Of Panjandrums, Pooh Bahs, Parvenus, and Prophets: Law, Religion, and Medical Science

George P. Smith II
The Catholic University of America, Columbus School of Law

Follow this and additional works at: https://scholarship.law.edu/scholar

Part of the Bioethics and Medical Ethics Commons, Ethics in Religion Commons, and the Law Commons

Recommended Citation
Of Panjandrums, Pooh Bahs, Parvenus, and Prophets: Law, Religion and Medical Science

George P. Smith, II

This paper can be downloaded without charge from the Social Science Research Network electronic library at:

http://ssrn.com/abstract=1092200

Legal Studies Series Editor – Elizabeth Edinger: edinger@law.edu
The Columbus School of Law – http://law.cua.edu/
Of Panjandrums, Pooh Bahs, Parvenus,
and Prophets:

Law, Religion, and Medical Science
This monograph derives from a lecture—under the same title—given, originally, in honor of Justice Michael D. Kirby, AC, CMG, High Court of Australia, in the Banco Court of The Supreme Court Building, Queen’s Square, Sydney, Australia, on July 27, 2005, and in commemoration of the thirtieth anniversary of the founding of the Division of Law at Macquarie University.
Acknowledgments

I met Justice Kirby when I visited Australia in 1984 and I especially remember hearing him speak for the first time, in his capacity as Chairman of the Australian Law Reform Commission, in the Hall at St. Andrew’s Cathedral in downtown Sydney. As I recall, the focus of his remarks was on the significance of God and religion in the life of the law in a Nation not overwhelmingly religious as say, Poland. Particular interest was paid to the “significance” or “relevance” of God’s name in the Courtroom Oath.

I now return to the 1984 theme—but in the specific context of the interrelated roles law, religion, and medical science have in shaping normative standards in this the Age of Biotechnology.

I remember attending a lecture given by Professor Margo Somerville of McGill University entitled, rather mischievously, (as Margo is wont to do with her titles), “Doctors, Ethics, and Dropping Dead” in the Great Hall at the University of Sydney in 1990. Margo took several minutes to explain what was and was not meant by the title, itself, and added a few disclaimers. I, too, wish to explain my title, as well as the placement of the words in the subtitle. I will then have a disclaimer or two as well.

First off, lest some of you think there is a da Vinci-like code in the title, and that it describes roles or names that Justice Kirby has—at one time or other in his career—been called, I wish to advise otherwise. While, in fact, he certainly has been termed both a prophet of law reform and law in action—as well as a parvenu or upstart by others for his positions, I doubt that he could be thought of, strictly, as a panjandrum but very probably a pooh bah. The Oxford English Dictionary defines the former as a pretender—a futurist, to be sure, but, Justice Kirby is never a pretender. Although an afficionado of Gilbert and Sullivan, I am unknowing whether, in his “salad days,” he ever played the role of Pooh Bah, the Lord High Everything Else, in the Mikado (or, The Town of Titipu). In any event, the Oxford English Dictionary, again, defines a pooh bah as a person with much influence. There can be no question that Justice Kirby has, indeed, established a real, positive global influence.

While, as I acknowledge forthwith that my title of this monograph was not meant, originally, to describe real or imaginary qualities or appellations given to the good Justice, it could perhaps—upon
additional reflection and depending upon one’s temperament and sense of humor—apply, in reality, to him to one degree or other. I leave it to each reader and Justice Kirby, himself, to resolve this issue.

What I had in mind, originally, in shaping, first, the title, was to test the extent to which law, religion, and medicine play out their roles, interchangeably, as panjandrums, parvenus, pooh bahs, and prophets—and with what results. The placement of religion in the middle of the subtitle is significant because, as I shall show in this monograph, religion acts as a bridge in stabilizing both law and medical science.

I write as a nondenominational Christian pilgrim. When I gave a set of Fulbright Foundation Lectures in 1984 here in Australia through the good offices of the University of New South Wales as its Visiting Professor of Law and Medical Jurisprudence, I was—invariably—taken to be a priest; I think probably because of my University affiliation in America. In Tasmania, I was even asked if I was a member of the episcopacy. I was neither then, nor am I today, a priest or bishop!

A Tribute to Justice Kirby

Termed one of the “liveliest minds” in the field of law reform by Lord Scarman, and seen by Sir Zelman Cowan as an “able popularizer” who “brings great learning, great breath of vision and a lively social awareness” to the law, Justice Kirby has re-enforced the power of his legal knowledge by ad through the wisdom of his judicial judgments and the effectiveness of the exposition of his philosophy both in and out of court—demonstrating, consistently, both courage and tenacity.

Acknowledged as early as 1990 as one of the thirteen men and women of the Australian Continent who has made a significant and enduring contribution to the growth of Australia as a Nation, Justice Kirby has continued, both nationally and internationally, to present—and thus advance—Australia as a Nation in the vanguard of progress in the administration of justice and especially so in Medical Jurisprudence.

The Editors of WHO’S WHO IN AUSTRALIA, 2005, have summed up neatly Justice Kirby’s life in 68 lines. The OXFORD COMPANION TO THE HIGH COURT OF AUSTRALIA devotes 24 paragraphs to present his biography.
since 1999, ten pages (in rather small print) of Justice Kirby’s papers, lectures and essays.\textsuperscript{12}

We also know that, during his tenure thus far on the High Court, as well as that time during his tenure as President of the Court of Appeal, he enjoys the status of being the all-time record holder for being in dissent.\textsuperscript{13}

It would surely be presumptuous of me to select one achievement or honor which might be defining or foundational in Justice Kirby’s illustrious career. But, if I were emboldened to hazard a guess, in addition to his Presidency of the Australian Law Reform Commission and subsequent elevation to the bench, first at the Court of Appeal and then the High Court of Australia, I would suggest the award of “Call Me God” honors by Queen Elizabeth in 1983 (or the Commander of St. Michael and St. George as it is officially known) and the conferral of the Companion of Australia in 1991 are significant achievements. His Chancellorship of Macquarie University and awardance of an honorary LL.D. degree from it are also sources of pride as was the awardance, in 1991, of the Australian Human Rights Medal and in 1998 the Laureate of the UNESCO Prize for Human Rights Education.\textsuperscript{14}

If I had been on the editorial board of WHO’S WHO IN AUSTRALIA or THE OXFORD COMPANION TO THE HIGH COURT, in addition to the biographical entries, I would have added: Pathfinder; Futurist; Dreamer; Visionary; Idealist; Noble and Compassionate Christian and Person of Goodwill; Judicial Gardener;\textsuperscript{15} Humanitarian; Exemplar of Civility and Professionalism; Eloquent and Patient Teacher; Informed and Courteous Polemicist; Champion of Civil Rights, Sexual Integrity and Equality and, finally, Valued Friend.

Justice Kirby has led, and continues to lead, a great life of the mind and the spirit; a life dedicated to doing “justice according to law to all manner of people without fear or favour, affection or ill-will”\textsuperscript{16} and a judicial life tempered further with the desire to break free from the shackles of strict ad complete legalism that, in 1967, marked Australia judges as “dogmatic conservatives.”\textsuperscript{17}

By so acting, this response will bring to bear an acknowledgment, by the judiciary, of the importance of changing social conditions in their judicial analysis and decision making.\textsuperscript{18} With this acknowledgment comes a co-ordinate need to study and to see the law in action—as distinct from “law in the books”—with the goal being to effect institutional law reform by evaluating the actual social effects of the legal institutions, legal precepts and legal doctrines.\textsuperscript{19} Indeed, law needs to be viewed “from the outside” or through the world’s eye if it is to be seen as progressive and not
In Michael Kirby, one finds, then, the quintessential judicial role model who follows the admonition of Socrates to hear courteously, answer wisely, consider soberly and decide impartially. And, in following this course, Justice Kirby has truly lived, and continues to live, in the words of Oliver Wendell Holmes, "greatly in the law as well as elsewhere.

From virtually the beginning of his public career in the Australian Law Reform Commission, Justice Kirby was called upon to address vital and complex issues in health law and ethics. Indeed, it may be seen that the whole national debate of how best to renew the legal system in order to ensure its fairness accessibility and continued relevance in The Age of The New Biomedical Technology was begun on his “watch.”

Dealing first in 1977 with law reform in the field of human tissue transplants, he was forced—of necessity—to study the need to re-define death, the feasibility of adopting a regime of organ donation or one of the taking, with an opting out privilege, the acceptability of payment for body parts, the availability of donations by minors, the rights of relatives to override the wishes of a deceased to donate body parts for either research or organ donation, together with legal and ethical issues of the then rather novel process and procedure of \textit{in vitro} fertilization and the scope of genetic engineering. Medical confidentiality and privacy in medical information, child abuse reporting and other cutting edge issue were studied subsequently.

More recently, Justice Kirby has applied his boundless energies and keen interests to tackling ethical and legal questions surrounding the HIV/AIDS pandemic, UNESCO’s work on the Human Genome Project and the need for protections of human rights for homosexual and bisexual men and women, drug users and drug dependent persons and those infected with HIV/AIDS and, finally, shaping ethical principles to be used as guides for charting health care allocative schemes through the application of cost-benefit analysis. Indeed, as Justice Kirby has cautioned, this issue of rational and principled apportionment of scarce medical resources, or what has been termed distributive justice, is a foundational issue facing Australia and the United States in this 21st century.

\textbf{The Kirby Informing Principle or Ethic}

The Informing Principle or Ethic that emerges from Justice Kirby’s work as a judge, lawyer,
humanitarian, and scholar—and, more often than not from his lectures and papers delivered *ex cathedra* (or away from the High Court bench)—is, in one, both visionary and futuristic and anchored in a value system termed, “Transcendent Idealism.” This set of values draws on humanism and moral realism and represents a synthesis of what is regarded as the three primary value systems: the human individual, society and transcendent purpose.29

In order to consider and evaluate the vexatious problem of balancing individual rights against social authority, transcendent idealism, then, acknowledges “God’s transcendent purpose which is concerned with the dignity and salvation of each human soul.”30 While not providing an exacting template for resolving all socio-legal issues, it seeks to posit a “body of shared values through which problems can be mediated.”31

The Kirby Ethic builds upon this value system and clearly embraces the foundational principle or quality of Love set forth in St. Paul’s letter to the Corinthians.32 Indeed, it is not only the cornerstone of the Ethic but also the yardstick by which the effectiveness of any discourse or implementation of human rights is measured. Without its acceptance, there can be no real appreciation or understanding of the very essence of human relations.33

Achieving a new world order which recognizes the centrality of human rights calls for a recognition of an individual responsibility to advance the virtues of honesty, compassion, kindness, justice and nobility of life purpose—together with an abiding respect for human goodness and dignity and a tolerance for diversity:34 qualities found inherently (or at least ideally) within all of us. Recognizing the dignity of one’s very own existence demands, in turn, a witnessing of that humanity and dignity within the polity for all.35

In order to lead and support the advancement of human rights, one must be informed and educated to the hard issues which shape current debate.36 To this end, participatory democracy—an obligation for all citizens in democratic countries37—must assist in promoting rational discourse in all aspects of law, health, and biotechnology; for it is only through informed discussion that a level of perception can be set which allows for solutions to vexatious issues.38

With the obligation to be informed is a co-ordinate responsibility, as citizens, to remember the right to dissent (when necessary) and remember further that powerful dissenting ideas may not be seen as either persuasive or valid in the time in which they are expressed but—over the course of
history—may well be recognized and even accepted ultimately as new contemporary bases, or vectors of positive force, in the social ordering of that day.39

As pilgrims all, Justice Kirby bids us to be forever optimistic40 maintaining an idealism not only to the future but a measured respect for that of the past.41

When there are changes in social circumstances and community attitudes, which in turn, make old rules anachronistic, then, the Kirby Ethic holds those rules must bend in order to accommodate change.42 In order to achieve an openness of spirit to change, interdisciplinary outreach is needed.43

To implement the Kirby Ethic judicially, it—of necessity—must morph into a principle of judicial interpretations which holds that in cases of ambiguity, it is not only permissible, but indeed essential, to construe Australian Statutes and the Constitution in a manner utilizing the norms of universal human rights and law so that a reconciliation of international law and municipal law can be effected and thereby witness the enforcement of Human Rights as a universal phenomenon.44

The Kirby Ethic eschews a rigid and almost mechanical application of case decisions over conceptualism (or that way of considering law as a set of preferred values).45 Indeed, normative values must be set forth in all cases of determinative decision making,46 with efforts taken to go beyond categories of indeterminancy such as “fair” or “just” or what is rational and supportable.47

If integrated into the fabric of informed decision making by the courts, legislative bodies and the polity, the Kirby Informing Principle or Ethic will set new parameters for discussions, action and mediation in the perplexing issues of the New Age of Biotechnology. In a word, the Ethic will advance a more comprehensive framework for principled analysis grounded, as it is, in honesty, compassion, kindness, humaneness, justice and nobility of life purpose.
ENDNOTES
Justice Kirby Tribute

1. XII OXFORD ENGLISH DICTIONARY 642, 643 (2d ed. 1989).
2. XII OXFORD ENGLISH DICTIONARY 289 (2d ed. 1989).
4. XII OXFORD ENGLISH DICTIONARY 102 (2d ed. 1989).
5. *Supra* note 3.


    Interestingly, in the last year he served as President of the New South Wales Court of Appeal, leaving aside formal decision, there were 234 cases in which he participated and gave reason. In 198 of these (84.6%), he was in the majority. In 36 (15.4%), he was in dissent. In 64 cases (27%), his reasons were given for a unanimous Court and in a further 27 (11.5%) at least one other judge agreed in his reasons without adding any of his own. *See* Michael D. Kirby, *Address, “Judicial Dissent,”* James Cook University at Cairns, Law Student Society, Feb. 26, 2005.


17. Kirby, id. at 37.


22. OLIVER WENDELL HOLMES, The Profession of Law, in COLLECTED LEGAL PAPERS, 29 (1920).


24. Id. at 32.

25. See generally Kirby, supra note 20 at ch.4. 


30. Id. at 52.

31. Id.

32. 1 Corinthians 13:8.

33. Michael D. Kirby, The New Biology and International Sharing—Lessons from The Life and

34. Kirby, supra note 20 at 6, 13, 40.
   See also Kirby, supra note 23 at 202.

35. Kirby, supra note 20 at 13.

36. Kirby, supra note 20 at 6.
   See also Kirby, supra note 23 at 202.


   See also Kirby, supra note 20 at 13; Tradition and Diversity—Twin Strengths of the Judiciary, 42 N.S.W. LAW SOC. J. 76 (2004).

39. Supra note 11 at 395.

40. Kirby, supra note 20 at 78.

41. Kirby, supra note 23 at 202, 238.

42. Supra note 11 at 395.

43. Kirby, supra note 23 at 238.

   See generally HOWARD DAVIS, HUMAN RIGHTS AND CIVIL LIBERTIES (2003).

45. Lord Cooke at xv, supra note 20.

46. Kirby, supra note 23 at 20.

47. Id.
Faith, religion, spirituality and prayer have a current focused outreach and easy parlance in the market places and public squares throughout America. News stories and court cases abound of dramatic challenges to the placement of monuments to the Ten Commandments in public buildings and grounds, the use of God’s name in school pledges of allegiance, the teaching of Darwinian or evolutionary science in public education, the role of faith and religion in health care healing, the value of affirmations of religious faith on the political hustings, and—internationally—the efforts of French President Jacques Chirac to ban “overt religious symbols” in public schools in France in an effort to maintain secularism throughout the educational system.

This past June in England, senior executives at the University of Leicester NHS Trust, announced the placement of Bibles in hospital bedside lockers by Gideons International—a century old tradition—was ending because it was determined that some ethnic minorities might be offended by this continued practice. Religious texts would be made available at hospitals through the chaplaincy. At Newham General Hospital in East London a crucifix was removed from a prayer room because it made the room too Christian and, thus, offensive to non-Christians.

The impact that these occurrences have on the fiber of contemporary society is significant, and—at the same time—truly incalculable. It is made more problematic because of a failure of the system to agree, in the first instance, on a unified definition of religion. This situation parallels that state which also exists in international law. Because of this present vacuum, it has been suggested that in lieu of defining religion, it would be more practicable to consider it as a belief, identity, or way of life. Regrettably, the law—from a national context or perspective—has not risen to the challenge and structured an unerring definition. Rather, the United States Supreme Court has chosen to define religion in United States v. Seeger by stating that,

[T]he test of belief ‘in a relation to a Supreme Being’ . . . is whether a given belief that is sincere and meaningful occupies a place in the life of its possessor parallel to that filled by the orthodox belief in God. . . .

In August, 2001, the Chief Justice of the Supreme Court of Alabama, Roy Moore, installed a two and a half ton monument to the Ten Commandments as the centerpiece of the rotunda in the
Alabama State Building—intending, as such, to remind the citizens of the state of his personal belief in the sovereignty of the Judeo-Christian God over both the state and the church. The Federal District Court ordered, subsequently, the removal of the monument finding its placement to be in violation of the Establishment Clause of the 1st Amendment to the Constitution. On appeal, the Eleventh Circuit affirmed and the United States Supreme Court refused to review the case. While the judicial disposition of this case is now settled, the issues of the extent to which the acknowledgment and expression of religious faith, within the ambit of state action, and is consistent with the Establishment Clause of the Constitution, remains a highly vexatious matter.

Defining the appropriate role of religion in the town square and the nation’s public buildings has, of late, however, focused on the extent to which religious monuments may be placed appropriately on public land. This has become a new, energized national issue because of the pervasive concern that distinctive American moral values that underpinned the founding of the Nation are eroding and, further, that society is becoming Godless. In addition to key cases in Alabama and Texas, it has been reported that some two dozen disputes over the placement of monuments to the Ten Commandments or similar displays have—since 2000—been taken to the courts for settlement.

Early in 1980, the United States Supreme Court recognized the Ten Commandments as a “sacred text in Jewish and Christian faiths” for which “no legislative recitation of a supposed secular purpose can blind us to that fact.” It did not hold, however, that not all government uses of the Commandments are taken as impermissible.

Subsequently, in 1988, the High Court—while acknowledging the subtle ways in which the values of the Establishment Clause were “not susceptible to a single verbal formulation.”—reaffirmed its decision in Everson v. Board of Education in 1947 which structures the modest framework for analyzing issues under the Establishment Clause.

A democratic and political process tied more to television sound bites than intelligent and informed deliberations among its citizens is a process guaranteeing itself of lethargic inactivity if not stagnation. It is for the judiciary to fill the breach and continue its role as interpreters of the Common Law and when need be, architects of the new Age of Biotechnology. Ideally, when individual cases of profound disagreement arise over issues of medical science, courts and legislatures should remain passive and allow resolution of these disputes within each concerned family unit and, where possible, their church community of faith. Oftentimes, the at-risk family
and its religious support groups are unable to cope with understanding the ramifications of ultimate decisions regarding medicine. “Meditating structures” can only go so far in discerning and promoting legal justice—or, the obligation to support the common good. The common good is shaped by the legislatures and the courts and—it remains for an enlightened judiciary to interpret its course. It is regrettable, but a fact in contemporary society, that every complex moral issue is more often than not, transformed into a legal issue. Since law and morality intersect in daily life, it is not surprising that the courts are called upon to arbitrate. Invariably, law supports some visions of how life should be lived within the community while, at the same time, undermining others.

The basic question underlying the involvement of religion in American and Australian public life would seem to be whether a free society depends ultimately on religious values for cohesion and of human rights.

If Lord Devlin is correct when he concludes that it is difficult to teach morality without religion, then the answer to this question is that free societies depend upon religion as a bedrock for stability and social action.

Yet, Chief Justice Murray Gleeson of the Australian High Court, reminds us that there can be morality without religion—for, “it is the general acceptance of values that sustains the law, and the social behavior; not private conscience.” Whether this fundamental idea “is expressed in terms of teaching, or communication, there has to be a method of getting from the level of individual belief to the level of community values. Religion is one method of bridging the gap.”

The purpose of this monograph, then, is to explore the conjunctive and disjunctive influences that religion has in one specific field of current socio-political debate: namely, biomedical technology and ethical decision making. More specifically, the role of religion as an equal—or, as the case may prove to be—limited, partner with law and medical science in assessing the dimensions and patterns of application of the new startling biotechnologies will be evaluated.

From this analysis it will be seen that far from being antagonistic to law and medicine, religion and religious principles stabilize the field of biomedicine and serve, additionally, as vectors of force in shaping both ethical and moral constructs for decision making. In turn, each of these three disciplines complements and strengthens what should be the ultimate goal of the state namely: to secure the happiness, spiritual tranquility and well-being of its citizens. This purpose is, in turn,
advanced—and thus enhanced—by safeguarding the genetic well-being and general health of its citizens. Working toward this goal and meeting it eventually will have the effect of minimizing human suffering and maximizing the social good that derives from rational and humane actions taken to displace man’s genetic weaknesses from the line of inheritance.

THE LECTURE
I.
A DIALOGUE BEGINS

A primary goal for many religious thinkers has been to develop a process for determining how to lead science and technology toward a level of awareness and appreciation of human and environmental values. Given the growing trend of placing and then testing scientific development within a framework of moral understanding and normative values, the choice is “having theologians and religious ethicists contribute a theological perspective or having scientists attempt to be moral philosophers.”

The foundational texts of most religious communities, as well as scripture itself, do not address the complex issues of biotechnology and molecular biology. While the religious texts do establish broad ethical norms for purposeful living, the task becomes one of adapting a mechanism for them to apply to the biomedical issues of contemporary society; in other words, how to re-shape and, thus, modernize them into a constructive dialogue with science—one which escapes the confines of abstract applications and offers specific guidance and modern ethical norms for resolving concrete biomedical conflicts.

Whether it is practical to pursue the development of a common framework for morality and ethical analysis within the context of the New Biology, is problematic. Advocates of post modernism argue that a “Christian rather than denominational approach to bioethics” is to be preferred. Whatever course is followed, the challenge remains the same: namely, how to show—and thereby attempt to restate—the relevance of these religious principles to a skeptical secular society.

In an effort to address the basic theological and ethical issues associated with the new medico-science technologies and, thus, engage the issue, much study have been undertaken over the years by various ecumenical and denominational bodies beginning in 1973 with the efforts of The World
Council of Churches to study the ethical significance of science and technology. Through the succeeding years, various other studies were commissioned by various organizations such as the World Conference on Faith and Science and The Future. Interestingly, their findings were never granted any official standing but merely accepted as the views of each study panel. The Roman Catholic Church did—however—in 1987, begin to both clarify and shape the official dialogue for its members through the issuance of its “Instruction on Respect for Human Life in Its Origin and on the Dignity of Life.”

All too often, a recitation of traditional beliefs is set forth without an interpretation of their implications for scientific applications. While of marginal universal significance, these faith-based denominational efforts nonetheless provide a rich opportunity for education and interaction as well as for the development of a broader-based perspective on the religious, moral and ethical ramifications of the New Biology. Only time will tell whether these “seedlings” will take root from these critical engagements and provide normative values for biomedical decision making.

As the astonishing positive successes of genetic research and engineering and of genetic medicine continue to be charted with clarity, the role of moral theology—grounded in various faith traditions—should be used to frame guidelines for determining if and when various specific applications of these technologies, within an appropriate ethical context, may be utilized. Richard McCormick suggested the controlling consideration should be, “Will this or that intervention (or omission, exception, policy, law) promote or undermine” the integrity of the human person.

The central concern of Fr. Richard A. McCormick is the integrity of personhood. For him, personhood begins at conception and, accordingly, would be violated by human stem cell experimentation, cloning, and generally, in vitro fertilization. In this regard, McCormick is micro—as opposed to macro—in his viewpoint. Long range or societal benefits from scientific advances of this nature and other genetic research are of secondary concern.

Drawing upon a contemporary interpretation of tikkun olam—or the mandate to participate in an active partnership in the repair and perfection of the world—the Jewish community supports scientific discoveries and human applications of genetic research. And, interestingly for Presbyterians, “prophetic inquiry” directs that they endeavor to utilize modern technology and science in affirming the dynamic character of the creation through the teachings and interpretations of the biblical tradition.
Law and policy making as well as administrative and judicial decision making should not—indeed, cannot—favor one denominational theology over another. Rather, balanced decisions must be made incorporating, when appropriate, moral, ethical (e.g., religious) values with scientific objectives for individual growth and societal advancement. When cases or issues for consideration arise, they are just that: individual and fact sensitive. Yet, nevertheless, their evaluation can be undertaken by a template shaped by a balancing of costs versus benefit: use or non use—all designed to achieve a positive, just good.

No substantive resolutions are needed. The role for the various church theologies should be, rather, “interrogative.” For any dialogue between science and religion to be effective, “fallibilism” must then be an acknowledged given. In other words, both parties need to accept the proposition that they may not only be incorrect in their understandings of each other, but “in their inferences about the implications of their positions, in their development of their own arguments and even in some basic claims they have never questioned.”

Love and Justice

While there are differences between a legal order, system of morality and set of religious beliefs, it does not follow that contemporary legal order does not contain elements of moral religious beliefs. All laws are norms set within a hierarchy whose foundation is to be found in love; for it is within the primary form of love that justice is found. Indeed, Augustine saw the ethics of love as the essence of justice. For him, without the ethics of love, there could be no true orderliness—this, because nature would be disturbed by man’s wilfulness. “Without love there could be no justice for there would be lacking a cogent motive, and pattern, for men to render to other men their due. . . .without love as a gift of God’s grace man could not love the proper things properly.” In addition to including rules and concepts, law is—at its most basic level—but a set of relationships among people.

Despite the obvious tensions or discontinuities between law and religion, one cannot truly flourish without the other. Without religion, law degenerates into little more than a mechanical legalism; and religion without law loses its social effectiveness.
Any use of biotechnology brings with it the ever-present problem of how to distribute its benefits justly and fairly among various social groups. Presently, the vast majority of distributional problems are decided on a local *ad hoc* basis. Because demand will normally exceed supply, the threshold question becomes, for example: Who should receive a kidney transplant, an artificial heart, or become a candidate for gene therapy? What is the fairest principle for distribution—first come, first served or medical compatibility? Should equal access to health care be recognized as an important social goal? To what extent is there an inequitable distribution of biomedical research risks to the institutionalized? Finally, is it unjust to distribute health care as a free market commodity or consider the social utility of persons in distributing scarce medical services? No definitive answers can be postulated. Indeed, as Richard McCormick has cautioned, the operative watchwords should be: “beware of ethicists bearing solutions!” Anyone claiming to have explicable rules that cut through the philosophical agonies of ambiguity and uncertainty in our present pluralistic society is guilty of deception. “All too often the question of how to distribute justly often is reduced to who shall decide ow to distribute.”

Although wide social consensus will never be achieved on developing a framework for resolving difficult medical issues of the New Biology (simply because the criterion of final selection will vary with the nature of the medical dilemma or particular biomedical technology used), policies that aid decision making can and must be advanced. Such a set of policies must be formulated not only to provide protection for the vulnerable, while respecting familial and personal autonomy and privacy, but also to recognize inherent common values and not so much the centrality of technical expertise. Such values foster humility as well as tolerance and grace.

**The UNESCO Effort**

Even though uncertainties plague bioethical decisionmaking, a much needed framework for action is being advanced by UNESCO: first, in its *Universal Declaration on the Human Genome and Human Rights* and, presently, through a *Draft Declaration on Universal Norms on Bioethics* (or, alternatively, a *Universal Declaration on Bioethics and Human Rights*). Both of these documents show, with striking clarity, the unstable guiding spirit of Justice Kirby’s draftsmanship as a pivotal member of the International Bioethics Committee; for, the need to respect human dignity and defend it when human genetic research is referenced repeatedly in the Universal
Declaration on the Human Genome and Human Rights\textsuperscript{75} as well as in the Declaration on Universal Norms on Bioethics.\textsuperscript{76} This, then, is an over-arching principle in both instruments: to accord respect for “human dignity, human rights, and fundamental freedoms,” and thus effectuate a Principle of Social Responsibility to advance “the common good” by providing access to health care.”\textsuperscript{77}

A Shared Tradition

There are four elements shared by law and religion: ritual, tradition, authority and universality.\textsuperscript{78} Within every religion is found two legal elements—one which relates to the social processes of the particular community sharing a faith and the other “to the social processes of the larger community of which the religious community is a part.”\textsuperscript{79} Indeed, it has been suggested that the two major dimensions of man’s social life may be seen as law and religion even though, as such, they are dialectically interdependent vectors of force.\textsuperscript{80}

In the final analysis, perhaps it is best to see law as a way in which both justice and love are translated into complex social situations within various communities.\textsuperscript{81} Since love is situational, it has been argued persuasively that it—rather than binding rules and \textit{a priori} principles—should direct moral responses (\textit{micro} and \textit{macro}) at all levels of decision making in issues of the New Biology.\textsuperscript{82} Accordingly, the standard of humane treatment in end-of-life cases should be shaped and guided by love just as scientific decisions regarding the suitability of investigation. In one case, the construct is personal and in the other it is communitarian.\textsuperscript{83}

Values

Lord Cooke of Thorndon has observed that at the High Court, the constant choice facing the court “requires, in the ultimate, a weighing of values.”\textsuperscript{84} Yet, interestingly, there are no rational grounds for determining one set of value over another; for, one’s beliefs and values simply exist outside the domain of reason.\textsuperscript{85}

Law and the values of society, then, may be thought correctly of as sharing a symbiotic relationship; this, because without the cement of common values to fortify and strengthen it, law is sterile.\textsuperscript{86} Conversely, for a society to be without direction and constraint makes it as a society without power to protect itself from the unscrupulous.\textsuperscript{87} If law is at odds with society’s values, it runs the risk of falling into disrepute.\textsuperscript{88}
Since differing values lead to differing principles, it remains for the law to ascribe to those principles which “reflect a consensus value capable of articulation as a normative proposition from which it is possible to reason logically and analogically.”

Aristotle, in Book 1 of his Nichomachean Ethic, states that every action and choice aims “at some good.” In contemporary society, that good could well be economic, ethical, medical, moral, philosophical, physical, political, religious, social or spiritual. For the Greek Stoics, one of their essential obligations in life was acceptance of the maxim that, “what you do not wish to be done to you, do not do to anyone else.”

It remained for Jesus in his Sermon on the Mount to re-state this ideal or standard of normative conduct and urge rather that one should, “Do to others what you would have them do to you,” and thus emerged what has been termed the Golden Rule.

Modernly, it could be argued that drawing upon—and thereby restating John Rawl’s Principle of Intergenerational Justice—a “new” Golden Rule or operational standard for scientific advancement and legal containment thereof—could be posited. As such, the Principle would state simply that the present generation should do unto the next generation as we would (or should) do unto ourselves. And this, I think, is but a natural complement to the broader Kirby Ethic that I have postulated.

**Legal Directions**

Often, the law has responded or reacted to, rather than directed, an agenda for social needs and demands. Indeed, the former Chief Justice of the United States Supreme Court, Warren E. Burger, once observed: “Law does not search out as do science and medicine; it reacts to social needs and demands.” Law, science, and medicine must become full, unlimited partners in the bioethical ventures of modern society. They must march in unison as they approach the task of assuring the primary goal of society itself: namely, that all citizens be provided with an equal opportunity to achieve their maximum potential for human growth, development, interpersonal relations, and intellectual fulfillment within the economic marketplace as well as the marketplace of ideas, and to have not only their physical suffering minimized and their spiritual tranquility assured, but also to have their rights of autonomy and/or self-determination recognized.

In the 1960 Julius Rosenthal Lecture, “The Law and Its Compass,” delivered at the Northwestern
University Law School, Cyrille John Radcliffe, Lord Radcliffe, suggested that the law needs a “point of reference more universal than its own internal logic.”

The layman insists that the law “stand for something more, for some vindication of a sense of right and wrong that is not merely provisional or just the product of a historical process, but is rooted in that great tradition” of individual freedom and humane civilization that has procedural the “institutions” of our modern “liberal world.” That, then, is “the compass of the law must steer by.”

This, indeed, is the Kirby compass. And one that sees law as the center force or point of direction for “stability, conservatives and predictability in society.”

Justice Windeyer opined in 1970, long before the pace of medical and biotechnological science had quickened to the level of achievement today, that the law was not keeping pace with medicine and, indeed, marched “in the rear,” limping along. Nowadays, as Justice Kirby has observed, “this observation seems positively charitable.”

Since human behavior is “the very currency in which law deals,” it follows that the law should intensify its efforts to understand the causes of human behavior and thereby seek to increase its overall effectiveness and efficiency. All too often, in the science of behavioral biology, it is routinely “ignored, misunderstood, or improperly invoked.” Inasmuch as law is about changing behavior, then, sound behavioral models must be used in developing new laws in this the Age of Biotechnology. Interdisciplinary outreach as an element in the Kirby Ethic, again, becomes fundamental.

II.

A CONSTITUTIONAL PHILOSOPHY

Ever since America was founded, the national symbol has been an eagle supported in its flights and its destiny by two powerful wings: plain reason or common sense and humble faith. The founding generation drew its common sense from not only the traditional wisdom of ancient philosophers and moralists, but from the scriptures; for, it was evidence to them that a faith in the God of Abraham, Isaac and Jacob was an ideal magnification of human reason. Indeed, for the founders, of all philosophies and religions, Judaism and Christianity served as the best unified foundation for republican institutions because they encouraged virtue and sharpened a zest for liberty.
From the very beginning of the Nation, the “dominant metaphor for church-state relations was that public officials must act as ‘nursing fathers’ to the religious and moral habits of the people . . .”\textsuperscript{109}  Put simply, as a religious people, the majority of early Americans believed wholeheartedly that they owed their liberty to their creator.\textsuperscript{110}

In the United States Constitution, the action to separate church from state was driven significantly by the same recognition that religion concerns itself with differing senses or levels of reality than those of the political world.\textsuperscript{111}  Accordingly, two clauses in the First Amendment enunciate with clarity the boundaries of church and state—the Establishment Clause forbids the government from making any “law respecting the establishment of religion,” and the Free Exercise of Religion Clause prohibits the government from restricting religious belief or practice.\textsuperscript{112}  While these two clauses, especially the second one, are taken in contemporary society as affirming rights of individual conscience together with the appropriateness of religious pluralism, there is strong historical evidence suggesting however that the framers were more interested in recognizing the establishment of religious duties free from state interference.\textsuperscript{113}

Drawing upon these two clauses Section 116 of the Australian Constitution states:

‘The Commonwealth shall not make any law [(i)] for establishing any religion, or [(ii)] for imposing any religious observance, or [(iii)] for prohibiting the free exercise of any religion, and [(iv)] no religious test shall be required as a qualification for any office or public trust under the Commonwealth.’\textsuperscript{114}

One of two driving and very practical forces behind the crafting of the religion clauses in the First Amendment in America was an evangelical conviction that religion—and not just individual conscience—was to control a limited government that in turn must be subordinate to a sovereign God.  A second fundamental conviction undergirding the separation of church and state was that the state should, quite simply, be secular and not religious.  It was this unyielding view that was in direct opposition to the Republican belief that the state should support religion in order to promote public morality.  It was mainly on the arguments that, for the sake of religious integrity, religion should be insulated from state support, that the secular view of the state triumphed in the Establishment Clause.\textsuperscript{115}

**Religion’s Role**
The role of religion in a constitutional democracy is, surely, at the apex of current legal and social debate. Since questions about religion involve moral issues, they are presented regularly both to the courts and to the legislatures. And, furthermore, since these two bodies are not “philosophically reflective enough to deal with moral issues which are integral to debates on religious issues,” difficulties in meaning, interpretation and application are a given. Under these circumstances, it could be viewed as improper to demand of the state that it be subject always to “the higher law of God.” Nevertheless, it has been suggested that since the “bedrock of moral order is religion,” politics and morality can only be viewed as inseparable. Interestingly, today political activists now include religious believers who seek not only to shape public policy but often to seize state power.

If the proposition is advanced that only religion provides morality with a foundation, then it follows that religion may be taken as an “independent moral force” in American society. Yet, the extent of its independence remains a complex and volatile issue. While some religions advance civic responsibility as a noble virtue and set high levels of moral performance in daily life, others stress a form of political withdrawal and personal passivity and, still others, are obsessive and fanatical.

Historically, however, religion is seen as an associative force that serves to strengthen moral solidarity as well as political attachment. This is seen dramatically in the work of various communities of faith where strong welfare organizations are developed which, in turn, draw upon high levels of popular participation in promoting multiple forms of everyday assistance.

In an effort to understand the evolution of religion, recent study has yielded a new postulation: namely, that memes, as transmittable units of culture (found, for example in songs, poems and fashions), advance religion from generation to generation. Memes, framed from the word gene, by geneticist Richard Dawkins, are learned by instruction and imitation. They may or may not be beneficial to those holding them and serve only to the extent that they are transmitted effectively from person to person. Under this theory, then, culture—rather than biology—is responsible for the transmission of religious memes.

The Law of Religion in Australia
and Other Considerations

Although Cicero is thought to have been responsible for attempting to define religion, today the courts continue to grapple with a contemporary definition. A commonly accepted lay definition of the term states that a religion “means belief that the totality of existence includes objective overall purpose or significance beyond pure reason or the senses.

The High Court of Australia did not deal directly and definitively with this issue until 1983 in the case of *Church of the New Faith v. Commissioner of Payroll Tax (Vic)*. Here, it overturned two appeal decisions of the Supreme Court of Victoria which had held, in essence, that—under the Victorian Payroll Tax Act of 1971—the Church of the New Faith, formed to promote Scientology, was not a religious institution whose ways were exempt for payroll tax under the Act.

In the three judgments in *Church of the New Faith*, two were written jointly—the first by Chief Justice Mason and Justice Brennan, the second by Justice Murphy and the third by Justices Wilson and Deane. All three judgments attempt to define, and thereby interpret, religion.

For the Chief Justice and Justice Brennan, theism is not an essential element of religion. Rather, “it is belief in a supernatural being, thing or principle” and “the acceptance of conduct to give effect to that body.” Thus, religion not only encompasses conduct but belief as well. Indeed, beliefs, practices, and observances are all central to this analysis.

For Justice Murphy, casting his judicial net as far as possible, results in testing the validity of a religion’s claim that it truly a religion by, broadly, evaluating the centrality of its position and whether it proposes a way to achieve purpose in life. Accordingly, “Any body which attempts to be religious and offers a way to find meaning and purpose in life is religious.

The third judgment, authored by Justice Wilson and Deane, references its foundation to then current meanings of the word, religion, in the United States and thereby presents as much broader template for analysis which may be thought of as somewhere between the previous judgments in the case at bar. Under their opinion, a range of indici test is used in the ultimate determination—among them being whether the claimed religion espouses a belief in the supernatural or ideas relating to man’s inherent nature and peace within the universe and advances among its identifiable group followers, particular standards of behavior having supernatural significance and, furthermore, that the adherents of the religion maintain their practices or ideas in fact constitute a religion.
Indeterminacy and Extra-Legal Norms

When hard cases arise in the law and relevant statutes, common law, contracts or constitutional law provisions, do not clearly resolve a dispute in question, a state of indeterminacy results.136 Exactly how this is to be resolved remains unclear. Some argue that noncomprehensive extra-legal norms such as religious views may “guide”—and only guide—judicial decisionmaking in such cases.137 Others contend judges have a right to include religious sources when justifying decisions even though such values are not shared universally138 or even by the litigants. Still others suggest judges must always first seek to develop an analysis that follows a secular model—except in those cases involving issues of human worth where religious arguments may then be considered.139

The nature and extent to which interdisciplinary or extra legal normative outreaches should be tolerated remains problematic. Suffice it to suggest that contemporary law in action would incorporate the Kirby Ethic and allow religious values, when pertinent to the resolution of a particular case, to be allowed so long as they are acknowledged specifically as being a part of the judicial analysis of a case at bar.140 Whenever existing legal authority proves inadequate, conscientious exploration dictates a judge search out the real bases of legal principle and legal policy—whatever grounding they may have.141

A new Associated Press survey of ten countries—the United States, Australia, Britain, Canada, France, Germany, Italy, Mexico, South Korea and Spain—regarding their attitudes toward faith and secularism, found nearly all U.S. respondents saying faith was important to them—with only two percent acknowledging that they did not believe in God.142 Australians, in keeping with their lax attendance at church services,143 were generally split over the importance of faith in their lives.144 Two-thirds of the South Koreans and Canadians polled said religion was central to their lives. Interestingly, Australians, South Koreans and Canadians were united, however, on one major point: they were all strongly opposed to mixing religion and politics.145

Interestingly, other polls have revealed that approximately 85 percent of Americans identify with a religious faith and more than 40 percent attend religious services at least once a week making the United States—with the exception of Iceland and Poland—the most religious nation in the Free World.146

Political Underpinnings

23
Religions, and the moral theologies attendant to them, have a decidedly political character. Indeed, Judaism, Christianity and Islam are regarded, in the main, as political. While being prophetic, they have sought nevertheless, and continue to seek, to challenge the socio-political status quo and attack the economic inequalities of society as well as endeavor to protect the sick and unhealthy and be a voice for the abused and other marginalized interest groups.

When ecumenical political dialogue is engaged, it is a significant and positive undertaking because it provides a forum where citizens and members of faith communities can seek consensus or more often to merely diminish dissension or simply clarify issues of common disagreement, “but always to cultivate the bonds of political community, by reaffirming their ties to one another, in particular their shared commitment to certain authoritative politico-moral premises.”

Often defined as a Christian nation, America still advocates a discursive type of religious pluralism. Allowing, indeed tolerating, an open debate on religion itself becomes the short run or immediate goal. When, however, religion does not inform the debate, but rather undergirds it, the central concern is the extent to which “belief or nonbelief in a God makes the difference in one’s normative stance.”

A distinct feature of modernity is the notion that law is totally secular, without a founding God and, thus, independent of any divine command other than the force of human reason which is, of necessity, directed toward the establishment of intelligible order. A contrary view suggests, “everyone must invoke some God or other because . . . everyone has to speak normatively”—for participation in any public activity calls for an acknowledgment of the need for law.

No doubt, the central question to be posited today is: In a constitutional democracy defining itself as a secular polity, can religion ever be represented as the basis of the rule of law? Can the law’s secular legitimacy be derived from religious principles, values, moral teachings or practices apart from validating a specific historical religion? Finally, does moral adherence to a body of law require belief in a God or not? Throughout most of recorded human history, there has always been a connection between God and the law. For example, the all inclusive name the Bible uses for “God” is elohim which means “authority”—first, divine and secondarily, human.

Whatever the template for contemporary analysis is tied to—a convenantal theology of the Bible, Platonic natural law, Hobbesian natural law or a philosophically informed morality seen in the English Common Law—in America, “the majority of the citizens believe themselves obligated by
a prior, divine morality, despite the fact that most of them are unable to argue for it theoretically.\textsuperscript{160} It is for the philosophers and moral theologians to make these arguments.\textsuperscript{161}

III.

CHRISTIAN THOUGHT
AND EVOLUTION

While Charles Darwin’s ORIGIN OF SPECIES first appeared in 1859 and advanced a theory of organic evolution, arguing—as such—current living species evolved from pre-existing species, more than a century earlier a French naturalist, Chevalier de Lamarck, advanced a theory of progressive evolutionary development derived from “vital forces within living things and the inheritance of acquired characteristics.”\textsuperscript{162} Rather than accept Lamarck’s theory that the process of natural selection was driven by a benign process of individual adaption, Darwin postulated a “survival of the fittest” process in evolutionary development. Indeed, the central feature of Darwinism became the concept of natural selection.\textsuperscript{163}

For the Christian world at that time, the ultimate challenge of Darwinism to it was stated thusly: “Beneficial variation was random and natural selection cruel. If nature reflected the character of its creator, then the God of a Darwinian world acted randomly and cruelly.”\textsuperscript{164} The Darwinian theory of a mindless process of natural selection suggests a universe not only blind to life and humanity but totally indifferent to its operation.\textsuperscript{165} Yet, within this theory was found the elements of what is termed “evolution theodicy.” This, in turn, gave rise to a movement that advocated the acceptance of God’s aloofness or separation from natural evil and thus stood outside a strictly scientific framework of analysis but instead was wed to metaphysical presuppositions about the nature of God.\textsuperscript{166}

Interestingly, while philosophy and science have always been influenced by theology—and especially so with evolutionary theory—evolutionists deny steadfastly the influence.\textsuperscript{167} Yet, as observed, a central metaphysical presupposition infuses the whole of the technical ordering of evolutionary science: namely, that evolution’s success is tied to a doctrine of God. In other words, “It is a theological view that preceded evolution historically and became the metaphysical landscape on which the theory was constructed.”\textsuperscript{168} Today, one of the leading authorities in the field has suggested that the process of evolution should be seen within an historical context which, in turn,
serves as an enhanced guide to understanding nature.\textsuperscript{169}

It is thought that evolutionary information comes from two central sources: the science of genetics and from contemporary culture.\textsuperscript{170} From this comes the view that religion is to be seen “as an information system within culture that is part of the effort of nature to understand itself and conduct itself in freedom.”\textsuperscript{171}

The interrelatedness of all creation is shown time and again by scientific work in genetics. Indeed, the new DNA discoveries restate with convincing clarity the shared evolutionary heritage of all living things\textsuperscript{172} and the constant lifetime interaction between genes and the environment.\textsuperscript{173} Interacting with the biological sciences as a co-efficient, or at least a vector of force, in influencing the total development of the individual is the environment—both the cultural and the physical. Because of the fact that, as cultural beings, individual shape the contexts in which social interactions occur, they exhibit an inherent capacity for ethical behavior and spiritual development.\textsuperscript{174} Indeed, the mystery of the human spirit and the capacity for self-transcendence will never be eliminated by the New Biology.\textsuperscript{175}

While human nature is illuminated by genetic science, it is not explained totally. The complexity, transcendence, and mystery of the human person remains and thus serves as a reference point of intersection between culture and theology as well as the natural sciences.\textsuperscript{176} A positive force in contemporary society is to be seen in the new and ongoing dialogue between genetics, molecular biology, and the theology of human nature which seeks to build upon these very points.\textsuperscript{177} When a distinctly religious voice in, for example, medical ethics becomes passive or is lost, this in turn encourages a form of moral philosophy for the market place and thus places law as the dominant source of morality.\textsuperscript{178} It can only be hoped that from this inter-cultural discourse will come new frameworks for principled decision making which, in turn, promote reasoned and balanced ethical responses to personal and societal challenges of this age of the New Biology.\textsuperscript{179}

\textbf{A Papal Clarification}

On October 23, 1996, in an address by John Paul II to the Pontifical Academy of Science, the Holy Father suggested science and religion are compatible. “Science can purify religion from error and superstition, religion can purify science from idolatry and false absolutes. Each can draw the other into a wider world, a world in which both can flourish.”\textsuperscript{180} As to the specific issue of the
theory of evolution, the Pope acknowledged that it is “more than just a hypothesis.”

While not mentioning Charles Darwin by name, the statement is seen nonetheless as advancing the idea that religious faith and the teaching of evolution can co-exist easily. Indeed, while observing that there are a number of different theories of evolution, the Holy Father, went on to observe that, “It is possible to accept evolution as a theory while affirming that the spiritual and philosophical elements must remain outside the competence of science.” At least for Roman Catholic theology, what had been—up to this time—the most significant point of argument and division between the genetic revolution and theology as a body of thought, is no longer in issue.

Today, a consensus has been reached not only among 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. With the Pope’s acceptance of evolution as a theory, comes the realization that, as such, “Science is not a threat to faith.” Accordingly, what John Paul II did was to chart a middle position between the creationists and evolutionists which, in turn, fosters not only dialogue but an openness to truth.

**Darwinism and Intelligent Design**

In 1991, Philip E. Johnson constructed the philosophical underpinnings of a contemporary intelligent-design movement which, in essence, asserts the theory of Darwinian evolution is based on inaccurate assumptions and weak evidence. More specifically, the small and vocal number of biologists, chemists, philosophers and mathematicians who constitute the membership of the movement, argue that because of the refusal of mainstream science to consider anything but natural explanations for things, it is therefore biased subjectively against proofs of supernatural intervention in the evolutionary process. Thus, the efficacy of the evidence for evolution through natural processes is called in question.

Proponents of the theory of intelligent design believe, simply, that an intelligent agent (but not necessarily using the word, God) has guided the history of the earth. Criticized as not being a science, the president of The National Academy of Science has termed intelligent design as nothing more than a “way of restating creationism in a different formulation.”

For the vast majority of the scientific community, evolution began billions of years ago and was
both unsupervised and impersonal. Yet, others find significant gaps in the scientific record that leave evolution more a theory than a documented fact. Accordingly, they put forth the notion that the evolution of the species took place over time by the grand design of a transcendent personal creator. These Creationists also contend that the true age of the earth should, as inferred from the Bible, be computed in thousands of years—not billions. 

With the publication in 1965 of THE GENESIS FLOOD, the term, “creation science” was introduced into the American vocabulary. Soon thereafter, a whole movement took shape. Followers of the creation science movement, termed creationists, adopt the Biblical narrative of the Book of Genesis as their theory of origin, accepting as such the creation of the world by a personal God. For the creationists, only two possible constructs can be employed to resolve the question of the origin of life and of the universe: theistic and atheistic. In other words, God is acknowledged as the creator of history or life and seen as a evolutionary dynamic.

The book of Genesis has not been accepted in the public school classrooms of the Nation as a teaching source nor has creation science succeeded in re-shaping mainstream science. Indeed, led by the National Academy of Science, mainstream scientific organizations have rejected totally the creationist approach.

Central to the claims of the legitimacy of creationism is an apparent conundrum: normally, if creationists accept the Bible as true and infallible, why is it regarded as important to link science with it? The answer given is that since creationism does not qualify as a science in that it does not afford a set of hypotheses capable of being tested, a higher level of legitimacy is sought for it by placing science at its heart or as its modus operandi. “Modern Americans cling to scientific rhetoric no matter what the issue.” Indeed, “scientific sanctification” validates many conservative beliefs by attributing scientific credibility to their biblical interpretations. What is seen in reality, then, is that by shifting attention from issues of faith and value to those of scientific interpretation, the scientific creationists have “reduced the Bible to the level of a science.”

Since mainstream Christians and Jews do not see the Bible and evolutionary theory as inconsistent, modern creation science is not a contemporary issue of great moment. Rather, they understand that science, itself, can neither tackle and resolve the moral issues of the day nor serve as a template for living life to the fullest. Put simply, “whether rejected or accepted, evolution cannot speak to the vital issue of right and wrong.”
Scopes and Its Aftermath

When in 1925 in Dayton, Tennessee, a high school science teacher, John T. Scopes, taught a class on evolutionary theory, a national debate was thereby triggered over the origins of humans which—in turn—forced the Nation to confront not only its fears and suspicions of scientific knowledge, but its application and uses as well. In essence, the “Scopes Monkey Trial” pitted religion, and a fundamentalist view of divine creation (e.g., creationism) against scientific thought on evolution. It became a harbinger of the utilization of evolutionary biology that did not begin however until after World War II.

In 1925, the Tennessee Legislature became the first state in the Nation to enact a law against the teaching of evolution in the public schools. Not only was Darwinism banned, but all teaching concerned with human evolution as well and criminal sanctions were imposed for violations. Originally initiated by the ACLU as a means of invalidating the state’s anti-evolution statute as a violation of the First Amendment, in the end, Scopes lost and was found guilty by a jury and the court imposed a fine of $100.00. On appeal, the Supreme Court of Tennessee went back to the original legal issue—that is, whether the anti-evolution statute was inconsistent with the state constitution’s religion clause which forbade preferences being given, by law, “to any religious establishment or mode of worship.” With but one dissent, the court held that the challenged legislation was constitutional. Yet, on a technicality, Scope’s conviction was reversed. Since, under the Tennessee Constitution, any fine greater than $50.00 could be assessed only by a jury, it was held that the trial judge had no jurisdiction to impose the $100.00 fine.

The historians of the 1950’s and the commentators of the 1930’s saw the Scope trial at two levels: both groups agreed that it was a defeat for fundamentalism, while the commentators of that period during which the trial occurred saw it as a “media spectacular.”

In the end, then, perhaps the Scopes trial can be viewed properly as “a step in the triumph of reason over revelation and science over superstition.” Or, stated otherwise, the enduring importance of Scopes is that it embodied the quintessential “American struggle between individual liberty and majoritarian democracy, and cast it in the timeless debate over science and religion.” The Scopes controversy continues to persist even today. It is recast now as creation science (as opposed to creationism) versus evolution.
IV.  
A CREATIVE PARTNERSHIP?

Religion, and its denominational theologies, set normative standards for ethical conduct and, thus, serve as a construct for social decision making. Alternatively, as suggested, these norms and constructs can be seen properly as a third culture—interpreting, reconciling and stabilizing law and medical science. Yet, if the view is accepted that the “bedrock of moral order is religion,”213 it must follow that law and science not only build upon it but are linked irretrievably to it in all of their present policies and actions.

The alternative hypothesis suggests the synergistic forces of law, religion, and science combine in a dynamic partnership to form a communitarian alliance dedicated to providing a framework in which man can pursue the peace of ordered harmony which allows for a balanced happiness in his social, spiritual, and physical relationships.214 Within the alliance, the rank or equality of status depends largely upon the frame of reference taken for each problem presented.

Historically, there can be no disputation of the first order significance of the moral and ethical theories and principles derived from religion. Indeed, it has been suggested that without religious beliefs, moral teachings merely “hang in the air” without any foundation.215 In contemporary society, however, law—as has been suggested—must assume the primary role of directing and stabilizing all courses of human affairs—fortified in interpretative analysis, to be sure, by ethical and moral principles. In public matters, however, if not a Jeffersonian “wall of separation” between matters of church and state, then at least a Madisonian “scrupulous neutrality” must be maintained if faithfulness to the original intent of the framers of the Constitution is to be respected.216

While Americans believe in “The Living Constitution” as a “morphing document” evolving from age to age according to majority wishes217—expressed and manifested ideally, as such, through a “deliberative” democratic process218 (sadly, not guided by informed judgment)—the central weakness to this theory of living constitutionalism is that there is no one guiding principle for it to follow.219 In contemporary issues of bio-medicine, there is little “rational” deliberation by the populace. This condition, in turn, forces the judiciary—as interpreters of the laws and the social conscious—to define and inevitably test current medico-legal issues by the text and legislative history of the Constitution thereby providing, ideally, both predictably and stability to both an evolving and highly contentious area of the law.220
Compatibilities and Incompatibilities

The duality of man or the recognition of his spiritual and material sides, has not been the grounds upon which contemporary science has advanced. Rather than challenge and attack this concept, science has merely set it aside and defined as non-scientific all inquiries into spiritual matters. As the scientific dialogue has assumed increasingly that man is no more than matter and energy, dualism has nearly disappeared. Yet, throughout modern science, there remains a continuing search for an intersection point between values and empiricism.

Perhaps the noblest and most practical point of balance between religion and science should be love, justice or humaneness—for its achievement by man promotes the essence of faith by instilling meaning and value to the life-experience and also enhances one’s overall physical well being. Stated otherwise, the fulcrum of this balancing test between religion and science is the achievement of a point of equilibrium that promotes policies and shapes direct actions that minimize suffering and improve the social well-being of all men.

There is a common misperception that religion needs only faith in order to sustain itself. The correct understanding is that “religion requires belief and belief is built on knowledge.” Within differing contexts, both science and theology, then, seek truth and wise judgment.

Toward Reconciliation

Not every scientist must become a believer nor every believer embrace science totally in order for there to be a reconciliation between science and faith. While viewed from vastly different perspectives, the biblical and the scientific description of the creation of the universe and the beginning of life or earth present identical realities. Once these perspectives are identified, they can coexist rather comfortably. If an acceptance of the need to read and understand the Bible on the Bible’s terms—complete with subtextual levels of interpretation—is understood and science then admits it is powerless to either confirm or deny a purpose for life, a true reconciliation between science and faith will be achieved.

Scientific investigation is in fact very similar to religious experience. In science, the defining event is when that which was unknown becomes visible and even clear. In spirituality, experiences with meaning, purpose, and teleology are foundational. Thus, semantic differences remain small between scientific insight and what is termed—in the language of religion—revelation.
CONCLUSION

Shaping a Unified Goal and Response

The theologies of the world religions not only demand an answer but also prompt a response to the problem of suffering—for they assist in seeking an explanation to, or rationalization of, suffering. In one very real sense, then, the New Biology is considered properly as a theological response to the enigma of human suffering. The medical scientists and physicians endeavor to cure. Through therapeutics and investigation, the purpose of religion and medical science is the same: to minimize or ameliorate suffering.\textsuperscript{229}

It remains ultimately for law to serve as a primary mechanism for effecting this duality of purpose through wise and humane legislation, administrative policy making, and judicial interpretations designed to assume both distributive and corrective justice in the delivery of health care and the advancement of medical science\textsuperscript{230} which, in turn, promote the personal dignity, value and integrity of the human person.\textsuperscript{231}

Law’s Challenge and The Kirby Ideal

In the “dreamtime” of tomorrow, comparative jurisprudence and international law—together with a reliance on interdisciplinary disciplines—will be the touchstones for contemporary lawmaking which seeks to both elevate and thereby validate the nobility of the human purpose and protect its free and oftentimes diverse exercise;\textsuperscript{232} eschews parochial strait jackets and, instead, codifies humanistic values;\textsuperscript{233} and, furthermore, recognizes its compass must always point to the advancement of human rights.\textsuperscript{234}

If lawyers are to continue to play a relevant role in the “dreamtime,” they must become more aware of the nature and consequences of the scientific and technological advances of the Age.\textsuperscript{235} Otherwise, they will not only “increasingly lack understanding of the questions to be asked, let alone the answers to be given.”\textsuperscript{236} For, it is well to remember that “doing nothing has just as many consequences as doing something.”\textsuperscript{237}

“Unless interdisciplinary machinery can be developed, capable of consulting the experts and the general community and helping [legislatures] with social and legal implications of medical developments,” we must then be forced to acknowledge the inability of democratic institutions to respond to the challenges of science and technology—unmistakenly “the great engines” of the 21st
It is well to remember that even though science promises an unpredictable future, futures are inevitably unpredictable. The most fundamental lesson to be learned from the march of science and technology, then, is that in order to foresee development of the future, controlled leaps of the imagination must be engaged in. In the final analysis, the observations of Justice Kirby are pertinent:

“If democracy is to be more than a myth and a shibboleth in the age of natural science and technology and more than a triennial visit to a polling booth, we need a new institutional response.”

—a response that is both informed and guided by the Kirby Ethic that I have delineated previously. If we fail in this challenge, Justice Kirby continues, “we must simply resign ourselves to being taken” where the machines of science and technology move us. Such a pathway “may involve nothing less than the demise of the Rule of Law as we know it.”

It is for “society to decide whether there is an alternative or whether the dilemmas posed by modern science and technology, particularly in bioethics, are just too painful, technical, complicated, sensitive and controversial for our institutions of government.”
ENDNOTES

* B.S., J.D., Indiana University-Bloomington; LL.M. Columbia University; LL.D., Indiana University-Bloomington. Professor of Law, The Catholic University of America.

The research and writing of the monograph began in Spring, 2005, when the author was a Visiting Fellow at the Emory University Center for the Interdisciplinary Study of Religion and continued while he was a Visiting Fellow at Wolfson College, University of Cambridge in June.


Professor Smith expresses his gratitude to Dean Rosalind Croucher and her colleagues at the Division of Law during his stay as a Distinguished Visiting Professor at Macquarie during July—August, 2005.


2. Larry Copeland, Church-and-State Standoffs Spread over USA, USA TODAY, Sept. 30, 2003, at15A.


On October 12, 2004, the United States Supreme Court granted review of Van Orden v. Perry, 351 F.3d 173 (6th Cir.), 72 U.S.L.W. 3702, and addressed the question of whether a six foot high, three foot wide monument presenting the Ten Commandments and located on a stretch of state owned property between the Texas State Capitol and the Texas Supreme Court promotes the establishment of religion in violation of the First Amendment. On this same date, the High Court granted certiorari to review McCreary County, Ky. v. American Civil Liberties Union of Kentucky, 354 F.3d 438 (6th Cir.), 72 U.S.L.W. 1389. Here, essentially, the Court reviewed a lower court ruling barring an exhibition of displays of the Ten Commandments in court houses and public school buildings together with other secular documents (e.g., The Declaration of Independence and the Magna Carta) and symbols which have had a significant role in shaping the American legal system, as a violation of the First Amendment’s Establishment Clause.

On June 27, 2005, in Van Orden, a 5-4 court held a valid secular purpose was to be found in the display of the Commandments donated by the Fraternal Order of Eagles over some 40 years ago, as but one of seventeen sculptures on the State Capitol grounds—and, as displayed, they have a dual historical and religious meaning and did not promote a significant religious message which violates the Establishment Clause. 125 S.Ct. 2854 (June 28, 2005).

In McCreary, decided the same day, a 5-4 court held there was no valid secular purpose in courthouse displays of the Commandments. The crucial difference in the two cases is to be found in the origins of the displays—for, in McCreary, the Commandments were displayed first, by themselves, on the courthouse walls in Kentucky by county officials. Other historical
documents were not added to the displays until the American Civil Liberties complained that—standing alone—the Commandments promoted religion. 125 S.Ct. 2722 (June 28, 2005).

   On June 14, 2004, the U.S. Supreme Court held that Michael A. Nedow had no standing to sue the school district where his daughter attended elementary school, on her behalf, to ban the words, “under God,” from the Pledge of Allegiance. ___ U.S. ___, 124 S.Ct. 2301 (2004).
   Interestingly, an April 2004 Gallup Poll revealed only 8% of the public wanted the “under God” clause removed from the Pledge—with 91% wishing to retain it. See Charles Lane, Justices Keep ‘Under God’ in Pledge, WASH. POST, June 15, 2004, at A1.


   See generally William Carey, American Democracy and The Politics of Faith, ch. 5 in RELIGION RETURNS TO THE PUBLIC SQUARE, supra note 1; A. JAMES REICHLEY, FAITH IN POLITICS (2002).


12. *Id.* at 190.

13. *Id.* at 200-205.


16. 335 F.3d 1282 (11th Cir. 2003).


   In a September, 2003, pool of 1,003 adults conducted by USA TODAY/CNN/Gallup, it was determined that 70% of the respondents approve of the placement of Ten Commandments monuments in public places. *Id.*


23. Van Orden v. Perry, 351 F.3d 173, 176 (5th Cir. 2003).


26. Stone v. Graham, *id.* at 42 (their use in teaching a secular study of comparative religion, history or civilization is acceptable).


31. DOUGLAS W. KMIEC, supra note 29 at 97.


33. Id.

34. Id.

35. REICHLEY, supra note 7 at 8.


38. Id.

39. Id.


   I am, of course, expanding the “unalienable” rights to life, liberty and happiness set out in the Declaration of Independence to include, modernly, the right to access good genetic health since being healthy is required usually for total happiness.


45. Id.
46. *Id.*

47. *Id.* at 24, 25.

48. *Id.* at 25.

   *See generally* TAD S. CLEMENTS, SCIENCE vs. RELIGION (1990).

49. CHAPMAN, *id.* at 31, 32.

50. *Id.* at 32.

   Various reports, policy statements and studies have been commissioned by eight major
North American Protestant denominations (including the Methodist, Episcopal, Lutheran,
Presbyterian and Baptist churches) which address the religious and ethical ramifications of the
science of genetics. *Id.* at 34 *passim.*

51. *See generally* KEVIN D. O’ROURKE & PHILIP BOYLE, MEDICAL ETHICS: SOURCES
FOR CATHOLIC TEACHING (2d. ed. 1993).

52. CHAPMAN, *supra* note 44 at 40.

53. *Id.* at 37.

54. RICHARD A. McCORMICK, THE CRITICAL CALLING: REFLECTIONS ON
MORAL DILEMMAS SINCE VATICAN II at 267 (1989).

   Alterations of infrahuman life—if judged to be advantageous to a fuller human life—may be
allowable under the Roman Catholic faith. Rihito Kimura, *Religious Aspects of Genetic
Information* in HUMAN GENETIC INFORMATION: SCIENCE, LAW AND ETHICS at 157

55. *See generally* Sarah Delaney, *Pope Condemns Cloning of Human Embryos & Organ Transplant
Stoeger & George Coyne *infra* note 183; Cindy Wooden, *Human Cloning Would Be A Crime

56. *Supra* note 44 at 45.

57. *Id.* at 44-46.

58. David H. Smith, *Creation, Preservation and All The Blessings*, 81 ANGLICAN THEOL.

59. *Id.* at 568, 569.

   *See generally* IAN BARBOUR, RELIGION IN AN AGE OF SCIENCE (1990).


62. St. Augustine, THE CITY OF GOD, book xix, c.1 at ps. 112-14 (John Healey trans. 1931). One finds happiness—or attains the peace of a rational soul (defined, in turn, as an ordered harmony of knowing and doing)—only within society itself. The happy life, then, is social and is guided by love which is seen as service and acknowledged as the universal good. Ernest Barker makes these points eloquently in his introduction to this translation at xxv—xxvii, xxxiv, xliii.


63. Hall supra note 62 at 1270.

64. Id.

See generally MARTIN RHONHEIMER, NATURAL LAW AND PRACTICAL REASON: A THOMIST VIEW OF MORAL AUTONOMY (Gerald Malsbary trans. 2000).


66. Id. at 11.


70. Id.

71. Kass, supra note 68 at 65.


75. See e.g., Arts. 15, 21, 24.

77. Art. 22 (b); Art. 13 (i).

78. BERMAN, supra note 65 at 25.

79. Id. at 79.


81. Id. at 391.


84. KIRBY, supra note 76, THROUGH THE WORLD’S EYE at xiii.

85. RONALD P. SOKOL, JUSTICE AFTER DARWIN 76 (1975).


87. Id.

88. Id.

89. Id.

90. ARISTOTLE, NICHOMACHEAN ETHICS (Martin Osterwald trans., 1962).


92. Id. at 274—275.

93. Id. at 275.
94. See supra note 67.

95. Warren E. Burger, Reflections on Law and Experimental Medicine, in 1 ETHICAL, LEGAL & SOCIAL CHALLENGES TO A BRAVE NEW WORLD 211 (George P. Smith, II, ed. 1982).


98. Id. at 77, 93.


103. Id. at 407, 500.

104. Id. at 420.


See also REICHLEY, supra note 7 at ch. 3.

106. MICHAEL NOVAK, id. at 28-29.

107. Id. at 30.

108. Id. at 30, 33.

109. Id. at 70.

110. Id. at 77.

While the framers valued the contribution religion made to morals, “they distrusted faith, the transcendent dimension of religion, the yearning for the divine likely to express itself in prophecy, theology, or mysticism.” William Carey McWilliams, American Democracy and The Politics of Faith ch. 5 in RELIGION RETURNS TO THE PUBLIC SQUARE supra note 1 at 147.

111. FRED M. FROHOCK, HEALING POWERS 140 (1992).

See generally R. Kent Greenawalt, Diverse Perspectives and The Religion Clauses: An Examination of Justifications and Qualifying Beliefs, 74 NOTRE DAME L. REV. 1433 (1999).
112. *Id.*


113. FROHOCK *supra* note 111.


115. FROHOCK, *supra* note 111.


121. *Id.* at 623.


123. Michael Walzer, *supra* note 120 at 624.

124. *Id.* at 630.

125. *Id.*


See also SUSAN J. BLACKMORE, THE MEME MACHINE (2000).
127. Reichberg, supra note 35 at 22.

128. Id.

129. (1983) 154 CLR 120.

In two earlier cases—Adelaide Company of Jehovah’s Witnesses Inc. v. The Commonwealth (1943) 67 CLR 116 (1943) and Kryger v. Williams (1912) 15 CLR 365 — the High Court chose not to take decisive action on this definitional issue.


131. 154 CLR at 132.


133. 154 CLR at 151.

134. Kaye, supra note 132.

135. 154 CLR at 173, 174.


137. KENT GREENAWALT, PRIVATE CONSCIENTES AND PUBLIC REASON 142 (1995).


141. Id.

143. The Chief Justice of the Australian High Court, Murray Gleeson, observed that the
majority of people [in Australia] do not attend church services. Murray Gleeson, The Relevance

144. supra note 142.

145. Id.

146. REICHLEY supra note 7 at 1.

147. MICHAEL J. PERRY, LOVE AND POWER: THE ROLE OF RELIGION IN
See also CHAPMAN, supra note 44 at 17.

148. PERRY, id. at 78.

149. Id. at 124, 125.


151. Id. at 576.

152. Id. at 576, 577.

153. Id. at 580.

154. Novak, supra note 116 at 593.

155. Id. at 572.

156. Id.

157. Id. at 573.
See generally Pierre Schlag, Law as the Continuation of God by Other Means, 85 CAL. L.

158. Novak, supra note 116 at 574.

159. Id. at 575.

160. Id. at 595, 596.

161. Id. at 596.
See RONALD DWORKIN, LAW’s EMPIRE 407 (1986).

163. *Id.* at 16. The theory of evolution focuses on changes in life once begun rather than the origins of life.

164. *Id.* at 17.
   

165. CHAPMAN, *supra* note 44 at 169.


167. *Id.* at 160.

168. *Id.* at 159.
   


170. CHAPMAN, *supra* note 44 at 172 (citing PHILIP HEFNER, THE HUMAN FACTOR: EVOLUTION, CULTURE AND RELIGION at 37 (1993)).

171. CHAPMAN, *supra* note 44 at 173 (citing P. HEFNER, *id.* at 156).

172. CHAPMAN, *id.* at 175.

173. *Id.* at 178.

174. *Id.*

175. *Id.*

176. *Id.*

   
   CHAPMAN, *supra* note 44 at 199—204.

178. CHAPMAN, *supra* note 44 at 15 (relying upon the philosophy of Daniel Callahan).


182. *Id*. at A12.


184. CHAPMAN, *supra* note 44 at 235.

185. J.A. MOORE, FROM GENESIS TO GENETICS at 190, 191 (2002).


187. *Id.* at 389.


190. BRIAN J. ALTERS & SANDRA M. ALTERS, DEFENDING EVOLUTION IN THE CLASSROOM: A GUIDE TO THE CREATION/ EVOLUTION CONTROVERSY (2001). See Edward B. Davis & Robin Collins, ch. 25, Scientific Naturalism in SCIENCE AND RELIGION: A HISTORICAL INTRODUCTION, *supra* note 5 (analyzing the advocates of intelligent design attacks on scientific naturalism or the claims that “all objects, processes, truths, and facts about nature fall within the scope of scientific method” at 322).


197. *Id.* at 351.


198. STEVEN GOLDBERG, SEDUCED BY SCIENCE 33 (1999).

199. *Id.* at 35, 36.

200. *Id.* at 36.

201. *Id.* at 37.

202. *Id.* at 25.

203. *Id.* at 38, 39.

204. *Id.* at 39.


208. LARSON, *supra* note 162 at 239.

See generally EDWARD A. WHITE, SCIENCE AND RELIGION IN AMERICAN THOUGHT: THE IMPACT OF NATURALISM (1952).

209. LARSON, *supra* note 162 at 227.

210. *Id.* at 265.


See also News Service, *Bush Goes Out on a Limb for Creator*, The AUSTRALIAN,
August 1, 2005, at 10 (reporting on President George Bush’s essential endorsement of efforts by Christian conservatives to allow both evolution and intelligent design to be taught in the public schools); Laurie Goodstein, Teaching of Creationism is Endorsed in New Survey, N.Y. TIMES, Aug. 31, 2005, at 9 (reporting on the results of a survey which found nearly two-thirds of Americans support the idea of teaching creationism alongside evolution in public school curricula offerings).


214. See St. Augustine, supra note 62.


216. See Witte, supra note 115.
    See generally GOLDBERG supra note 198 at ch. 8; R. KENT GREENAWALT, RELIGIOUS CONVICTIONS AND POLITICAL CHOICE (1988).


218. CASS R. SUNSTEIN, THE PARTIAL CONSTITUTION chs. 4-6 (1993).

219. SCALIA, supra note 217 at 44, 45.

220. See id., supra note 217 at 44 passim.

221. GOLDBERG, supra note 198 at 18.

222. Id.

223. Id. at 135.
    See generally GUSTAFSON, supra note 177.

224. George P. Smith, II, supra note 82.


226. JOHN POLKINGHORNE, BELIEF IN GOD IN AN AGE OF SCIENCE 92 (1998).

227. SCHROEDER, supra note 225 at 21, 141.
    Science has already sought to close biblical ranks by recognizing there was not only a beginning to the universe but that life began on earth rapidly following water and not through millennia of random sets of reactions. Id. at 29.
    See also ARTHUR PEACOCKE, PATHS FROM SCIENCE TOWARDS GOD: THE END OF ALL OUR EXPLORING chs. 1, 2 (2001).
228. See SCHROEDER, supra note 225; ARTHUR PEACOCKE, THEOLOGY FOR A SCIENTIFIC AGE (1993).


Interestingly, eighty-four percent of Americans think that praying for the sick improves their chances of recovery. Claudia Kalb, supra note 6 at 46. But, there is no scientific proof that prayer induces healing, however. Symposium, Prayer and Healing: Can Spirituality Influence Health? 15 CQ RESEARCHER 25 (Jan. 14, 2005); Rob Stein, Prayer Power to Heal Strangers Is Examined, WASH. POST, July 15, 2005, at A8.


233. See Kirby, supra note 76, THROUGH THE WORLD’S EYE at xviii, ch. 15.


236. Id.

237. Kirby, supra note 140, The Hamlyn Lectures at 88 fn. 386 (quoting Lord Justice Sedley).


See also Michael D. Kirby, Health, Law and Ethics, 5 J. LAW & MED. 31, 34 (1997).

239. Jones & Goldsmith, supra note 102 at 499.

240. Kirby, supra note 76, THROUGH THE WORLD’S EYE, at 48.

241. Kirby, supra note 101, REFORM THE LAW, at 238, ch. 4.
242. *Id.*

    *See also* Kirby, *supra* note 76, THROUGH THE WORLD’S EYE, at 50, 51.

243. *Id.*

244. *Id.*