached.

With a focus on the deepest questions on technology and human nature, especially including the meaning of human reproduction, what has the Council wrought? This question must be answered in terms of what might be understood as the purpose of the Council's deliberations. Are they like the National Commission for the Protection of Human Subjects, designed to produce specific legal and policy proposals on a discreet subject, or are they broader, aiming at thoughtfully raising central questions? Do they see themselves as similar to a legislative committee where experts present findings, staffs prepare reports, and specific proposals are developed, or more like a national postgraduate seminar on the meanings of advances in biomedicine for our future? The current state of the work of the Council seems to suggest that both of these aims are a plausible reading of at least part of its work. These two are in tension with each other, but both results can be seen in the Council's work. One of the Council's reports and its two follow ups, *Human Cloning and Human Dignity, Monitoring Stem Cell Research*, and the "white paper" *Alternative Sources of Human Pluripotent Stem Cells*, are clearly directed towards reaching some specific policy conclusion, even if the conclusion is tentative and preliminary. The report *Beyond Therapy: Biotechnology and the Pursuit of Happiness*, which treats the use of technology to alter the biological given of human nature, is clearly directed toward producing thoughtful reflection, i.e., the national seminar mode. The report on assisted reproductive technologies, *Reproduction and Responsibility*, and the latest one, *Taking Care*, combines both of these features.

The Council was created in the wake of President Bush's decision concerning federal funding for embryonic stem cell research, and this topic was its first focus of attention. The Council's report, *Human Cloning and Human Dignity,* issued in July 2002, is an object lesson in the difficulty of public bioethics in a pluralistic, liberal regime. The report begins by considering the importance of cloning, the history of the topic, and the science of cloning both for therapeutic

purposes (to produce stem cells) and for reproductive purposes. These sections represent a useful summary of the state of the discussion up to late spring, 2002. The central part of the report focuses on the ethical issues of reproductive and research cloning. Though important, these chapters do not constitute an argument for a specific set of conclusions; rather, they are a thoughtful review of arguments for and against each sort of cloning. Though several members of the Council, especially Leon Kass, were on record with strong views on cloning, these chapters are not *an argument* but *a review of arguments*. Finally, the report considers a number of policy proposals and offers a conclusion that was only supported by a bare majority of commissioners. Interestingly, the Council's actual recommendation did not depart far from the conclusion reached by its predecessor, NBAC. On the question of reproductive cloning, the council supported the already well established view of the public that cloning children should be legally prohibited. Since there is no lobby for producing cloned children and serious arguments about safety, the technological domination of humanity, and problems of personal identity (could I be both father and twin), the Council's conclusion is well grounded and hardly controversial. On the question of the cloning of stem cells for research, the Council was, as is the U.S., deeply divided. Whether or not wisdom required postponing judgment, pragmatism surely seemed to. The Council was divided into three groups. Some Council members opposed stem cell research either because of a belief that even the earliest embryos represent human life or because of deep concerns of the manufacture of human beings and the selection of human nature. A second small group of members believed that at present not enough is known about embryonic stem cells to proceed with research. These members wanted a moratorium on embryonic stem cell research in order to see how the ethical discussion will proceed and to see if alternative adult or cord blood cells can be used instead. A third group of members wanted no moratorium, voting to proceed with research immediately. When opponents sided with those advocating a moratorium, the final result was a vote of ten to seven to support a proposal for a four year moratorium on embryonic stem cell research. Thus, though the topic of cloning and stem cell research differs from topics considered by many of the Council's predecessors, the actual report, and especially the recommendations look surprisingly familiar. Reproductive cloning is condemned more strongly than in the past, but the reasoning is almost equivalent: problems of safety, consent, and personal identity dominate the discussion, just as in previous commissions. Though the Council raised questions about the manufacture of human beings and the prospects of eugenics, the crucial part of the argument seemed to rest on questions of safety and benefit as well as the way in which cloning might threaten our sense of individuality and hence autonomy. While opponents hope that science will demonstrate more promising and less morally troubling alternatives, others hope that with further developments the case for stem cell research will become too compelling to ignore. In the meantime, the call for a moratorium is the classic liberal compromise.

III

At the other end of a spectrum is the Council's report *Beyond Therapy: Biotechnology and the Pursuit of Happiness*. Though this report does not offer specific policy recommendations, it does represent a thoughtful discussion on the key issues related to the prospects for human enhancement both with biotechnology and without: selecting the sex and genetic destiny of our children, enhancing performance (e.g. for athletics) with steroids or biotechnological enhancement, life span increases, and using technology to produce "happy souls" as is done with mood altering drugs. In much of the bioethics literature, an artificially lengthened lifespan, muscle increases, etc. are considered "enhancement" as distinguished from therapy for a specific disease. Many thinkers have come to the conclusion that the use of genetic or other technologies to allow us to live comfortably to 150 is highly problematic but that gene therapy to treat cystic fibrosis or retinoblastoma is not. The Council properly questions the sufficiency of this distinction. The categories of therapy and enhancement are vague and overlapping. The recognition of therapy is inherently connected to its partner illness. But what counts as illness is often spread across a spectrum, not placed in concrete categories of sick and healthy. We may recognize the ends of a spectrum such as severe depression vs. normal mood, but what about mild depression, named medically as "dysthymia"? Blindness vs. 20/20 vision is easy, but is someone sick because they need glasses or are colorblind?

The fundamental problem is that to give an account of the distinction between therapy and enhancement, one must articulate a comprehensive account of what counts as normal. This account, therefore, must set forth a clear, precise vision of what human nature is. "Normal" is a term denoting that which is standard or natural to human functioning; as the Council notes "there are difficulties owing to the fact that both enhancement and therapy are bound up with and absolutely dependent on the inherently complicated idea of health and the always complicated idea of normality". This observation brings us to the heart of the analysis: if we want to know what enhancement is, we first need to resolve what the standard is. I can know what a better pole vaulter is because I know the rules of the sport. I know that in this case better literally means higher. To put it in classical terms, since I know the telos of pole vaulting I know that a better or "enhanced" pole vaulter is one who better reaches toward the end of "height". In the case of human nature in general, however, do we have any such comprehensive account of the rules or standards in terms of which we can know what constitutes "better" or "best"? Broadly, much of ancient Greek philosophy and Christian theology answered *yes* to the question of a noetically available human telos, while modern philosophy, especially after the enlightenment, has answered *no* to the same question. The Council wants to conclude with the ancients that nature can provide guidance on these difficult matters, while avoiding the religiously revealed solution; yet, their grounds for doing so, while carefully stated, are open to dispute.

The Council first encourages us to respect what it calls the "given" or "giftedness" of human nature. The key passage reads:

> [O]ne revealing way to formulate the problem of hubris is what one of our council members has called the temptation to 'hyper agency', a promethean aspiration to remake nature, including human nature, to serve our purposes and to satisfy our desires… [This temptation] represents a false understanding of and improper disposition towards the naturally given world. The root of the difficulty seems to be both cognitive and moral: the failure to properly appreciate and respect the 'giftedness of the world'. Acknowledging the giftedness of life means recognizing that not everything in the world is open to any use. Our talents and powers are not wholly our own doing, nor even fully ours, despite the efforts we expend to develop and exercise them.

The Council obviously recognizes the religious nature of this claim, for at this point there is a long footnote to C.S. Lewis' *The Abolition of Man*.[6] The Council seems to admit this religious connection when they acknowledge that "going 'beyond therapy' in this sense means returning to an account of the human being seen not in material or mechanistic or medical terms but in psychic and moral and spiritual ones." Given the precision with which these reports are written, the word "spiritual" cannot be a mistake. Respect for the giftedness of life, however, has its problems, as the Council immediately acknowledges. Alzheimer's, cancer, typhus, and other conditions are also given in nature. Should they simply be accepted? The Council's answer is that of any sensible person: *no*. If this is granted, however, then we require a standard other than mere "givenness" to judge the "given" and, hence, the moral standing of interventions to alter the given. "Only if there is something inherently good," writes the Council, about such things as natural procreation or a standard lifespan, can we defend such givens against technological intervention. What then is the source of this goodness? It cannot now be its natural "givenness", for the Council has rightfully shown that while "givenness" is important, it is not decisive. This is where the issues get murky. If we took the theological route to which the passage quoted above points, we would then ask what rules or principles the source of the gift, presumably God, has provided for the proper employment or enjoyment of the gift. But the Council does not—and as a public body in a liberal regime probably cannot—take such a route. Yet, absent such a theological move, where is the standard? Consider, e.g., the question of aging. It is obviously the case that human beings exist in such a way that the physical body simply wears down after a number of years. Illness or injury may shorten life, sometimes severely. Even absent these events, however, the body simply cannot function after a certain length of time. Why should we consider that this limit should be respected such that attempts to increase the human lifespan by 50 years are not merely possibly impossible, but wrong in principle? As human beings we have a natural aversion to death and a "given" desire for longevity, especially if combined with good health. These desires are natural and have been the genesis of medical technology employed regularly and without regret: vaccines, antiseptic procedures, antibiotics, surgery, etc. The last century has seen almost a doubling of the normal lifespan of white Americans. Would we really have it otherwise?

The Council notes that vast social changes would accompany any serious prolongation of the lifespan, say by 50 years. But vast social changes have already accompanied the increase in average lifespan in the U.S. The Council seems to admit that these sorts of social concerns, while important, are not decisive. Hence, they move to a focus on the goods that would be negatively affected if we did not have a "natural" rhythm to our lives. What, they ask, would the world look like if the old never made way for the young? Would not the young remain immature longer? Is that a good we should want? Do not human engagement, seriousness, virtue, and the quest for meaning only make sense in a world of human finitude? The Council may be right on this point. All of these goods seem to require human finitude. Yet, would not an increase in the theoretical lifespan by 50 years still leave us with that finitude that the Council argues is the precondition of these human goods? Theologians might argue that there are good reasons in their context to conclude that parents should have lives long enough to care for their children until adulthood and to see the continuity of God's creation in grandchildren, but that resources used to increase the theoretical lifespan from 100 to 150—that could be used in feeding the hungry or developing a malaria vaccine—are profoundly misused. After all, if you are not afraid of death, as Christians should not be, why should you want to live longer? This move, unfortunately, is not open to the Council. Yet, without this sort of move rooted in a theological vision, can the Council's worry about increasing the lifespan be anything more than an unsupported uneasiness with something that appears out of the ordinary? The Council seems to bring us to the point of grasping at a transcendent or Divine source of judgment about technological transformations of the forms and rhythms that have heretofore constituted human existence, but by its very nature as a public deliberative body in a liberal political order, the Council cannot fully embrace what the deepest implications of its arguments seem to entail.

IV

The limits of a bioethics that speaks with a united public voice in a liberal regime are seen most directly in the Council's report, *Reproduction and Responsibility*. This report is an examination of issues at the intersection of biotechnology and what the Council groups together as "assisted reproductive technologies" (ART), such as the widely used in vitro fertilization (IVF). The Council considers issues related to ART itself and in conjunction with genetic screening of embryos and the future possibilities of genetic modification of embryos. The Council begins with entirely conventional foci: the well being of the child who is the product of ART and the woman who is the subject of ART. They rightly note that there have been almost no comprehensive studies of outcomes for children of ART, even though more than a hundred and seventy thousand children have been born using these technologies. In fact, IVF was preformed on 1,200 women before it was reported to have been tried on primates (though it had been extensively tested in rodents). Some recent studies show an association of ART with rare birth defects. Though larger studies have not been done and no clear causal mechanism connecting ART and birth defects has been established, these data are cause for concern. While these concerns are entirely proper, the Council

turns directly, as is its habit, to deeper issues that some commissions, with a more direct public policy focus, might have left untouched. The Council raises three issues that thoughtful persons should not ignore. First, ART raises the possibility of altering biological relationships "that are central to normal sexual reproduction", e.g., surrogacy, anonymous donor sperm, sperm harvesting post mortem, etc. Second, the technological domination of reproduction moves us in the direction of seeing human beings as made or manufactured, not begotten. Third, ART might alter the meaning of childhood and parenthood by making sexual reproduction simply one option among many. The question, however, is what to do with these worries? Does the Council wish to conclude that sexuality and reproduction should go together? Though this is an entirely sensible position articulated by Roman Catholic orthodoxy and by eminent Protestants,[7] one doubts that the Council would wish to condemn technological birth control. Does the Council wish to condemn IVF and its companions that have brought joy to tens of thousands of couples? While some critics raised questions about the technologizing of reproduction and the move to a sense of manufacturing humans when IVF practices began, they were ignored because the heartbreak of infertility seemed so compelling. Now that these practices have been operating for more than twenty years, one doubts that a liberal society can go back. If the concern is that reproduction must be intrinsically connected to sexual expression as nature's way of placing limits around our most powerful and potentially destructive desire, then are we not back with the criticism of artificial birth control per se? Thus the problem of finding in nature limits that will keep sexuality within responsible boundaries is not solved merely by arguing that reproduction must be limited to sexual intimacy. The problem, as articulated by Kass himself in a seminal essay on cloning, is not locating limits for reproduction; the problem is locating limits for sexuality. For this problem, the reverse relation must be stressed: sexual expression has a naturally reproductive telos. Yet, this is apparently the very point that the Council does not want to raise explicitly.

On the matter of genetic screening of embryos, the Council focuses on a new procedure known as pre-implantation genetic diagnosis (PGD). In this procedure an early embryo fertilized in vitro is grown to the eight-sixteen cell stage. One or more of the cells is then removed and screened for sex, chromosomal abnormalities, and for any genetic abnormality for which a specific mutation is known, such as retinoblastoma. The unwanted embryos are discarded. As the specific genetic connection to many diseases and traits increases, the ability to use PGD for the screening of genotypes will increase exponentially. The Council rightly points out that PGD requires IVF and that studies of the safety of IVF for the child are almost non-existent. The Council also points out that we do not know whether the removal of one or more cells from the early embryo is at all harmful, though in their recent "white paper" they seem to think that it can be done safely. The crucial ethical issue, however, is the increased control that this technology provides over the characteristics that our children will be born with. PGD cannot be used to create designer babies, but it certainly can be employed to weed out those characteristics that a couple does not want, i.e., a design by elimination. PGD may "normalize" (the

Council's word) the idea that a child's genetic destiny is a matter of parental choice, alter our perceptions of the disabled, and result in selecting a specific child to be a donor for another.[8] The Council's queries are useful here, but they fail to note that these very questions were raised and debated in the early 1970s with the arrival of amniocentesis, the first method for prenatal diagnosis of chromosomal abnormalities such as trisomy 21 (Down's Syndrome). This procedure has been followed by other prenatal screening techniques and ultrasound screenings for anatomical deformities like spina bifida. To argue that PGD is problematic because it undermines our sense of the child as a precious gift and the child's sense of himself as being "more than his genes" must we not call into question all such highly popular screening techniques and the abortions that follow? Traditional amniocentesis, which has been widely available since the early 1970s, does not return results until the fetus is about nineteen to twenty weeks along in pregnancy. Waiting that long and then aborting can only mean one thing: the couple wanted a baby. Why else wait until abortion is much less safe than it would have been early in pregnancy? But such a couple would not accept an abnormal baby or even one with the sex they do not want. Is not PGD simply another version of the same intention? Again, the Council makes an argument that leads fairly directly to a deep criticism of popular current practice. But when brought to the edge of the ocean, it refuses to take the plunge lest its insights be drowned by public sentiment.

The same deliberate reluctance is seen in the discussion of the possible genetic modification of embryos. This technology is in the early stages of development, which will alter a couple's "germline" or progeny into the distant future. Because this procedure raises questions of one generation choosing the genetic destiny of another, it was deliberately avoided when gene therapy was developed in the early 1990s. The preferred alternative was called somatic cell therapy, which involved attempting to alter the genetic basis of a disease in a specific individual with that disease. Unfortunately, this process simply has not worked well, and increasingly researchers are concluding that problems intrinsic to this kind of therapy suggest that it may never work very well. Hence, to cure genetic disease there is increasing attention to germline modification. If this technique works, however, it would not only help a family avoid cystic fibrosis or Huntington's disease in all of their descendents, it would allow them to choose any genetic destiny they desire. Right now, the safety of genetic modifications of these sorts cannot be guaranteed, so the procedure should not be done. But this sort of objection avoids the real issue. There is no reason to suppose that these safety problems cannot be solved by modern science. They may not be solvable, but one's argument should not rest on this hypothetical situation. This technology raises even more directly the uneasiness that many people feel about the concept of designer babies that are seen as technological artifacts, made not begotten, a product not a gift. The same problem appears as before, however. Can we criticize this sort of selection without at the same time raising questions about the process of negative selection which has been around for over thirty years in the form of selective abortion?

Finally, the Council wades into the problem of embryo research, a topic that will involve consideration of the moral standing of the embryo, especially the early embryo involved in stem cell research. The Council recognizes these questions only in a tentative fashion. The Council recognizes that since it has raised many concerns about assisted reproduction, genetic screening and modification, embryo research and commerce, it cannot really ignore thoughtful consideration of the moral status of the embryo. The result of the Council's thoughtful, probing inquiry is not definitive: "we are in no position at this stage in our inquiry to offer any comprehensive suggestions regarding what if anything should be done regarding this field (assisted reproduction) as a whole". Instead they review a series of regulatory options and conclude with "interim" recommendations that few could criticize: fund serious studies of the effect of assisted reproductive technologies on children and women, as well as studies of the effect of PGD on children. Also, there is a need to improve informed consent and strengthen the Fertility Clinic Success Rate Act, a federal statue that requires uniform reporting of fertility clinic rates of success, designed to improve informed consent of couples involved. The Council also calls for legislative action to prohibit the creation of human/non-human genetic hybrids that are for now theoretical, may be impossible, and are universally condemned. These are the very sort of recommendations given by previous commissions: 1), dely answering difficult questions and call for more data or hearings, 2) improve the process of informed consent but do not challenge the product, and 3) call for outlawing that which is already widely condemned.

Right at the end of the discussion, the Council endorses two policy recommendations that go beyond the above limits. One of these recommendations has proven to be intensely controversial. The first recommendation asks Congress to legally prohibit "attempts to conceive a child by any means other than the union of sperm and egg". This language would prohibit cloning for purposes of reproduction, since cloning does not involve reproduction by the union of sperm and egg. Cloning is, as chairman Kass has pointed out repeatedly, asexual reproduction. The silent result of this language, however, would appear to be an opening for research cloning, if one does not regard the embryo at the stem cell stage as a "child". This result becomes explicit with a second recommendation that Congress "prohibit the use of human embryos in research beyond a designated stage of development (ten to fourteen days after fertilization) and prohibit the buying and selling of embryos." Though stated as a prohibition, the key is what is *not* prohibited. The prohibition is only on embryo research after ten to fourteen days. By implication research before that time would be silently permitted.

For the second time, Council recommendations resulted in a series of richly revealing personal statements from Council members. Those Council members who strongly support stem cell research regard the recommendations as a sort of breakthrough. For them it is a formulation that silently permits research cloning (since no intent to produce a child is present), and it addresses what they regard as the one "rational" objection to research cloning: if we permit destruction of a five day old embryo today what prohibits the destruction of

a three month old fetus tomorrow. The answer, they argue, is a legislative "bright line" which roughly corresponds to the lines of implantation and twinning. While some would have preferred a bolder statement in defense of such research, these Council members regard this formulation as a statesman-like compromise and approvingly quote then Senate majority leader Frist, who in July of 2001, proposed a policy similar to these recommendations.[9] A second group of Council members sets forth a much different reading of the key recommendation regarding embryo research, including stem cell research before and after 10 to 14 days. They correctly note that in holding that no research should be done after 14 days, one cannot automatically to be said to be endorsing research before that time. The same logic applies with respect to the other controversial recommendation regarding cloning per se. The Council's recommendation would prohibit cloning for reproductive purposes. It is silent on the matter of "cloning for biomedical research". Silence, these members note, does not constitute endorsement. In the absence of clear language to the contrary, they point out that one should read these silences in light of the Council's previously announced support for a four year moratorium on any cloning and stem cell research. However, even some pro-life council members seem to admit that if we cannot expect the nation to publicly endorse the view that from the moment of conception the early embryo might be firmly protected in law and policy, then we can *at least* limit the assault on life to a two week window. In the end, chairman Kass offers a defense of the proposed regulations. Prudent scientists must, he argues, find moderate regulations in their own interest. If science goes too far too fast, the public clamor will be for more onerous restrictions. On the other hand ardent defenders of the dignity of even the earliest human life must see that a victory that cuts off all public support for embryonic stem cell research will be pyrrhic. It will only mean that worse practices will be driven into the private sector where no regulation is needed or overseas where regulations may be much less strict. In the chairman's view "practical ways forward" can be found even where sharp disagreements remain on fundamental issues.

Thus, while having raised the most fundamental questions in its discussion, when it comes to making actual recommendations to shape the legal and policy environment, this Council returns to the very sort of pragmatic compromises that have been the conclusions of previous commissions. At times the President's Council points the serious reader in the direction of rich, though controversial, conclusions on the most important matters, e.g., *Are we begotten, or are we manufactured?* But when actual recommendations are being set forth, they step down from the Olympian heights and become democratic pragmatists seeking compromise over purity. This is not wrong; it is the essence of democratic policy making. One must recognize, however, that these sorts of limits are just that: limited and tamed to fit the common ground of liberalism. Like their three predecessors, the conclusions of this Council represent what can be done, not perhaps what should be done.

V

The President's Council shows in broad terms the difficulties of bioethics in liberal regimes. Insofar as the Council conceives of its work on a model of a graduate seminar made up of thoughtful but diverse members, its deliberations may be seen as a way of stimulating public discussion of the crucial issues facing biology and medicine in the era of biotechnology, assisted reproduction, mood altering drugs, and stem cell research. While this is a useful task, one may wonder whether it is anymore useful than scores of books on these same topics, such as those by council members Leon Kass and Francis Fukuyama. The Council's reports are thoughtful and comprehensive, but on the graduate seminar model, they have not added to the public debate what was not present before. When the Council moves from being a seminar to being like previous commissions, a body recommending law and policy, its rhetoric and recommendations lose the depth and expansiveness of the seminar mode and begin to resemble their predecessors. In general, and very similar to previous groups, the Council offers three types of recommendations: 1) a call for more data such as on assisted reproductive technologies or moratoriums to allow further study such as on stem cell research, 2) recommendations to improve the process of informed consent, and 3) recommendations that are rooted in an existing public consensus (such as on reproductive cloning or the creation of genetic hybrids). These are the very kinds of relatively easy recommendations that previous groups have given: not arguing forcefully for controversial recommendations but following either an unformed public consensus, the wisdom of repugnance Kass has called it, or the values of liberalism such as informed consent.

In the seminar mode the Council raises many of the most crucial issues related to human biotechnology and reproduction. For this it is to be warmly congratulated. But at the deepest level the Council's deliberations point toward a central problem for a liberal bioethics. In all of its deliberations many, if not most, of the Council members want to provide publicly accessible moral limits to the use of technology, especially but not only biotechnology, to alter human existence. The Council also raises questions about the use of mind and body altering drugs such as psychopharmacological agents like Prozac and steroids, as well as assisted reproductive technologies like in vitro fertilization.

The Council's search is for moral principles articulated out of the rhythms and regularities of human nature, the "given" as they call it. These are the regularities that the Council's reports seem to suggest should be respected in the name of human dignity and responsibility: the goodness of life, the giftedness of life, respect for what is given and not made. Nature in this respect becomes a moral standard. The Council, however, seems to accept a role for technology that undercuts their very appeal to nature. It is one thing to commit oneself to nature as a standard and argue that claims about "redesigning human nature" are the stuff of science fiction, not a potential reality that this or any public body should concern itself with. While acknowledging that we do not have the technology for things such as vast life extension or biotechnological enhancement of human athletic or mental performance, however, the Council

seems to believe that such transformations may be possible in the future and should be considered now. If so, then we must ask whether human nature can provide the necessary framework within which to comprehend and limit technology. Is not the human aspiration for physical and mental health a part of our nature that has spurred the development of much modern technology to our benefit? Do we not quite naturally seek the physical health of our children with genetic technologies if needed? Do we not naturally seek the well-being of our children by naturally limiting our fertility to a number we can reasonably care for? Do we not quite naturally fear death or disability and thus seek to enhance our abilities in the face of the reaper? The fundamental question, then, is this: are not the technologies that so worry the Council themselves products of our nature, or our natural desires? It seems that the Council holds that while these technologies are acceptable, we should not push them too far or too fast, that small changes in the way we live our lives are fine but large or rapid ones are questionable. Does this mean, however, faster or larger than *normal*? This leads back to giving an account of the human norm, which is difficult at best without a comprehensive account of the destiny of human beings, for which we lack any liberal consensus.[10]

If the sheer naturalness of something is not a reason to avoid technology that alters it, nor the mere pace of change, then we need a broader vision within which to view the sorts of changes that trouble members of the Council. Once the Council accepts the proposition that dramatic changes in heretofore settled biological regularities and complexities of human life are possible and are a product of natural desires, the Council cannot return to those regularities for guidance. The changes are every bit as driven by human nature as are the previous settled regularities. The development of assisted reproductive technologies that concerns the Council is rooted in a wonderful and essential inherent desire of human beings to have genetic offspring. Without this desire human existence would have ceased long ago.

Theologians can recognize the limits of natural desires. Some desires are noble, others warped or perverse. But theologians recognize such a diversity because they recognize human nature as an entirely problematic standard for moral judgment, or at best an incomplete standard. The theologian's standard is transcendent and as such seems to transcend the limits of liberalism. Previous commissions were confined to the moral dyad of autonomy and beneficence. The legacies of Kant and Mill swirled around their discussions like hawks over a rabbit field. The current Council adds a deeper sense of guidance from human nature and a deeper range of questions that can be seen as deriving ultimately from Aristotle. The questions that the Council raises because of their broader range of concerns cannot be ignored by thoughtful persons. But the answers they seek may not be completely found on the route they have chosen. If human life is a gift, as the Council at one point writes, can a comprehensive account of human existence ignore the source of the gift? Gift giving is a purposeful activity; understanding a gift must include a grasp of the purposes of the giver. The gift may be out of love or anger or indifference. It may be intended to aid or destroy. The question then returns to the giver. Perhaps we might remember,

even in a pluralistic, liberal regime, that in the Bible, preeminently the text in which life is seen as a gift, the first question is not, pace Aristotle, humankind's inquiry about nature, but God's query about us. An answer to this question would fill in the gaps in the Council's inquiries. This, however, is the very sort of answer that liberal regimes, as regimes, cannot grasp.

The newest report, *Taking Care*, returns almost wholly to the graduate seminar mode in a clear and thoughtful examination of issues that arise about caretaking and medical decision-making at the end of life. The first two chapters examine what the council believes (along with many others) is a looming crisis of caring for the frail, perhaps demented, elderly. The crisis is deceptively simple: a vast expansion of the elderly and a shrinking pool of caretakers. The demographic challenge is well known: as "baby boomers" age, the population of elderly will grow exponentially. Simultaneously the numbers available for caretaking will decrease. Mobility pulls extended families apart; low pay and hard working conditions mean high turnover and low staffing in care facilities; poverty often results in inadequate care.

The second section of the report examines the unique features of dementia and the currently popular approaches for decision-making for mentally incapacitated persons. The council points out the serious defects with living wills or advance directives. Living wills are often not clear; many people do not have them; and, most importantly, they cannot anticipate all of the contextual features of medical decision-making. We know, for example, that healthy young or middle-aged persons may say that they would not want to live in a severely compromised state. Yet when they are faced with that prospect they decide that such a life has possibilities they never imagined and that such a life is better than no life at all. Living will theory developed out of the legal concept of "substituted judgment", which is employed regularly in probate decisions. On this model the judge who must interpret a vaguely worded will tries to put him or herself in the place of the individual and decide as he or she would have decided. In the medical case, living wills or advance directives are supposed to be a way in which we can preserve the autonomy of the incapacitated person. In rejecting this as sound public and moral policy, the Council deepens the moral responsibility of caretakers at the point where decisions have to be made. The Council strongly endorses the idea of designating a "health care proxy", usually but not necessarily a family member who should be consulted when decisions need to be made for persons who cannot now make their own. This move drops the often futile search of what a patient would want in a complicated situation and instead asks what is in the best interest of this sick human being in this caretaking situation. In my view the council is profoundly correct to argue that this is the central question. By implication the fascination with advanced directives is an attempt to avoid the burden of moral choice that caretakers and proxies should properly bear.

The third section of the report is the moral heart of the argument. The Council advances a set of moral principles and then seeks to show how these principles might be applied in practice in the shifting, highly contextual cases of practice. Here again the Council's Aristotelianism comes through. The

Council sets out a series of principles involved in decision-making in these sorts of situations. Some things are absolutely forbidden, others are required and many are matters of judgment. At this point practical wisdom or what the council calls "prudence" is required to apply the principles to the cases. The forbidden is always out of bounds; caretaking that looks to the best interest of the individual is always required; the rest are maters of judgment about which, as Aristotle notes, we cannot expect the precision of mathematics. The Council's bottom line is the equal worth and dignity of each human life irrespective of its qualities: "In a society dedicated to the proposition that all men are created equal we must insure that we do not allow the genuine inequalities of human capacities and human character to blind us to the equal humanity of all human beings". This is the basis of true caretaking and of a "welcoming community" in the Council's words, which cherishes all lives. On this basis the council rejects quality of life judgments that ground the worth of a life in its mental or physical qualities. On such a view, as quality declines so does equality. The council clearly rejects this view, but the grounding of this rejection and the support for the alternative remain unclear. Do they mean to say that this premise about equal worth is simply basic to our kind of society, thus linking it to the conventions of a democratic republic? Do they wish to ground it to the historic ethos medicine which they frequently appeal to in this regard, or can they give it a broader foundation such as "endowed by their creator"? Ultimately, by failing to give a foundational account, they leave themselves open to the charge that they cannot ground fully the caretaking ethos that they so richly describe. The ethics of caretaking that the Council defends is to be much praised as an antidote of the often sterile discussions of much contemporary bioethics. Yet caretaking must aim at some good. Bodily health can sometimes be this good but not always. Continued physical life may be, but again not always. Since the Council does not confront the deepest question of the telos of human life as such they cannot articulate a comprehensive good that can unify all of the partial goods of caretaking in specific instances.

In its practical advice the Council argues that directly intending the death of a human being is always forbidden, including euthanasia and assisted suicide. By linking these issues under a broader principle, the Council spares itself any detailed analysis of the practices of such things as assisted suicide in places like Oregon and the Netherlands. The principle they announce regarding directly intending the death of the patient is a noble one. They link it to the classic double effect principle so richly developed in Roman Catholic bioethics. But they go no further in developing precise casuistic rules out of this principle. Rather than consistency in difficult cases, they prefer Aristotelian prudence or practical judgment in specific contexts. After announcing this principle and the acts forbidden by it, the Council backtracks. They say that treatment may be withdrawn or withheld when it is: 1) useless, 2) when the treatment is excessively burdensome, 3) when a better death is possible (e.g. at home) in circumstances where death is proximate. But if we really are aiming at a better death, then the aim is still at death as such. This seems to stand in tension with the principle just announced. The Council focuses on Alzheimer's and other forms of dementia, but consider individuals in a persistent vegetative state.

Keeping them alive on a respirator and feeding tube is hardly burdensome in any typical reading of the term. It is surely not useless for its intended purposes: it keeps the physical body alive. Finally, death is not proximate. One can stay in this state for years. Does the Council really wish to conclude that patients in persistent vegetative state should be kept alive indefinitely? They have rejected quality of life criteria for making such a judgment, so any such appeal they would regard as misguided. Furthermore, they have not considered a possible transcendent telos in which death is hardly the worst event possible for a human being. It seems they are left with the completely counter intuitive view about the PVS patient just noted.

Taking Care is one of the richest treatments of caretaking at the end of life in the available literature. It puts caretaking of the whole person at the center of medicine, as it should be, but it leaves open what the good is at which caretaking must aim. When read in conjunction with the Council's earlier report that rejects longevity research, the goal of caretaking cannot be merely extending physical existence, a point that the Council makes here with its analysis of specific "hard cases" in chapter four. The Council says that part of its aim is to encourage the habit or disposition of caretaking, an entirely worthy goal framed in an Aristotelian way. But if we may not aim at death, and if mere longevity is not the highest good, what is the good in whose light all the lesser principles that the Council announces can be seen? For a theist, aiming directly at death would be a faithless act of denial of the sacred good of life, while prolongation would also deny the transcendent end of human beings. This is the very route that again the Council cannot take within the context of a liberal regime, so it is left with noble but ungrounded sentiments about caretaking, without setting forth the divine example of caretaking as the light which shines in the darkness and illuminates all human caretaking. E&M

Endnotes

1 This decision only involved federally funded research, as the President had no authority over research involving private or state funds.

2 Not to mention committees established by the National Institutes of Health (such as the Recombinant Advisory Committee that considers work in genetic engineering), committees established by the National Academy of Sciences, or national study groups established by the American Association for the Advancement of Science.

3 As of the time of this article's composition.

4 Since "liberal" and "regime" can in certain contexts be somewhat loaded terms, a brief initial explanation of their usage here may be necessary. "Liberal" is not here necessarily associated with the left-wing of any political party, but rather denotes the general attitudes of a pluralistic society that values individual liberty and tolerance as its highest ideals. "Regime" simply denotes here the socio-political structure or force that ensures and propogates these ideals.

5 The Commission considered how such persons may not be able to give informed consent, and even if they appear to do so they may not appreciate the delicacy of changing an often precisely calibrated drug treatment regimen. For example, in order to see if a new drug treatment for schizophrenia is superior to existing treatment, researchers need to take some patients off their current treatment or withhold possibly effective treatment from some newly diagnosed patients. These actions do pose interesting questions of risk, benefit, consent, etc.

6 In *Abolition*, Lewis argues for a moral order of Reason found embedded in Nature itself. Lewis calls this order the *Tao*, a term that deliberately suggests a religious meaning to this moral order. Moreover, at this point Lewis' footnote is not to the actual *Tao te Ching* but to the *Analects* of Confucius, which is a classic statement of the cosmic, "great chain of being" set in an ancient Chinese context. Lewis adds an appendix which contains a vast number of citations to moral principles found worldwide. But the citations are overwhelmingly to religious texts or, in the case of stoicism, to texts that presuppose a cosmic teleology: Hindu, Egyptian, Babylonian, Biblical, Talmudic, Confucian, Stoic, Old Norse. Only one reference is modern, to Locke, though a number are to Plato and especially Cicero. Finally, throughout the text Lewis capitalizes "Nature." This is a way of calling attention to the fact that Lewis is not referring to nature as understood by modern science as empirical facticity. Nature in this way is a supra-empirical, though not personal, moral order. It is a Law of Heaven, a moral great chain of being. For Lewis, recognition of this moral order should lead a rational person to consider the source of the moral law: God. This argument is central to book one of *Mere Christianity*. There, Lewis argues that the existence of a universal moral law requires a belief in a creator God to explain it. Lewis essentially sets up a dichotomy: either the moral law is explained as derived from matter or from God. (He explicitly rejects Bergsonian pantheism.) Lewis thought that getting morality out of "brute matter" was impossible. Hence, the rational person ought, all things considered, to believe in a Divine being. One can argue that Lewis has set up a false dichotomy, as would Kantians as well as Darwin and conservative Darwinians like Larry Arnhart. But one cannot deny that Lewis thought that Natural Law (his capitalizations) has a supernatural origin.

7 Such as the late George Grant and, in a way, Paul Ramsey.

8 Indeed, it is now verified that PGD has resulted in the selection of specific children as donors.

9 Though Frist has shifted in his stance on this issue as of late.

10 For example, in sub-Saharan Africa human beings have developed with malaria for millennia, which is a primary reason why as much as 40 percent of the population in some areas in central Africa carries the otherwise disastrous trait for sickle cell anemia. The trait provides protection against the ravages of malaria. Would the "going too fast" claim about medical technology mean that it would be wrong to develop and deploy *en masse* an effective malaria vaccine? Such a deployment would be a rapid and large change in the developmental context of Africa. Yet, in liberal terms of physical wellbeing, it is difficult to conclude that such a change would be wrong.

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BOOK REVIEWS

Preaching Eugenics

Christine Rosen. New York: Oxford University Press, 2004.

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"WWJD? What Would Jesus Do?" Only a few years ago, this slogan emblazoned bracelets and book covers. One would hardly have realized that, in 1896, Rev. Charles M. Sheldon challenged his congregation to ask the very same question. His subsequent book, *In His Steps*, sold over 30 million copies and "encapsulated the major impulses of the Protestant Social Gospel movement" (25). In *Preaching Eugenics*, Christine Rosen chooses this event to begin her review of the enthusiastic embrace by some within the Protestant, Catholic and Jewish clergy for the American eugenics movement at the beginning of the 20th century. From this beginning, she correlates clerical enthusiasm for eugenics with their departure from traditional religious tenets.

Since the beginning of time, humanity has longed to be both perfect and immortal. The scientific milieu of the early 1900s, following Galton's use of the term "eugenics" to mean "improving the human race through better breeding" and on the heels of Darwinian evolutionary theory, it appeared to make perfection, at last, within humanity's grasp – the ". . . gradual improvement of the human race, aided by new contributions from machinery and science . . . ." (12) Social ills were attributable to heredity, therefore one need only control heredity to eradicate social ills. The "feebleminded" were considered a particular threat to racial health, ". . . an assumption made even by religious leaders who had little direct connection to the eugenics movement . . ." (62)

Improving the human lot fit well within the Social Gospel. Prominent at the time, the Social Gospel promised the ". . . ushering in of the Kingdom of God on earth through reform and service. . ." (61) which ". . . succeeded in creating space for Protestant ministers to participate in secular reform movements. . . Indeed, it was the duty of Christians to work for the 'social salvation' of the world . . . to perfect the earth to ensure Christ's return." (16) Enthusiasm for this interpretation of the Gospel rendered the clergy susceptible to entreaties by eugenicists who wished to enlighten the body politic through their preaching and pastoral guidance; the ultimate goal was to influence social policy to end needless suffering and save the "race."

Few have studied this movement in the recent American past. Since many have drawn similarities between the promises given for today's genetic manipulation and genetic selection with those of the past, today's ethicists have much to learn from the arguments and unanticipated results of this other period of eugenics. Additionally, Christian contemporaries of the earlier eugenics movement gave it their imprimatur – unaware of the ultimate consequences. Rosen's study may aid people of faith to decide if that imprimatur was disingenuous, simply naive or ignorant, or frankly arrogant.

Preaching Eugenics meticulously documents the clergy's dance, utilizing much previously unexplored material. With a facility for religious terminology suggesting a bias, her presentation is nonetheless objective and well documented. Rosen's treatise would be a good addition to any ethicist's library, and warrants scrutiny lest we repeat history.

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Witches, Westerners, and HIV: AIDS and Cultures of Blame in Africa

Alexander Rodlach. Walnut Creek, CA: Left Coast Press, Inc., 2006.

ISBN 1-59874-034-2; 258 PAGES, PAPERBACK, $29.95

"A witch's curse, an imperialist conspiracy, a racist plot…" So begins the apt description of *Witches, Westerners, and HIV.* Austrian Alexander Rodlach, an ordained priest, does a wonderful job of weaving together the various forces identified in his fieldwork as affecting the understanding of HIV/AIDS by the people of Zimbabwe. He demonstrates how traditional beliefs and power structures influence local attempts to explain both the origin and victims of HIV/AIDS.

Rodlach was introduced to Zimbabwe as a parish priest in 1991 and returned ten years later to do ethnographic fieldwork while a graduate student in cultural anthropology. He begins by briefly reviewing the distinction between disease and illness, as well as differing approaches to the study of any illness: what is known about the disease and its diagnosis, beliefs that "explain" the origin of the disease in general or in particular, and underlying beliefs of the culture. Rodlach focuses on the second track, but must touch on the latter in the process.

Differing approaches were used to gather information – both interviews, some repeated and in depth, as well as surveys. As a priest, Rodlach admits to a potential advantage in establishing a relationship of trust with victims and their families, which he hoped resulted in more reliable data. While surveys are a common method for information gathering, he felt them less reliable than interviews, particularly about sorcery theories which were "underground."

According to Rodlach, three questions are asked when misfortune strikes, "how it happened… why it happened to this particular individual and why at this particular time." (53) In an attempt to answer these questions, people typically rely on the traditional knowledge or widely held beliefs of their culture. In addition, a "tradition of blaming" abounds in Zimbabwe, giving fertile ground for both sorcery and conspiracy theories.

Both types of theories are, at their base, defense mechanisms to "…help people cope with insecurity, alleviate anxiety, and give hope that the wheel of misfortune can be turned around." (108) Prime differences between sorcery and conspiracy are the location of the perpetrator (within the social group with sorcery or outside it with conspiracy) and the victim (an individual vs a larger group).

Rodlach believes that differing causal views can be "nested," resulting in a simultaneous or consecutive understanding that while sexual contact is the immediate cause of HIV, "… vulnerability [to HIV] has been created by the operation of more remote causes, including conspiracy, sorcery, political irresponsibility, and poverty." (173) Disentangling these is vital to planning effective public education and health care. He ends his book with a plea to make these services more sensitive to the community, its views, values, and perceived needs.

Rodlach has produced a well-researched and annotated but very readable account of his studies in Zimbabwe. As a priest, he has a unique vantage point from which to study the effect of HIV/AIDS on families. Even though his title promises a more generalized study (of Africa rather than just Zimbawe), it is, nonetheless, informative and may serve as a template for approaching the perception of an epidemic in other cultures.

Reviewed by Sharon F. Billon, MD, who is in the private practice of dermatology in Arroyo Grande, California, USA.

Ectogenesis: Artificial Womb Technology and the Future of Human Reproduction

Scott Gelfand and John R. Shook, Editors. New York: Rodolpi B.V., 2006.

ISBN-10: 90-420-20814; 197 PAGES, PAPERBACK, $55.00

As our culture makes rapid technological progress toward the realization of Aldous Huxley's *Brave New World*, one missing link remains – ectogenesis or artificial womb technology – which threatens to "change forever our concept of human life." (p.1). But, in light of the progress being made at Cornell University and Juntendo University (Tokyo), the authors of *Ectogenesis: Artificial Womb Technology and the Future of Human Reproduction* believe ectogenesis will become reality within this decade, a prediction that warrants our moral attention.

This book so directs our attention by examining the ethical implications, moral permissibility, and potential regulation of ectogenesis from feminist and utilitarian ethical perspectives. Several of the essays were particularly thought-provoking, addressing issues such as the changing views of reproduction, changing concepts of viability, the inevitable increase in fetal moral status resulting from direct observation of fetal development, the equalization of men and women as gamete contributors in the reproductive process, regulatory issues arising from the seductive opportunity for fetal research made available by in vitro fetal development, and the need to distinguish research from therapy. More reflective essays discussed the loss of the relational and bonding aspects of pregnancy, as well as the significance and meaning of the loss of our "navels as a symbol of a lifeline linked to the past." (p. 74). The conflictedness of feminists with regard to motherhood was also unmistakable: ectogenesis is seen as liberation from the tyranny of reproduction as well as a potential means to women's obsolescence.

The early portion of the book was heavily weighted toward the potential impact of ectogenesis on the sanctity of abortion in America, voicing the fear that granting greater moral status to a fetus that is independent of the mother could undermine abortion rights. The essays also poignantly disclose the real issue in abortion for women: at stake is not autonomy and bodily integrity, but responsibility. Contrary to Judith Jarvis Thompson's infamous analogy which illustrates a woman's right to disconnect herself from the famous "violinist" while not directly killing him, abortion advocates see ectogenesis as a threat because, in fact, they do not want the unborn child to live; rather, they ultimately wish to be free from any responsibility for the child. Ectogenesis threatens to unclothe the irresponsibility they have regaled as freedom. But the essays left a crucial question unanswered: who would be responsible for the transplanted fetus should ectogenesis make it possible to end abortion by transferring the unwanted fetus from the mother to an artificial womb?

As an extrapolation of technology developed to save the lives of those born out of due time, ectogenesis has the potential to profoundly impact the warp and woof of our culture and society as we move ever further away from our understanding of a child as a gift. Are we prepared for such change? This book is an initiation into the moral implications of this technology and the moral discourse that must precede this brave new world.

Reviewed by Susan M. Haack, MD, MA (Bioethics), FACOG, who is in the private practice of consultative gynecology at Hess Memorial Hospital and Medical Center in Mauston, Wisconsin, USA.

Goals of Medicine in the Course of History and Today: A Study in the History and Philosophy of Medicine

Kurt Fleischhauer and Göran Hermerén. Stockholm, Sweden: Almqvist & Wiksell International, Vitterhets Historie och Antikvitets Akademien (The Royal Academy of Letters, History and Antiquities), 2006.

ISBN 91-7402-353-5; 480 PAGES, HARDCOVER, $127.50

The study of medicine does not extend very far before one comes up against the intrinsic goals of medicine and the fact that the practice of medicine is often as much an exercise in ethics as it is of science. The objective of the authors in this book is to provide an in-depth study of the goals of medicine from antiquity. At first blush, it would seem to be a relatively straightforward task. After all, the telos of Western medicine has its roots in the Hippocratic tradition with the relief of suffering in the patient at its very core. As the history of medicine is traced, however, the goals become as complex and multifaceted as the discipline itself.

Goals of Medicine in the Course of History and Today is divided into two parts: a survey of the history of medicine and the concomitant changes in its goals, followed by a philosophical consideration of the goals of medicine in the present. The historical survey takes up two thirds of the content as the authors wind their way through history adding layer upon layer as the complexity of study and practice grew. By the time the reader is taken to the middle of the twentieth century, the goals of medicine have become so multifaceted and divergent that the areas of cosmetic surgery, abortion, contraception, medical genetics, and medical research are chosen as topics to illustrate this. At the end of this section it is evident that the goals of modern medicine are much more complex than they were in antiquity.

The second part of the book is a philosophical consideration of these varied and complex goals while the authors search for a common core as a meeting place for the resolution of conflict between these goals. The authors give due thought to the factors that affect the goals of medicine, including the values and differing perspectives of both patients and health care providers, and the conflicts that arise from these differences.

Overall, this is voluminous and daunting reading but well worth the effort for those who wish to have a greater understanding of the goals of medicine and how they came to be what they are today. The authors have written in a way that presents the many sides of an issue, such as abortion, without being judgmental. The detail and depth of the material demand that it be read slowly and thoughtfully and discussed with colleagues to appreciate the richness of the art of the practice of medicine and its goals as they are today.

Reviewed by Jeffrey G. Betcher, MD, FRCPC, MA (Bioethics), who practices anesthesiology and critical care medicine at the Regina Qu'Appelle Health Region in Regina, Saskatchewan, CANADA.

HUMAN REPRODUCTION AND GENETIC ETHICS

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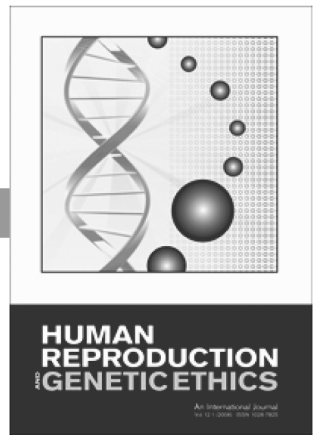

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