

Cloning: A Jewish Law Perspective with a Comparative Study of Other Abrahamic Traditions

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INTRODUCTION

Modern scientists are now engaged in studies that even the great writers of science fiction, such as Orson Scott Card, Carl Sagan, Piers Anthony, and Issac Asimov could not have envisioned mere decades ago. Genetic engineering has reached the stage of experimental medical application. There is no longer any doubt that the Human Genome Project will successfully map a complete DNA structure. In fact, scientists are now advancing the development of animal cloning procedures. In time, science will enable us to clone, and perhaps even modify, a human being with implanted genes as desired by the progenitor. "There is little doubt that soon on the horizon there will be yet another (modified) form of cloning that would permit the taking of nucleic genetic material from a variety of sources without incorporating the genetic material of just one person."¹ This

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¹ Michael Broyde, *Cloning People: A Jewish Law Analysis of the Issues*, 30 CONN. L. REV. 503, 523 (1998). That we, as a world society, should have learned our lesson is not a fully satisfactory response to the danger of the genetically engineered person. Nothing in the Talmud, however, supports the prohibition of an otherwise lawful activity because it may lead to immoral or even unlawful activity. "As a religion of law, the basic principle is that if a specific act or course of action is not proscribed as a contravention of a divine prohibition, or condemned as a violation of the spirit of the law, then, by definition, the action is permitted." J. DAVID BLEICH, *BIOETHICAL DILEMMAS: A JEWISH PERSPECTIVE* 204 (1998) [hereinafter *BIOETHICAL DILEMMAS*].

The principle that we should "place a fence around Torah" to assure that we comply with its commandments by extending the duties and taking steps to remove temptation could be applied to some of the issues surrounding the cloning debate. A. COHEN, *EVERYMAN'S TALMUD* 150 (1975). Applying the "fence" principle to the cloning issues, however, would be very difficult.

prospect for many persons, especially for those who were the victims of, or remember, the Nazi eugenics "experiments,"² is awesome. It has been recognized that "[t]he eugenics experiments of the Nazis inevitably color discussion of this topic in the public mind and certainly in Jewish minds," and at the very least this form of cloning "must clearly be forbidden."³

Cloning will likely one day allow organic development through a process similar to that imagined in *Jurassic Park*.⁴ Human cloning, quite possibly, could proceed by using the cells from a deceased person, just as the dinosaur age creatures in *Jurassic Park* were created from dinosaur DNA preserved in amber.⁵ This possibility reflects the new face of biological research in cloning.

In its basic sense, the word "clone" "refers to a precise genetic copy of a molecule, cell, plant, animal, or human being. In some of these contexts, cloning refers to established technologies that have

² When the Nazis came to power in 1933, they initiated a eugenics program that, among other things, used marriage controls, forced sterilization and castration, and forced women, regardless of marital status, to bear children by members of the SS, to "enhance" the "master race." See generally CATRINE CLAY & MICHAEL LEAPMAN, *MASTER RACE: THE LEBENSBORN EXPERIMENT IN NAZI GERMANY* (1995); see also STEFAN KÜHL, *THE NAZI CONNECTION: EUGENICS, AMERICAN RACISM, AND GERMAN NATIONAL SOCIALISM* (1994). Kühl outlines some of the laws enacted to promote "good stock," "hereditarily valuable" farmers, and other racial improvements combined with elimination of "inferior" races. See *id.* at 29. These laws included The Decree for the Granting of Marriage Loans (to foster desired procreation); The Law on Preventing Hereditarily Ill Progeny (sterilization of persons with mental or physical afflictions); The Law Against Dangerous Habitual Criminals (sterilization and castration of criminals); and The Law for the Unification of Health Administration (to support "hereditary and racial care"). See *id.* Numerous so-called medical and eugenics experiments were conducted at concentration camps.

³ Elliot N. Dorff, *Human Cloning: A Jewish Perspective*, 8 S. CAL. INTERDISC. L.J. 117, 119 (1998).

⁴ See MICHAEL CRICHTON, *JURASSIC PARK* (1990). The writer remembers an earlier book, *The Boys from Brazil*, which he vividly remembers closing with a scene in which a young, orphaned boy with a shock of black hair was sitting and playing his musical instrument. See IRA LEVIN, *THE BOYS FROM BRAZIL* (1978). The image of this cloned young boy, with the genetic makeup of Adolph Hitler, has never left my mind.

⁵ Were cloning from cells from a deceased person to occur, Halakhic issues concerning limitations on desecration of the body would come into play. Similar issues have been addressed in reference to organ transplants, in which the principle of saving life, in general, has overcome the rules prohibiting desecration of the body. See Stephen J. Werber, *Ancient Answers to Modern Questions: Death, Dying and Organ Transplants—A Jewish Perspective*, 11 J.L. & HEALTH 13, 23-27 (1996-1997) and authorities cited therein; see also JOHN D. RAYNOR, *JEWISH RELIGIOUS LAW: A PROGRESSIVE PERSPECTIVE* 124-26 (1998) (noting that rules regarding treatment of the body of a deceased may be set aside if there is the chance of saving a life using that body). Reasoning similar to that applied in the organ donation context could be applied to permit cloning procedures that require the removal of cells from a decedent.

been part of agricultural practice . . . and currently form an important part of the foundations of modern biological research."⁶ The belief that this biological research may allow human beings to be cloned—"created from a single somatic cell without sexual reproduction"⁷—is no longer limited to the innovative thinking of science fiction writers. Biological researchers may well have responded to the February 23, 1997 announcement that Scottish scientist Ian Wilmut had successfully cloned a sheep,⁸ in much the manner as physicists reacted to publication of Einstein's Theory of Relativity or the world's reaction to the bomb delivered by the Enola Gay. Dolly, the cloned sheep, represented the first time that cloning was fully successful in mammals.⁹ President Clinton immediately asked the National Bioethics Advisory Commission (NBAC) to review the legal and ethical issues relating to cloning technology.¹⁰

The NBAC knew that this new technology spoke to the creation of human beings. The NBAC stated in the Executive Summary of its report that "any effort in humans to transfer a somatic cell nucleus into an enucleated egg involves the creation of an embryo, with the apparent potential to be implanted in utero and developed to term."¹¹ In closing its discussion of the science of cloning and its

⁶ I National Bioethics Advisory Comm'n, CLONING HUMAN BEINGS: REPORT AND RECOMMENDATIONS OF THE NAT'L BIOETHICS ADVISORY COMM'N 13-14 (1997) [hereinafter NBAC REPORT].

⁷ *Id.* at i. That the potential for human cloning exists, based on the DNA similarity between humans and other mammals, has been emphatically stated: "It should be noted that there is very little difference among mammals with respect to DNA; meaning the cloning of human beings now poses no significant technological hurdles." Joshua H. Lipschutz, *To Clone or Not to Clone—A Jewish Perspective*, 25 J. MED. ETHICS 105, 105 (1999) (emphasis added). Within a "very short number of years, it will be medically possible to clone human beings." Broyde, *supra* note 1, at 508.

⁸ Dolly the sheep was successfully cloned, and born on July 5, 1996. See I NBAC REPORT, *supra* note 6, at i.

⁹ See *id.* at i. Perhaps lost in the haze of a media blitz surrounding Dolly was the announcement, just one week later, that researchers in Oregon had produced genetically identical rhesus monkeys through nuclear transfer. See Alicia DiRado, *Monkey Duo Primes the Debate on Cloning*, PORTLAND OREGONIAN, Mar. 3, 1997, at A1.

¹⁰ See Letter from Bill Clinton, President of the United States, to Dr. Harold Shapiro, Chair, National Bioethics Advisory Committee (Feb. 24, 1997) (in I NBAC REPORT, *supra* note 6). Other governmental organizations also sought a prompt review of the issues raised by the announcement. See generally Advisors to the President of the European Commission on the Ethical Implications of Biotechnology, *Ethical Aspects of Cloning Techniques* (May 28, 1997), in 23 J. MED. ETHICS 349 (1997).

¹¹ I NBAC REPORT, *supra* note 6, at i. Chapter Two of the NBAC Report provides details of the science and technology that is now being utilized in biological research efforts to enhance the ability to clone, the changes that have taken place in this technology, and remaining scientific difficulties. See *id.* at 13-38; see also Potter

applications, the report observed that the technology that created Dolly, "somatic cell nuclear transplant cloning," develops an "animal that is a 'delayed' genetic twin of the adult."¹² This approach has enormous potential for "biotechnology, livestock production, and new medical approaches," including "prospects for regeneration and repair of human tissues."¹³ These potential benefits, however, come with a substantial downside:

[T]he possibility of using human cloning for the purposes of creating a new individual entails significant scientific uncertainty and medical risk at this time. Potential risks include those known to be associated with the manipulation of nuclei and eggs and those yet unknown, such as the effects of aging, somatic mutation, and improper imprinting. These effects could result in high rates of failed attempts at pregnancy as well as the increased likelihood of developmentally and genetically abnormal embryos.¹⁴

The New York State Taskforce on Life and the Law also reviewed the propriety of cloning in a report issued in April 1998. This report, which placed substantial attention on somatic cell cloning and had the benefit of the NBAC's report, briefly reviewed primary moral arguments and noted that widespread international support existed for a ban on human cloning.¹⁵ The Taskforce report, despite the differing views of Taskforce members on the moral status of an embryo, concluded that "research designed to provide a direct benefit to embryos that will be transferred for implantation is ethically acceptable, as long as it involves only minimal risk."¹⁶ The Taskforce conclusion demands, however, that such research be approved by an institutional review board and be conducted with the informed consent of the proper parties.¹⁷ The Taskforce reached no consensus regarding nontherapeutic embryo research that would result in destruction of an embryo. Some Taskforce members believed that nontherapeutic embryo research was ethically proper with appropriate safeguards when there was a "significant likelihood" that such research could yield important medical advances. Other

Wickware, *History and Technique of Cloning*, in *THE HUMAN CLONING DEBATE* 17-40 (Glenn McGee ed., 1998) [hereinafter *CLONING DEBATE*].

¹² I NBAC REPORT, *supra* note 6, at 33.

¹³ *Id.* at 34.

¹⁴ *Id.*

¹⁵ See NEW YORK STATE TASK FORCE ON LIFE AND THE LAW, *ASSISTED REPRODUCTIVE TECHNOLOGIES: ANALYSIS AND RECOMMENDATIONS FOR PUBLIC POLICY* 391-93 (Apr. 1998).

¹⁶ *Id.* at 393.

¹⁷ See *id.* at 394.

members believed such a process was ethically inappropriate under all circumstances.¹⁸

This ambivalence between Taskforce members foreshadows the most difficult issue in cloning: the creation of a child through somatic cell nuclear transfer. In light of the current dangers inherent in such a procedure, the New York State Taskforce report declared that such a step "would be ethically unacceptable at the present time."¹⁹ The membership, however, could not reach agreement as to the propriety of cloning if and when the safety concerns were obviated and felt no need to reach a conclusion given the current technological limitations on cloning.²⁰ Although this restraint is logical, the fact remains that the potential for cloning a child is real and the ethical concerns posed by such a potential must be addressed before, rather than after, the fact.

Cloning experiments and the development of human cloning for its beneficial medical implications and its profit potential are inevitable. Science and technology, once embarked on a given journey, are irresistible forces. We cannot stop them. The best we can hope is that (1) science will effectively self-regulate and (2) the nations that have the most potential for development of cloning will be the most active in regulating its advances and applications.²¹ For

¹⁸ See *id.* at 394-95.

¹⁹ *Id.* at 395.

²⁰ See *id.* at 395-96.

²¹ The likelihood of effective regulation or limitation of cloning research through either scientific self-regulation or national regulation is limited. Some small number of scientists will likely be co-opted by a desire for fame or economic enrichment and proceed without regard to appropriate limitations. Even if some nations regulate this field, the enforcement of such regulation would be inconsistent due to inherent ambiguities in any such law, limited funding for investigation and enforcement, and because such enforcement would be inherently unfair in light of the absence of any means for effective international regulation. Regulatory efforts of various nations, including the 19 signatories to the Council of Europe Protocol, which prohibits the cloning of human beings, of various states in the United States, and congressional legislation with discussion of federalism and other constitutional issues are discussed by Heidi Forster and Emily Ramsey, *The Law Meets Reproductive Technology: The Prospect for Human Cloning*, in CLONING IN THE FUTURE OF EMBRYO RESEARCH (Paul Lauritzen ed., forthcoming 2000) (manuscript at 526-57, on file with Author) [hereinafter CLONING IN THE FUTURE].

The NBAC recognizes that "regulation of science has thus become part of the landscape, particularly for those who receive federal funds," I NBAC REPORT, *supra* note 6, at 6, and does not mean that society can place confidence in the level or effectiveness of any such regulation. Two highly regarded authorities are more optimistic. See Broyde, *supra* note 1, at 533 (referencing society's experience with the cautious use of artificial insemination); Dorff, *Human Cloning: A Jewish Perspective*, *supra* note 3, at 128 (referencing personal experience with hospital ethics committees and a hospital review board to support his belief that self-regulation will

these reasons, the legal and moral imperatives of theology are all the more important. The values they represent may lead to a universal societal demand that the development of cloning and related genetic research be used for good rather than evil.

From a Jewish theological perspective, God has given each of us the power to act righteously. Maimonides eloquently states this element of free will:

Do not imagine that character is determined at birth. We have been given free will. Any person can be as righteous as Moses or as wicked as Jereboam. We ourselves decide whether to make ourselves learned or ignorant, compassionate or cruel, generous or miserly. No one forces us, no one decides for us, no one drags us along one path or the other; we ourselves, by our own volition, choose our own way.²²

The likelihood that the biotechnology industry will be blind to the significance of its freedom of choice is high. Indeed, "America is not ruled by ethics. It is ruled by law."²³

Advances in cloning technology, coupled with the authoritatively recognized possibility of creating a human embryo and person,²⁴ raise substantial moral, theological, and legal questions²⁵—questions of

be effective).

²² MAIMONIDES, MISHNEH TORAH, *Hilchot Teshuva* 5.1.

Maimonides, R. Moses b. Maimon (1135-1204), ranks among the greatest of Jewish scholars. He is best known for his codification of Jewish law, the *Mishneh Torah* (1177). For what may be the best translation of the *Mishneh Torah*, see generally THE CODE OF MAIMONIDES (Julian Oberman & Leon Nemoy eds., 1956-79). Additionally, a substantial number of Judaic references to good and evil may be found in THE BOOK OF LEGENDS: SEFER HA-AGGADAH 537-43 (Hayim Nahman Bialik and Yehoshua Hana Ravnitzky eds., Willam G. Braude trans., 1992). For example, "R. Naham son of R. Hisda, expounded: Why is the word *Va-Yitzer* [He formed man] (Gen. 2:17) spelled with two *yods*? Because the Holy one created two *yetzers* [impulses] in man—the impulse to good and the impulse to evil." *Id.* at 537 (quoting Ber. 61a).

Note that the letter "R" represents the Hebrew designation "Rav" or "Rabbi." Although there are historical differences between these designations, for most purposes both are recognized as similar to what we now describe as "Rabbi." References to sources that include a letter and numerical designation are to the Talmud—the letters reference a specific Tractate (book), here Berakhot, and the numbers reference a folio page (each folio is identified by its front "a" and back "b").

²³ Broyde, *supra* note 1, at 507 (citations omitted). Broyde also observes that constitutional law scholar Lawrence Tribe endorses a "free market approach to cloning." *Id.* at 506.

²⁴ Whether one believes that being exists from the moment of conception or at some later time is of no relevance to this discussion. Carried to its logical, scientific, and practical end, the cloning process will create a human being as defined by any applicable theology.

²⁵ For discussion of the moral issues created by cloning from Jewish perspectives,

good versus evil. These questions often address moral, theological, and legal issues all at once, making it difficult to focus on just one of these prongs.²⁶ This Article focuses primarily on the "legal" leg of this triangle. Because law-based discussions cannot be completely separated from moral and theological concerns, however, the relationship between Jewish law, morality, and theology is also addressed. The primary and initial focus will be to explore Jewish law, or Halakah.²⁷ This exploration is followed by discussion of, and comparison to, other religious perspectives.

see generally Broyde, *supra* note 1; Dorff, *Human Cloning: A Jewish Perspective*, *supra* note 3; Lipschutz, *supra* note 7; see also I NBAC REPORT, *supra* note 6, at 39-82. Regardless of theology, there is a strong argument that cloning, as any other biotechnological advance, is morally neutral as "[i]ts moral valence depends upon how we use it. Its enormous potential to affect us both negatively and positively requires that we be especially alert to the uses we plan for it." ELLIOT N. DORFF, MATTERS OF LIFE AND DEATH: A JEWISH APPROACH TO MODERN MEDICAL ETHICS 317 (1998) [hereinafter LIFE AND DEATH]. The potential for benefit and abuse is also addressed by Dorff's recognition that cloning holds the potential for significant benefits in regard to the etiology and cure of diseases, such as cancer and to overcome infertility. See Dorff, *Human Cloning: A Jewish Perspective*, *supra* note 3, at 118-21. The potential for saving life through organ transplant raises perhaps the most significant benefit for many persons. This potential, paradoxically, may also present the greatest practical potential for abuse of a clone. On a more theoretical level, however, the greatest moral abuse would be creation of persons with predetermined traits.

²⁶ The difficulties in separating moral, theological, and legal issues is well illustrated by the difficulty in distinguishing law from theology when the legal conclusion is premised on the belief that it "is impossible to duplicate the soul." *Definitive Vatican "No" on Human Cloning*, Ref. No. 5320 (June 25, 1997) <<http://www.cwnew.com/new/viewrec.cfm?RefNum=5320>>. This difficulty may again be seen when analyzing the belief that saving life is the essential element of all law and that man is obligated to "become a partner with the Almighty in the continuation and perfection of His creation." RABBI JOSEPH B. SOLOVEITCHIK, HALAKAHIC MAN 105-06 (1983); see also *infra* Part I(B)(2) (discussing the Jewish duty to save life); *infra* Part I(B)(3) (discussing the Jewish duty to heal).

²⁷ For an explanation of Halakah, see *infra* notes 30-33 and accompanying text. Halakah can provide insight into the current debate despite the fact that it is rooted in laws that extend centuries before the Common Era ("C.E." or "A.D."). Halakah contains an inherent recognition that "[t]he law must be stable yet it cannot stand still." ROSCOE POUND, in *THE QUOTABLE LAWYER* 38 (David S. Shrager & Elizabeth Frost eds., 1986).

A relatively small number of ultra-Orthodox Rabbis argue that they, and only they, have the wisdom and authority to interpret and apply the precepts of Torah and Talmud. See Justice Haim H. Cohn, *Foreword* to RABBI DR. MOSHE ZEMER, *EVOLVING HALAKAH: A PROGRESSIVE APPROACH TO TRADITIONAL JEWISH LAW* at xviii-xix (1999). This approach may yield results inconsistent with modern concepts of justice and an inability to properly address the issues posed by technological advances. The better and well-recognized view, including that of the Supreme Court of Israel Justice Haim H. Cohn, is expressed by Rabbi Zemer and states:

[O]ur rabbis faced a grave dilemma, because some situations of injustice stemmed from the requirements of the codified Halakah. . . .

Although this Author has grave concerns with the Halakhic conclusions by several scholars largely approving of various applications of cloning technology, it must be recognized that these conclusions are well reasoned and consistent with real world practicality. Arguably, the Catholic Church's conclusion provides a superior moral answer as to creation of a human clone for therapeutic purposes.²⁸ The overall Catholic approach, however, is overly restrictive and untenable as it ignores the realities in which we live. Ultimately, if we, the scientific community and society at large, make the right choices regarding our ability to clone human beings, perhaps our scientific and technical prowess will serve mankind, rather than making mankind subservient to science.²⁹

Is it possible to remain faithful to the prophetic imperative of justice while at the same time obeying the codified Halakah that seems to discriminate against defenseless human beings? In this book I shall present many diverse approaches and methods that were developed by the rabbis in order to resolve this dilemma: acting in accordance with justice while preserving the framework of Halakah. . . .

. . . [I]t is still possible today to act in the framework of Halakah, safeguarding justice for individuals and society while not compromising our intellectual honesty.

Cohn, *supra*, at xxiii; see also RAYNOR, *supra* note 5, at 54-60 (discussing a progressive approach to the Halakah).

²⁸ The theology relied upon by Catholic authorities, as well as other Christians, discussed *infra*, Part II(B), is consistent with at least one Talmudic expression relating to procreation and the family. *Niddah* 31a declares:

There are three partners in man: The Holy One, blessed be He, his father, and his mother. His father supplies the semen of the white substance out of which are formed the child's bones, sinews, nails, the brain in his head, and the white of his eyes. His mother supplies the semen of the red substance out of which is formed his skin, flesh, hair, blood, and the black of his eye. And the Holy One, blessed be He, gives the spirit and the breath, beauty of features, eyesight, the power of hearing, the ability to speak and walk, understanding and discernment.

Niddah 31a.

²⁹ As observed by Dorff, even without regard to theology we must make choices, including: (1) determination of who would be cloned and how society can make such a decision; (2) treatment of clone embryos that suffer from problems arising from the inefficiency of the procedure, or flaws in quality control; (3) potential threats to the environment; (4) the moral questions that accompany the science of eugenics; and (5) the rights of the clone as a human being. See LIFE AND DEATH, *supra* note 25, at 313-16.

I. THE JEWISH PERSPECTIVE—HALAKAH

A. *Sources of Jewish Law*

Halakah can best be understood by the traditional view that Moses met God at Mt. Sinai approximately 3200 years ago and received the written law, the Torah (instruction), from Him.³⁰ The Torah is a nonamendable constitution³¹ that God complemented with an oral law, the Mishnah, that was redacted by R. Judah Ha-Nasi (the Patriarch), who completed the task c. 200 C.E. Rabbis further explained the Torah and the Mishnah in the Gemara, the Talmud.³² Although these foundation sources do not change, they are subject to interpretation. This interpretation often is utilized to make the wisdom of these sources applicable to modern issues.³³

The Gemara is a form of interpretation. Subsequent interpretation was performed in at least four ways: (1) judicial decision making; (2) rabbinic response to specific questions—"Responsa"; (3) commentary by such scholars as Maimonides, Rabbenu Gershom ben Judah (960-1028), Rashi (R.

³⁰ Torah consists of the five books of Moses—Genesis, Exodus, Leviticus, Numbers, and Deuteronomy. Christians refer to the Torah as the "Old Testament."

³¹ The concept of Torah as a constitution may have played a role in drafting the Constitution of the United States:

Described as a confederacy of "united states or tribes," with a constitution that protected liberty and a congress and a president to lead its people, Israel "mirrored to Christian republicans of New England a remarkably clear image of their own developing institutions." The drafting of the Constitution confirmed the parallel

JEROLD S. AUERBACH, *RABBIS AND LAWYERS: THE JOURNEY FROM TORAH TO CONSTITUTION* 9 (1990). Auerbach also states:

Harvard president Samuel Langden recalled the development of Israelite government in the wilderness as it moved "from a mere mob to a well regulated nation" under the rule of law, lacking only a "permanent constitution." The Ten Commandments and Mosaic laws . . . remedied this deficiency. As, of course, did the American Constitution, a "heavenly charter of liberty."

Id.

³² There are two versions of the Talmud: the Jerusalem or Palestinian, completed c. 400 C.E., and the Babylonian, completed c. 600 C.E. The Babylonian version is considered the more authoritative. Talmud references in this paper are to the Babylonian Talmud. The Rabbis that developed the *Mishnah*, ending with its redaction by R. Judah, are collectively known as the *Tannaim* or teachers (the singular is *tanna*). The following group of scholar Rabbis, students of the *Mishnah* who compiled the *Gemara*, are collectively known as *Amoraim* or expositors or interpreters (the singular is *Amora*).

³³ For an excellent discussion of how the Talmud and Jewish law were formulated, including their emphasis on communal obligation, see AUERBACH, *supra* note 31, at 7-48.

Sholomo ben Issac, 1040-1105), and The Tur (R. Jacob ben Asher);³⁴ and (4) Midrash. Each of these forms of interpretation reflects the fact that “we inhabit a *nomos*—a normative universe,” and “no set of legal institutions or prescriptions exists apart from the narratives that locate it and give it meaning.”³⁵

During the early biblical period, the elders of the people made judicial decisions. A more formal procedure for making judicial decisions was adopted during the period of the Second Temple³⁶

³⁴ Rashi's commentaries remain highly valued. They can be found in the Art Scroll Series of both the Torah and the Talmud and in various other sources such as the CHUMASH WITH TARGUM ONKELOS, HAPTAROTH AND RASHI'S COMMENTARY (Rabbi A. M. Silberman ed., 1934). A concise treatment of the role of judicial decisions and of *Responsa*, including their precedential value, can be found in AUTHORITY, PROCESS AND METHOD 1-100 (Hanina Ben-Menahem & Neil S. Hecht eds., 1998); see also A.M. SCHREIBER, JEWISH LAW AND DECISION MAKING (1979) (for a comprehensive study of the role of judicial decisions through the Middle Ages). *Responsa* literature of various early scholars can be found in collections cited by the name of the author and city, for example, Asher ben Yehiel (Rosh): Venice, 1607. Modern day *Responsa* collections include: JACOB BAZAK, JEWISH LAW AND JEWISH LIFE: SELECTED RABBINICAL RESPONSA (1998), WALTER JACOB, CONTEMPORARY AMERICAN REFORM RESPONSA (1987), AMERICAN REFORM RESPONSA (Walter Jacob ed., 1983); see also generally 1 J. DAVID BLEICH, CONTEMPORARY HALAKHIC PROBLEMS (1976); GEORGE HOROWITZ, THE SPIRIT OF JEWISH LAW 40-67 (1973) (discussing the major commentators); A HISTORY OF THE JEWISH PEOPLE (H.H. Ben Sasson ed., 1976); ISRAEL ZINBERG, A HISTORY OF JEWISH LITERATURE (Bernard Martin trans. and ed., 1972).

³⁵ Robert M. Cover, *The Supreme Court 1982 Term Foreword: Nomos and Narrative*, 97 HARV. L. REV. 4, 4 (1983). Cover observes that in terms of constitutional meaning

[t]he biblical worlds of normative meaning were built around a sacred text that included both precept and narrative. The text constituted the paideic center for the interpretive traditions that grew from it. Historically, the texts we know as the Bible did not always occupy the uncontested, conventionally defined center of the tradition; but in attempting to understand the creation of legal meaning, we can treat the tradition from a distant perspective that simplifies analysis. In our own normative world, there is no obvious central text, certainly none that exhaustively supplies both narrative and precept. This reasoning is then applied to the Constitution which, though “foundational” and “widespread,” is not a “universally accepted basis for interpretations.”

Id. at 25.

³⁶ The First Temple (c. 922-586 B.C.E.) was built by King Solomon and served as a place of worship as well as being the center of government and commerce for the realm. Though of lesser influence after the death of Solomon, this Temple continued to play a significant role for Jews until its destruction by the Babylonians under King Nebuchadnezzar in 586 B.C.E. See ELLIOT N. DORFF & ARTHUR ROSETT, A LIVING TREE: THE ROOTS AND GROWTH OF JEWISH LAW 7 (1988); THE NEW STANDARD JEWISH ENCYCLOPEDIA 911-12 (Geoffrey Wigdoner ed., 1992).

The Second Temple (c. 516 B.C.E.-70 C.E.) was completed during the reign of King Herod. This Temple served as the center of Jewish political and religious life until its destruction by the Romans, ending a four-year rebellion against Roman rule. See DORFF & ROSETT, *supra*, at 9; THE NEW STANDARD JEWISH ENCYCLOPEDIA, *supra*, at

through the judicial aegis of the Great Sanhedrin.³⁷ With the destruction of the Second Temple in 70 C.E., however, the Great Sanhedrin was dissolved and has never been reestablished.³⁸ Judicial decision making based on Jewish law continues throughout the world by courts known as Bet Din, which usually consist of three Rabbis.³⁹ In the United States, each court can decide any legal civil issue brought before it over which the state does not maintain exclusive

912. The Western Wall of the Second Temple has survived the years and is an important religious site for Jews throughout the world.

³⁷ See HOROWITZ, *supra* note 34, § 19, at 27-28. The Great Sanhedrin sat in Jerusalem and was an assembly of 71 Rabbis, scholars, and judges devoted to many aspects of governance, including sitting as the highest court of the land. See *id.* at 28. The number of judges does not appear to be coincidence. Moses, at the behest of his father-in-law and as commanded by God, was to "seek out from among all the people capable men who fear God, trustworthy men. . . . Set these over them as chiefs of thousands, hundreds, fifties, and tens, and let them judge the people at all times." *Exodus* 18:21-22. These elders acted primarily as judges so that Moses no longer had to resolve all disputes among the people, but Moses remained the supreme arbiter. See *id.* at 18:22-23. The Great Sanhedrin, as the Supreme Court, appears to be derived from a reprise of the problems of governance faced by Moses:

Then the Lord said to Moses, "Gather for me seventy of Israel's elders of whom you know to have experience as elders and officers of the people, and bring them to the Tent of Meeting and let them take their place with you. I will come down and speak with you there . . . they shall share the burden of the people with you, and you shall not bear it alone."

Numbers 11:16-17.

³⁸ The Great Sanhedrin or "High Court" was removed from Jerusalem and transferred to Yavneh after the destruction of the Second Temple in 70 C.E. Thus, a new source of instruction came into being as it was no longer possible to speak of the High Court, which, in effect, had been abolished. The "High Court in Jerusalem" came to mean local courts that were recognized as possessing, for local inhabitants, the authority of the High Court. See MENACHEM ELON ET AL., *JEWISH LAW (MISHPAT IVRI): CASES AND MATERIALS* 60 (1999) [hereinafter *CASES AND MATERIALS*]. A *yeshivah*, presided over in Palestine, came into existence after the fall of the Second Temple and was called a "Great Sanhedrin" because it functioned as both a learned society and a supreme court. See HOROWITZ, *supra* note 34, § 332, at 629. This was not truly the Great Sanhedrin as it had existed in Jerusalem.

There is one view that the Great Sanhedrin, as a political, religious, and judicial body, continued at various locations until the abolition of the patriarchate (c. 425 C.E.). See 14 *ENCYCLOPAEDIA JUDAICA* 836 (1972). The more accurate view, in this Author's opinion, states: "The tannaitic sources, however, depict the Great Sanhedrin as an assembly of sages permanently situated in the Chamber of Hewn Stone in the Temple." *Id.* at 836-37. From this perspective, the Great Sanhedrin was permanently terminated with the destruction of the Temple in 70 C.E., as the Chamber could exist only in the Temple.

³⁹ In the talmudic age, inferior courts consisted of three persons. See HOROWITZ, *supra* note 34, § 332, at 626. This tradition of a three-member panel continues to the present day, though the modern court can consist of a single member. For a description of a modern *Bet Din*, see *id.* § 333, at 631.

jurisdiction.⁴⁰ These courts are essential in regard to the granting of a Jewish divorce, a *Get*.⁴¹ Bet Din sit on a regular basis in major cities, such as New York and Boston, and are frequently formed in other cities in which the parties seek to resolve a legal problem, including realty and commercial matters, based on traditional Jewish law. Additionally, there is a Bet Din of America. The Bet Din may even be utilized by non-Jews to gain a cost effective and fair means of dispute resolution similar to other forms of noncourt-based arbitration proceedings.

Responsa offer another form of interpretation. Responsa address issues of substantial concern and, in modern times, reflect the positions of various branches within Judaism. The process, which began as an exchange of letters regarding Halakhic matters, was initially observed in the Talmud.⁴² The process grew in importance when Jews outside of Babylonia wrote to scholars in the Babylonian academies seeking their explanations of various tractates of the Talmud.⁴³ Thereafter, the requests and responses became more specific so that the responding Rabbi would review available sources, interpret those sources, and apply them to the specific factual context of the inquiry. The answer was, of course, a response, hence "Responsa" literature. This tradition is now carried on by rabbinic organizations and highly regarded individual scholars utilizing forms

⁴⁰ This is consistent with long standing Halakhic recognition of the doctrine *Dina de-Malkhuta Dina*—"The Law of the Land is law." This principle was developed to permit application and recognition of Jewish law in ways that would not conflict with the law of whatever society governed the Jewish community at a given time. Thus, matters of criminal justice, state and federal taxation, or other laws that address governmental concerns and benefits are to be followed and are beyond the jurisdiction of the *Bet Din*. See generally MENACHEM ELON, *JEWISH LAW: HISTORY, SOURCES, PRINCIPLES—Ha-Mishpat Ha-Ivri* 64-74 (Bernard Auerbach & Melvin J. Sykes trans., 1994) [hereinafter *JEWISH LAW*].

⁴¹ For traditional Jewish women, there can be no remarriage absent a *Get*, regardless of whether a secular court has issued a divorce decree. The conservative branch of Judaism now includes a provision regarding the parties' rights to seek a *Get* within the Jewish Marriage Contract (*Ketubah*). This clause requires that the parties appear before the Joint Bet Din of the Jewish Theological Seminary. Rabbi Edward J. Sukol, Congregation Bethaynu, Pepper Pike, Ohio provided materials related to this procedure, which are on file with the Author. See also *THE PRENUPTIAL AGREEMENT* (Rabbi Kenneth Auman & Rabbi Basil Herring eds., 1996) (discussing the Orthodox approach).

⁴² See, e.g., *Yevamot* 105a, *Sanh.* 29a.

⁴³ The beginning of *responsa* literature as a literary and historical phenomenon of important dimensions, however, took place in the middle of the geonic period, when it played a decisive part in the process of disseminating the Oral Law and establishing the Babylonian Talmud as the sole authority in the life of the Jewish people, who were becoming ever more widely dispersed as a result of the Islamic conquests. See 14 *ENCYCLOPAEDIA JUDAICA* 85 (1972).

ranging from the traditional practice of private communications in response to an individual request to published opinions providing information to a broader audience.⁴⁴

Scholarly commentary relating to Torah and Talmud can be analogized to the work of the Advisory Committees for the Federal Rules of Civil Procedure and the Federal Rules of Evidence, the Official Commentary to the Uniform Commercial Code, or the Reporter's Notes for the American Law Institute Restatements. In each of these cases, scholars have provided their perception of how given text provisions are to be interpreted and applied. Similarly, the work of Jewish scholars seeks to clarify and explain the often ambiguous language of the Torah and the Talmud. Rashi, for example, often sought to find the most simple meaning of a word or phrase, *p'shat*,⁴⁵ and utilized rules of grammar and similarity of word roots to ascertain the meaning of given words or verses within the Torah.⁴⁶ When this approach failed to yield a rational explanation of a verse, Rashi would turn to prior Midrash concerning the word or verse in an effort to create a rational overall meaning.⁴⁷

The fourth method of interpretation, Midrash, is the most interesting in many ways. That anyone can write a Midrash is, perhaps, its most fascinating aspect and is possible because

⁴⁴ For example, *American Reform Responsa* includes discussion of such issues as homosexuality, various concerns relating to abortion, medical refusal to treat an indigent patient, euthanasia, and triage. See AMERICAN REFORM RESPONSA, *supra* note 34, at 49-54, 246-53, 261-74, 396-477, 541-43.

⁴⁵ A recent article sets forth an imaginative illustration of interpreting the meaning of the Torah and Talmud:

When we open ourselves to these writings, [biblical text and midrash] we find that beyond the *p'shat*—the simple, conventional meaning of the text—multiple meanings resonate within each word. The interpretive process is like the birthing of a child. Once the umbilical cord—i.e., the tie of the biblical text to a particular time, place, and circumstance—is severed, once it exists independently, it can grow, expand, and change through each interaction and interpretation in every age.

Norman J. Cohen, *How Could Abraham Take Isaac to Sacrifice Without a Word to Sarah?*, 28 REFORM JUDAISM No. 2, at 42 (Winter 1999). Methods of Biblical interpretation, including the widely recognized Hermeneutic Rules (*Middot*) of R. Ishmael, are presented in 8 ENCYCLOPAEDIA JUDAICA, at 366-72, 1418-20 (1972).

⁴⁶ The task of effectively translating the Torah was, and is, more difficult than a standard translation because the Torah is written in an ancient form of Hebrew and Aramaic. Both languages were linguistically "dead" well before the writing of the major commentaries. See generally 3 ENCYCLOPEDIA JUDAICA 259-87 (1972).

⁴⁷ For a concise discussion of Rashi's significance and the method by which he interpreted Torah, see ZINBERG, *supra* note 34, at 11-21.

Halakah was the result generally of "midrash torah," interpretation of Torah. When the interpretation was in the form of direct commentary, when the text to be interpreted was given along with the interpretation—the teaching derived from it, or based upon it, or associated with it—the form of exposition was known as "midrash."⁴⁸

Midrash was conceived and developed by Rabbis beginning in the third century CE.⁴⁹ The term is derived from the Hebrew root word *darash* "'to seek, search or demand' meaning from the biblical text—Midrash is the process of recreating the biblical text through interpretation."⁵⁰ The term also has been defined as "to investigate" in the sense of "an exposition of the [verses] of the Torah which was derived by our sages after they had probed into the depths of each [verse] and all the words and letters thereof in search of its true inner meaning," and thereby "expound the precepts and ethical values of the Scriptures."⁵¹

Although all of these sources and recorded interpretations play an important role in determining the Halakah applicable to cloning, Midrash is the most important as it will establish a modern Halakah—law—based on a new analysis of Torah. In a very real

⁴⁸ HOROWITZ, *supra* note 34, at 31. Of course, the value of a Midrash depends on the authority and respect earned by the writer and the writer's fidelity to proper methods of application and analysis of the sources. The quality distinction can be analogized to that between persons who play a team sport in a league that invites anyone to play and those individuals who play that same team sport at a professional level.

⁴⁹ Midrash, as a form of exposition, "refers to homiletic and Aggada material compiled on the Biblical text mainly in Eretz Israel from the 3rd to 10th centuries." NEHAMA LEIBOWITZ, *NEW STUDIES IN BERESHIT: GENESIS 582* (Aryeh Newman trans., 1995).

⁵⁰ COHEN, *supra* note 1, at xvii. For a thorough discussion of Midrash and its relation to the Mishnah, see generally JACOB NEUSNER, *INVITATION TO MIDRASH: THE WORKINGS OF RABBINIC BIBLE INTERPRETATION* (1989).

⁵¹ David R. Dow, *Constitutional Midrash: The Rabbis' Solution to Professor Bickel's Problem*, 29 HOUS. L. REV. 543, 544 (1992). Dow's article propounds that Professor Bickel's question concerning the power of judicial review is biblical in origin and can be resolved by study of religious texts. In part, the answer is premised on the belief that both religion and law are predicated upon key principles and that "both use legal codes—scriptures—which embody these principles to resolve disputes. Scripture in Jewish law is the Hebrew bible; scripture in America is the Constitution." *Id.* "[B]oth scriptures are rooted in cultures that subscribe to the normative *legislative* principle that the majority rules. Thus, although the very enterprise of interpretation is utterly unavoidable as a practical matter, it is enormously problematic as a normative matter. . . ." *Id.* at 545 (emphasis in original). The power to interpret is fundamental in the Jewish legal system and from its application we can learn much about the proper use of the power to interpret in the American system.

sense, this Article, at least insofar as it relates to Jewish law, is a Midrash.

B. Midrash: Jewish Law Approves of Cloning

It is not presumptuous to assert that all religions are based on a person's relationship with God. Jewish theologians view each person's relationship with God in differing ways. The relationship envisioned by Martin Buber⁵² is dramatically different from that envisioned by Rabbi Joseph B. Soloveitchik.⁵³ No further rationale is needed if Halakah simply accepts the principle that we exist to continue and perfect God's creation of the universe. Halakah, however, is law rather than theology even though this law is part of the religious tradition.⁵⁴

⁵² See generally MARTIN BUBER, *I AND THOU* (Walter Kaufman trans., 1970). Interpretation and understanding of Martin Buber is an individualized process. In abbreviated form, this writer views Buber as presenting a number of significant concepts including (1) recognition of an "I - It" world based on objective concepts that include material things as a necessary for society, but which is inadequate for the society he envisions; (2) there is also a transient world of "I - You," which always exists and even preexists its human recognition; (3) the world of "I - You" elevates man because it requires us to comprehend and respond unconditionally to the needs of others; (4) one can attain the "I - You" relationship only by recognition of a relation to the Divine that mandates acceptance of a Divine spirit and presence that actively engages each individual; and (5) if all of this is done we will create a community-society that will provide the basis for a Divinely based moral world as distinct from a morality built on self.

⁵³ For a brief description of Rabbi Soloveitchik's vision of the individual relationship with God, see generally SOLOVEITCHIK, *HALAKAHIC MAN*, *supra* note 26. Soloveitchik's concept, however, is far more complex than indicated by the simplicity of the sentence quoted in note 26. The principle that man is to continue the work of God to aid in the perfection of creation through medical intervention is recognized by numerous decisors. See, e.g., DAVID M. FELDMAN, *HEALTH AND MEDICINE IN THE JEWISH TRADITION: L'HAYIM—TO LIFE* 15-16 (1986) (illustrating that Maimonides and Rashi interpret Halakah to mean that man is to use medical intervention to continue the work of God in perfecting creation and reciting a Midrash that is illustrative of the underlying analysis) [hereinafter *HEALTH AND MEDICINE*]. In Feldman's Midrash, a sick man encounters two Rabbis and indicates that he cannot seek a cure for his illness because the affliction was caused by God. Upon ascertaining that the man was a farmer, the Rabbis propound a series of questions to illustrate that without man's assistance in weeding, fertilizing, and plowing, the vineyard, created by God, would not produce any fruit and concluded: "so with the human body. The fertilizer is the medicine and the means of healing, and the tiller of the earth is the physician." *Id.* at 16; see also Dorff, *Human Cloning: A Jewish Perspective*, *supra* note 3, at 121 (recognizing that "we are God's 'partners' in the ongoing act of creation when we improve the human lot in life (citing B. Shabbat 10a & 119b)").

⁵⁴ The relationship between Jewish law and Jewish religion has been encapsulated by Elon:

"Religious" law and "legal" law in the *Halakah* are of one piece, and this

Ascertainment of Jewish law regarding cloning can logically begin with the Jewish obligation to procreate, the duty to save life, and the authority provided to the doctor in his effort to heal a patient. To apply these principles to the propriety or impropriety of cloning requires interpretation of Halakhic sources. Not only is it necessary to understand that Halakah is a dynamic concept,⁵⁵ but also that, despite our fallibility, this task is assigned to human authority. "[W]hile 'the Torah is *from* heaven' (*torah min ha-shamayim*), 'the Torah is not in heaven' (*torah lo ba-shamayim*); i.e., the application and interpretation of the Torah is no longer the province of the Almighty, but rather of mortal humans."⁵⁶ In this spirit, including the right to err, the following discussion presents the arguments for Halakhic approval of cloning that appear to be a largely uniform conclusion that cloning is appropriate for purposes of medical research, medical treatment, and providing a means of procreation when all other methods have failed. The collective wisdom in two recent articles by eminent scholars, Michael Broyde and Elliot N. Dorff, support this conclusion.⁵⁷ This Author, however, concludes that Halakah supports cloning only insofar as it contributes to the resolution of an infertility problem or experimentation for therapeutic purposes during the first forty days of embryonic gestation.⁵⁸

is not so merely because they have a common source. The analytical approach, the terminology, the methods of interpretation, and all the other methods of halakhic clarification and creativity characterize the entire body of the *Halakah*.

JEWISH LAW, *supra* note 40, at 111. For a discussion of the "legal" law aspect of Halakah, as distinct from its broader conceptualization, see *id.* at 105-11. "As a result of this interrelationship between the religious and civil parts of Halakhah, numerous 'Legal' doctrines are employed within the context of 'religious' matters, and vice versa." *Id.* at 13.

⁵⁵ See *supra* Section IA and, specifically, notes 42-50 and accompanying text.

⁵⁶ CASES AND MATERIALS, *supra* note 38, at 17-18. The conclusion that the Torah is no longer the province of God is supported by the Talmudic discussion of the Oven of Akhnai. See *id.* at 18-19; Bava Metzia 59b. The relationship of ancient laws to biotechnology is made clear through the work of legal scholars and clearly stated by Dr. Chaim Povarsky: "Although Jewish law has lacked a central legislative body for many centuries . . . legal scholars have been able to determine legal issues arising from modern scientific and technological developments, including those generated by artificial insemination and in-vitro fertilization, based upon hypothetical cases discussed in early Judaic legal sources." Dr. Chaim Povarsky, *Regulating Advanced Reproductive Technologies: A Comparative Analysis of Jewish and American Law*, 29 U. TOL. L. REV. 409, 412 (1998).

⁵⁷ See generally Broyde, *supra* note 1; Dorff, *supra* note 3.

⁵⁸ As well stated by Broyde: "The Jewish tradition imposes a duty on those capable of resolving such matters to do so. This preliminary analysis is submitted in

1. Procreation and Infertility

Halakah permits recognition of cloning as a potentially new form of advanced reproductive technology—a means of procreation consistent with the biblical mandate that we be fruitful and multiply.⁵⁹ The idea that a human being can be created without sexual intercourse, indeed without the participation of a human being, is consistent with the biblical view of creation. “And God created man in His image, in the image of God He created them; male and female.”⁶⁰ “The Lord God formed man from the dust of the earth. He blew into his nostrils the breath of life, and man became a living being.”⁶¹ Regardless of which account of creation one accepts, God, not a human being, created Adam and Eve, the first human beings.⁶²

the hope that others will comment on and critique it, and Jewish law will develop an established policy concerning a variety of issues relating to cloning.” Broyde, *supra* note 1, at 534 (citing SHULHAN ARUKH, *Yoreh Deah* 242:14).

⁵⁹ See *id.* at 525-28; see also *Genesis* 1:28. This verse is often translated as “be fruitful and multiply.” See, e.g., M. Yevamot 6 (“A man may not refrain from [the *mitzvah* of] being fruitful and multiplying”); LEIBOWITZ, *supra* note 49, at 3 (“And God blessed them, saying be fruitful and multiply.”). This verse is also translated as “be fertile and increase.” See, e.g., THE TORAH: A MODERN COMMENTARY 20 (W. Gunther Plaut et al. eds., 1981); TANAKH: THE HOLY SCRIPTURES 4 (1985). The two translations may support different nuances of meaning and underlying values. For purposes of this Article, either translation is appropriate as both unquestionably provide a mandate to propagate.

Though indicating that the theological and spiritual aspects of genetic engineering and DNA recombinant research require exploration, and offering no personal guidance, a highly regarded Jewish bioethicist suggests that the sentiments expressed by Rabbi Immanuel Jakobovits be taken to heart. Rabbi Jakobovits, after warning of the danger of mechanization of human life and potential disaster resulting from man’s encroachment upon nature, concludes:

Man, as the delicately balanced fusion of body, mind and soul, can never be the mere product of laboratory conditions and scientific ingenuity. To fulfill his destiny as a creative creature in the image of his Creator, he must be generated and reared out of the intimate love joining husband and wife together, out of identifiable parents who care for the development of their offspring, and out of a home which provides affectionate warmth and compassion.

FRED ROSNER, M.D., MODERN MEDICINE AND JEWISH ETHICS 183 (1986) (citing IMMANUEL JAKOBOVITS, JEWISH MEDICAL ETHICS 261-66 (1975)). This approach could, of course, lead to the conclusion that cloning beyond the confines of family is precluded by Jewish law. It could also, however, allow for cloning to meet the duty to procreate within the family unit.

⁶⁰ *Genesis* 1:27.

⁶¹ *Genesis* 2:7.

⁶² For a comparison of *Genesis* 1:27 and *Genesis* 2:7, see JOSEPH B. SOLOVEITCHIK, THE LONELY MAN OF FAITH 9-11 (1965). Once we accept the principle that man works with God to perfect creation, it is logical to recognize that man, too, can create a human being by means other than sexual relations. This principle has been explained and illustrated as distinct from any “natural law,” which may be a

These passages, however, do not suggest that the creation of Adam and Eve lends theological support for cloning. The biblical purpose of creating man and woman was to further God's intent for human reproduction to occur through a male/female relationship.⁶³ The consensus of Jewish expert opinion, nevertheless, is that just as the divine creative process "entailed creating something out of nothing," cloning is simply the creating of "something out of something," through "the unearthing of preexisting factors in the nature of Creation."⁶⁴

Broyde and Dorff agree that a human being created through the cloning process is entitled to all of the respect and dignity of any other person.⁶⁵ Thus, a clone must be treated as a unique human being, as a person created in the image of God and as unique in character as an identical twin.⁶⁶ "[A] human being who was cloned

philosophic consideration in Christian traditions:

Nature is not sovereign; it is in the service of man. We are to control nature, not to be controlled by it. This is what mandates our use of lightning rods, our damming rivers, even our use of heaters and air conditioners. Circumcision, too, implies that nature or the body need not be taken as is. If blocked Fallopian tubes impede the natural process of fertilization, or if sperm must be strengthened by combining ejaculates, there should be no objection to making use of the laboratory or the Petri dish. . . . This, too, is a matter of controlling nature, especially in view of the desirability of the goal, namely making conception possible.

Rabbi David M. Feldman, D.H.L., *The Ethical Implications of New Reproductive Techniques*, in JEWISH VALUES IN BIOETHICS 175-76 (Rabbi Levi Meier, Ph.D. ed., 1986).

⁶³ Although Eve was created asexually, as in cloning, she was not a clone. Genes, a part of our DNA located on chromosomes in the cell nucleus, determine our biologic identity. Male somatic cells have a complement of 44XY chromosomes, while females carry a complement of 44XX. See Harvey L. Gordon, M.D., *Human Cloning and the Jewish Tradition*, in UNION OF AMERICAN HEBREW CONGREGATIONS DEPARTMENT OF JEWISH FAMILY CONCERNS, BIOETHICS COMMITTEE, PROGRAM GUIDE X 13-14 (Summer 1998) [hereinafter UAHC REPORT]. Thus, Adam and Eve had different chromosomes and unique genetic identities while a clone would have an identical genetic identity with the donor. See *id.* at 14.

⁶⁴ Peter Hirschberg, *Cloning*, THE JERUSALEM REPORT (Apr. 16, 1998), in UAHC REPORT, *supra* note 63, at 20.

⁶⁵ Broyde finds that "a clone, no less than any other 'born' child, meets the prima-facia test for humanness and is to be considered human." Broyde, *supra* note 1, at 522. Dorff warns:

Images of clones in literature and film as slaves of their creator make us fearful that clones may not be treated as full human beings. Cloning, of course, will, if it is ever effected, produce independent human beings with histories and influences all their own and with their own free will.

Dorff, *Human Cloning: A Jewish Perspective*, *supra* note 3, at 120.

⁶⁶ See Broyde, *supra* note 1, at 530.

from another human is a separate and unique person, fully entitled to be treated as a unique human."⁶⁷

Although there are legal and moral issues in regard to who should be deemed the mother (or mothers) of a cloned child, the Halakhic answer, although not universally accepted, is that the gestational mother is the only mother.⁶⁸ The motherhood issue is important not only because of the legal need to identify the party who is the mother, but also because a child is deemed to have the religion of the mother under Jewish law.⁶⁹ Thus, if the woman who carried the cloned child to term is Jewish, the child is Jewish regardless of the religion of the DNA donor. Once this determination is made, one aspect of the moral debate as to parenthood is ended despite the potential claim of a female DNA donor.⁷⁰ Similarly, Halakah would deem the DNA donor, if male, to be the father. There is a strong argument that such fatherhood would comport with the duty to procreate.⁷¹

⁶⁷ *Id.* As with identical twins, each cloned being remains unique because a person, including the soul, is more than his or her genetic makeup. See Dorff, *Human Cloning: A Jewish Perspective*, *supra* note 3, at 125-26.

⁶⁸ See Broyde, *supra* note 1, at 512-13, 515. Despite genetic identity with the DNA donor, each cloned human being should be treated as a child of the gestational mother rather than as a sibling of the DNA donor. See *id.* at 518. For opinions that do not agree that the mother is the gestational mother, see *id.* at 520 (citing an unpublished *Responsa* of Shlomo Zalman Auerbach cited by J. David Bleich, *In-vitro Fertilization: Questions of Maternal Identity and Conversion*, TRADITION 82, 86-88 (Summer 1991) [hereinafter *In Vitro Fertilization*]).

⁶⁹ See *Yevamot* 45b; *Kiddushin* 68b (discussing *Deuteronomy* 7:4). Rabbi Solomon B. Freehof, after analysis of these sources, concludes that "there is no question that the child of a Jewish mother is fully a Jew." *Status of Children of Doubtful Religious Background*, in AMERICAN REFORM RESPONSA, *supra* note 34, at 195-96; see also THE OXFORD DICTIONARY OF THE JEWISH RELIGION 370 (R.J. Zwi Werblowsky and Geoffrey Wigoder eds., 1997). "A Jew was defined by *Halakah*, as one who was born of a Jewish mother (or who converted to Judaism) and who, in actual practice, regarded himself and was regarded as belonging to the Jewish community." *Id.* at 371. The past tense was used in this definition because today other views have been put forward including that of the Reform Movement, which recognizes both maternal and patrilineal descent. *Id.*; see also Broyde, *supra* note 1, at 519-20.

⁷⁰ See Broyde, *supra* note 1, at 512-13. Feldman reached a similar conclusion in regard to surrogate mothers, observing that "embryonic transfer arrangements, when protected from abuse, can be an acceptable solution to problems of conception." Feldman, *supra* note 62, at 179. Feldman cautions, however, that Jewish law does not sanction recourse of such methods to spare one from pregnancy or ensure desired genetic characteristics. See *id.* at 180. Still, Feldman recognizes that "where the natural alternative is not available, these resourceful ways of bringing about the desideratum become acceptable" and would be deemed a *mitzvah* (good deed). *Id.* The reference to "embryonic transfer arrangements" suggests that this reasoning could logically be applied to cloning.

⁷¹ See Broyde, *supra* note 1, at 513. Competing views regarding fatherhood and

To a limited extent, the conclusion that cloning may be consistent with Halakah in certain instances may be challenged as a conflict with the uniqueness of man as discussed in the rabbinical analysis of why all of mankind is derived from Adam. The most germane of these reasons provides:

Man was created as a single being in order to proclaim the greatness of God. . . . For man mints many coins in a single mold and all of them are similar to one another. But God . . . stamps all people with the mold of the first man, Adam, and still no one is similar to his fellow, as the verse says "It is changed like clay in a cast, and they stand as a garment."⁷²

From this teaching it can be said that God has ordered a genetic diversity that is denied through cloning. God has made sure that even though all humans are derived from Adam, He has given each a unique identity. Though each of us is created in God's image, "It's clear that *genetic diversity* is an important part of God's plan. That is the course set out upon by Adam and Eve. To that extent, human cloning does not respond to the first *mitvah* given to our original ancestors, 'Be fruitful and multiply.'"⁷³

This line of argument does not negate the view that Halakah permits cloning as, from the moment of birth, the influences on the child impose differences and create a unique identity.⁷⁴ That this occurs upon birth, rather than during the molding (gestation) process, is of limited Halakhic effect. Such changes can also occur during the gestation period due to factors such as the mother's diet, substance abuse, or exposure to environmental pollutants and

"test tube babies" are represented by the conflicting opinions of two leading Rabbinic authorities. Rabbi Eliezer Yehudah Waldenberg argues that this method of conception does not meet the obligation to be "fruitful and multiply." See MEDICINE AND JEWISH LAW 176 (Fred Rosner ed., 1990). Rabbi Ovadiah Yosef, however, comes to an opposite conclusion. See *id.* The dispute seems to have been resolved in favor of Rabbi Yosef's approach through general acceptance of an analysis by Rabbi Avigdor Nebanzahl. Rabbi Nebanzahl rejected the position of Waldenberg and stressed the need for harmony within the family. Rabbi Nebanzahl declared:

It is proper to remember that if we prohibit in-vitro fertilization, we will cause at least one of two things: either the husband will be unable to fulfill the precept of "Be fruitful and multiply," leading to ongoing tension and bitterness within the household, or the couple will separate. . . .

Id. at 177.

⁷² *Sanh.* 38a (quoting *Job* 38:14).

⁷³ Gordon, *supra* note 63, at 16.

⁷⁴ See *supra* notes 65-67 and accompanying text (discussing the uniqueness of clones).

toxins.⁷⁵ The negation of genetic diversity does not affect free will, which, since Adam and Eve, "has been the mark of a human being. Cloning, most Jewish ethicists say, may change the process of reproduction, but not the essence of the product."⁷⁶ Given the differences in humans that may result even from the cloning process, on balance there has been compliance with the letter, though perhaps not the spirit, of God's mandate.⁷⁷

The use of cloning to preserve a genetic line complements the argument predicated on the duty to procreate. As with other minority groups who have faced extinction, the Jewish people are keenly aware of the need to maintain their genetic lines.⁷⁸ A statement of Rabbi Moshe Tendler emphasizes this point: "Show me

⁷⁵ For example, a protein deficient diet may alter brain development. See J. ROBERT WILLSON & ELSIE REID CARRINGTON, *OBSTETRICS* 259 (6th ed. 1979). Smoking during pregnancy increases the risk of premature birth, low birth weight, and perinatal death and may cause serious placental complications. See DEBORAH MATHIEU, *PREVENTING PRENATAL HARM: SHOULD THE STATE INTERVENE?* 4 (2d ed. 1996). Various narcotics, such as cocaine, have severe negative effects such as emotional and developmental problems, malfunctions, and central nervous system disorders upon children born of addicted mothers. See *id.* Alcohol consumption during pregnancy can lead to the birth of children with retardation, central nervous system disorders, and craniofacial abnormalities. See *id.* at 3. Toxins in the environment, such as ethylene oxide, lead, and vinyl chloride can result in mutagenic and teratogenic effects upon the fetus. See *id.* at 7.

⁷⁶ Hirshberg, *supra* note 64, at 22. "Jews have always understood that identity is chosen, is to some degree the product of moral choice. . . . The absolution the genetic self offers for the responsibility for one's behavior is anathema to Jewish thinking and to Jewish experience." Paul Root Wolpe, *If I Am Only My Genes, What Am I? Genetic Essentialism and a Jewish Response*, 7 KENNEDY INST. OF ETHICS J. 213, 223 (1997).

⁷⁷ There is a Hebrew term that embraces compliance with the letter and not the spirit of the law:

Nahmanides coined an apt and pointed term that illuminates the essence of such behavior [doing "what is right and good"]. A person who acts according to the technical and formal sense of Torah's laws, *i.e.*, who carefully follows only the explicit rules but not those implicit from the general spirit of the text, is "a scoundrel within the bounds of the Torah" (*naval bi-reshut ha-Torah*).

C.A., *Roth v. Yeshufeh (Construction) Ltd.* 33(i) P.D. 617 (1979), in *CASES AND MATERIALS*, *supra* note 38, at 122; *cf.* 2 *Corinthians* 3:6 (King James), which states "Who also hath made able ministers of the new testament; not of the letter, but of the spirit; for the letter killeth, but the spirit giveth life."

⁷⁸ Speaking on behalf of native peoples, the Rev. Abraham A. Akaba, a Native American pastor, has commented: "For aboriginal people of our planet who see themselves as a dwindling and endangered species, cloning of the best of their race will be a blessing—a viable avenue for preserving and perpetuating their unique identities and individualities upon lands they revere as Father and Mother." Courtney S. Campbell, *Cloning Human Beings: Religious Perspectives on Human Cloning*, in II NBAC REPORT, *supra* note 6, at D-32.

a young man who is sterile, whose family was obliterated by the Holocaust and who is the last in a genetic line. I would advise cloning him to create a descendent."⁷⁹ Such a combination of elements is highly unlikely, but Rabbi Tendler's acceptance of cloning in such circumstances suggests that the principle of cloning, in and of itself, is not prohibited by Jewish law. Given that a basic precept of Jewish law is that that which is not prohibited is permitted, the significance of this statement should not be minimized.⁸⁰

A final consideration is the concern observed in cases of artificial insemination, especially with the use of sperm from an anonymous donor, when the potential for incest exists. This same concern applies to cloning.⁸¹ Torah and Halakah forbid incest.⁸² As with artificial insemination, this prohibition can be prevented by appropriate regulation and notice to those concerned.⁸³

⁷⁹ Rabbi Moshe Tendler, Editorial, *The Right Situation*, N.Y. TIMES, Dec. 12, 1997, at A22. This is not to say that cloning can be used to tailor-make a child with specific physical or intellectual capacities. Any such effort is precluded by Halakah and is inconsistent with the deeply held belief that eugenics must never be used to create any form of "master-race."

⁸⁰ This basic tenet of Jewish law states: "Anything for which there is no reason to forbid is permissible with no need for justification, for the Torah has not enumerated all permissible things, rather forbidden ones." Hirschberg, *supra* note 64, at 20 (citation omitted).

⁸¹ The cloning process, in its most basic form, requires the transfer of a cell nucleus into an egg. See Janet Rossant, *Cloning Human Beings: The Science of Animal Cloning*, in II NBAC REPORT, *supra* note 6, at B-5. The source of the cell nucleus, with its genetic material, can be from virtually any person. A potential mother might seek a cell nucleus from any source in a manner similar to that in which sperm banks are used to aid in artificial fertilization. A child who is ignorant of the manner in which he or she came into existence could ultimately have relations with another child of the same cell donor. Although such a likelihood is remote, it raises the same concern for possible incest as does artificial fertilization through a donor not the husband of the mother.

⁸² See *Leviticus* 18:6-17. The prohibition against incest is so strong that Talmudic law provided for execution by stoning for "[i]ncest with one's mother or stepmother or daughter in law." COHEN, *supra* note 1, at 319. The sages taught that "with regard to all commands in Torah, if a man is told, 'Transgress or you will be slain,' he may transgress them so as not to be slain, except, however, when told to worship an idol, to commit incest, or to murder." THE BOOK OF LEGENDS, *supra* note 22, at 654 (quoting *Sanh.* 74a). The procedural and evidentiary safeguards for imposition of capital punishment, however, were so stringent that such judgments were almost impossible. The sages observed: "A Sanhedrin that issues a sentence of execution once in seven years is a murderous [destructive] tribunal." *B. Mak.* 7a (other sages in this passage indicated 70 years and still others that they would never impose such a sentence); see also ADIN STEINSALTZ, *THE ESSENTIAL TALMUD* 163-74 (Chaya Galai trans., 1976) (describing the Jewish criminal law system); see generally AARON KIRSCHENBAUM, *SELF INCRIMINATION IN JEWISH LAW* (1970); SAMUEL MENDELSON, *CRIMINAL JURISPRUDENCE OF THE JEWS* (1991).

⁸³ See Povarsky, *supra* note 56, at 414-24 (discussing both adultery and incest in

Despite the many questions raised by the use of cloning for the purpose of procreation, there is little doubt that it is consistent with the mandates of Halakah. The conclusion that it meets the Biblical and Halakhic obligation of a male to be fruitful and multiply is well supported.⁸⁴

2. To Save a Life

Among the strongest imperatives of Halakah and the values reflected in Judaism is the obligation to save a life.⁸⁵ This core concept is so important that its practical application can override religious observations, while its more cosmic application imposes a moral imperative to value life. Given that there is no dispute in regard to the importance of human life and its preservation, two well-known illustrations will suffice. First, the most holy days in the Jewish religion are the Sabbath and *Yom Kippur*. There are many commandments delineating the proper observance of each.⁸⁶ A

the context of artificial insemination). The underlying discussion of Halakah and the many related ethical and moral concerns upon which Dr. Povarsky relies will bear on the ultimate resolution of similar questions relating to cloning. To the extent that Dr. Povarsky agrees with the position that artificial insemination through a donor other than the husband comprises adultery based on the belief that biblical adultery is based on insemination, we may face the somewhat paradoxical situation that artificial insemination is prohibited while cloning is permitted. See *id.* at 419-21 (discussing why artificial insemination constitutes adultery); see also ZEMER, *supra* note 27, at 340-41 (discussing the propriety of a husband donating sperm that will be used to artificially inseminate his wife).

⁸⁴ The commandment to be fruitful and multiply is imposed solely upon the male. For the woman, assisting in the fulfillment of the male's commandment is a *reshut*, an obligation of the marriage relationship. See Broyde, *supra* note 1, at 524 & n.76 (noting that only a man, not a woman, has a duty to procreate). Tradition teaches that the obligation is met by fathering a minimum of two children. The early debate as to whether this meant two sons is resolved, according to most authorities, consistent with the ruling of Hillel. The obligation is met by fathering at least one son and one daughter. See *Mishnah Yevamot* 6:6. Hillel derived his ruling from the creation of the world as God initially created a male and a female, thereby rejecting the argument that two sons were required because Moses fathered two sons.

⁸⁵ See 1 BLEICH, *CONTEMPORARY HALAKHIC PROBLEMS*, *supra* note 34, at 93. "In Jewish law and moral teaching the value of human life is supreme and takes precedence over virtually all other considerations." *Id.* Although there is no specific statement to this effect found in the Torah or the Talmud, the principle is derived from many such sources. See, e.g., *Avodah Zarah* 27b; *Leviticus* 18:5; *Mishnah Sanh.* 4:5, *Mishnah Yoma* 8:7; *Yoma* 83a; *Yoma* 85b; *Sanh.* 74a.

⁸⁶ The commandments regarding observance of the Sabbath are set forth in the *Mishnah*, *Seder Mo'ed*, in the tractate *Shabbat* of the Talmud and other Talmud tractates. The principle of overriding obligations applies to all other holidays and prohibitions. For example, the biblically mandated fast on *Yom Kippur*, the Day of Atonement, must be broken if fasting endangers health. "One who feels ill on *Yom Kippur* is fed on the advice of the physician." HEALTH AND MEDICINE, *supra* note 53,

primary commandment is that no work be performed on the Sabbath. Nevertheless, should a building fall upon a person, even if we do not know whether that person is alive or dead, we are obligated to set aside the commandment. The Mishnah provides:

If debris falls on someone [on the Sabbath] and it is uncertain whether he is . . . alive or dead . . . one must probe the heap [of debris] for him. If he is found to be alive, one must remove [the debris] for him. If he is found to be dead, he is left there [until after the Sabbath].⁸⁷

The Gemara explains:

[If debris had fallen upon someone . . .] What does he teach herewith? It states a case of "not only." Not only must one remove the debris in the case of doubt as to whether he is there or not, as long as one knows that he is alive if he is there; but, even though it be doubtful whether he is alive or not, he must be freed from the debris. Also, not only if it is doubtful whether he be alive or dead, as long as it is definite that he is an Israelite; but even if it is doubtful whether he is an Israelite or a heathen, one must, for his sake, remove the debris.⁸⁸

The sages also instructed us that "therefore was a single human being created: to teach you that to destroy a single human soul is equivalent to destroying an entire world; and that to sustain a single human soul is equivalent to sustaining an entire world."⁸⁹ The importance of saving a single life is thereby traced to the act of creation of the world and as a means to protect that creation.

To the extent that the medical benefits of cloning can save the life of another person, it is easy to conclude that Halakah must recognize and accept cloning for this purpose. When combined with the obligation upon the physician to heal and the obligation of each

at 25 (quoting *Yoma* 83a).

⁸⁷ *Mishnah Yoma* 8:7.

⁸⁸ *Yoma* 85a. In other editions, such as the Schottenstein Edition, the first sentence of the quoted passage reads "[The Mishnah] is saying 'not only. . .'" The obligation to remove the rubble applies to Jew and non-Jew when the rescuers are not certain of the victim's religion. When the victim is known to be a non-Jew, the rescuer may, as a good deed, remove the rubble in violation of the Sabbath. This concept applies to all emergency life threatening circumstances so as to permit setting aside Sabbath restrictions to save the life of any person, Jew and non-Jew alike. We are also taught that "the Torah says: Profane one Sabbath for a man's sake, so that he may keep many Sabbaths." *Yoma* 85b.

⁸⁹ *Mishna Sanh.* 4:5, in *THE NEW UNION PRAYER BOOK: GATES OF REPENTANCE* 5 (1978). Some authorities translate this verse with a reference to saving a "soul of Israel." Although this may be a valid interpretation focused on the time and place of its writing, the modern interpretation is largely in accord with the broader statement so as to encompass all persons because all persons have value in the eyes of God.

person to take the measures necessary to remain healthy, the argument appears overwhelming.⁹⁰ But for the fact that all of this is apparently predicated on the assumption that the cloned human being has no right to object, the argument might be irrefutable.

3. The Duty to Heal

Two passages from the Torah have been interpreted to establish that God authorizes us to heal and to raise this authorization to the level of a mandate from God.⁹¹

The sages' capacity to appreciate the laws inherent in Torah, where the express words are limited, is well illustrated by the finding of a duty to heal in these verses. The first, in Exodus, deals directly with the obligation of a person who has harmed another to compensate the person harmed for the loss incurred, including the cost of cure.⁹² The second, in Deuteronomy, provides a rule for the return of lost animals (property).⁹³ In the Talmud's discussion of the meaning of Exodus and the distinctions between compensation for idleness and for cure, it was observed that "[t]he School of R. Ishmael taught: [the words] 'And heal he shall heal' [are the source] whence it can be derived that authorization was granted [by God] to the medical man to heal."⁹⁴ The rule in Deuteronomy requiring the

⁹⁰ The view that Halakah permits cloning to the extent that it allows life to be saved is also consistent with Talmudic recognition of the "conflict inherent in our being divine yet embodied creatures." Wolpe, *supra* note 76, at 224. Indeed, "the history of Jewish recognition of the reality of embodiment has made Judaism more receptive to human manipulation of life than is Christianity and may help to explain Jew's traditional inclination toward medicine as a profession." *Id.* at 33 (citations omitted).

⁹¹ There is also an obligation upon each person "to maintain physical health and vigor in order that his soul may be upright." HEALTH AND MEDICINE, *supra* note 53, at 15 (quoting MAIMONIDES, MISHNEH TORAH, *Deuteronomy* 3:3).

⁹² Exodus states: "[I]f he [one who has been stricken and confined to bed] then gets up and walks outdoors upon his staff, the assailant shall go unpunished, except that he must pay for his idleness and cure. When a man strikes his slave, male or female, with a rod, and he dies there and then, he must be avenged." *Exodus* 21:19-20. The Talmud relies on a slightly different translation of the verses. In modern terms, the relevant portion is the rule requiring compensation for a civil battery that results in injury and criminal battery that results in death.

⁹³ Deuteronomy states, "If your fellow does not live near you or you do not know who he is, you shall bring it [the lost animal] home and it shall remain with you until your fellow claims it; then you shall give it back to him." *Deuteronomy* 22:2.

⁹⁴ *Bava Kamma* 85a (quoting *Exodus* 21:19). As noted by Rosner, the Talmud interprets this repetition of "healing" to mean that God granted the authorization to the physician. See ROSNER, *supra* note 59, at 9. The interpretation is of substantial importance because one may read *Exodus* 15:26 to declare that only God retains the power to heal.

return of property was interpreted to include an obligation to restore a person's body and come to the assistance of one facing a life-threatening situation. This extension is based on the need to explain an additional letter in the Hebrew text of the verse.⁹⁵

These interpretations are consistent with the bedrock principle that you must not "deal basely with your countrymen. Do not profit by the blood of your fellow."⁹⁶ This verse, through tradition,⁹⁷ is commonly understood to mean "nor shall you stand idly by the blood of your fellow."⁹⁸ In addition to the application of this verse in connection with the duty to rescue,⁹⁹ the Talmud has expanded this verse to mandate the expenditure of financial resources in connection with the provision of medical assistance.¹⁰⁰ Although God remains the ultimate Healer, "the physician, in Jewish theology, is God's agent in accomplishing that task, and so use of the medical arts is not only permissible, but required."¹⁰¹ Two of Jewish history's most highly regarded scholars also reached this conclusion. Maimonides recognized the physician's obligation to heal and wrote: "Included in the interpretation of the verse 'You shall restore it to him' is the obligation to heal his body, *i.e.* when one sees another in danger and he can save him, whether using his body, his money, or his

⁹⁵ See Dorff, *Human Cloning: A Jewish Perspective*, *supra* note 3, at 123.

⁹⁶ *Leviticus* 19:16.

⁹⁷ See THE TORAH: A MODERN COMMENTARY 898 & n.26, 901 & n.26 (W. Gunther Plaut et al. eds., 1981) (explaining traditional meanings given to the verse "You shall not eat anything with its blood").

⁹⁸ CASES AND MATERIALS, *supra* note 38, at 223 (quoting MAIMONIDES, MISHNEH TORAH, *Roze'ah U-Shermirat Ha-Nefesh* 1:14). For translations of this rule, see, for example, HOROWITZ, *supra* note 34, § 74, at 124 ("Thou shalt not stand idly by the blood of thy neighbor."); MAIMONIDES, MISHNEH TORAH, *Roze'ah U-Shermirat Ha-Nefesh* 1:14 (in which a related part of the cited section is commonly translated as "Whoever could have rescued, but failed to do so, transgresses the commandment 'Do not stand idly by the blood of your fellow.'").

⁹⁹ The duty to rescue has been taken to mean, for example, when one could prevent a murder and does not do so he has "transgressed the command: 'Thou shalt not stand idly by the blood of thy neighbor.'" *Sanh.* 74a. For a general description of the duty to rescue, including quotations from Maimonides, see HOROWITZ, *supra* note 34, § 74, at 125-27.

¹⁰⁰ See Dorff, *Human Cloning: A Jewish Perspective*, *supra* note 3, at 123 (citations omitted). Rabbi Dorff also notes that the obligation to care for another through medicine is included in the mandate of *Leviticus* 19:18 to "love your neighbor as yourself." *Id.* The description "mandate" rather than "Commandment" is used in this instance because some authorities do not include *Leviticus* 19:18 among the traditional 613 Commandments set forth in the Torah.

¹⁰¹ *Id.* at 124. Dorff points out that human cloning presents the danger of self-idolization and that some may seek to use the process to make themselves immortal. This danger parallels the temptation that Adam and Eve faced to not eat of the Tree of Life lest they be like gods and live forever. *Id.* at 126-28.

knowledge."¹⁰² Similarly, R. Moses b. Nahman (Nahmanides "Ramban" c.1195-1270) observed: "With regard to the saving of life, which is a great *mitzvah*, the scrupulous are to be extolled . . . ; any physician who is knowledgeable is *obligated* to heal, and if he refuses to do so, he is considered to have shed blood."¹⁰³

The importance of the physician's duty to heal is so great that the Talmud prohibits the imposition of damages upon a physician for harm caused by unintended mistreatment and places the need for charitable medical services above the need to build a Temple.¹⁰⁴

Perhaps most important as an indication of the doctor's special role, the licensed physician was not liable in Jewish law for damages caused in unintended mistreatment, provided proper care was taken (*Sanhedrin* 84b).

. . . The communal court could coerce physicians to give free medical service to the poor. . . . [W]hile use of charitable funds to build a synagogue take precedence over other purposes, the needs of the indigent sick come before even that.¹⁰⁵

To the extent that cloning permits a doctor to heal another without causing the death of the clone, Jewish law appears to mandate that this step be taken.¹⁰⁶ That a couple seeks to use the

¹⁰² MAIMONIDES, COMMENTARY ON THE MISHNAH, *Nedarim* 4:4 (emphasis added).

¹⁰³ C.A., Shefer v. State of Israel, 48(i) P.D. 87 (1993), *in* CASES AND MATERIALS, *supra* note 38, at 594 (citation omitted).

¹⁰⁴ Prohibiting the imposition of damages on a doctor for mistakenly harming a patient enhances the willingness of a doctor to serve his patient without regard to the second guessing found in the American common law of medical malpractice in which liability is imposed through a negligence standard predicated on whether the doctor has acted in accord with community medical standards. The conflict between the Talmud and the American rules reflects important distinctions in societal values.

¹⁰⁵ HEALTH AND MEDICINE, *supra* note 53, at 37. Meir Tamari, a modern scholar of economics and Jewish law, after noting the predominant role of the commandment to save life, *pikuach nefesh*, recognizes the economic ramifications of such an obligation to society and to physicians. See MEIR TAMARI, WITH ALL YOUR POSSESSIONS: JEWISH ETHICS AND ECONOMIC LIFE 302 (1998) (quoting VA'AD KEHILAH KEDOSHA PADUA (D. Karfi ed., 1973)). Tamari quotes a letter from a medieval physician, Yehuda Ibn Tibon, to his physician son: "While you take your fees from the rich, heal the poor gratuitously. The Lord will requite you." *Id.* Tamari also notes that the duty of the community to support medical treatment for the poor aids in making practical the concept that "The Lord will requite you." See *id.* at 301-06. One must consider whether this communal obligation will effectively prevent cloning, used as a process to gain transplant organs, from becoming a procedure available only to the wealthy.

¹⁰⁶ Fred Rosner and Moshe Tendler suggest limitations on the belief that Jewish law mandates the use of cloning technology to heal when the clone will not be killed by the process. See FRED ROSNER, M.D., F.A.C.P. & RAV MOSHE TENDLER, PH.D., PRACTICAL MEDICAL HALACHAH 37 (3d ed. 1990). Rosner and Tendler observe that a live fetus, even if not viable, is considered a living person. See *id.* Any research

cloning process for this purpose, independent of, or complementary to, the purpose of procreation, does not negate this conclusion. For example, Broyde asserts that Jewish law permits a couple to conceive a child in the hope that this will make possible a bone marrow transplant to save the life of a sibling and that attaining the same objective through cloning is equally proper.¹⁰⁷ "While the popular press condemns this conduct as improper, the Jewish tradition would be quite resolute in labeling this activity as completely morally appropriate. Having a child is a wonderful blessed activity; having a child to save the life of another child is an even more blessed activity."¹⁰⁸ The Jewish tradition arguably places the creation of a child for the purpose of saving another on an equal or even higher moral plane than conceiving a child for the usual family objectives or to meet the duty to procreate.

This Jewish approach, however, is morally problematic. The distinction between natural procreation or even artificial insemination (assisted reproduction) and cloning (asexual reproduction) raises more than biological differences. The instinctive "popular press" form of moral repugnancy may well be more justified in connection with the cloning of a human being.

For Jews, one of the most compelling factors that supports advances in cloning technology is its capacity to address and prevent genetic diseases, particularly Tay-Sachs disease, which leads to death within three to five years of birth.¹⁰⁹ Cloning may prevent the transmission of the defective gene that causes Tay-Sachs disease.¹¹⁰ Because Jewish law views each life as of infinite value and "all biblical and rabbinic commandments are set aside for the overriding

activities which might shorten the life of the fetus, therefore, are prohibited. Moreover, "Jewish law is categorically opposed to any form of experimentation in which the human organism serves as an experimental animal, if there is the slightest hazard to the individual taking part in the experiment, without concomitant benefit to the *same* individual." *Id.* at 90 (emphasis added).

¹⁰⁷ See Broyde, *supra* note 1, at 533.

¹⁰⁸ *Id.* Rabbi Tendler maintains a similar view when he asserts that the clone "would be doubly loved—for itself and for the fact that it saved its sibling." Hirschberg, *supra* note 64, at 21.

¹⁰⁹ The concern over genetic diseases is not unique to Jews. The same concern exists in the African-American community with regard to diseases such as sickle cell anemia that disproportionately strike African-Americans.

¹¹⁰ Tay-Sachs disease is a fatal, inherited genetic disorder with a high incidence of Jewish victims. 1 BLEICH, *CONTEMPORARY HALAKHIC PROBLEMS*, *supra* note 34, at 109. Rosner, in a discussion of Tay-Sachs, observes that the use of genetic engineering would be proper under Jewish law as "[t]he main purposes of gene therapy are to cure disease, restore health, and prolong life, all goals within the physician's Divine license to heal." ROSNER, *supra* note 59, at 181; see also *infra* note 112.

consideration of saving a life," if cloning is found to be efficacious it "would be commendable for this purpose."¹¹¹ This potential would likely require a combination of germ-line gene therapy (GLGT)¹¹² with cloning. As any error in the genetic procedure can, in the biblical sense, "visit itself unto the fourth generation," the process would require greater levels of stringency than are currently associated with GLGT.¹¹³ This potential, alone, commends cloning as a compelling means to preserve life and to heal as required by Jewish law.

The idea that the principle of saving life is limited when such steps endanger the life of the mother, as distinct from that of the clone, has been given little attention in the debate surrounding cloning. Halakhic discussion has addressed questions of motherhood in two main areas: (1) the definition of who shall be the mother of the child and (2) the role of the mother as part of the family unit. Largely ignored is the simple fact that any pregnancy carries a degree of danger to the woman in whose body the child grows. It is one thing to accept this danger as a function of natural procreation, but may be quite another thing to accept this same danger as a function of cloning. Jewish tradition through ritual immersion and public recitation of the prayer of rescue knows "not only of the obvious risk involved in physical childbirth . . . but also of the fact the birth of a child restates the ending of the self. It is the entrance into the room of your life of the he-who-will-hold-you-as-you-lay-dying."¹¹⁴ At this

¹¹¹ Stephen M. Modell, M.D., M.S., *Analysis of Four Cloning Scenarios from the Perspective of Science and the Jewish Tradition*, in UAHC REPORT, *supra* note 63, at 5.

¹¹² Gene therapy is described:

With the advent of molecular biology in the 1960s and of the recombinant deoxyribonucleic acid (DNA) era in the early 1970s, concepts and tools began to appear for a rational kind of treatment: gene therapy. The revolutionary new concept underlying this approach is that effective treatment should correct the underlying genetic defect itself and not just its symptoms.

2 ENCYCLOPEDIA OF BIOETHICS 907 (1995).

Germ-line therapy is one of two forms of gene therapy. The other form is somatic gene therapy. Germ-line gene therapy "involves a permanent genetic change that is passed on to offspring, because every cell, including the sex cells, is genetically changed. . . . [T]he change that is made can be permanent; it may be carried by a fraction of the offspring of the treated individual and subsequently through their lineage." 1 ENCYCLOPEDIA OF BIOETHICS, *supra*, at 284. By 1995, this gene transfer procedure was common in molecular genetic laboratories. See 2 ENCYCLOPEDIA OF BIOETHICS, *supra*, at 912. The difference between somatic and germ-line genetic engineering is that the germ-line procedure leads to inheritable traits whereas the somatic procedure does not. See *id.* at 939.

¹¹³ See Modell, *supra* note 111, at 5 (quoting *Exodus* 34:7).

¹¹⁴ Laurie Zoloth, *Born Again: Faith and Yearning in the Cloning Controversy*, in

point, although there is no evidence of increased danger, science cannot determine whether the mother's risk of pregnancy through cloning is greater than that of a traditional pregnancy. The emotional element of the procedure is also indeterminable. Our present knowledge level is too limited to allow a determination of whether cloning would violate the precept of not causing harm to the mother. For the moment, this gap in our knowledge is insufficient to support a conclusion that the process violates Halakah. It is sufficient as an indicator that great caution is required before a final decision is made.

At this time, however, Halakah, the value-laden principles of Jewish tradition, and the analyses provided by modern scholars of Jewish law permit several tentative conclusions to be drawn as to the propriety of human cloning.¹¹⁵ These are: (1) Clones are fully human and must be treated with the full dignity accorded to all humans; (2) Although cloning is not the ideal means of reproduction, it is a *mitzvah* (good deed) in some circumstances and morally neutral in several other circumstances; and (3) Cloning may be allowed for purposes of medical research or therapy.

These conclusions are consistent with those of the NBAC, which relied, at least in part, on testimony offered by Rabbi Dorff.¹¹⁶ This is not to say that the NBAC fully endorses the research and development of human clones. The report's chapter on religious perspectives includes its perceptions of the Jewish viewpoint that (1) we are to use our capacities for the benefit and health of humanity, and (2) the divine mandate to be a partner with God in the ongoing act of creation results in a strong emphasis on the use of medical

CLONING IN THE FUTURE, *supra* note 21 (manuscript at 350, on file with the Author).

¹¹⁵ Although Halakah supports these conclusions, Jewish ethicists share the concern of others regarding the potential misuse of cloning technology and believe that scientists should proceed with caution. There is, however, a degree of ambivalence. For example, the Ashkenazic Chief Rabbi in Israel called for a ban on cloning whereas the Sefardic Chief Rabbi did not. See Barbara Trainin Blank, *The Ethics of Cloning*, in UAHF REPORT, *supra* note 63, at 23. The ambivalence is well stated in Midrash:

There is a statement in Midrash Rabbah: "The sword and the book came down to the world intertwined". . . . It's a double helix. Every significant sphere of human activity has the potential for good or evil. There are no long-term studies of offspring of genetically manipulated conceptions and [the] data on animal embryo splitting—that each piece of the embryo is pluripotent—gives cause for concern. But we have a responsibility to help people and advance science.

Id. at 24.

¹¹⁶ See Campbell, *supra* note 78, at D-29.

skills and knowledge to promote health, cure, and heal.¹¹⁷ Although there is some concern as to the moral problem posed by whether the prospect "to master nature will be transformed into mastery over humans,"¹¹⁸ this concern does not preclude acceptance of the cloning process. Rather, the ethical duty of preservation of life permits support of cloning when it is "presented as a therapeutic remedy for genetic disease or condition."¹¹⁹

The NBAC report further states that, despite the golem tradition,¹²⁰ there is rabbinic consensus that the clone "would have human status, and the imperative to protect life would require protection and care for the clone."¹²¹ However, because an embryo is not granted "full moral status," research on human embryos is warranted, but "a high incidence of embryo deaths, attributable to the inefficiency of research, would violate the maxim of do no harm."¹²² This position is untenable and somewhat internally inconsistent. The point admits that embryos have some level of right to existence, yet tolerates an immeasurable number of embryo deaths before the point of "no more" is reached. The right to existence cannot properly be defined by the concept of "do no harm." Nor is it possible to draw this line based on Halakhic, moral, or other law. If some embryos are to be protected, all must be protected.

Finally, Jewish scholarship reflects ambivalence in regard to the benefits and dangers of the cloning process on human values, but recognizes that the potential benefits justify continued research.¹²³

¹¹⁷ See *id.*

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ For a Bible and fable-based discussion focused on the creation of Eve set forth in *Genesis* 2:20-22 and the ancient fable of the Golem of Prague who was brought to life by Rabbi Judah Lowe (also spelled Loeb) to save the Jewish people, see Lipschutz, *supra* note 7, at 106; see also Dena Davis, *Religious Attitudes Toward Cloning: A Tale of Two Creatures*, 27 HOFSTRA L. REV. 509, 510-12 (1999) (observing that the golem tradition is rooted in the Talmud and describing the creation of the Golem of Prague as being molded from wet clay and then brought to life by receiving the breath of life from the Lord). The golem, regarded as an artificial creation, does not attain human status.

¹²¹ Campbell, *supra* note 78, at D-30.

¹²² *Id.* The reference to "do no harm" may relate more to the ethical obligations imposed upon physicians by their professional standards than it does to any Jewish legal standard. Judaically, this reference relates to the principle that one life may not be sacrificed to save another. "Logic dictates that in regard to taking the life of an Israelite to cure another individual . . . one may not destroy one human life to save another human life." Modell, *supra* note 111, at 8 (citing MAIMONIDES, MISHNEH TORAH, *Hilchot Yesodi Hatorah* 5:7).

¹²³ See Campbell, *supra* note 78, at D-30. The potential death of an embryo does not necessarily preclude continued research. If death of the embryo alone was

Jewish law finds that cloning violates the sacred character of human life if it results in the treatment of clones as a fungible commodity.

The primary conclusions reached in the NBAC report are consistent with Jewish law and values. The flaw in the conclusion that research for three main purposes (infertility, medical advancement, medical treatment) may continue, however, rests with the uniform recognition that the clone must be accorded full human rights.¹²⁴ These rights would be violated if the body of the clone was invaded for purposes of medical research or treatment.

C. Midrash: Jewish Law Should Reject Cloning as a Violation of the Clone's Rights as a Human

The premise that an embryo does not immediately attain full human status means only that medical research can be conducted upon a clone for a period of time during gestation. This does not negate the fact that at some point an embryo is regarded as a human being or, at the latest, attains such status at birth.¹²⁵ Although Halakah is divided as to precisely when a fetus reaches the status of a person, ample authority supports the view that human status attaches prior to birth. Even a nonviable fetus may be considered a living person.¹²⁶ Rabbinic debate as to this question is observed in the

sufficient to preclude research, Halakah could not approve of procedures such as in-vitro fertilization, which, especially during its development stages, caused embryonic death. There appears, however, to be virtually unanimous agreement that in-vitro fertilization is consistent with Halakah:

AIH [artificial insemination of the husband's sperm] is generally regarded as a halakhically permissible procedure through which paternity can be established and the [obligation] of *peru u-revu* ["to be fruitful and multiply" . . .] or at least *la-shevet* [. . . the rabbinic obligation to have children] can be fulfilled. By and large most [decisors of Jewish law] have assimilated IVF [in-vitro fertilization] to AIH and have permitted its utilization. . . .

Broyde, *supra* note 1, at 514 (quoting Yitzchok Breitowitz, *Halakhic Approaches to the Resolution of Disputes Concerning Disposition of PreEmbryos*, TRADITION 64, 65-66 (Fall 1996)). Bleich's recent discussion of issues that arise only after a birth following in-vitro fertilization conception also assumes the validity of in-vitro fertilization. See generally J. David Bleich, *In Vitro Fertilization*, *supra* note 68. But see ROSNER, *supra* note 59, at 107-24 (suggesting that embracing the validity of in-vitro fertilization may be problematic).

¹²⁴ Though not a "legal" concept, the rights of an embryonic person must include that the embryo be treated with the same "dignity" as is afforded to persons after birth.

¹²⁵ Recognizing an embryo as a human being may be equated with the embryo gaining full moral status.

¹²⁶ See ROSNER & TENDLER, *supra* note 106, at 37 (referencing premature and malformed fetuses).

Talmud where disparate views are succinctly stated as: "From when may an infant enter the future world? R. Hiya: From birth . . . R. Simeon b. Rabbi: From when it spoke . . . Rabina: From conception . . . R. Nahman b. Issac: From circumcision . . . R. Meir: From when he said 'Amen.'"¹²⁷

More recent commentators recognize that the fetus is considered a person and is, therefore, protected by laws forbidding the choosing of one life over another. Therefore, taking the life of a fetus is considered murder.¹²⁸ Rabbi J. David Bleich, a highly regarded Orthodox scholar, concludes that "[t]he taking of any life, even that of a fetus, is clearly forbidden by Jewish law. Man does not have the right to destroy even the life which he has created and which would not come into existence save for his intellectual prowess and technical skill."¹²⁹ The question then becomes precisely when during the gestation period a fetus moves from a state of nonbeing to a state of personhood. One view states that personhood occurs after the first forty days of conception¹³⁰—at a point between those urged by Rabina (conception) and R. Hiya (birth).¹³¹ There is substantial rabbinic authority suggesting that prior to this time a fertilized egg is considered no more than fluid.¹³² Bleich observes that there is continuing debate as to whether a fetus can be destroyed within the first forty days following conception and observes that the distinction "has as its source texts which have been handed down from antiquity. In particular, the Septuagint does draw such a distinction."¹³³ Indeed, "Judaism posits that the destruction of the fetus within the first forty days of development entails no moral infraction while at the same time maintaining that, insofar as Jews themselves are concerned, the destruction of even a nascent or potential life within that period is forbidden."¹³⁴

¹²⁷ *Sanh.* 110b.

¹²⁸ See, e.g., RACHEL BIALE, *WOMEN AND JEWISH LAW: AN EXPLORATION OF WOMEN'S ISSUES IN HALAKHIC SOURCES* 232-33 (1984) (discussing the halakhic writings of Hayyim Soloveitchik and Issar Unterman, the former Chief Rabbi of Israel).

¹²⁹ BIOETHICAL DILEMMAS, *supra* note 1, at 209. The scope of this principle may be even broader because there are strong Halakhic sources that suggest the "destruction of such nascent life [a preimplantation embryo] cannot be continued." Bleich, *In-vitro Fertilization*, *supra* note 68, at 72-73 n.9 (discussing a significant number of Halakhic sources that agree with this proposition).

¹³⁰ See Modell, *supra* note 111, at 7.

¹³¹ See *supra* note 127 and accompanying text (noting the Talmud debate on when personhood occurs).

¹³² See Modell, *supra* note 111, at 7.

¹³³ BIOETHICAL DILEMMAS, *supra* note 1, at 209.

¹³⁴ *Id.* at 210. The disparate standard imposed on Jews and non-Jews is explained

The only current dispute is whether the fetus gains personhood after forty days of gestation or at a later time.¹³⁵ This continuing debate is of little significance in regard to how Jewish law demands we treat experimental or medical use of an embryo created through cloning. This embryo is as human as any created by natural means of reproduction. For most medical purposes, the clone will be regarded as fully human well before transplant procedures can be undertaken.

It is medically impossible, for example, to draw bone marrow¹³⁶ before an infant has time to mature. Similarly, it is problematic to believe that an organ, such as a kidney, could be harvested in the womb.¹³⁷ Simply put: Any medical use of a clone to save the life of

as relating to distinctions between the Hebrew and Greek translations. *See id.*

¹³⁵ Further guidance in determining when a fetus receives fully protected human status as distinct from being regarded as a part of the mother is provided in connection with discussion of Halakah as it relates to abortion rights. *See generally* BIALE, *supra* note 128; *see also* CASES AND MATERIALS, *supra* note 38, at 609-24; HEALTH AND MEDICINE, *supra* note 53, at 79-90; *Mishna Oholot* 7; *Sanh.* 57b; *Sanh.* 72b; MAIMONIDES, LAWS OF MURDER AND THE PRESERVATION OF LIFE, ch. 1; *Exodus* 21:22-25; Isser Yehuda Unterman, Concerning Saving the Life of the Fetus 367 (1992) (unpublished teaching materials of Professor Ernest J. Weinrib, University of Toronto, on file with Author).

The position taken in this Article is conservative and uses the term "personhood" in a broad sense. Halakah makes clear that a fetus is not a *nefesh* (a person or a soul) until at least part of the infant has emerged during birth. *See* Dena S. Davis, *Abortion in Jewish Law: A Study in Casuistry*, LX/2 J. AM. ACAD. OF RELIGION 313, 315-17 (1992). This concept is particularly compelling in its recognition that maternal welfare has priority over fetal life even during birth procedures. *See Mishna Oholot* 7:6. For a concise and lucid analysis of abortion and related issues, *see* Ronald M. Green, *Contemporary Jewish Bioethics: A Critical Assessment*, in THEORY AND BIOETHICS 244-66 (1985).

¹³⁶ The drawing of bone marrow is the example chosen by Broyde to illustrate that having a child with the hope that the child will enable a life to be saved is not prohibited or discouraged under Jewish law. *See* Broyde, *supra* note 1, at 532.

Various efforts, however, have "paved the way . . . for the successful engraftment of stem cells, derived from adult bone marrow, as alternative life saving therapies [for congenital disorders]." Atfab A. Ansari, Ph.D. & J. Bruce Sundstrom, Ph.D., *Transplantation of Fetal Tissues*, 16 ORGAN AND BONE MARROW TRANSPLANTATION 333, 345 (1996) (emphasis added). Gene therapy experimentation utilizing bone marrow cells from human donors has also been performed, including experiments with human hematopoietic cells to optimize gene transfer efficiency into progenitor cells. *See* Stefan Karlsson et al., *Gene Transfer and Bone Marrow Transplantation with Special Reference to Gaucher's Disease*, 11 BONE MARROW TRANSPLANTATION SUPP. 1, 124, 125-26 (1993); *see also* Leonie C. M. Kaptein et al., *Bone Marrow Gene Therapy for Adenosine Deaminase Deficiency*, 4 IMMUNODEFICIENCY 335, 337 (1993) (describing a study, one element of which was based on "[p]eripheral blood lymphocytes . . . obtained from a two-year old ADA-SCID patient," that successfully treated patients through bone marrow transplants from suitable donors).

¹³⁷ Researchers have attempted the transplantation of various tissues, including the liver, thymus, and pancreas. Human fetal thymus and liver transplantation research for hematolymphoid disorders is now taking place. *See* Ansari & Sundstrom,

another, with the possible exception of stem cell harvesting¹³⁸ or similar non life-threatening embryonic procedures, cannot physically be performed until the clone has reached the point at which it is recognized as a human being.¹³⁹ The question then becomes: Is the harvesting of bone marrow or an organ consistent with the clone's status as a person? A person with legal capacity may consent to a transplant in order to save a life. This action is fully consistent with human integrity and dignity. Performance of such an act is a *mitzvah*. The problem lies in the fact that an infant, who under both Halakhic and American law lacks legal capacity, cannot consent to such a procedure.

Viewed from the perspective of the DNA donor, "[i]t would appear . . . that a person's right to physical integrity is sufficiently well established in Jewish law and tradition that there is no need to demonstrate that Jewish law would prohibit one from assaulting another to get cells from their body to clone."¹⁴⁰ The failure to recognize that this principle also applies to a clone comprises the missing link in the discussion of whether Halakah permits the use of a human clone for medical purposes.

In virtually every state in the United States, battery, in its basic form, is the intentional and nonconsensual touching of another person.¹⁴¹ This principle applies with equal force under Jewish law.¹⁴²

supra note 136, at 345-48.

Fetal tissue research uses cells harvested from fetuses that were either spontaneously or electively aborted. See *Setting the Stage: Fetal Research, Fetal Tissue Research, and Historical Timeline of Regulation and Legislation*, in FETAL RESEARCH AND APPLICATIONS: A CONFERENCE SUMMARY 4, 6 (Institute of Medicine 1994). This is distinct from research addressed to medical treatment of a live fetus that can be performed in utero. See *id.* at 4, 26-43.

¹³⁸ Stem cell harvesting involves the gathering and transfer of stem cells for bone marrow transplants. Pluripotent stem cells are found within the bone marrow space or, in lesser amounts, in the peripheral blood. See COLOR ATLAS AND TEXT OF BONE MARROW TRANSPLANTATION 13 (Jennifer Treleaven & Peter Wiernik eds., 1995). The cells are taken from an "HLA-matched related or unrelated donor (allogeneic) or from self (autologous)." MARIE BAKITAS WHEDON & DEBRA WUJCIK, BLOOD AND MARROW STEM CELL TRANSPLANTATION: PRINCIPLES, PRACTICE, AND NURSING INSIGHTS 37 (1997). "Because the fetal immune system is not developed . . . [umbilical] cord blood may be a very desirable option for unrelated and mismatched transplants." *Id.* at 39.

¹³⁹ An embryo must have reached a certain level of physiological development in order to produce the desired cells or organs. That Halakah regards the embryo as "fluid" for the first forty days of gestation appears to be independent of this level of biological analysis despite the remarkable coincidence that modern science draws the line between an embryo and a fetus at six weeks of gestation.

¹⁴⁰ Broyde, *supra* note 1, at 529 (citing SHULHAN ARUKH, *Hoshen Mishpat* 420:1-3).

¹⁴¹ See, e.g., W. PAGE KEETON ET AL., PROSSER AND KEETON ON THE LAW OF TORTS § 9

The Halakhic prohibition against battery prevents obtaining a few cells that can be taken without an invasive procedure and must apply with greater force to the invasive procedures involved in any form of organ transplant. Talmudically, the question might well be posed as "How much more when there is extreme invasion?"

In the absence of intellectual capacity to consent, the only means to obtain consent is through the device of presumed intent, *umdena*. The Supreme Court of Israel, in *Attorney General v. Anonymous*,¹⁴³ discussed this principle in an opinion authored by Deputy President Elon.¹⁴⁴ The broad issue presented was whether it is "permitted to remove a kidney from a mentally disabled adult to transplant it into his father-guardian's body?"¹⁴⁵ The father, age sixty-two at the time of opinion, suffered from kidney problems for a number of years and had to undergo eight hours of daily dialysis. His thirty-nine-year-old son was classified as having a low-level retardation, which negated his capacity to consent to a kidney transplant. In support of the petition, counsel for the father argued that (1) the father was his son's caregiver, (2) soon the father would be unable to provide necessary care, and (3) if the operation were a success, the son would benefit from continued care.¹⁴⁶ Two adult daughters were also transplant candidates. Testimony indicated that they had not undergone a compatibility screening. Although it was possible that one or both daughters would be a better match than the son, other personal concerns militated against either daughter becoming the donor.¹⁴⁷

(5th ed. 1984); RESTATEMENT (SECOND) OF TORTS §§ 13-16 (1965).

¹⁴² See DORFF & ROSETT, *supra* note 36, at 148-60 (including discussion of Mishnah, *Bava Kamma*).

¹⁴³ 42 (ii) P.D. 661 (1988), in CASES AND MATERIALS, *supra* note 38, at 713.

¹⁴⁴ See *id.*; see also C.A., Shefer v. State of Israel, 48 (i) P.D. 87 (1993), in CASES AND MATERIALS, *supra* note 38, at 592-607, 638-76 (discussing many issues addressed in this Article, including duties in regard to healing and their relation to the concept of "love your fellow as yourself," the supreme value of human life, and statutory law governing human dignity and freedom).

¹⁴⁵ *Attorney General v. Anonymous*, in CASES AND MATERIALS, *supra* note 38, at 713. Although the facts focus on a mentally incompetent person rather than an embryo or a newborn, the reasoning is equally applicable to the clone embryo provided only that the clone attain the status of a person while still an embryo. See *supra* notes 122-34 and accompanying text (discussing when a fetus attains full status as a person). As in any other area of developing law, existing precedents aid in the determination of the appropriate parameters of the new law.

¹⁴⁶ See *Attorney General v. Anonymous*, in CASES AND MATERIALS, *supra* note 38, at 714.

¹⁴⁷ See *id.* at 726-27. These concerns included, *inter alia*, an absence of evidence that there would be a critical deterioration in the father's health without a

The court entered into extensive discussion of whether presumed consent was appropriate and performed a balancing test to ascertain the propriety of removing one kidney from the son.¹⁴⁸ In an opinion carefully weaving between Halakahic principles and state law, the court determined that "one may not direct the removal of a kidney from a legally incompetent person for the purpose of a transplant. Neither the guardian nor the court may authorize a procedure that a legally competent individual cannot be obligated to undergo."¹⁴⁹ Relying on Maimonides' *Mishneh Torah*, the court found that mentally deficient persons are "like children," and that guardians are appointed for them.¹⁵⁰ Such guardians have the "authority to manage the minor's property and business affairs," but a guardian's consent as a substitute for the consent of the minor is limited to those purposes.¹⁵¹ Although the guardian is responsible for the health of the minor, the guardian cannot consent to removal of an organ when doing so benefits a third party.¹⁵² The court recognized that some Halakhic authority even precluded an eleven-year-old-child from donating a kidney for the benefit of his brother when the child's consent was negated by lack of capacity and the parents' consent was invalid as beyond their authority.¹⁵³ A clone is a far younger "child." We need no analogy to protect that child just as the court protected the mentally incompetent adult.

Not fully satisfied with this support, the court turned to an opinion of a "leading halakhic authority," Moses Hershler, for insight into the question of "presumed intent."¹⁵⁴ Hershler's *Responsum* recognized the distinction between allowing presumed intent in

transplant, the mother's mental state precluded her as a potential donor, evidence that the occupations of both sisters required intensive physical activity making it unwise for either of them to be left with only one kidney. *See id.* One sister was divorced and the loss of a kidney could reduce the likelihood of remarriage, some likelihood that, nevertheless, one sister would donate if the son could not, and a variety of case specific medical concerns. *See id.*

¹⁴⁸ The balancing test factors, though of substantial importance, will be addressed herein only to the extent that they illuminate the consent ruling and its reasoning. Similarly, the court's concern with the potential for commercial sale of organs is of no direct relevance to the question of consent.

¹⁴⁹ *Attorney General v. Anonymous*, in *CASES AND MATERIALS*, *supra* note 38, at 717. Common sense dictates that both an embryo and a newborn child are equally lacking legal competence.

¹⁵⁰ *See id.*

¹⁵¹ *See id.*

¹⁵² *See id.* at 717-18.

¹⁵³ *See id.* at 718 (citing Silverstein, 4 *Halakah u-Refu'ah* 156, 157 (1985)). The court did not indicate its approval of this Halakahic interpretation.

¹⁵⁴ *Id.*

regard to financial and charitable matters, on one hand, and organ donation, on the other. He found that despite the danger to the minor in regard to organ donations that presented an argument for denying consent in such cases, "it seems correct to equate the two. Whenever we can presume that the person would surely have done something, we can say that he also would have consented to it."¹⁵⁵ The likelihood of such consent in regard to saving the life of a close relative is strong and even more so when the protected person is dependent on the potential donee. Despite this accurate appraisal of general principle, Hershler concluded that on the specific facts of the case, presumed intent was improper.¹⁵⁶

Two essential findings supported this result. First, there was a determination that the sick father's life was not in danger. Second, there was a finding that a competent sister refused to be a donor, which suggested an absence of certainty that the incompetent brother would consent had he been competent.¹⁵⁷ After review of further Halakhic authority that supported a determination of presumed intent, especially for a close relative, Justice Elon was not satisfied. He reasoned:

In my opinion, this is a far-reaching conclusion from the point of view of Jewish law, namely, to allow the removal of a kidney from an incompetent person because of the presumption that most people would donate the kidney. This "presumed intent"—even if based on a factually correct assumption—is *insufficient to permit the removal of an incompetent's kidney unless, in addition to the "presumed intent," the taking of the kidney and transplant are of significant benefit to the incompetent's physical and mental health*¹⁵⁸

It is difficult, if not impossible, for this Author to conceive of a situation in which the taking of an organ, bone marrow, blood cells, or any other part of the body solely to aid in the treatment of a third party would provide a "significant benefit" to the clone embryo or infant clone. The benefits to the person gaining therapeutic treatment, as well as the emotional benefit to parents of the children (the older sibling and the clone), are distinct from direct benefit to the clone. Even if such emotional benefit exists as to either the parents or the older sibling, it should not be viewed as a substantial benefit to the clone. A nexus derived from benefit from the clone to another person could theoretically be predicated on an analog to

¹⁵⁵ Attorney General v. Anonymous, in CASES AND MATERIALS, *supra* note 38, at 719.

¹⁵⁶ See *id.*

¹⁵⁷ See *id.* at 719-20.

¹⁵⁸ *Id.* at 720 (emphasis added).

transferred intent, for example, transferred benefit. Such a step raises substantial policy concerns and should be rejected as an untenable extension of legal principle. This analysis is consistent with the court's determination.

Following an evaluation of the actual benefits that could accrue to the mentally incompetent son, the court concluded that, on balance, these benefits were insufficient. The district court order permitting the transplant procedure was reversed.¹⁵⁹ A concurring opinion of Justice Beiski stressed that this case should not be taken as establishing a rule for other cases, such as those involving bone marrow or blood transfusions, in which there would be no harm to the donor.¹⁶⁰ This distinction, suggesting and supporting a policy determination that would ignore battery when that battery caused no harm to the victim and provided benefit to a third party, must also be rejected. The existence of a battery depends not on the seriousness of the violation, but upon its very existence. To start down the path of redefining battery based on this form of policy-oriented balancing is to start on a path that has no bounds and can only confuse settled law.

Deputy President Elon's opinion finds that Halakah insufficiently addressed the question of presumed intent by failing to place sufficient emphasis on danger to the incompetent donor.¹⁶¹ This danger is exacerbated when the donor is a clone created for the very purpose of a transplant. In many such cases, the medical condition of the potential recipient will be extreme, thereby creating a powerful temptation to perform the transplant procedure at the earliest possible time. The danger to the health and life of an infant

¹⁵⁹ Justices Bach, Barak, Beiski, and Former Deputy President Ben-Porat concurred in the opinion of Justice Elon. *See id.* at 730-31.

¹⁶⁰ *See id.* at 731.

¹⁶¹ Justice Elon, as Justice Beiski, relies on potential harm, rather than on the distinct question of consent to a touching or the broader concern of bodily integrity. For example, the opinion declares:

In the instant case, we must also add to the balance the likely harm to the son. The surgery, and the resultant suffering, will have negative emotional and mental effects. The fits of anger to which the son is susceptible because of his mental retardation make him more vulnerable to injury to his remaining kidney than a healthy individual. . . . And if, Heaven forbid, his remaining kidney is damaged, dialysis treatment will be much more difficult than for a healthy individual, because this long and difficult treatment requires patience, understanding, and repose. . . .

Id. at 729. This approach, as discussed by Justice Elon, appears to complement rather than modify the ultimate judgment of the court in regard to the absence of consent.

who undergoes major surgery is real. All surgery, especially that performed under anesthesia, presents risk to the patient.¹⁶² To create a human being for the purpose of exposing that infant to such danger is unacceptable. Subjecting an infant clone to an organ transplant procedure will provide no "significant benefit to the [clone's] physical and mental health."¹⁶³ Such a practice, with its substantial potential for treating the clone as a "commodity," defies the inherent values of Halakah that all persons be treated with dignity and integrity. That this "commodity" is designed to aid in the cure of another person does not change the clone's status back to that of a human being.

D. Conclusions—Jewish Law

Halakah mandates that a clone be recognized as a human being with all of the protections afforded to any other person. With this understood, it is, nevertheless, permissible to create a clone for purposes of procreation as this aids in the creation of a person. To the extent that medical research can be performed during pregnancy, it is permissible to engage in such research provided that there is no reasonable likelihood that this will result in the death of, or serious injury to, the embryo.¹⁶⁴ There is no acceptable level of fetal death or serious injury when that result is reasonably likely to occur.

Unavoidable embryo death, however, has no relevance to the rule that must apply after the child is born. The use of a clone for

¹⁶² The risks associated with surgeries performed while the patient is under anesthesia include, but are not limited to, adverse reaction to the anesthesia, infection, and professional malpractice.

¹⁶³ *Attorney General v. Anonymous*, in *CASES AND MATERIALS*, *supra* note 38, at 720.

¹⁶⁴ Halakah, and the related discussion of ethical issues concerning cloning, virtually assume the consent of the woman who will bear the child. Professor Laurie Zoloth, writing from the perspective of traditional Jewish ethics and feminist analysis, raises serious questions that may suggest that this presumption is invalid. She argues that cloning reflects the yearning of men "to order and control how it is that women are closer to the mystery of reproduction of the self." Zoloth, *supra* note 114 (manuscript at 353-54). This article should make us consider the potential that women may be coerced to consent by male "power," enhanced by the fact that no female scientist was involved in the presentation of the cloning event, the scientists were male, the linguistics were male gendered, and the only woman named was Dolly Parton in a blatant sexist slur. See *id.* at 354-55. Professor Zoloth's insights reveal the deep emotional elements of child-bearing on a mother's life, elements largely ignored by other scholars. See Abigail Rian Evans, *Saying No to Human Cloning*, in *HUMAN CLONING: RELIGIOUS RESPONSES* 29 (Ronald Cole-Turner ed., 1997) (raising the related issue of devaluation of women) [hereinafter *HUMAN CLONING*].

any form of organ or bone marrow transplant,¹⁶⁵ after birth and prior to the clone reaching an age at which he or she can grant permission for the transplant, is impermissible. Neither parental nor guardian consent nor presumed intent can be utilized as a legal device to impose such a bodily invasion upon the clone regardless of the potential benefit to any third party.¹⁶⁶ Halakah recognizes that a child's legal capacity is measured by chronological age and that a child below the age of six, a *katon*, lacks contractual capacity.¹⁶⁷ Consistent with this principle, the doctrine of presumed consent should not be available until the child passes from the status of *katon* to at least that of *pa'ut*, the age between six and the onset of puberty. To those who would argue that this approach may foreclose the effective use of a cloned human being for therapeutic purposes that might save the life of another, the answer is: "Exactly."

II. A COMPARISON TO OTHER ABRAHAMIC TRADITIONS

It is difficult, if not improper, to declare that there is "a" given position attributable to any religion. With the possible exception of

¹⁶⁵ Halakah distinguishes between organ donation and bone marrow or blood donation to the extent that the body can replenish bone marrow. See Attorney General v. Anonymous, in CASES AND MATERIALS, *supra* note 38, at 715. This distinction, which applies to the commercial sale of blood or bone marrow, should, however, be of little relevance when determining the necessity of consent to use the clone's organs or bone marrow for transplantation.

¹⁶⁶ The conclusion that the clone himself must consent to marrow or organ donation is limited to the cloning process and is distinct from questions concerning such procedures as the use of fetal blood cells from the umbilical cord to develop cells for infusion to aid in the treatment of leukemia or the growing of skin cells from one's own body for use in transplants to aid burn victims. Similarly, the cloning process is distinct from the use of embryonic stem cells to grow organs. The use of embryonic stem cells to grow organs recently was reported by Japanese scientists, who grew frog eyes and ears from the animal's own embryo cells. This process, when fully developed, could allow for replacement of human sensory organs using cells from the patient's own body. Eric Prideaux, *Japanese Scientists Learn to Grow Frog Eyes*, THE PLAIN DEALER (Cleveland), Jan. 4, 2000, at 5A. Scientists have also "cloned" four calves using skin cells from a bull's ear. "Experts believe that the technique should work in other species, including humans." Nicholas Wade, *New Method Helps Cloning Efficiency*, THE PLAIN DEALER (Cleveland), Jan. 5, 2000, at 7A.

¹⁶⁷ See HOROWITZ, *supra* note 34, § 134, at 241-42. Although *katon* status commences at birth, the principle can be applied to the human being in the embryo stage. American tort law recognizes similar age distinctions in regard to one's capacity to commit an act of negligence. See PROSSER & KEETON ON THE LAW OF TORTS, *supra* note 141, § 32, at 180. Though some states do not set an arbitrary age limit, a number of states have ruled that a child below the age of seven lacks the intelligence necessary to commit tortious conduct and "undoubtedly there is an irreducible minimum, probably somewhere in the neighborhood of four years of age." *Id.*

Roman Catholicism, religious organizations do not speak with a single voice. Indeed, even among Jews, the Halakhic view described above does not speak for the variety of persons who practice Judaism. The Halakah most related to the cloning debate does not directly consider the strong sense of family value that is part of the Jewish tradition. The discussion that follows seeks only to provide a degree of comparative analysis and to focus only on general theological principles as illustrated by a limited number of published opinions, rather than as a stated and formal position of a given religion.¹⁶⁸

We must also recognize the validity of Roger L. Shinn's declaration that "[n]o law from Sinai, no commandment from a sacred Mount, nothing in the Buddhist eightfold path or the Muslim sharia decrees: Thou shalt not clone. The historic philosophers are equally silent. We are engaged in exploratory ethics."¹⁶⁹ Moreover, though speaking of Christian theology, Shinn's recognition regarding the effect of this belief accurately describes the proper ethical role for theology in this debate: "Christians cannot expect a pluralistic society to adopt an ethics based solely on Christian belief. They can declare their beliefs and seek to live by them. Doing that, they may discover that their ethical insights have some persuasiveness for humankind."¹⁷⁰ An understanding of the diverse and developing perspectives of all religions will enhance discussion of the ethical and moral propriety of cloning. That theology provides no uniform conclusion is no more detrimental to an appreciation of values than is the equally conflicting secular-based discussion.¹⁷¹

¹⁶⁸ This Article does not include an analysis of the views of all religions. Rather, it contains a synthesis of Christianity and Islam because these religions have substantial representation in the United States. Moreover, Judaism, Christianity, and Islam form the Abrahamic family of religions. See Campbell, *supra* note 78, at D-27. Limiting this discussion to these three religions does not diminish the insights that can be provided by many other religions followed by substantial numbers of persons throughout the United States and the world. For a presentation of various additional religious perspectives on cloning, including those of African-American churches, Buddhist, Hindu, and Native American traditions, see *id.* at Part D; see also generally REFLECTIONS: THE NEWSLETTER OF THE PROGRAM FOR ETHICS, SCIENCE, AND THE ENVIRONMENT (Dept. of Philosophy, Oregon State University), May 1997, in UAHF REPORT, *supra* note 63, at 38-52 [hereinafter REFLECTIONS]. *Reflections* includes concise and illuminating essays by scholars representative of the views of Native Americans, African-Americans, Buddhists, and Hindus.

¹⁶⁹ Roger L. Shinn, *Between Eden and Babel*, in HUMAN CLONING, *supra* note 164, at 106.

¹⁷⁰ *Id.*

¹⁷¹ A significant body of discussion based on secular approaches by scholars and medical experts from several nations is now available. See, e.g., Advisors to the President of the European Commission on the Ethical Implications of Biotechnology, *Ethical Aspects of Cloning Techniques*, 23 J. MED. ETHICS 349 (1997);

A. *Islam*

In terms of a theology-based legal system, Islam may be closer to Judaism than any other religion and is more akin to the concepts within Halakah than is the American common-law system. Islam, as Judaism, provides law based upon divine and immutable revelation.¹⁷² Both systems govern all aspects of behavior, integrate religion with law, and have places of worship that can function as courts of law.¹⁷³ Indeed, the two share a linguistic similarity. "Just as *halakah* is related to the verb 'to walk' or 'to go,' the parallel term for Islamic law, *shari'a*, is literally translated as 'the way to a watering place.'"¹⁷⁴ Both terms define a path to be followed by the faithful.

Another scholar, Professor David F. Forte, places a somewhat different emphasis on the role of Islamic law, Islamic culture, and Islam itself, noting that these labels do not represent one and the same thing.¹⁷⁵ Forte observes that "[t]he character of Islamic law is, in some ways, similar to Talmudic law. Both have retained an intellectual longevity. . . . Both developed through debate, exegesis, interpretation, and commentary."¹⁷⁶ Forte observes, however, that with the exception of some orthodox Jews, there is no Judaic equivalent recognition of the principle that "Islamic states and political movements define themselves by their attitude towards the Shari'a."¹⁷⁷ Despite this "definition," there are diverse views in regard to the relationship of the Shari'a and state law.¹⁷⁸ It may be unfair to

John Harris, "Goodbye Dolly?" *The Ethics of Human Cloning*, 23 J. MED. ETHICS 353 (1997); Jeff McMahon, *Cloning, Killing, and Identity*, 25 J. MED. ETHICS 77 (1999); CLONING DEBATE, *supra* note 11; *Cloning Symposium*, 38 JURIMETRICS J. (Fall 1997).

¹⁷² See AUERBACH, *supra* note 31, at 47.

¹⁷³ See *id.*

¹⁷⁴ *Id.*

¹⁷⁵ See DAVID F. FORTE, *STUDIES IN ISLAMIC LAW: CLASSICAL AND CONTEMPORARY APPLICATION* 11 (1999).

¹⁷⁶ *Id.*

¹⁷⁷ *Id.*

¹⁷⁸ Forte notes:

For Islamic fundamentalists, the Shari'a is the only legitimate means of state rule. For eclectics, parts of the Shari'a . . . can be melded together with other legal structures to create a modern, but still Islamic, political entity. For secularists, as well as for some Marxists, it is an anachronism to be rejected. For a number of Islamic jurists, the Shari'a can be developed anew . . . to meet the needs of twentieth-century Islam. For radicals (many Marxist-trained), Islam is actuated through revolutionary and politics, and the Shari'a is the emblem of a society's Islamization. For reformers, the Shari'a (at least in its entirety) no longer meets the moral, economic, or political needs of the Muslim people.

characterize Islam as a "theology-based legal system" or to conclude that any more than the most literal adherents to the Shari'a hold that it "governs all aspects of behavior."¹⁷⁹ Indeed, "[t]he Islamic state never gave over to the jurists the authority to impose the entire Shari'a on the body politic. For their part, the jurists of the Shari'a never devised a constitutional theory declaring illegitimate those state actions or actors that contravene the rules of Islamic law."¹⁸⁰ Despite the different emphasis discussed by Forte, the perspectives described below are consistent with the basic precepts of Islam.

As with Judaism and Christianity, Islamic analysis of the propriety of cloning begins with an understanding of God's creation. In a thoughtful article recognizing some differences among Islamic scholars, Abdulaziz Sachedina provides insight as to how Islam views creation:

We created (khalaqna) man of an extraction of clay, then we set him, a drop in a safe lodging, then We created of the drop a clot, then We created of the clot a tissue, then We created of the tissue bones, then we covered the bones in flesh; thereafter We produced it as another creature. So blessed be God, the Best of creators (khaliqin)!¹⁸¹

From this verse four important principles are derived:

- (1) The creation of embryos is an act of divine will that determines development of the embryo to a full human person;
- (2) Perceivable human life is only possible during the latter stage of embryonic development when God says "We produced him as another creature;"
- (3) The fetus, therefore, gains status as a legal person only at this later stage of development rather than when it lodges in utero; and
- (4) As the Qur'an is silent as to when ensoulment occurs, it is possible to distinguish between a biological and a moral person

Id. at 12.

¹⁷⁹ David F. Forte, Comments after review of this Article (March 2000).

¹⁸⁰ FORTE, *supra* note 175, at 13.

¹⁸¹ Abdulaziz Sachedina, *Human Clones: An Islamic View*, in CLONING DEBATE, *supra* note 11, at 235 (quoting *Qur'an* 23:12-14). Another scholar observes that according to the *Qur'an* "[c]reation can be described in two ways: Creation resulting from putting together things that are already in existence or creating things from nothing." Dr. Maher Hathot, *Who Will Set the Limits*, in REFLECTIONS, *supra* note 168, at 48. The first form, *khaliq*, empowers human minds to put together things. The second form, *bari*, belongs exclusively to God as He alone creates things from nothing. See *id.*; cf. *supra* note 120 (noting that the Golem of Prague was also created out of clay).

and that the stage of a moral person takes place after, at least, the first trimester.¹⁸²

Although some scholars, including a leading Mufti of Egypt, declare "copying" as an act of disbelief and immoral, the prevailing view seems to be that expressed by an Egyptian legist, Yusuf al-Qaradawi, who does not challenge cloning based on God's will because anything man can create is under the will of God.¹⁸³ Rather, he asks whether the process is "licit" and "[w]ould such a process create disorder in human life when human beings with their subjective opinions and caprices interfere in God's created nature on which He has created people and has founded their life on it?"¹⁸⁴ Despite concern that cloning may negate the differences between human beings, contrary to God's direction, al-Qaradawi "maintains that the technology can be used to overcome certain hereditary diseases, such as infertility, as long as it does not lead to abuse in other areas."¹⁸⁵ This Sunni perspective is consistent with the Shi'ite¹⁸⁶ view that the Islamic tradition endorses "the applications of the

¹⁸² Sachedina, *supra* note 181, at 235-36.

¹⁸³ See *id.* at 232. Some leading Sunni authorities from Saudi Arabia and Egypt deem cloning to be "the work of the devil" and urge officials to punish scientific researchers involved in cloning. See Campbell, *supra* note 78, at D-28. However, this is not the view of Islamic jurists in general. See *id.*

¹⁸⁴ Sachedina, *supra* note 181, at 233 (quoting *Sayyidat*, No. 843, at 63).

¹⁸⁵ *Id.*

¹⁸⁶ Sunni Muslims constitute more than 90% of the world's Islamic population. See CAROLYN FLUEHR-LOBBAN, ISLAMIC SOCIETY IN PRACTICE 20, 22 (1994). Unlike divisions in Christianity and Judaism, the primary divergence between the Sunni and Shi'ite traditions relates more to "succession, governance, and leadership of the community of Muslims than with differences in theology." *Id.* at 22. For example, Sunnis advocate a selection or election for succession to the *khalifa* while Shi'ites believe in "divine succession to Iman through the family of the Prophet." *Id.* at 23. The Sunni tradition does not require allegiance to a religious authority other than acceptance of legal procedures, but the Shi'ite tradition demands adherence to a superior authority, the Mujtahid. See CYRIL GLASSÉ, THE CONCISE ENCYCLOPEDIA OF ISLAM 369-70 (1989). The most important Mujtahid are the Ayatollahs who decide not only religious matters, but also control many economic-based decisions. See *id.* at 370.

There are also differences between Sunni and Shi'ite Muslims in religious and related practices including, but not limited to: Shi'ites include a few additional verses in the call for prayer and for funeral prayer; Shi'ites use specially made open-roofed buses for pilgrimages while Sunnis use open or closed roofed vehicles; Shi'ites allow consumption of meat slaughtered by non-Muslims, while Sunnis allow this only when necessary; Shi'ites believe that God changes his decisions while Sunnis do not; and Shi'ites deny the efficacy of prayer offered by a morally unworthy leader while Sunnis accept such prayer if offered in a technically correct manner. See *id.* at 370.

technology as long as it provides practical benefits in terms of improved human life."¹⁸⁷

The question of when a clone embryo takes on a human life through ensoulment plays an important role in determining the limits imposed on the use of the embryo. A majority of Sunni and some Shi'ite scholars set this point at four months, but others regard the embryo as alive at all times, making its eradication a sin.¹⁸⁸ As neither the Qur'an nor tradition provides a universally accepted definition,¹⁸⁹ a tenable conclusion is that man can participate with God in the act of creating through "the early stages of embryonic development."¹⁹⁰ Or, as more fully stated:

[I]n Islam human management of genes made possible by biotechnical intervention in the early stages of life is regarded as an act of faith in the ultimate will of God as the Giver of all life, as long as such an intervention is undertaken for the purpose of improving the health of the fetus or increasing the chances of fertility for a married couple.¹⁹¹

That theology is largely supportive of continued development of cloning technology does not, in and of itself, fully address the ethical concerns facing those of the Islamic faith. Muslims believe that religion is made up of ten parts, nine of which constitute human relationships and only one of which bears on the relationship of man to God.¹⁹² In this sense, Islam regards marriage and family as the prime institution of the divinely created order and recognizes that reproductive technology does not require a moral connection between man and woman. To preserve the lineage of children, reproduction must take place within the religiously specified boundaries of a spousal relationship.¹⁹³ In this respect, Islam parallels

¹⁸⁷ Sachedina, *supra* note 181, at 234.

¹⁸⁸ *See id.* at 236; *see also* Campbell, *supra* note 78, at D-28.

¹⁸⁹ The Jewish tradition, on some views, recognizes that an embryo becomes human after 40 days, a much shorter period than the four months set by the Islamic tradition. *See supra* notes 132-35 and accompanying text.

¹⁹⁰ Sachedina, *supra* note 181, at 236. This view is consistent with the *NBAC Report*, which indicates a lack of consensus on the moral status of the embryo. The *NBAC Report* notes that some view ensoulment as taking place at the moment of fertilization, while others believe it occurs at the end of the fourth month. For those who adhere to the latter tradition, "it becomes possible to argue for research on the human pre-embryo for purposes of human health. Moreover, if the embryo is not accorded personhood, then destruction of the embryo is permissible." Campbell, *supra* note 78, at D-28.

¹⁹¹ Sachedina, *supra* note 181, at 237.

¹⁹² *See id.*

¹⁹³ *See id.* at 238.

Judaism and Christianity in its concern for protection of any child created. A second similarity is that Islam and Judaism focus on the use of this technology for therapeutic purposes, while permitting its use for reproductive purposes.

Finally, several important subsidiary principles guide and limit the use of cloning under Islam. The principle of *la darar wa la dirar*, "the necessity to refrain from causing harm to oneself or others,"¹⁹⁴ provides a significant limitation on even experimental use of cloning. Again, this principle parallels that of Jewish law. All of these religious and ethical concerns reflect a cautious approach to cloning particularly where the process goes beyond treatment of infertility or assessment of genetic abnormalities prior to implantation. Sachedina summarizes the general Islamic view that recognizes the grave and unprecedented risks posed by this technology:

Nevertheless, since we do not will unless God wills, can this breakthrough in cloning be regarded as part of the divine will to afford humankind yet another opportunity for moral training and maturity? The Qur'an seems to suggest that embryo splitting is just that opportunity for our overall maturity as members of the global community under God.¹⁹⁵

This approach is consistent with that of another Islamic scholar who recognizes that Islam believes that all knowledge emanates from God and that humans have an obligation to "interact with this knowledge in order to communicate with God and serve human society."¹⁹⁶ From this basic belief, he concludes that "scientific and empirical investigation is part of human nature as created by God. Any attempt to curb this investigative nature is contrary to Divine principles of creation."¹⁹⁷ Those Muslim scholars who have adopted a view similar to that of the Vatican¹⁹⁸ are perceived to be in error as the

¹⁹⁴ See *id.* at 240. The principle of *la darar wa la dirar* flows from the concepts of *isithsan*, equity, and *maslaha*, public interest. See *id.* at 239. Two other principles, '*usr wa haraj*,' protection against distress and constriction, and '*ala jalb al-massalih*,' averting causes of corruption, also flow from these two concepts and take precedence over bringing about a benefit. See *id.* at 240. These, too, are consistent with Jewish law and moral values.

¹⁹⁵ *Id.* at 240. Embryo splitting is a form of cloning that parallels the natural process, which can yield identical twins, but is distinct from the nuclear transplant procedure, which is the primary foundation of this Article. The quoted reasoning, however, can readily be applied to both cloning procedures.

¹⁹⁶ Hathot, *supra* note 181, at 48.

¹⁹⁷ *Id.* at 49. This belief is analogous to, if not identical with, the Judaic belief that creation is a partnership with God.

¹⁹⁸ See *infra* notes 202-07 and accompanying text (reciting the Vatican's position on human cloning).

Qur'an, in more than fifty places, invites human beings to research, work, and understand the universe and then to draw conclusions that enable them to adopt methods and technology that serve God.¹⁹⁹ On this analysis, cloning research is not so much an interference with *bari*²⁰⁰ as it is a "manipulation of elements created by God to imitate the creation, not to change it."²⁰¹

The approach of Islamic scholars appears to be that, with proper attention paid to the prevention of harm and the promotion of health benefits, the application of cloning technology is consistent with the will of God. In light of the relationship between the core theologies of Islam and Judaism (despite differences in historical and religious development), it is not surprising that the two reach similar conclusions and share similar concerns.

B. Christianity—The Catholic Tradition

The Catholic approach to all cloning issues, unlike that of other organized religions, is unambiguous. The Vatican has issued several relevant statements. In February 1997, just days after the "Dolly" announcement, the Vatican's leading moral theologian, Father Gino Concetti, through an editorial in *L'Osservatore Romano*, made an "urgent appeal to reason and humanity" to ban the cloning of humans.²⁰² The editorial declared that children "have the right to be born in a human way and not in a laboratory" and that stopping cloning would safeguard the values inherent in the human being and its existence rather than as simple opposition to scientific progress.²⁰³ This initial editorial also noted, as do subsequent authorities, that human life must be conceived within the bonds of marriage.

Shortly after Concetti's editorial, the Pontifical Academy for Life, founded by Pope John Paul II, issued a statement condemning all aspects of the cloning practice, including the cloning of a fetal embryo for experimental purposes.²⁰⁴ The Academy saw cloning as a "cavalier treatment of living beings" and showed concern over the potential for mutation arising from efforts to work with the genetic

¹⁹⁹ See Hathot, *supra* note 181, at 49.

²⁰⁰ See *supra* note 181 (describing the *bari* understanding of creation).

²⁰¹ *Id.*

²⁰² See *Vatican Calls for Ban on Human Cloning*, Ref. No. 4389 (Feb. 27, 1997) <<http://www.cwnews.com/news/viewrec.cfm?RefNum=4839>>.

²⁰³ See *id.* This release also noted that Monsignor Elio Sgreccia, Director of the Bioethics Institute at the Catholic University of Rome, urged a cautious approach to genetic experiments on animals that would be permissible only for "grave reasons of scientific research" because there is a duty to respect animal species. See *id.*

²⁰⁴ See *Definitive Vatican "No" on Human Cloning*, *supra* note 26, at 1.

code.²⁰⁵ As with Judaism and Islam, the Catholic approach is concerned with the soul, and the Academy concluded that it is "impossible to duplicate the soul."²⁰⁶ In addition, a number of ethical concerns were posited as grounds to reject cloning. These concerns, shared by virtually all religious and secular scholars and bioethicists, include "the manipulation of human procreation; the exploitation of women in breeding; the industrial approach to production of human beings; the perverse complication of relations between family members; and the destruction of living embryos."²⁰⁷

The Catholic Medical Association on Cloning briefly addresses several of these theological and ethical concerns in a release by its President, Paul A. Byrne.²⁰⁸ As with Islam and Judaism, this position paper begins with creation concepts: "From the beginning God created marriage to fill heaven with saints. Marriage . . . today has that same divine purpose."²⁰⁹ Technology that creates life outside the normative conjugal act of husband and wife, therefore, is immoral as it circumvents God's plan for generation of the human person.²¹⁰ The cloning process negates the uniqueness of each human being: "soul, intellect and will are concreated."²¹¹ The Association concludes that cloning is degrading and destroys the dignity of man by viewing a person as a commodity that "replaces the sanctity of life of a human person with a 'quality of life' judgment about the human person."²¹²

²⁰⁵ *Id.*

²⁰⁶ *Id.* Judaism recognizes that we cannot duplicate a soul, viewing this as an indicator that cloning does not negate the uniqueness of each human being nor does it inhibit any divine plan for diversity among persons. See *supra* notes 72-77 and accompanying text (discussing the view that cloning does not negate the uniqueness of each human being).

²⁰⁷ *Id.*; see also Campbell, *supra* note 78, at D-38. The *NBAC Report* reiterates several of these points and notes

an encyclical issued in 1987 by the Congregation for the Doctrine of the Faith condemned cloning (blastomere separation) as a violation of the dignity of the human embryo and the intrinsic goods of human sexuality. [Such efforts] are to be considered contrary to moral law, since they are in opposition to the dignity both of human procreation and of the conjugal union.

Id. (quoting *Donum vitae*, 1987 I, at 6).

²⁰⁸ See *Position of the Catholic Medical Association on Cloning* (visited Nov. 29, 1999) <<http://www.cathmed.com/cloning.html>>.

²⁰⁹ *Id.*

²¹⁰ See *id.* This approach is diametrically opposed to that of Jewish and Islamic thought.

²¹¹ *Id.*

²¹² *Id.*

The conclusory nature of these position statements provides only limited insight into the theological basis for the conclusions reached.²¹³ This gap will no doubt be filled by more developed essays that encapsulate the theological elements of the Catholic faith.

The Catholic faith is partially founded on how people view themselves and who they are, perceptions that the application of technology could change profoundly.²¹⁴ As recognized by Saint Augustine, "the proper Christian stance is *fides quaerens intellectum*, 'faith seeking understanding.' Christians glorify God through expanding understanding of nature, recognizing themselves more and more clearly as creatures in the midst of creation."²¹⁵ This and other Catholic theological and moral traditions make it impossible to imagine any reason sufficient to justify the cloning of a person.²¹⁶ Cloning is viewed as inconsistent with the theme of scripture, which may provide common ground for all Christians because "God holds each human being in a personal covenant, revealed in Jesus to be a covenant of love. We respond by worshipping God in a spirit that cries out *Abba*, 'Father' (Gal.4:6-7), and by loving others in the *imitatio Christi*."²¹⁷ This relationship to God and Jesus is of substantial importance as only human beings were created by God for their own sake and each has inherent dignity as a child of God who is free to pursue his or her eternal destiny in relationship to the divine. At this fundamental level, "cloning is unacceptable because clones would be human beings created, at least in part, to fulfill the will of another

²¹³ The late John Cardinal O'Connor observed that cloning is an invasion of human parenthood, negating the right of a child to be born within marriage and making that child a product rather than a person. See John Cardinal O'Connor, *Diminished Humanity*, in REFLECTIONS, *supra* note 168, at 50. Cardinal O'Connor also questioned whether human wisdom is able appropriately to deal with the "profound ethical difference between 'having a child' and 'making a child.'" *Id.* at 51. A begotten child "can always be seen as a gift; whereas a child *made* or *manufactured* can always be seen as a thing." *Id.* (emphasis in original).

A Catholic-philosophy based essay provides several perceptive arguments against cloning, including: "The danger that human cloning would alter the very meaning of humanity is clear and present; in a world of cloning, our defining experience of transcendence is likely to unravel. For this reason alone, we must not underestimate the peril of human cloning." Kevin P. Quinn, *Human Cloning After Dolly: What Sort of Creations Might We Become*, 38 JURIMETRICS J. 91, 96 (1997).

²¹⁴ See David M. Byers, *An Absence of Love*, in HUMAN CLONING, *supra* note 169, at 66-67.

²¹⁵ *Id.* at 67.

²¹⁶ See *id.* at 67-68.

²¹⁷ *Id.* at 69. Of interest to some may be the fact that the Hebrew, *Abba*, rather than either Greek or Latin, is used to express "Father."

human being."²¹⁸ The Vatican Congregation for the Doctrine of Faith has declared that experimentation on embryos is a crime against the dignity of human beings, but, relying on Pope John Paul II, recognizes that therapeutic intervention with the objective of healing is within the logic of the Christian moral tradition.²¹⁹ Thus, Catholic teaching "condemns destruction or manipulation [of embryos], while affirming attempts to heal."²²⁰

Catholic values and theology also emphasize the family as the means intended by God to attain procreation. Catholicism teaches:

Every child should be the fruit of an act by which parents give themselves to their partner in love and collaborate with the power of the Creator; procreation is another instance of that covenant that binds us to one another and to God. . . . Observing God's plan for human procreation leads to order and harmony; it is a foundation stone of what John Paul II calls "the civilization of love."²²¹

These values overcome any theological claim that cloning has been given to us by God to build the reign of God. Rather, "[t]he life and death of Jesus Christ, who did not deem equality with God something to be grasped at (Phil. 2:6-11), is witness against this addictive will to power."²²²

The theme of human dignity was also addressed by Bishops of the Church at a general council in the mid-1960s when they recognized "the sublime dignity of the human person, who stands above all things and whose rights and duties are universal and inviolable."²²³ This concept of dignity extends to restriction of sexual activity to marriage as this relationship engenders human life and is based "fundamentally on common sense, the insights of which come

²¹⁸ *Id.* at 70. Byers also notes that we cannot clone human embryos because they are not created to share in the covenant of love. One may not, however, kill a cloned embryo as this would be an improper exercise of power over helpless innocents. *See id.* at 71. Consistent with the 1987 Encyclical, however, some medical experimentation that could benefit the embryo may be permissible. *See id.*

²¹⁹ *See* Byers, *supra* note 214, at 71.

²²⁰ *Id.* To the extent of its limited approval of intervention for purposes of healing, this interpretation is consistent with broader Jewish law.

²²¹ *Id.* at 72.

²²² *Id.* at 76. Byers also notes, consistent with this Author's view of Jewish law, that "[c]loning, at base, is an assertion of power over another human being, exercised without consent. . . . [T]he cloner asserts power not just over the clone's liberty or privileges, but over its very being." *Id.*

²²³ John Haas, *Catholic Perspectives on Cloning Humans*, in CLONING DEBATE, *supra* note 11, at 207 (citations omitted).

to be confirmed by revelation."²²⁴ Thus, if a human being were cloned, it would be deprived of the nurture of its own parents.

Although there is some authority permitting treatment and cure experimentation upon an embryo, the Catholic view of cloning strongly repudiates any effort to clone human beings. Any such effort is regarded as a violation of God's will regarding procreation, repugnant to the role of the family as the sole means by which a child should be created, and counter to the dignity owed to all human beings.

C. The View from Other Christian Traditions

Although the various Christian faiths share a common belief in the resurrection of Jesus Christ and address issues of cloning from perspectives predicated on Creation and the essential theological role of Jesus, there is diversity in the positions taken by scholars seeking to illuminate the views of the different faiths. In some instances the conclusions reached are similar to those reached by Jewish and Islamic scholars, while in other instances they are similar to those of Catholic scholars. Similar conclusions, however, do not uniformly reflect similarity in the ethical and theological reasons that support such conclusions. The discussion below is offered to provide the reader with an indication of these diverse views rather than a comprehensive study. One effect of this limitation is that views that may be shared by several faiths are sometimes presented only within the confines of a specific faith. For example, the significance of Baptism as related to cloning is presented only in connection with the views of the Methodist faith even though it is a more universal Christian belief and practice.²²⁵

²²⁴ *Id.*

²²⁵ The categorizations below are based on either the stated background of given authors or the cited author's affiliation with a specific institution such as the Southern Baptist Theological Seminary or the Divinity School, Duke University which, is described on its website as United Methodist. See *Duke Divinity School At a Glance 1999-2000* (visited Apr. 3, 2000) <<http://www.divinity.duke.edu/ataglanc.html#school>>. To the extent that any categorization is erroneous, the Author begs forgiveness.

1. Nonsectarian: Mainline Protestant Christianity²²⁶

The NBAC report presents a concise summary of the primary concerns of Protestant Christianity reflecting the diversity within these Churches.²²⁷ The Christian recognition of creative freedom supports the pursuit of science when used to fulfill divine purposes and meets the correlative obligation of accountability. In this sense, though steps must be taken to assure respect for the pre-embryo and to minimize the potential for discarded embryos, the primary ethical concern is described as one of science rather than theology.²²⁸ This approach is consistent with Christian theological ethics, which are founded on recognition that God gave "human beings a future to shape and create in partnership with God. Genetic and reproductive technologies express the creative dimensions of the *imago Dei* insofar as they promote human dignity and welfare."²²⁹ Thus, no theological principle precludes human cloning. The NBAC conclusion is analogous to both Judaism and Islam in its recognition of man's creative partnership with God and focus on dignity and welfare. This theological view is inconsistent, however, with that of Catholic theology that casts the partnership role in a different light.

Another view supports research on cloned embryos, but sees cloning of human beings as involving creation "after our image rather than God's," which can lead to power over humans rather than enhancement of choice. This position criticizes appeals to "human" dignity as too global and impersonal to justify cloning and urges that the focus of decision making should "be on the interests of children, that is, on those persons living in the future created for them."²³⁰ At a minimum, there should be debate as to the benefits and detriments posed by human cloning, and the scientific community should bear the burden of establishing a compelling case for the beneficial and therapeutic use of this technology.²³¹

²²⁶ This section discusses an article authored by Roger L. Shinn of Union Theological Seminary, a nonsectarian Christian seminary, and the collection of views representative of seven "mainline" Protestant Churches as described in the *NBAC Report* (American Baptist, Christian Church [Disciples of Christ], Episcopal, Evangelical Lutheran, United Methodist, Presbyterian, and the United Church of Christ). Part D of the *NBAC Report, Cloning Human Beings: Religious Perspectives on Human Cloning*, consists of a commissioned paper by Courtney S. Campbell of Oregon State University.

²²⁷ See Campbell, *supra* note 78, at D-36.

²²⁸ See *id.* at D-36-37.

²²⁹ *Id.* at D-36.

²³⁰ *Id.* at D-37.

²³¹ See *id.*

Two views appear to support a moratorium or ban on further research. One view would implement a long-term moratorium pending full debate of all scientific, ethical, and social issues. Christians would bring to this discussion an emphasis on "human creative possibility" but also a "'hermeneutics of suspicion'" stressing human fallibility and the risks of arrogance.²³² A second view "places cloning within the context of positive eugenics" and is critical of both "research process and product" as cloning raises issues about the characteristics desired in a person, control of "enormous powers of manipulation" by a small number of experts, and whether human life will "assume instrumental rather than inherent value."²³³ On balance, therefore, mainline Protestant Christianity supports cautious cloning research and an even more cautious approval of human cloning.

The concerns expressed by those who seek a moratorium pending a debate on all related issues are consistent with the almost unanimous perception that society should proceed with great caution as it enters upon the application of cloning technology to human beings. Of considerable interest is the last position that argues for a total ban on cloning as a form of immoral "positive eugenics." Jewish thought reflects an identical concern based on both Jewish values and the Holocaust experience. Jewish thought concludes, however, that this fear is insufficient to overcome the potential benefits of cloning technology.

Based on general principles of Christian theology, ethics, and morals, one scholar, Roger L. Shinn, also reaches the conclusion that cloning should be banned unless those who seek its advancement can provide a compelling justification for such action. Shinn advises that he has "not seen a reason that justifies cloning," but that some day he may conceivably be persuaded that cloning of fetal tissue for the sake of knowledge, "without the prospect of producing a new person," is appropriate.²³⁴

Shinn's belief that a ban on cloning is appropriate is supported by secular and theological based justifications. With some reference to God and the Christian belief in a divinely created order, Shinn provides a series of five secular arguments against cloning: (1) The statistical risks of proceeding are currently so great that "society will not tolerate treating human beings that way";²³⁵ (2) We cannot treat

²³² See *id.* (citation omitted).

²³³ *Campbell*, *supra* note 78, at D37.

²³⁴ Shinn, *supra* note 169, at 116.

²³⁵ Shinn notes that out of 277 attempts, 29 embryos were formed, 13 pregnancies occurred, and only 1 birth resulted. See *id.* at 113.

humans as means rather than ends as this offends human dignity; (3) Informed consent cannot be obtained even though it is a basic mandate of medical ethics; (4) There is an "unbearable arrogance" in dictating the genome of a future individual and in moving from the process of nature to that of a manipulative process of manufacture; and (5) Replication is doomed to failure as the process can yield only a resemblance and that the desire for replication is "itself suspect and, yes, irreverent."²³⁶

From a theological perspective, Shinn presents arguments in much the style and approach of Jewish midrash, but comes to a diametrically opposed conclusion. Two Biblical images are interpreted to establish that cloning is contraindicated. The first image involves the instructions provided to Adam and Eve in the Garden of Eden in which "a human creature is given 'dominion' over the garden and a responsibility to 'till and keep it.' (Gen. 1:26, 2:15)."²³⁷ This dominion is not limitless. It does not include "Pleiades and Orion" (Amos 5:8) or specified animals (Job 39:41). These exclusions remind us that the "world was not created by or for us."²³⁸ Moreover, the story of the Tower of Babel informs us that wrongful ambition is destructive.²³⁹ "[T]he desire to be like God, combined with technological power brought historical chaos."²⁴⁰

These images of the Hebrew Bible are reinforced in the New Testament. The New Testament never suggests that scientific technology is the New Creator and "even less that technology should seek to replicate old patterns rather than welcome the new."²⁴¹ Both Shinn and the NBAC analyses reflect a view that Christian theology does not preclude technological advances and, under proper circumstances, supports such advances. After consideration of other factors, however, the conclusions reached reflect a marked diversity of opinion as to the efficacy of cloning. Mainline Protestant

²³⁶ Shinn, *supra* note 169, at 113-15.

²³⁷ *Id.* at 117.

²³⁸ *Id.*

²³⁹ *See id.* at 117.

²⁴⁰ *Id.* This interpretation is consistent with Jewish tradition. For example, Rabbi Benno Jacob declared: "Their [the builders of the Tower] terrible mistake was to use their technology for pride and vanity instead of using it to improve the quality of life in their society." 1 HARVEY J. FIELDS, A TORAH COMMENTARY FOR OUR TIMES 33 (1990). Moreover, "[w]hen Abram son of Terah passed by and saw them building the city, he cursed them in the name of his God: 'O Lord, confound their speech, confuse it!'" THE BOOK OF LEGENDS, *supra* note 22, at 29 (quoting *Psalms* 55:10). Abraham observed that the men wept and stopped work if a brick fell to the ground yet continued work if a man fell to his death. *See id.*

²⁴¹ Shinn, *supra* note 169, at 117.

Christianity lends cautious support to continued research and development of cloning technology, while Shinn calls for a complete cessation unless and until compelling evidence requires a different conclusion.

2. Lutheran

Gilbert Meilaender presented his perception of the Lutheran views on cloning to the NBAC in an essay that applies theological language, or “language . . . grounded in important Christian affirmations that seek to understand the child as our equal—one who is a gift and not a product” to the cloning debate.²⁴² This theology finds a normative view in the Bible that establishes that sexual differentiation is ordered toward creation of offspring through the marital union. “By God’s grace the child is a gift who springs from the giving and receiving of love. Marriage and parenthood are connected—held together in a basic form of humanity.”²⁴³ Human cloning breaks this connection and is aimed “at the heart of the mystery that is a child.”²⁴⁴

The link between sexual differentiation and procreation must not be broken as it is a basic form of humanity. When the sexual act becomes a mere personal object, so too does the child. Instead of a child conceived from love, the child becomes a means to meet needs and desires.²⁴⁵

A child should be a natural fruition of love rather than a chosen project, a gift who springs from the embrace of loving parents rather than “a being whom they have made and whose destiny they should determine. This is light-years away from the notion that we all have a right to children—in whatever way we see fit.”²⁴⁶ As with Catholicism and other traditions that stress the importance of family, Meilaender combines a theological concept of God’s will in terms of creation with a strong moral sense of family and rejection of the commodification of procreation.

The need for natural procreation is reinforced by the fact that when Christians sought to tell the story of Jesus they wanted to say that Jesus was truly one with that God whom he called Father, as this would show that Jesus overcame the gulf that separates us from God.

²⁴² Gilbert Meilaender, *Human Cloning Would Violate the Dignity of Children*, in CLONING DEBATE, *supra* note 11, at 190.

²⁴³ *Id.* at 191.

²⁴⁴ *Id.*

²⁴⁵ *See id.* at 192-93.

²⁴⁶ *Id.* at 193.

"The language in which they did this (in the fourth century Nicene Creed . . .) is language which describes the Son of the Father as 'begotten not made.'" . . . [T]his distinction between making and begetting, . . . carries considerable moral significance."²⁴⁷

This distinction between "begetting" and "making" may be understood to mean that what we beget is like ourselves, while what we make is not. Humans are not begotten in the same sense that Jesus is said to be begotten of the Father.²⁴⁸ Humans are made by God through other human beings. Although "we are not God's equal, we are of equal dignity with each other,"²⁴⁹ and, if it is human begetting that expresses this equal dignity, it should not be set aside through cloning.

These theological and moral values must not be set aside in order to gain the possible benefits of cloning, such as the use of stem cells to replace damaged tissue. Many good causes place temptations before us that we must resist. However, Christians worship a God who teaches that "what matters is how we live, not how long—that we are responsible to do as much good as we can, but this means, as much as we can within the limits morality sets for us."²⁵⁰ Meilaender asserts that these moral and theological reasons require that all cloning efforts, including preimplantation embryo experiments, must be terminated.²⁵¹ His focus on family and the role of procreation as conceived by God is consistent with the values and beliefs of other religions and most certainly accords with the instinctive repugnance felt by many when they think of a child born through the cloning process. Unlike some other religions, such as Judaism and Islam, this Lutheran theological perspective implicitly rejects the belief that God has empowered mankind with the potential capacity to procreate through advanced reproductive technologies.

Not only may diverse views regarding human cloning be seen when comparing various religions, but such diversity may also be found between scholars within a given denomination. This diversity is well illustrated by the analysis of a second Lutheran scholar, Ted Peters, who asserts that "on distinctively theological grounds no good reason for proscribing human cloning can be mustered."²⁵² Peters

²⁴⁷ *Id.* at 194.

²⁴⁸ See Meilaender, *supra* note 242, at 194.

²⁴⁹ *Id.*

²⁵⁰ *Id.* at 195.

²⁵¹ See *id.* at 196.

²⁵² Ted Peters, *Cloning Shock: A Theological Reaction*, in HUMAN CLONING, *supra* note 164, at 13.

observes that the question of cloning shocks our religious sensibilities and causes us to withdraw into religious conservatism as a form of safe harbor.²⁵³ We then answer the question of whether cloning is proper with "No." "And we add, 'We say no because God says no.' But, I ask: Does God really say 'No?'"²⁵⁴ He answers his own question with at least a tentative "No."

After rejecting claims that cloning violates the uniqueness of human life that God has given each of us as predicated on false assumptions, Peters moves to areas common to the religious debate: the soul and human dignity.²⁵⁵ "No reputable theological position has ever held that two twins share a single soul. . . . The human soul, theologically speaking, is not formed from DNA as the phenotype is formed from the genotype. The soul is not a metaphysical appendage to the physical."²⁵⁶ Understanding of the soul must be based on our relationship to God. This unique relationship is not governed by DNA, but "by God's active grace, by God's desire to love as we are."²⁵⁷ Thus, the risk of cloning is not found in asexual reproduction or treating children as products subject to quality control standards, but in the potential harm to the dignity of cloned children.²⁵⁸ Dignity, for this purpose, is derived from the verse "'We love because [God] first loved us,' with the following maxim: God loves each of us regardless of our genetic makeup, and we should do likewise."²⁵⁹ The secular companion to this religious precept is that "we should treat each person as an end and not merely as a means for something more valuable."²⁶⁰ Our dignity is not the result of identity or uniqueness. Dignity comes from those who love us and "ultimately if not ontologically, from God's love for us."²⁶¹

Despite the vast difference in approach of Meilaender and Peters, they both recognize the need to view a child as a gift that must

²⁵³ See *id.* at 16.

²⁵⁴ *Id.* at 16.

²⁵⁵ See *id.* at 16-17 (rejecting claims that: (1) individual identity requires a unique genome; (2) God has ordained that each person possess a unique genome; and (3) genetic technology can produce two persons with the same identity in violation of the Creator's intent).

²⁵⁶ *Id.* at 17. Here, the parallel to Judaic analysis is far greater than to the Catholic analysis.

²⁵⁷ *Id.* at 18.

²⁵⁸ See Peters, *supra* note 252, at 22 (observing that the dangers of asexual reproduction and technological reproduction sound a warning siren that should alert us to the potential harm to the child).

²⁵⁹ *Id.* at 21 (quoting *John* 4:19).

²⁶⁰ *Id.*

²⁶¹ *Id.* at 22.

not become a means to an end. Peters, however, believes that the end/means issue is not a bar to cloning and expands the definition of "gift" beyond that of one given to us only through God's initial form of procreation. He argues that we cannot move forward by denying choice of procreative methods or allow our ethics to be derived from fear of science:

We need to construct visions of just what it means to treat children with dignity when they are the product—that is when they are the gift—of advanced reproductive technology. For cloned children as well as children born the old-fashioned way, we need to be reminded that God loves each of us regardless of our genetic make-up. And we should do likewise.²⁶²

²⁶² *Id.* at 24. Karen Labacqz presents a vastly different approach, which also stresses the need to love children. Labacqz, writing from her theological tradition, the United Church of Christ, takes a strongly equal rights-feminist-theological approach, asserting that this tradition is committed to equal rights for everyone, including lesbian and gay persons. See Karen Labacqz, *Genes, Justice and Clones*, in HUMAN CLONING, *supra* note 164, at 53. Labacqz, therefore, believes that if there is a "right" to have children "in the genetic sense," as argued by John Robertson, this right must provide parallel rights for lesbians or gay couples. *Id.* at 53. Robertson's position, predicated on nontheological foundations, is widely published. See, e.g., John A. Robertson, *Wrongful Life, Federalism, and Procreative Liberty: A Critique of the NBAC Cloning Report*, 38 JURIMETRICS J. 69 (1997); see also John A. Robertson, *Cloning as a Reproductive Right*, in CLONING DEBATE, *supra* note 11, at 67-82; John A. Robertson, *Liberty, Identity, and Human Cloning*, 76 TEX. L. REV. 1371 (1998). Moreover, this right must be secured for those who are economically disadvantaged. "Our individualistic, 'rights'-based assumptions about families and procreation need to be challenged, and fundamentally new understandings of family need to be developed, so that God's love for all children—especially those already born in circumstances of poverty and injustice—might be reflected in the human community." Labacqz, *supra*, at 56.

Labacqz's approach is in accord with the Jewish tradition as to those who are disadvantaged. The extent to which Judaism would embrace this position in regard to the gay and lesbian community, however, is problematic. Traditional Judaism continues to view homosexuality as an abomination or abhorrent thing in accord with the verse "[i]f a man lies with a male as one lies with a woman, the two of them have done an abhorrent thing; they shall be put to death." *Leviticus* 20:13; see also *Leviticus* 18:22. By the 1970s, the Reform tradition began to take a more liberal view on homosexuality. See *Judaism and Homosexuality*, in AMERICAN REFORM RESPONSA, *supra* note 34, at 49; *Homosexuals in Leadership Positions*, in AMERICAN REFORM RESPONSA, *supra* note 34, at 52. The Union of American Hebrew Congregations (Reform) now ordains lesbian and gay Rabbis, accepts lesbian and gay congregations such as Chevrei Tikva, in Cleveland, Ohio, into membership, and permits its member Rabbis to perform "Commitment Ceremonies." Whether the Reform approach would extend to the use of cloning for procreative purposes by homosexual couples is a question that will have to be left to another day.

3. Methodist

The primary concern, as expressed by Stanley Hauerwas and Joel Shuman, "is not whether cloning is a good or bad thing, but rather how Christians, given the character of the Christian community and in particular the way that community understands the human body, are to understand cloning."²⁶³ It is baptism and discipleship, not genetics, which govern the lives of members of the Christian community. Contrary to the modern view that the "I" names a self apart from the body, "we assume that what makes Christians Christian is that through baptism they are made part of Christ's body."²⁶⁴ In this sense the issue is not the propriety of cloning, but whose body we are cloning. When Paul encouraged disciples to imitate him he understood this to mean that they should be formed into a body more significant than a DNA sequence.²⁶⁵ Paul "assumes the church is Christ's body in such a way that immortality is not *like* the body becoming ill or polluted; it is the body becoming ill or polluted."²⁶⁶ Paul's expectations reflected an understanding that all baptized into Jesus Christ were "baptized into his death," so that "just as Christ was raised from the dead through the glory of the Father, we too may live a new life."²⁶⁷

Cloning violates this construct. Moreover, the ultimate purpose of the body is "eternal friendship with God in the new creation."²⁶⁸ This friendship begins with baptism and includes transformation into a part of the body of Christ which makes "Christ redemptively present to the world."²⁶⁹ According to Methodists, Christian bodies have been cloned through baptism and discipleship into the one body whose presence is essential to the world. It is, therefore, "imperative that we continue first of all to reproduce that body—a reproduction that cannot be effected genetically—and to wait patiently for the final redemption of our individual bodies."²⁷⁰ Cloning, of course, has

²⁶³ Stanley Hauerwas & Joel Shuman, *Cloning the Human Body*, in HUMAN CLONING, *supra* note 164, at 59. In this respect, the authors indicate that cloning "is not a new thing for Christians, since we have been made part of Christ's body." *Id.* From a purely scientific vantage point, as distinct from a theological perspective, this conclusion is invalid. See *supra* note 63 (explaining the difference between the genetic makeup of Eve and the genetic makeup of a clone).

²⁶⁴ Hauerwas & Shuman, *supra* note 263, at 60.

²⁶⁵ See *id.*

²⁶⁶ *Id.* at 61.

²⁶⁷ *Id.* at 62 (quoting *Romans* 6:3-4 (NIV)).

²⁶⁸ *Id.* at 64.

²⁶⁹ *Id.*

²⁷⁰ Hauerwas & Shuman, *supra* note 263, at 64.

appeal to those who are impatient for redemption, but succumbing to this desire is only "another gnostic technique designed to avoid or to overcome our bodies as Christians."²⁷¹ Carrying this theology to its logical conclusion, the use of cloning is viewed as an "idolatrous attempt" to perfect the created order "in a manner that denies our lives have already been perfected in Christ."²⁷²

This theological argument is based on general concepts of Christian tradition and refined exegesis of relevant Biblical passages. These foundational predicates, consistent with those of other Christian faiths, are distinct from those applicable to Jewish and Islamic traditions. Though not intended to address all of the theological or other factors involved in the debate,²⁷³ the described theology suffices to reject cloning as (1) inconsistent with the fact that our bodies have already been "cloned" into becoming a part of the body of Christ and (2) a process that wrongfully seeks to perfect that which has already been perfected in Christ.

4. Orthodox (Greek)

Some Greek Orthodox scholars draw a distinction between the valid use of DNA grown in laboratories to correct malformed or deficient DNA and the extension of genetic advances into human cloning.²⁷⁴ Cloning is perceived as immoral, regardless of motivation, as there is no escape from the charge that "manufacturing a human being for the purpose of exploiting him or her . . . depersonalizes the human clone."²⁷⁵ Humans are created in the image of God for a purpose willed by God and "should not be created for a human reason."²⁷⁶ Because the zygote is committed to becoming a human, it is improper to create a clone so that its organs can be used as "spare parts," to create embryonic cells for treatment of Parkinson's disease, or to be stored in an "organ bank."²⁷⁷

²⁷¹ *Id.* at 60.

²⁷² *Id.* at 65.

²⁷³ The Hauerwas and Shuman essay was not intended to be comprehensive. This limitation may explain why the analysis does not indicate whether a clone would be viewed as a human being. If Methodist theology recognizes a clone as a person, the possibility of baptism and entry into the discipleship of Christianity exists.

²⁷⁴ See Rev. Dr. Stanley S. Harakas, *To Clone or Not to Clone?*, in REFLECTIONS, *supra* note 168, at 40-41 (including a brief discussion of the propriety or impropriety of mixing human and animal DNA).

²⁷⁵ *Id.* at 40.

²⁷⁶ Rev. Dr. Demetri Demopoulos, *Cloning: Sanctity or Utility?*, in REFLECTIONS, *supra* note 168, at 41.

²⁷⁷ See *id.* Issues relating to the banking of organs have also been addressed by Jewish bioethicists and scholars. Most scholars conclude that the use of organ banks

Although Greek Orthodox thought includes many ethicists who are ready to accept technological means to resolve conception problems between a husband and wife, "[w]e draw the line, however, at the introduction of a third party into that sacred relationship, for it transgresses the spiritual and physical unity of the spouses, blessed by God."²⁷⁸ Cloning violates almost every sacred dimension of marriage and the family. Thus, a laboratory cannot substitute for one of the spouses.²⁷⁹

In terms of intelligence, self-consciousness, and the ability to relate to human beings, a clone would have a soul. However, if "soul" includes the capacity for relating spiritually to God, it would "seem . . . that the clone will be in need of forgiveness, redemption, salvation and sanctification as much as a person born of the mingling of genes which come from two parents."²⁸⁰ It is manifest in this analysis that the creation of a clone violates Orthodox tradition, but that if a clone came into existence it would be treated as a human being. Orthodox Christianity appears to have a theological question similar to that of Judaism as to precisely when ensoulment occurs.

Once a human zygote forms and begins to develop, it is committed to becoming a human person. Because we do not know when or how that person obtains a soul, we must not interfere with that development in any deleterious way. . . . We must treat the developing embryo with dignity and respect because we do not know when it becomes a person.²⁸¹

Orthodox Christianity opposes any use of cloning, whether for therapeutic purposes or for the broader purpose of creation, despite a willingness to engage in some level of genetic research and treatment. This position is predicated on the theological belief that to create a human being through advanced reproductive technology is (1) a violation of God's will in regard to the marriage relationship and its role in procreation and (2) an interference with embryonic development that violates the dignity that God demands be provided to all persons. In addition, it is morally wrong to permit even the possibility of commercialization and exploitation of clones as this

is proper due to the good chance that the frozen organs will save lives. See, e.g., ROSNER, *supra* note 59, at 265. There is substantial belief within the Jewish Orthodox community, however, that, for example, a corneal transplant is permitted only when the donated cornea can be implanted immediately into the recipient. See Werber, *supra* note 5, at 23-24 & n.51.

²⁷⁸ Harakas, *supra* note 274, at 40.

²⁷⁹ See *id.*

²⁸⁰ *Id.*

²⁸¹ Demopoulos, *supra* note 276, at 41.

would depersonalize their status as human beings. These concerns are of such magnitude as to outweigh any life-saving potential therapeutic benefit. Although Judaism and Orthodox Christianity share the same concerns, theological doubts, and difficulties in regard to when the soul comes into existence, the two reach disparate results as to the effect of ensoulment and the human status on the propriety of cloning.

5. Presbyterian (Reformed)

For Ronald Cole-Turner, the editor of *Human Cloning: Religious Responses*, no "compelling theological argument can be made against cloning for reproductive or experimental purposes."²⁸² This starting point, which is consistent with that of other Christian traditions, does not, however, extend to encompass human cloning. Moreover, as with other theologies, "Protestant theology emphasizes that both the means and the end are of moral significance because they affect individuals and the created universe."²⁸³

Despite Cole-Turner's recognition that genetics have some level of effect on cognitive functioning, he finds that genes merely "define a range of possibilities; they do not determine exactly what we will be."²⁸⁴ Stated differently, uniqueness does not pose a barrier to cloning technology. Similarly, questions regarding the soul present no barrier as "every human being, cloned or otherwise, is valued by God as a unique covenant partner, and therefore has a unique soul."²⁸⁵ This conclusion is buttressed by recognition of the various factors that distinguish man from other animals. The most important of these factors is the capacity "for a relationship with God, a relationship which we believe will continue forever."²⁸⁶

Abigail Rian Evans, however, takes a stronger gene-based position against cloning as a reductionist, rather than holistic, view of nature. Evans asserts that replication suggests that we are "the sum of our genes, lacking uniqueness and the qualities which are part of

²⁸² Ronald Cole-Turner, *At the Beginning*, in HUMAN CLONING, *supra* note 164, at 119-20.

²⁸³ Abigail Rian Evans, *Saying No to Human Cloning*, in HUMAN CLONING, *supra* note 164, at 27.

²⁸⁴ Cole-Turner, *supra* note 282, at 123.

²⁸⁵ *Id.* at 124.

²⁸⁶ *Id.* (quoting Ronald Cole-Turner, *Human Nature as Seen by Science and Faith*, in IN WHOSE IMAGE: THEOLOGY, BIOLOGY, AND HUMAN NATURE (1997)). Other factors include, for example, mental capacity, language, moral awareness, and more complex social relationships.

being made in God's image. The word replication is antithetical to an integrated understanding of personhood."²⁸⁷

For Cole-Turner, the special capacities that distinguish man from animals collectively form the human soul. This view of the soul

[i]s consistent with the Christian hope of resurrection, which sees human life as a unique, nonrepeatable journey through this mode of existence and into another that is more glorious and joyful. God does not send our souls back for another try. Any efforts to use cloning to 'try to bring someone back' would be scientifically and theologically misguided.²⁸⁸

Evans also emphasizes that the soul and the body unite in a way that can be analogized to the human and divine nature in Jesus Christ and that "[w]e err gravely in defining a human when we take one of these dimensions and make it the whole or when we separate the dimensions from one another."²⁸⁹ From this foundation she finds that it is the spiritual nature that motivates and enables us to search for the meaning and purpose of life in relation to mind and body.²⁹⁰ Moreover, cloning negates the communal dimension of human nature. "Especially from the Jewish perspective, seeing man/woman as part of the community, as the nation of Israel, was crucial to understanding each person as an individual."²⁹¹ The Jewish view is carried into the Christian tradition in the image of the Church as the body of Christ.²⁹² As a result, "[i]f cloning were universalized it would threaten this communal dimension of the human family."²⁹³

Although Presbyterian theology places substantial emphasis on uniqueness and the soul, it does not provide a reason to reject cloning for therapeutic use.²⁹⁴ It does, however, reject cloning as a

²⁸⁷ Evans, *supra* note 164, at 27.

²⁸⁸ Cole-Turner, *supra* note 282, at 125.

²⁸⁹ Evans, *supra* note 164, at 28.

²⁹⁰ *See id.*

²⁹¹ *Id.* at 29.

²⁹² This conclusion is rejected by all branches of Judaism. Judaism, however, does recognize that men and women, together, form the nation of Israel while retaining the unique value of each individual person.

²⁹³ Evans, *supra* note 164, at 29.

²⁹⁴ This conclusion may depend upon whether we define therapeutic use to include experimental use. Evans argues that the theological vision, which includes our dignity and worth, teaches us that we cannot use individuals for experimental purposes merely to advance science and fears that women are at risk of being devalued and providing "rent-a-womb" service. *See id.* A similar fear has often been expressed on both theological and secular grounds in regard to surrogate parenthood. Though far from groundless, the danger appears to be quantitatively of very limited effect.

means to create a human replacement for another person. The difficulties with cloning, however, go beyond this simple instance of line drawing.

There are elements of nature that must be respected and can be violated only at our own peril if society seeks to stand aloof from nature as some sort of technological God. God declared creation good before the arrival of human beings; we must, therefore, respect the value of what is already here.²⁹⁵ Asexual procreation, as distinct from in vitro fertilization, violates this natural order.²⁹⁶ Even if the arguments that the absence of two parents is detrimental to the child or that cloning violates the natural order of the family are not fully persuasive, the relationship between God and nature is of paramount importance:

As the Reformed tradition affirms, Christians find their best clue about nature by looking at Jesus Christ, where we see nature rightly related to God and where we see its destiny prefigured in Christ's resurrection. In Jesus Christ, we see a welcoming of children that transcends genetic parentage. From this we might infer that cloning is a matter of indifference. It may not be something Christians will choose, . . . but it is not something they will try to prohibit.²⁹⁷

Though the inference that cloning is a matter of indifference is not negated, and the natural order argument is not persuasive, cloning technology should not be applied to the creation of a human being as the time for such a step is not yet upon us.²⁹⁸ "Our ignorance is vast, our understanding limited, and our discussion has only begun. . . . For now, the weight of theological conviction is against the use of cloning to produce a child. It will be up to those who want to pursue cloning to make the stronger argument."²⁹⁹ Believing that

²⁹⁵ See Cole-Turner, *supra* note 282, at 126-27.

²⁹⁶ Judaism may, through diverse views of Halakah, distinguish between in-vitro and asexual procreation. See *supra* notes 82-83 and accompanying text (discussing in-vitro fertilization and cloning as they relate to incest). Judaism does not, however, base this distinction on the "natural order" as described in this Presbyterian theology.

²⁹⁷ Cole-Turner, *supra* note 282, at 128.

²⁹⁸ See *id.*

²⁹⁹ *Id.* at 129. The theology referenced appears to be that presented by multiple denominations, including those represented in *Human Cloning*, *supra* note 164. Thus, both Cole-Turner and Shinn relate the Presbyterian Reformed tradition to other theologies.

Evans shares the belief that there is risk in proceeding due to the limitations of our knowledge of human inheritance. See Evans, *supra* note 283, at 31. Evans, however, takes a more iconoclastic position: "The ultimate criteria for any technology are these: How do we glorify God, recognize God's sovereignty, honor each person's dignity, practice stewardship of the earth, and enhance life to the

for now, Reformed Presbyterian theology is not sufficiently informed to support any use of human cloning, Cole-Turner somewhat echoes the position of Shinn.³⁰⁰ At some future time, perhaps, both Cole-Turner and Shinn will be open to the possibility that those who wish to advance the use of human cloning will be able to compile sufficient evidence to justify doing so.

6. Southern Baptist

As with most religious traditions, the Southern Baptist perspective commences with the dual responsibility assigned to man at the time of Creation: dominion and stewardship. This responsibility does not grant us a "license for . . . [the] mechanistic manipulation [of animals], transgenic innovation, or ruthless violation."³⁰¹ Nor was man "commanded or authorized to create new forms of life as extensions of our own designs and egos."³⁰² According to R. Albert Mohler Jr., this broad statement, addressed to man's rights in relation to our dominion over the animal world, provides a strong lesson in regard to the propriety of any such acts as they relate to man.³⁰³

The human, created in the image of God, "represents the spiritual character and capacity God established in us. . . ."³⁰⁴ This image, an essential mark of humanity and the uniqueness of each person, forms the foundation for theological understanding of all questions related to the cloning process as a means of human procreation.³⁰⁵ That we cannot know the precise character of the

fullest? Human cloning fails to meet these criteria adequately. It should be banned." *Id.* at 33.

Peter Paris, however, despite substantial concern for potential abuse and lack of faith in any implicit trust of scientists' moral integrity, takes a position similar to that of Islam and Judaism in recognizing that the Creator gave us the capacity to develop this technology. See Peter J. Paris, *A View from the Underside*, in HUMAN CLONING, *supra* note 164, at 48. Paris opposes a ban on continued development and concludes: "Unlike Prometheus, no modern scientist has stolen anything from heaven. Rather, the capacity for knowledge has been graciously given to humanity by the omniscient and omnipotent Creator of us all, the one whose authority and being are not usurped even by the capacity of the creature to clone itself." *Id.*

³⁰⁰ See *supra* notes 234-36 and accompanying text (discussing the belief of Shinn that cloning should be banned absent the presentation of a compelling reason to the contrary).

³⁰¹ R. Albert Mohler, Jr., *The Brave New World of Cloning: A Christian Worldview Perspective*, in HUMAN CLONING, *supra* note 164, at 93.

³⁰² *Id.* at 92.

³⁰³ See *id.* at 92-93.

³⁰⁴ *Id.* at 95.

³⁰⁵ See *id.*

image of God is without significance as we have knowledge of its meaning. For example, Thomas Aquinas defined the image of God as the function and capacity of human consciousness or intellect found in three stages: potential knowledge of God, to actual knowledge, to perfect knowledge.³⁰⁶ Humans were not the result of a "cosmic accident" or by-products of fortuitous evolution but, like all creatures, were created to glorify God and to serve God's sovereign purpose.³⁰⁷

The secular view of the world, which would permit the "emancipation of human reproduction from the marital relationship,"³⁰⁸ is refuted by the Christian view which, according to Scripture, proscribes that "the family is God's gracious gift for our protection, our sexual integrity, and our enjoyment. . . . The marital relationship is the only divinely sanctioned locus of human sexuality and the bearing of children."³⁰⁹ Thus, we must remember that we were begotten, not made, and that procreation must be viewed as an acknowledgment of the Creator rather than as a "metaphor of the factory."³¹⁰ Cloning provides a powerful eugenic temptation that must be rejected by Christianity.³¹¹ The perception of this tradition, placed into the context of what is described as a "Christian worldview," recognizes that

We are not the Creator, and the responsibility to assume control over the universe is not ours. God the Creator rules over all and has revealed his intention for us in laws and commandments that demand our obedience and in limitations that demand respect. We are not to play God.³¹²

³⁰⁶ See *id.*

³⁰⁷ See Mohler, *supra* note 301, at 95–96. The secular "cosmic-accident/evolutionary process" view of mankind makes any value ascribed to human life tentative, arbitrary, and self-referential. See *id.* at 96. In an excessive and arrogant argument that extends too far and ignores the Crusades, the Inquisition, current religious based wars and other violations of the human race by virtue of excessive religious fervor, Mohler ascribes numerous horrors including, but not limited to, genocide and attacks on the heterosexual family being made by feminists and homosexuals, to the failure of society to recognize the theology and meaning of creation.

³⁰⁸ *Id.* at 100.

³⁰⁹ *Id.* at 101.

³¹⁰ *Id.* at 102 (citation omitted). The distinction between "begotten" and "made" is common to Christian belief. See, e.g., John Cardinal O'Connor, *supra* note 213, at 50; Meilaender, *supra* note 242, at 194.

³¹¹ Mohler uses more exclusionary and rhetorical language: "The eugenic temptation is so powerful that *only* the Christian worldview can restrain it." Mohler, *supra* note 301, at 102 (emphasis added).

³¹² *Id.* at 102-03.

CONCLUSION

This Article does not provide answers to the religious, ethical, and moral issues posed by advanced reproductive techniques in human cloning. Rather, the preceding analysis and discussion seeks to make a contribution, however modest, to the continuation of the societal discussion that will ultimately yield the answers. This Article presents the common concerns of the religious traditions of Judaism, Islam, and Christianity with their mutual emphasis on preserving the dignity of all beings. This and other common values must form the foundation upon which all questions related to the cloning debate must be predicated.

There are substantial differences in how the traditions view the Creation, humankind's relationship with God, the status or ensoulment of a fetus, continued research on an experimental level, and therapeutic uses of a clone to save the life of another. These differences, however, must not conceal the profound concern that each of these traditions has with continued development of cloning procedures and the potential evils that can arise from genetic engineering. In particular, each tradition demonstrates concern over whether human cloning violates, or is consistent with, God's will.

Religious perspectives will not be the ultimate determinant of how and to what extent scientific development continues. Indeed, in a world of diversity it is unlikely that any single voice will be determinative. This is as it should be. Nevertheless, the diverse voices of our many religious traditions provide an important and meaningful contribution to the multi-voiced decision-making process. If this Article has added even the slightest bit to the wisdom and scope of the cloning debate, its Author is fully satisfied.