

## THE CHRISTIAN RELIGION AND BIOTECHNOLOGY

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**The Christian Religion and  
Biotechnology**  
**A Search for Principled Decision-making**

*by*

GEORGE P. SMITH, II  
*The Catholic University of America,  
Washington, D.C., U.S.A.*

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Prof. Douglas W. Kmiec, Carolyn Keenan Kmiec,  
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## INTRODUCTION

Two of the three major conflicts between science and religion—that the earth is round, not flat, and that it revolves around the sun (rather than the sun circling the earth)—have already been resolved. Only one conflict remains—namely, establishing the origins of the universe. Well into the middle of the nineteenth century, it was accepted that, by divine creation described in the first book of the Judeo-Christian Bible, Genesis, and informed by faith, the universe was made.<sup>1</sup>

With Charles Darwin's publication of *ON THE ORIGIN OF SPECIES*, in 1859, a new challenging explanation for the origin of life was advanced that, in turn, challenged the traditional roots of Western thought and particularly the Christian fundamentalists or creationists. In essence, Darwin and his disciples—the evolutionists—advanced the proposition that as the environment changed over the years, plants, animals, fungi and micro-organisms changed as well—dividing repeatedly into new species instead of being accepted as immutable since the beginning of time.<sup>2</sup>

Today, as the twenty-first century commences, a consensus is seen among not only scientists and biblical scholars but mainstream religions and educators as well, that the theory of evolution is a verifiable account of the origins of life; and, furthermore, that its acceptance does not in any way force a denial of religious beliefs.<sup>3</sup> In 1996, Pope John Paul II declared that the Roman Catholic Church accepts the theory of evolution. He nonetheless affirmed Pope Pius XII's encyclical, *Humani Generis*, in concluding that if the human body does in fact take its origin "from pre-existent living matter, the spiritual soul is immediately created by God."<sup>4</sup> Since this assertion remains a belief, and the soul can be neither identified or studied by science, it does not present a problem for evolutionists.<sup>5</sup>

Amplifying his comments at this meeting of the Pontifical Academy of Science, the Pope went on to affirm specifically the realization that, indeed, "science is not a threat to faith."<sup>6</sup> He has, as such, sought to chart a middle position between the creationists and evolutionists that fosters not only dialogue but an openness to truth.<sup>7</sup> Through this dialogue, the Pope expressed his belief that scientific knowledge would, in turn, allow the Church to better understand its obligations to provide the criteria for moral conduct applicable to all individuals.<sup>8</sup> Without capitulating entirely to the other, faith and reason, as well as science and theology, should endeavor to examine each other's claims to truth; for, this form of dialogue "is grounded in the proposition that truth cannot belie truth."<sup>9</sup> It is hoped that through this discourse between science and theology, a fuller knowledge may be obtained by man of who he is, why he is, and how he should live.<sup>10</sup>

Since Darwin's proposal of his theory of evolution, the creationists and the evolutionists have engaged in battle over the years with varying degrees of intensity in social arenas, courts, and legislatures. Today, however, the arena is to be found in the public school system—with the scientific community, supported by the courts, demanding evolution be accepted as the only accepted scientific explanation for the origins of life and creationists demanding evolution be either excluded from



the teaching curriculum or, alternatively, be taught as a competing theory of creation science.<sup>11</sup>

In the past, pathbreaking scientific and biotechnological developments have occurred without either ethical forethought or serious, informed societal participation.<sup>12</sup> Indeed, it is rare—within contemporary society—to find any level of genuine understanding and communication between scientists and the public.<sup>13</sup> And, sadly, the simple reason for this is because of a lack of education. In order for there to be a full participation in policy debates over, for example, xenotransplantation, stem cell and gene transfer research, there must be a level of understanding about the fields of genetics, molecular biology, immunology, and infectious diseases, among others. Yet, no honest dialogue may be started and defensible positions on both ethical and policy issues shaped until there is a minimal level of education.<sup>14</sup>

The admirable goal of xenotransplantation, and gene transfer research is really quite simple: namely, to pursue alternative remedies for seriously ill patients unable to be assisted from conventional therapies.<sup>15</sup> Scientific advocacy stresses the very real therapeutic benefits accruing from research in these fields while conventional ethics places a central focus on an evaluation of the resulting (or potential) harms of the procedure.<sup>16</sup> Although ethicists “are likely to see certain advocacy activities as disturbingly promotional, and advocates to see ethicists as paternalistic and overproductive,”<sup>17</sup> the effect of both groups on social action can be salutary in that biomedical science is “democratized” by this very open interplay of opposing forces.<sup>18</sup> The more members of the public who are qualified educationally to enter the debate, the more representative the process of democratization will be.<sup>19</sup>

The new molecular science requires a re-thinking of the scheme of the universe and of the role of humanity within it. This, in turn, compels a re-evaluation of accepted theological and ethical issues such as: determinism versus free will, distributive justice, the status of human beings in relation to other life forms and the very meaning of personhood.<sup>20</sup> “It seems unlikely that dogmatic assertion or even scriptural texts will carry the day.”<sup>21</sup> What is needed instead is reason and a return to fundamental wisdom together with an appeal “to universal notions about the things that all human beings share in common.”<sup>22</sup> With regard to the wonders of the New Biology, it is wise to remember that risk is opportunity’s constant companion.

For some, an individual’s genetic profile is set at the moment of conception and, thus, they are considered persons.<sup>23</sup> Imbued with such status, research on and destruction of embryos is unthinkable.<sup>24</sup> When excess frozen embryos from *in vitro* fertilization procedures arise under circumstances where the participating couples no longer wish to use them, it is argued that they be donated to others and thereby provide an option for the embryos to be born.<sup>25</sup> Others regard embryos as the personal property of the couples creating them and having no type of moral status.<sup>26</sup> Most, however, see embryos as neither persons nor property. As such, they are entitled to a heightened moral status and “special respect,”<sup>27</sup> and should not—furthermore—be perceived as commodities which can be purchased and sold.<sup>28</sup>

Perhaps the easiest, and most equitable way to resolve dilemmas of this nature

is to adopt the recommendations of The American Society for Reproductive Medicine and follow a contractual approach to dispute resolution under which each couple participating in embryo storage agrees to a set of written instructions concerning the subsequent disposition of embryos no longer wanted either because of death, divorce, separation, etc.<sup>29</sup>

While governmental attempts both to identify and to correct genetic disadvantage borders on eugenics—long regarded by some as “politically suspect, if not unthinkable,”<sup>30</sup>—the cold reality of the present societal situation is that genetic enhancements are, indeed, inevitable.<sup>31</sup> The issue then becomes how society can curb the “genetically produced unfairness” that will result from developing enhanced individuals who will be in a more privileged social position than unenhanced individuals.<sup>32</sup> When all is said and done, perhaps the ideal should be to promote either “equality of opportunity”<sup>33</sup> or to recognize simply that unequal holdings will and do occur and require them to be acquired justly.<sup>34</sup>

The ultimate goal of law is to “seek decisions that fall within the boundaries of scientifically sound knowledge and approximately reflect the scientific state of the art.”<sup>35</sup> In turn, the practice of science is dependent upon sound law—law which not only supports it by offering “breathing space,” but allows it in turn to “search freely for truth on which all knowledge depends.”<sup>36</sup> Science is to be understood, first and last, as relativism—or the effort to establish relations between phenomena for ultimate practical use.<sup>37</sup> Science is concerned with structure, while philosophy and religion study purpose.<sup>38</sup> As society becomes more and more dependent upon science and technology for its advancement and well being, the law needs “access to sound science” in order to approach and, ultimately, resolve the verisimilitude of issues arising therefrom.<sup>39</sup>

Although some moral traditions, do assuredly, have religious inspiration—with Roman Catholics outreaching to a “universal common good”—regrettably, there is no universal moral language (or moral *Esperanto*) appropriate fully to an interdisciplinary and public audience that can participate in the discourse.<sup>40</sup> For Catholics, natural law thinking is supplemented within an historically particular religious tradition: Christianity as Catholicism—with Catholic ethics presenting itself as philosophical ethics.<sup>41</sup> Other religious traditions lack such a cohesive focus. Yet, regardless of the nature of the tradition, a co-ordinating issue binds them together: namely, the extent to which faith should be involved in legal decisionmaking?

Since faith cannot be established by right reason, and may be even opposed to it, a vexatious dilemma thus arises: “To act or to believe out of faith is to act or to believe without reason or for no reasons.”<sup>42</sup> A condition of rationality is reason.<sup>43</sup> Accordingly, the extent to which faith exceeds the boundaries of private life and shapes or directs the public sphere through lawmaking become problematic,<sup>44</sup> and must, of necessity, be considered on a case by case basis for there is no one, defining solution to this dilemma.

Historically, for Kant, reason and reason alone was seen as the basis for providing guiding principles.<sup>45</sup> Augustine, Anselm, and Aquinas began with faith and maintained that it was only within the framework of faith that reason or

philosophy finds its place.<sup>46</sup> The disagreement continues to this day and the contemporary challenge then becomes how to treat, respond or react to the presence of faith as the justification for belief and conduct. Rather than seek to justify beliefs and attitudes of various faiths as true, an understanding of them should be sought and taken as serious and important matters. When relevant, the belief systems should be taken into account in any decisionmaking process at any level.<sup>47</sup>

Already, the law accommodates personal religious beliefs in areas involving death. For example, when an individual's personal religious beliefs would be violated if a declaration of death is made based upon neurological criteria, that determination is held to be invalid.<sup>48</sup> As well, contemporary case law allows a competent adult, acting on the grounds of religious reasons, to forego medical treatments.<sup>49</sup> The law is, however, uneven regarding the right of a parent to withhold, on religious grounds, life-sustaining medical treatment for children—particularly when the proposed intervention is not highly invasive and is seen, rather, as likely to assist in returning the patient to full health.<sup>50</sup>

Religion has an interlinking, if not fundamental relevance to law and biomedical technology. It is, alternatively, either to be considered a significant vector of force in the decisional processes of the new molecular biology or as a full partner. The extent of its relevance will be analyzed within different ethical, social and medico-legal contexts. Continuities and discontinuities will be seen within the fields of law, religion, and biomedical science as they not only shape the social discourse here but establish a framework for principled action and policy making.

It has been suggested that the current malaise in medicine is partly, if indeed not totally, a spiritual malaise which can only be broken by an acceptance of spirituality.<sup>51</sup> Indeed, Christian health care professionals are encouraged to cultivate a “spirituality of practice.”<sup>52</sup> Sadly, over the past years, America has seen a significant decline in the ability and capacity of physicians and other health care professionals to concern themselves with the religious belief and values of their patients.<sup>53</sup> This is especially distressing to consider because the central essence of medicine as a “moral enterprise” is being ignored.<sup>54</sup>

Spirituality is seen as being more synthetic than analytic—with some suggesting that doctrinal theology not only forms and informs spirituality and others positing, conversely, that spirituality gives shape and substance to theology.<sup>55</sup> In its most basic understanding, it is seen as an interaction between belief and behavior set within the context of both the Old and New Testaments and within contemporary culture.<sup>56</sup> The very word, spirituality, did not appear in the field of medicine until the 1980s.<sup>57</sup>

Perhaps the proper frame of reference for contemporary theology is to place it within the evolutionary paradigm and style it “biotheology”—with biology becoming a significant resource for not only analyzing, but modifying and reconstructing fundamental theological concepts, or, in other words, making it plausible in modern society.<sup>58</sup> Enhanced relevance is found, as well, when the “sociology of religion” is introduced—or, a study of who religious concepts interact with social life.<sup>59</sup> This is considered in Chapter 2 of this book. Interestingly, within the last decade, new scientific claims have been advanced which assert there are

definite links between religion and health.<sup>60</sup> Today, instruction on how to address and accommodate the religious beliefs and concerns of patients is offered in the curricula of more than seventy medical schools.<sup>61</sup> Religion has been defined as “a spiritual way of being in the world” and—thus—much more than but a collection of views and diverse practices.<sup>62</sup>

Even though morality and religion are not identifiable with each other, it is indisputable that religion carries with it a code of values. The pivotal issue then becomes the extent to which society receives its moral compass from religion.<sup>63</sup> The acceptance of the teachings of Christ “gave Western people their spiritual values, their moral values, and their conception of a divine law from which all human laws ultimately derive their validity and their sanctions.”<sup>64</sup>

Within the Christian faith, primary focus is placed in this book on the traditions and views of the Roman Catholic faith. This posture is taken because of the historical wealth of theological, philosophical and ethical writings on the subjects of law, medical science and religion and their accessibility. In the world-wide statistical profile of adherents to the Christian faith of 2,038,905,000, Roman Catholics claim 1,076,951,000 members.<sup>65</sup> There are, interestingly, 1,226,403,000 adherents to the Muslim religion and 14,535,000 to the Jewish.<sup>66</sup>

Perhaps more than any other religion, modernly, the Catholic Church has asserted a dominant influence in informing and shaping the debates of contemporary society on the issues of biotechnology. While a wide variety of denominational views exist on this topic,<sup>67</sup> it remains for the Vatican to speak in one, unified voice, and—thus—provide a rich treasure trove of information.

Chapter 1 introduces the major ethical, social, legal, and medical issues of the New Molecular Biology and tackles a consideration of the role of law as a directive or as a non-directive vector of force in the decision making processes. Chapter 2 is a foundational analysis of the role of religion within the *oeuvre* of socio-legal and scientific norms or constructs tested here—historically and modernly—in order to determine the extent to which it informs, shapes or directs ethical and moral conduct, the development of law and the formulation of policy in this age of The New Biology. Religious ethics and morality are raised, as well, in particular context throughout the remaining chapters—especially in Chapter 3 dealing with the extent of reproductive autonomy. Reproductive biology is viewed rightly as the representational paradigm of the new biomedical technology—for, today’s scientific imperative is to advance the nature, the quality, and the limits of life. Indeed, all ethical, social, legal, medical, religious and philosophical conundrums tie to the beginnings and endings of life. Chapter 4, the most comprehensive chapter in the book, probes the centrality of scientific freedom to the advancement or, alternatively when impeded, stagnation in the new science. The goal of minimizing human suffering through genetic enhancements and assisted reproduction is studied in Chapter 5. The vexatious and contemporary issues of cloning and stem-cell research are interwoven throughout the first five chapters—set as such within varying epistemologies consistent with specific chapter interests and *foci*.<sup>68</sup> Finally, the last chapter in the book considers the inherent right of every competent citizen to have, with state approval if necessary, a fundamental right to a humane death and

thus not be condemned to a futile end-game *charade*.<sup>69</sup>

This book should not be seen as a panegyric exercise but rather as a balanced inquiry into the extent to which law, religion, and medical science are compatible with the goals of biotechnology. Both the continuities and the discontinuities found within these three disciplines can only serve to heighten and deepen the level of analysis and discourse of the New Biology and thereby assist in developing a template for principled decision making; one that must be seen ultimately as situational and not strait-jacketed by *a priori* ethics. Accordingly, in the development of law and policy, a critical balance must always be struck between the gravity of the harm—from both an individual or *micro* and a societal or *macro* viewpoint—and the utility of the social and economic good derived from the execution of such a particular policy of the new science.<sup>70</sup>

In seeking to integrate what is termed a “caring jurisprudence,”<sup>71</sup> with the ethics of justice and the whole decision making process here, a level of sensitivity to the individual experiences of patients and the circumstances under which they lie in the cultural *milieu* must be acknowledged. When a law is passed, a policy developed or a judicial decision made that seeks to lessen personal suffering and achieve the greatest level of social or utilitarian good *and* is guided by humanness and love,<sup>72</sup> then it should be taken as a sound and effective approach—whether it be development of a new scientific investigation<sup>73</sup> or a decision to withdraw or withhold life supports for a medically hopeless, incompetent and terminally ill person.<sup>74</sup> Similarly, a competent patient concluding medical treatment would be disproportionate to a reasonable hope<sup>75</sup> of benefit—and, furthermore, not wishing to unduly burden his family with the excessive expense of the additional treatment—should always be allowed to decline the treatment, itself,<sup>76</sup> without any intervention by the state.

## ENDNOTES

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2. *Id.*  
See generally E.F. KELLER, MAKING SENSE OF LIFE: EXPLAINING BIOLOGICAL DEVELOPMENT WITH MODELS, METAPHORS, AND MACHINES (2002).
3. Moore, *supra* 1 at 190, 191.
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5. *Id.*
6. Pellegrino, *Theology and Evolution in Dialogue*, 79 Q. REV. BIOLOGY 385, 389 (1997).
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8. *Id.* at 387.  
See e.g., Parker, *Bringing The 'Gospel of Life' to American Jurisprudence: A Religious, Ethical and Philosophical Critique of Federal Funding for Stem Cell Research*, 17 J. CONTEMP. HEALTH L. & POL'Y 771 (2001).
9. Pellegrino, *supra* note 6 at 385.
10. *Id.*  
See A. PEACOCKE, PATHS FROM SCIENCE TOWARDS GOD chs. 1, 2 (2001).
11. *Supra* note 1 at xii.
12. A.R. CHAPMAN, UNPRECEDENTED CHOICES: RELIGIOUS ETHICS AT THE FRONTIERS OF SCIENCE 110 (1999).  
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13. R. DRESSER, WHEN SCIENCE OFFERS SALVATION 8 (2001).
14. *Id.* at 170.
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19. See Dresser, *Accountability in Science and Government: Is Access the Answer?* 30 HASTINGS CTR. RPT. 29 (May-June, 2000). See also Pellegrino, *Balancing Science, Ethics, and Politics: Stem Cell Research, A Paradigm Case*, 18 J. CONTEMP. HEALTH L. & POL'Y 591 (2002); Jewett, *Science and The Promise of Democracy in America*, 132 DAEDALUS 64 (2003).
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21. M.D. KIRBY, THROUGH THE WORLD'S EYE 48 (2000).
22. *Id.* at 50.
23. Congregation for The Doctrine of the Faith, *Instruction on Respect for Human Life in Its Origins and on the Dignity of Procreation*, 16 ORIGINS 697, 701 (1987).
24. *Id.* at 702-03.  
See generally B.R. FURROW, T.L. GREANY, S.H. JOHNSON, T.S. JOST & R.L. SCHWARTZ, BIOETHICS: HEALTH CARE AND ETHICS 37 (4<sup>th</sup> ed. 2001).
25. Coleman, *Procreative Liberty and Contemporaneous Choice: An Inalienable Rights Approach to Frozen Embryo Disputes*, 84 MINN. L. REV. 55, 67 (1999).
26. *Id.*
27. *Id.*  
See also Gorovitz, *Progeny, Progress and Primrose Paths*, in THE ETHICS OF REPRODUCTIVE TECHNOLOGY 117, 122-23 (K. D. Alpern ed. 1992).

28. Coleman, *supra* note 25 at 68.
29. Ethics Committee of the American Society for Reproductive Medicine, *Ethical Considerations of Assisted Reproductive Technologies*, 67 FERTILITY & STERILITY IS (Supp. 1997).  
 See Chapter 4, *infra*, text and fn's 378-385, for analysis of the findings of the President's Council on Bioethics regarding surrogation and IVF procedures, BIOTECHNOLOGIES TOUCHING THE BEGINNINGS OF LIFE (2004).
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32. *Id.*  
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 See also N. DANIELS, JUST HEALTH CARE 28 (1986).
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 But see Jellinek, *Disease Prevention and The Genetic Revolution: Defining Parental Right to Protect the Bodily Integrity of Future Children*, 27 HASTINGS CONST. L.Q. 369 (2000).
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37. J. BARZUN, FROM DAWN TO DECADENCE: 500 YEARS OF WESTERN CULTURAL LIFE—1500 TO THE PRESENT 763 (2000); D. CALLAHAN, WHAT PRICE BETTER HEALTH? HAZARDS OF THE RESEARCH IMPERATIVE ch. 2 (2003).
38. SCIENCE AND SOCIETY at xv (M. Moskovits ed. 1995).  
 See generally Marty, *Our Religio-secular World*, 132 DAEDALUS 42 (2003).
39. Breyer, *supra* note 35.  
 Both science and democracy encourage not only unconventional opinions and vigorous debate but— as well—demand adequate reasoning, coherent argumentation and vigorous standards of honesty and evidence. Sagan, *Describing The World As It Is, Not As It Would Be*, in THE WRITING LIFE: WRITERS ON HOW THEY THINK AND WORK at 309 (M. Arana ed. 2003).
40. Cahill, *Can Theology Have a Role in 'Public' Bioethics Discourse*, 20 HASTINGS CENTER RPT. 10 at 11, 13 (Sp. Supp.) (July/Aug. 1990).  
 See J. BARZUN, *supra* note 37 at 55 (observing that although rarely acknowledged, religion and morality remain at odds with each other).
41. Cahill, *id.* at 13.
42. P. OLIVER, D. SCOTT, & V. TADROS, FAITH IN LAW: ESSAYS IN LEGAL THEORY 3 (2000).  
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43. OLIVER *et al.*, *id.* at 147.
44. *Id.*
45. *Id.* at 7.
46. *Id.*  
 See F.C.C. COPLESTON, A HISTORY OF MEDIEVAL PHILOSOPHY (1972); N.H.G. ROBINSON, THE GROUNDWORK OF CHRISTIAN ETHICS (1971).  
 See generally M. RHONHEIMER, NATURAL LAW AND PRACTICAL REASON: A THOMIST VIEW OF MORAL AUTHORITY (G. Malsbary trans. 2000).
47. OLIVER, *et al.*, *supra* note 42 at 148.  
 Those who stress rationality assume that a belief need not be true for it to be held as rational and it need not be false to be seen as irrational. While "faith seeking understanding" thus seeks a continuity between rationality and the content of faith, others see an inherent discontinuity between religious insight and all forms of rational meditation. C. F. DELANEY RATIONALITY AND RELIGIOUS BELIEF 31, 43 (1979).  
 See also PEACOCKE *supra* note 10.

48. See Armstrong & Olick, *Innovative Legislature Initiatives: The New Jersey Declaration of Death and Advance Directives for Health Care Acts*, 16 SETON HALL LEGIS. J. 177 (1992).  
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49. B. R. FURROW, T. L. GREANEY, *et al.*, *supra* note 24 at 258-261.
50. A. MEISEL, THE RIGHT TO DIE § 15.6 (2d ed. 1995).  
But see Comment, *In God We Trust: Faith Healing Subject to Liability*, 14 J. CONTEMP. HEALTH L. & POL'Y 451 (1998) (observing that using only prayer and faith in assisting the ill is considered as practicing religion, not medicine, citing *Crane v. Johnson*, 242 U.S. 339 (1917)).
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53. *Id.* at 58.
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56. See the OXFORD ENGLISH DICTIONARY 259-260 (2d ed. 1989).
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59. *Id.*
60. H. BENSON, TIMELESS HEALING: THE POWER OF BIOLOGY ON BELIEF (1996).  
Duenwald, *Religion and Health: New Research Revives an Old Debate*, N.Y. TIMES, May 7, 2002, at D5 (discussing claims that religion and positive spirituality are beneficial to sound health); Kalb, *Faith and Healing*, NEWSWEEK, Nov. 10, 2003, at 14.
61. *Id.*
62. Sloan, *et al.*, *Should Physicians Prescribe Religious Activities?* 342 N. ENG. J. MED. 1913, 1916 (June 22, 2000).  
See A. PEACOCKE, GOD AND THE NEW BIOLOGY 19 (1986) (defining religion as "the ultimate meaning a person finds in his or her relation to all that is"). See also J. BARZUN, *supra* note 37 at 387 (defining religion as a feeling that "combines humility with wonder and sustains the moral law imprinted on the individual conscience"); Gunn, *The Complexity of Religion and The Definition of Religion in International Law*, 16 HARV. HUM. RTS. J. 189 (2003).
63. J.P. DOUGHERTY, WESTERN CREED, WESTERN IDENTITY at xii (2000).  
Without religious beliefs, moral teachings merely "hang in the air" without any foundations. P. SINGER, WRITINGS ON AN ETHICAL LIFE xviii (2000).
64. *Id.* at 15.
65. THE WORLD ALMANAC 612 (2004).
66. *Id.*
67. See GOD AND THE EMBRYO: RELIGIOUS VOICES ON STEM CELLS AND CLONING (B. Waters & R. Cole-Turner eds. 2003); CHAPMAN, *supra* note 12.
68. See generally Symposium, *Conceiving a Code for Creation: The Legal Debate Surrounding Human Cloning*, 53 HASTINGS L. J. 987 (2002); Faden *et al.*, *Considerations of Justice in Stem Cell Research and Therapy* 33 HASTINGS CENTER RPT. 13 (2003).
69. George P. Smith, II, *Monograph*, FINAL EXITS: SAFEGUARDING SELF-DETERMINATION AND THE RIGHT TO BE FREE FROM CRUEL AND UNUSUAL PUNISHMENT (1997).
70. See generally, R. WILSON, ECONOMICS, ETHICS AND RELIGION: JEWISH, CHRISTIAN AND MUSLIM ECONOMIC THOUGHT (1997).
71. S.M. BEHUNIAK, A CARING JURISPRUDENCE chs. 3-5 (1999).
72. Smith, *Stop, in the Name of Love!*, 19 ANGLO-AM. L. REV. 55 (1990).
73. Smith, *Manipulating The Genetic Code: Jurisprudential Conundrums*, 64 GEO. L. REV. 697 (1976).



74. Smith, *Death Be Not Proud: Medical, Ethical and Legal Dilemmas in Resource Allocation*, 3 J. CONTEMP. HEALTH L. & POL'Y 47 (1987).

75. See Principle 56, *The Ethical and Religious Directives for Catholic Health Care Services*, authored by The National Conference of Catholic Bishops (1994), stating, "A person has a moral obligation to use ordinary or proportionate means of preserving his or her life. Proportionate means are those that in the judgment of the patient offer a reasonable hope of benefit and do not entail an excessive burden or impose excessive expense on the family or the community."

76. *Id.*, Principle 57. "A person may forgo extraordinary or disproportionate means of preserving life. Disproportionate means are those that in the patient's judgment do not offer a reasonable hope of benefit or entail an excessive burden, or impose excessive expense on the family or the community."

See generally L.R. KASS, *LIFE, LIBERTY AND THE DEFENSE OF DIGNITY* ch. 7 (2002).

But see Grossman, *Pope Declares Feeding Tube a 'Moral Obligation': Directive Applies to Vegetative Patients*, USA TODAY, April 2, 2004, at 1A (discussed in the body in Chapter 6 at fn's 238—244).