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Symposium on Human Cloning: Legal, Social, and Moral Perspectives for the Twenty-First Century- Foreword: Cloning Debate

Janet L. Dolgin

Maurice A. Deane School of Law at Hofstra University

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SYMPOSIUM ON HUMAN CLONING: LEGAL, SOCIAL, AND MORAL PERSPECTIVES FOR THE TWENTY-FIRST CENTURY

FOREWORD: CLONING DEBATE

*Janet L. Dolgin**

I. INTRODUCTION

In the winter of 1997, Scottish scientists announced that they had cloned¹ a sheep. They named the clone "Dolly." Its birth occasioned far-ranging social concern, philosophical inquiry, and legal response, including extensive debate about many of the central conundrums of the age. For a variety of reasons, considered in this symposium, cloning provides an especially fruitful context within which society can dissect,

* Maurice A. Deane, Distinguished Professor of Constitutional Law, Hofstra University School of Law. B.A., Barnard College; M.A. and Ph.D., Princeton University (anthropology); J.D., Yale Law School.

1. By "cloning," this Essay, and most of those in this symposium, refers to the technique used by Dr. Ian Wilmut and his colleagues at the Roslin Institute in Scotland to reproduce a sheep. That technique, referred to as somatic cell nuclear transfer, places a somatic cell (in the case of "Dolly," an udder cell) into an ovum from which the nucleus has been removed. Nuclear transplantation cloning involves a process in which "[t]he DNA of the transplanted nucleus . . . directs the development of the resulting embryo." 1 NATIONAL BIOETHICS ADVISORY COMM'N, CLONING HUMAN BEINGS: REPORT AND RECOMMENDATIONS OF THE NATIONAL BIOETHICS ADVISORY COMMISSION at A-3 (1997) [hereinafter CLONING HUMAN BEINGS]. The technique, and its use to create Dolly, are described in I. Wilmut et al., *Viable Offspring Derived from Fetal and Adult Mammalian Cells*, 385 NATURE 810 (1997).

examine, and reconstruct its own myths, beliefs, and visions of reality—in short, its own ideology.² The advent of cloning generated some new questions and created a forum in which old questions are considered anew.

Official responses to Dolly's birth were immediate. Two days after it was announced that a sheep had been born as a result of cloning, President William J. Clinton directed the National Bioethics Advisory Commission ("NBAC")³ to review the legal and ethical implications of human cloning and to prepare a report summarizing the Commission's deliberations within ninety days.⁴ That report was published in June 1997.⁵

In the United States, legislative responses to cloning among both federal and state lawmakers have been rapid and widespread.⁶ The Report of the NBAC to President Clinton proposed that Congress prohibit human cloning for a period of years.⁷ In the following year, Congress entertained a variety of bills proposing to ban or regulate human cloning.⁸ Some proposed prohibiting human cloning.⁹ Others proposed al-

2. By "ideology" is not primarily meant a system of political beliefs, though ideology may include such beliefs. Rather, by ideology is meant the widespread forms through which people in society understand what it means to be human. This definition of ideology is similar to that of the French indologist, Louis Dumont. Dumont wrote:

Our definition of ideology thus rests on a distinction that is not a distinction of matter but one of point of view. We do not take as ideological what is left out when everything true, rational or scientific has been preempted. We take everything that is socially thought, believed, acted upon, on the assumption that it is a living whole, the interrelatedness and interdependence of whose parts would be blocked out by the a priori introduction of our current dichotomies.

LOUIS DUMONT, FROM MANDEVILLE TO MARX: THE GENESIS AND TRIUMPH OF ECONOMIC IDEOLOGY 22 (1977).

3. See William D. Montalbano, *Cloned Sheep Is Star, But Not Sole Project*, at Institute, L.A. TIMES, Feb. 25, 1997, at A7. The National Bioethics Advisory Commission ("NBAC") was created in 1996 to "provide advice and make recommendations to the National Science and Technology Council, other appropriate entities and the public, on bioethical issues arising from research on human biology and behavior." R. Alta Charo, *Dealing with Dolly: Cloning and the National Bioethics Advisory Commission*, 38 JURIMETRICS 11, 12 (1997) (quoting OFFICE OF SCIENCE AND TECH., NATIONAL BIOETHICS ADVISORY COMMISSION CHARTER, available at <<http://www.bioethics.gov/about/nbaccharter.htm>>).

4. See generally CLONING HUMAN BEINGS, *supra* note 1.

5. See Judy Mann, *The Brave New World of Cloning*, WASH. POST, Feb. 28, 1997, at E3.

6. Few of the bills introduced to legislative bodies in the two years following Dolly's birth were enacted into law. See *infra* notes 8-11 and accompanying text.

7. Specifically, the NBAC recommended that federal legislation include a "sunset clause" and that the issue be re-examined in three to five years. See CLONING HUMAN BEINGS, *supra* note 1, at 105.

8. The 105th Congress did not pass any of the bills introduced. Following the publication of the NBAC report in June 1997, President William J. Clinton introduced the Cloning Prohibition Act of 1997. See Cloning Prohibition Act of 1997, H.R. DOC. NO. 105-97; see also President's

lowing such cloning for research purposes.¹⁰ Similarly, soon after Dolly's birth, state legislators presented a large number of bills aimed at regulating or prohibiting human cloning.¹¹ Other governments and international bodies responded to Dolly's birth with similar speed and concern.¹²

Message to the Congress Transmitting the Proposed "Cloning Prohibition Act of 1997," 33 WEEKLY COMP. PRES. DOC. 845, 845-46 (June 9, 1997). More than a dozen other bills have since been introduced in Congress. *See, e.g.*, Prohibition on Cloning of Human Beings Act of 1998, S. 1602, 105th Cong.; Human Cloning Prohibition Act, S. 1601, 105th Cong. (1998); Human Cloning Prohibition Act of 1998, S. 1599, 105th Cong.; Human Cloning Research Prohibition Act, H.R. 3133, 105th Cong. (1998); Human Cloning Prohibition Act, S. 1574, 105th Cong. (1998); Human Cloning Prohibition Act, H.R. 923, 105th Cong. (1997); Human Cloning Research Prohibition Act, H.R. 922, 105th Cong. (1997); *see also* Heidi Forster & Emily Ramsey, *Legal Responses to the Potential Cloning of Human Beings*, 32 VAL. U. L. REV. 433, 436-41 (1998) (delineating and describing bills relating to human cloning and introduced or placed in the Senate or House).

9. *See, e.g.*, S. 1601 (the Human Cloning Prohibition Act, introduced by Senator Trent Lott and 14 others, making it a crime to clone an embryo or to import a cloned embryo); H.R. 923; H.R. 922.

10. *See* S. 1602. The Prohibition on Cloning of Human Beings Act of 1998 bill was sponsored by Senators Feinstein, Kennedy, and Mosley-Braun, and would have prohibited the transfer of the product of somatic cell nuclear transfer into a woman's uterus. *See id.* § 3(1). The Act permitted somatic cell nuclear transfer for a variety of research purposes. *See id.* § 498C(c)(1).

11. *See, e.g.*, Cloning of Human Beings, S.B. 8, Reg. Sess. (Ala. 1998); Cloning Ban of Human Beings, H.B. 5475, Reg. Sess. (Conn. 1998); Human Cloning Ban, S.B. 241, 139th Gen. Ass., 2d Sess. (Del. 1998); Human Cloning Prohibition, H.B. 1508, 144 Gen. Ass., Reg. Sess. (Ga. 1997); H.B. 1408, 110th Leg., 2d Reg. Sess. (Ind. 1998); S.B. 212, 110th Leg., 2d Reg. Sess. (Ind. 1997); S.B. 411, 110th Leg., 2d Reg. Sess. (Ind. 1998); Human Cloning Ban, S.B. 1243, 90th Gen. Ass., Reg. Sess. (Ill. 1997); Human Cloning Prohibition Act, H.B. 2235, 90th Gen. Ass., Reg. Sess. (Ill. 1997); Crimes and Punishment, 2846 H.B., 77th Leg., Reg. Sess. (Kan. 1998); Human Cloning Prohibition, 932 H.B., Reg. Sess. (Md. 1998); Human Cloning, H.B. 2962, 89th Leg., Reg. Sess. (Mich. 1997); Health Human Cloning, S.F. 2423, 80th Reg. Sess. (Minn. 1997); Ethical Implications of Cloning of Human Beings, H.B. 1658, 155th Sess., 2nd Year (N.H. 1997); Cloning Prohibition and Research Protection Act, S.B. 6071, 221st Leg. Sess. (N.Y. 1997); Cloning of Humans, A.B. 9116, 221st Leg. Sess. (N.Y. 1997); Human Cloning, A.B. 9183, 221st Leg. Sess. (N.Y. 1997); Cloning of Human Being Prohibited, S.B. 782, Reg. Sess. (N.C. 1997); Prohibit Cloning of Humans, 218 S.B., 122 Gen. Ass., Reg. Sess. (Ohio 1997); Cloning of Human Beings, H.B. 7123, Leg. Sess. (R.I. 1997); Cloning Criminal Offense, H.B. 2281, 100th Gen. Ass. (Tenn. 1997); Human Cloning Prohibited, H.B. 752, 1998 Sess. (Va.); Human Cloning, A.B. 769, 93rd Reg. Sess. (Wis. 1997).

Few were enacted into law. California was the first state to prohibit human cloning. The state placed a five-year moratorium on the use of cloning to create a human being. *See* CAL. BUS. & PROF. CODE § 2260.5 (West 1998). In 1998, Rhode Island also banned the cloning of human beings as well as the division of a blastocyst, zygote, or embryo. *See* R.I. GEN. LAWS § 23-16.4-1 (Supp. 1998). The ban was not applied to these procedures insofar as their use would not result in the creation of a human being. *See id.* Under a five-year sunset clause, the law will expire in 2003. *See id.* § 23-16.4-4.

12. Politicians in Europe joined President Clinton in speedily calling for legal or ethical investigations of the implications of cloning. Within a few days of the announcement of Dolly's birth, Britain's Human Genetics Advisory Commission met to consider the implications of human

The rapidity and intensity of political and legislative responses to Dolly's birth and to the possibility of human cloning¹³ suggest the character of social responses more broadly. Journalists heralded Dolly's birth as an "event[] that alter[s] our very notion of what it means to be human."¹⁴ Ethicists, lawyers, and philosophers have already written widely about the implications of human cloning.¹⁵ And clergy from various religious groups evaluated human cloning against the central tenets of their particular orthodoxies.¹⁶

II. THE DEBATE

Much like the so-called "new reproductive technologies"¹⁷ that appeared in the two decades before Dolly's birth, cloning provides a context for broad social debate. As with each reproductive technology that appeared before 1997, the form of the debate about cloning largely follows from the effort to determine whether cloning is unprecedented, or an alteration of familiar forms. The English anthropologist Marilyn Strathern notes that as people think about whether the consequences of a new technology are likely to be beneficial or detrimental to individuals and to society, argument often focuses on considerations of "whether or not a change is *really* a change."¹⁸ Strathern writes: "Debates over bio-

cloning. See Tim Radford, *Well, Hello Dolly . . .*, GUARDIAN (London), Feb. 27, 1997, available in LEXIS, News Library, Arcnws File. European Commission President Jacques Santer asked a team of European Union bioethics advisors to consider whether the Union should take a position about cloning. See Maggie Fox, *Ministers Urge Calm as Cloning Fears Spread*, REUTER EUROPEAN BUS. REP., Feb. 27, 1997, available in LEXIS, News Library, Arcnws File. Jean-Francois Mattei, a member of France's bioethics commission, suggested that the United Nations develop rules in response to cloning. See Guy Clavel, *The Pros and Cons of the Clone: Politicians Tackle the Debate*, AGENCE FRANCE PRESSE, Feb. 25, 1997, available in LEXIS, News Library, Arcnws File. Less than a year after Dolly's birth, 19 countries signed the Council of Europe Protocol which prohibits human cloning. See *FDA May Assert Its Authority to Regulate Human Cloning Technology Under Biologic Product Regs*, "THE BLUE SHEET," Jan. 14, 1998, at 2, 3 (detailing the 19 country ban and describing it as the "first binding international treaty on the subject").

13. Hereinafter, use of the term "cloning" in this Essay will be in reference to human cloning, unless it is clear from the context that the reference must be to animal cloning.

14. GINA KOLATA, *CLONE: THE ROAD TO DOLLY, AND THE PATH AHEAD 2* (1998).

15. At least four symposia about human cloning appeared in law journals within a couple of years of Dolly's birth. See *Cloning Symposium*, 38 JURIMETRICS 1 (1997); Symposium, 32 VAL. U. L. REV. 383 (1998); Symposium, *Privacy, Property & Family in the Age of Genetic Testing*, 11 HARV. J.L. & TECH. 551 (1998); Symposium on Cloning, 8 S. CAL. INTERDISC. L.J. 87 (1998).

16. See, e.g., Ann Rodgers-Melnick, *Cloning a Difficult Issue for Churches*, PITTSBURGH POST-GAZETTE, Mar. 1, 1997, at A1.

17. Among other things, the "new reproductive technologies" include in vitro fertilization, embryo transfer (and thus gestational surrogacy), and gamete and embryo cryopreservation (and thus posthumous reproduction).

18. Marilyn Strathern, *New Families for Old?*, in THE FAMILY IN THE AGE OF BIO-

technology, at least as its development affects human reproduction, frequently turn on claiming either that there is nothing new in the new reproductive technologies or else to the contrary that there is everything that is new."¹⁹ Moreover, as Strathern notes, a technology understood as revolutionary from a scientific perspective may or may not hold revolutionary implications for society.²⁰

Many claims about continuity and discontinuity (and about their relative value) were made in the social debate about reproductive technology. Society responded to each new reproductive technology by noting its potential to solve old problems and thus to sustain continuity, and its potential to create a myriad of unprecedented social problems and thus to presage serious discontinuity. So, for instance, reproductive technology is envisioned as a form of reproduction that can create loving families for infertile couples, and thus as a new solution to a very old problem, and a source of stability and increasing social harmony. But each reproductive technology is also viewed as a threat to social continuity in general, and more specifically, as a menace to loving families. Behind such conclusions is a set of connected concerns about the use of reproductive technology to commodify children and the women who bear them, and about the involvement of third parties (brokers, health care workers, surrogates, gamete donors) in the reproductive process.²¹

In short, each form of reproductive technology that appeared during the last several decades, as well as artificial insemination, available for human use about a century earlier, was greeted in some quarters with fear, and in others with hope. Each was characterized in doomsday metaphors, and welcomed as an instance of the ability of science to make life better (easier, fairer, richer).²² Thus, even of those who saw reproductive technology as a set of new technological options,²³ some were approving and others disapproving. To some, each new technology, as it appeared, threatened to shake the ground on which familial relationships were predicated.²⁴ To others, these new technologies

TECHNOLOGY 27, 28 (Carole Ulanowsky ed., 1995).

19. *Id.*

20. *See id.* at 31-32.

21. *See* CHRISTINE OVERALL, ETHICS AND HUMAN REPRODUCTION 111-12, 128 (1987).

22. *See* Strathern, *supra* note 18, at 28-29.

23. As Marilyn Strathern noted, the term "new" has a variety of implications. "New" roots, to use Strathern's example, are regenerative, but certainly not revolutionary. Other things can be innovative but not new in kind (as an old product, designed better). And other things can be genuinely novel (in the sense of unfamiliar). *See id.* at 28 n.3.

24. Artificial insemination separated reproduction from sexuality. The technique was vocif-

promised to assist in the creation of loving, if not completely "traditional," families.²⁵ Each new reproductive technology occasioned widespread debate about the scope and meaning of familial relationships, and about the shifting dimensions of the connection between individuals and groups in American society.

Thus, each new reproductive technology furthered an ongoing debate about the scope of the family within American society. That debate preceded the advent of the new reproductive technologies,²⁶ but those technologies provided concrete images around which to ponder the implications of shifts in the form and meaning of domestic life. The fear of reproductive technology has, in one form or another, been largely the fear of abandoning traditional forms of familial interaction, and the fear of welcoming choice and autonomy into the center of domestic matters.²⁷ Yet, fears and calls for caution notwithstanding, American society

erously debated and widely condemned in the first half of the twentieth century especially when it involved the use of sperm from a third party. It was likened to adultery, and thus children created through use of the technique were considered bastards. See CARMEL SHALEV, BIRTH POWER: THE CASE FOR SURROGACY 60-62 (1989). By the late 1960s, American society and law largely assimilated, and provided for the regulation of, artificial insemination using husband and donor sperm. The appearance of the new reproductive technologies in the next decade raised a host of new concerns. In vitro fertilization provided for conception outside a woman's body. This allowed for reproduction that was discontinuous in space. Embryonic cryopreservation, available in the 1980s, made reproduction potentially discontinuous in time as well as in space, thus allowing for the birth of twins years, even decades, apart or for a woman to bear her own mother's (or grandmother's) genetic child.

25. See Janet L. Dolgin, *Status and Contract in Surrogate Motherhood: An Illumination of the Surrogacy Debate*, 38 BUFF. L. REV. 515, 535-45 (1990) (considering litigants' conclusions about effects of surrogacy on traditional families in *In re Baby M*, 525 A.2d 1128 (1987), *aff'd in part and rev'd in part*, 537 A.2d 1227 (1988)). The term "traditional" is used in reference to the form of family that developed in the early years of the nineteenth century and that was most widely actualized and valued in the middle decades of the twentieth century.

26. Since the start of the Industrial Revolution, American society self-consciously struggles with challenges and threats to presumed modes of interaction with the domestic sphere. See STEVEN MINTZ & SUSAN KELLOGG, DOMESTIC REVOLUTIONS: A SOCIAL HISTORY OF AMERICAN FAMILY LIFE 52-60 (1988). Following a period of apparent, though ultimately illusory, quiescence in the mid-twentieth century, the American family—and legal responses to that family—changed dramatically in the second half of the twentieth century. The character of the shift is illuminated through comparison of *Griswold v. Connecticut*, 381 U.S. 479 (1965), and *Eisenstadt v. Baird*, 405 U.S. 438 (1972), decided seven years later. In both cases, the Court invoked a right to "privacy" to find unconstitutional a state statute limiting the use of contraception. In *Griswold*, the Court attached that right to privacy to the marital unit, as such, and described marriage as a "sacred," "intimate," and "enduring" state. See *Griswold*, 381 U.S. at 486. In contrast, in *Eisenstadt*, the Court attached the right to the individual person. See *Eisenstadt*, 405 U.S. at 453. *Eisenstadt* explicitly rejects any view of a married couple that defines that couple as other than two separate individual persons. See *id.*

27. See, e.g., THE NEW YORK STATE TASK FORCE ON LIFE AND THE LAW, SURROGATE PARENTING: ANALYSIS AND RECOMMENDATIONS FOR PUBLIC POLICY (1988) (proposing that public policy "should discourage surrogate parenting"). The Task Force concluded: "Society, through

rapidly assimilated reproductive technology.

Mostly, state legislatures remained silent. Despite early predictions,²⁸ they have not widely prohibited reproductive technology, or limited its use. However, as society continues to debate the challenges and threats presented by reproductive technology, a legal consensus begins to emerge in judicial responses.²⁹ Courts generally refrain from openly abandoning traditional understandings of family, but they add new truths to old ones.³⁰ The result reflects a more complicated, more flexible vision of family than that which existed a half century ago. A few “natural” truths survive, but familial relationships are no longer conclusively grounded in such truths. So, for instance, in cases involving so-called traditional surrogacy arrangements, courts continue to presume a definitive natural relationship between women and their biological children.³¹ Yet, in other cases, courts describe intentional parents as “natural” parents³² and resolve disputes about frozen embryos by reference to contractual agreements entered into among progenitors and third parties.³³ This framework preserves an understanding of familial bonds as grounded in natural truth. But, it also recognizes intention—and thus choice—as central to the creation and operation of families.

Thus, the law’s developing response to the new reproductive technologies reflects a society generally ready to embrace new modes of *creating* familial units, and willing, though with much greater ambivalence, to tolerate, if not wholeheartedly to embrace, new forms of *living in* families. However, neither the broad acceptance of reproductive technology within the society, nor the law’s more specific, and equally permissive, response stills the larger social debate about the future of family, and about the structure and constitution of the bonds that link people within familial (and other) groups to one another.

Indeed, the announcement of Dolly’s birth in 1997, and thus the

the Legislature, should act to safeguard the basic values and rights that have long been embodied in our laws on the relationship between parents and children.” *Id.* at 139.

28. See Note, *Human Cloning and Substantive Due Process*, 111 HARV. L. REV. 2348, 2361 (1998). Of the legislation that does exist, a significant part focuses on data collection and on promises of informed consent. See *id.* at 2361 n.128.

29. See Janet L. Dolgin, *An Emerging Consensus: Reproductive Technology and the Law*, 23 VT. L. REV. 225 (1998) (describing the character of judicial consensus about surrogacy, gestational surrogacy, and embryo cryopreservation).

30. See Strathern, *supra* note 18, at 31-32.

31. See *R.R. v. M.H.*, 698 N.E.2d 790 (Mass. 1998); see also Dolgin, *supra* note 29, at 255-60 (considering *R.R.*).

32. See, e.g., *Johnson v. Calvert*, 851 P.2d 891, 892 (Cal. 1993).

33. See, e.g., *Kass v. Kass*, 696 N.E.2d 174 (N.Y. 1998); see also Dolgin, *supra* note 29, at 260-72 (discussing *Kass*).

advent of cloning,³⁴ provides a new context within which the debate about the meaning and scope of family can be enriched and enlivened. Once again, the debate reflects competing efforts to describe this new technology as similar to, or as different from, what came before. More specifically, conclusions and observations about cloning are often based on presumed similarities or differences between cloning and other procreative options. Cloning can be envisioned as another in a line of increasingly impressive technological options to sexual reproduction. Lewis D. Solomon, writing in this symposium, takes this view. He describes cloning as “one among a number of reproductive options, albeit an asexual method,” and is ready to “slide down the slippery slope of assisted reproduction practices deviating from the traditional conception of reproduction.”³⁵ In this view, human cloning may seem as routine as *in vitro* fertilization now does once cloning leads to the birth of actual children, and once families include clones (created from family members or from others).³⁶ By contrast, cloning can also be envisioned as resembling the new reproductive technologies only superficially and that it cannot be adequately understood and evaluated through reference to earlier experiences with surrogacy, embryo transfer, or cryopreserved embryos. Some, for instance, argue that cloning is not a form of human reproduction, but is a technique for *replicating* people.³⁷

Whether or not cloning is ultimately categorized as a new reproductive technology, the debate about cloning resembles the debate about earlier options such as *in vitro* fertilization, gestational surrogacy, and posthumous reproduction in that society recognizes a stake that extends beyond particular decisions, however important, about whether or not the law should regulate or prohibit reproductive technology and cloning.

34. At issue, along with cloning, is genetic engineering. Professor Lee Silver defines genetic engineering as “the process by which scientists alter or add specific genes to the genetic material present in the embryo so that an individual could be born with characteristics that he or she would not have had otherwise.” LEE M. SILVER, *REMAKING EDEN: CLONING AND BEYOND IN A BRAVE NEW WORLD* 129 (1998).

35. Lewis D. Solomon, *Reflections on Human Cloning*, 27 HOFSTRA L. REV. 659, 661 (1999).

36. See Eric A. Posner & Richard A. Posner, *The Demand for Human Cloning*, 27 HOFSTRA L. REV. 579, 580 (1999) (suggesting that cloning may seem less “weird” once it reaches “some critical mass”).

37. Sophia Kolehmainen, who opposes human cloning, takes this position. See Sophia Kolehmainen, *Human Cloning: Brave New Mistake*, 27 HOFSTRA L. REV. 557, 563-64 (1999); see also Cass R. Sunstein, *The Constitution and the Clone*, in *CLONES AND CLONES: FACTS AND FANTASIES ABOUT HUMAN CLONING* 207, 217 (Cass R. Sunstein & Martha C. Nussbaum eds., 1998) [hereinafter *CLONES AND CLONES*] (suggesting that as a constitutional matter, the “right to replicate stands on much weaker ground” than the right to reproduce).

At issue, beyond practical responses, are the meanings of personhood and the scope of familial relationships. Just as cloning can be categorized with, or distinguished from, the new reproductive technologies, so questions about, and responses to, cloning can be categorized with, or distinguished from, questions about and responses to earlier reproductive technologies. Thus, many of the questions being raised about cloning are familiar from earlier debates about reproductive technology, and from the wider debate about what it does, or should mean, to live in a family.

However, by contrast with earlier responses to reproductive technology, legal and political responses to human cloning are anticipatory, rather than reactive. Thus, in a number of regards, it is distinguished from similar debates about surrogacy, embryo transfer, or cryopreserved embryos. In those cases, abstract deliberations were quickly and often decisively measured against real stories—against actual families and the lives of actual children. Many, though not all, of these stories came to public attention in the form of legal disputes.

Thus, during the first six or seven decades of the twentieth century, society argued about the implications of artificial insemination—and thus about the meaning of marriage, paternity, and parentage more broadly—in light of a series of legal cases such as those of the Doornbuses in Illinois and the Sorensons in California. In the 1950s, Illinois courts considered whether a child born to Mrs. Doornbus as the result of artificial insemination using donor sperm was the legitimate child of Mr. Doornbus, and whether in consequence Mr. Doornbus owed that child support in the context of a divorce proceeding between the Doornbuses. The trial court, declaring the child illegitimate, privileged “blood” over behavior in the determination of parentage.³⁸ A decade later, a California court, deciding whether or not Mr. Sorenson was the father of his wife’s biological child conceived through use of donor sperm, privileged “intent” over “blood.”³⁹ Mr. Sorenson’s consent to the insemination procedure, the court concluded, guaranteed the legitimacy of the resulting child.⁴⁰ *Sorenson*, decided in 1968, signaled a far-reaching shift in the ground on which social understandings of familial relationships are predicated, and established a model for later decisions that premised “natural” parentage on intention.⁴¹ Several decades after

38. See *Doornbos v. Doornbos*, 23 U.S.L.W. 2308 (Ill. Super. Ct. Dec. 14, 1954), *appeal dismissed on procedural grounds*, 139 N.E.2d 844 (Ill. App. Ct. 1956).

39. See *People v. Sorenson*, 437 P.2d 495, 499 (Cal. 1968).

40. See *id.*

41. See, e.g., *Johnson v. Calvert*, 851 P.2d 776 (Cal. 1993); see also Janet L. Dolgin, *The*

Sorenson, society debated surrogacy—and thus the meaning of maternity—in the context of cases such as that of *Baby M*, involving a dispute between intending/contracting parents, William and Elizabeth Stern and a surrogate, Mary Beth Whitehead, with whom the Sterns had entered into a surrogacy agreement.⁴² And then, a half decade after *Baby M*, law and society considered whether to allow, and if so, whether to regulate, embryo cryopreservation—and thus how to weigh the comparative rights of divorcing spouses, and how to categorize gametic and embryonic material—in cases involving disputes between the progenitors of frozen embryos.⁴³ These cases, and others like them, have provided a concrete context for deciphering the implications of reproductive technology.

By contrast, it is not possible to consider the implications of human cloning through reference to cloned children or their parents because the debate has preceded the cloning of a person. Social responses to cloning emerge around foreboding and hope regarding cloning, rather than around dilemmas faced by actual clonants or by their genetic and/or social parents. In short, concerns and theories about cloning and its implications cannot be assessed in light of the reactions of, and consequences for, actual people.

But human responses can—and they must—be imagined.⁴⁴ The need to imagine, and the process of imagining, broaden the scope, and thus the implications, of the debate about cloning. Stories begin to be told, old myths begin to be refashioned, and new ones begin to be constructed. So, for instance, the essay by Dena Davis in this symposium refers to two myths about the creation of human life: the tales of Frankenstein and of the Golem of Prague.⁴⁵ Such refashioning of old tales, in their turn, may spawn new questions about the soul of a culture that aims to create life.

More generally, review of the essays in this symposium reveals a

"Intent" of Reproduction: Reproductive Technologies and the Parent-Child Bond, 26 CONN. L. REV. 1261, 1295-99 (1994) (considering judicial reliance on intent in *Sorenson*).

42. See *In re Baby M*, 525 A.2d 1128 (N.J. Super. Ct. 1987), *aff'd in part and rev'd in part*, 537 A.2d 1227 (N.J. 1988).

43. See, e.g., *Kass v. Kass*, 696 N.E.2d 174 (N.Y. 1998); *Davis v. Davis*, 842 S.W.2d 588 (Tenn. 1992).

44. There is a growing body of fictionalized stories that imagine the consequences of the process for those who are born as a result of the procedure and for those whose cells are used to produce a clone. Several such stories are collected in *CLONES AND CLONES*, *supra* note 37, at 310-46.

45. See Dena S. Davis, *Religious Attitudes Toward Cloning: A Tale of Two Creatures*, 27 HOFSTRA L. REV. 509, 510 (1999).

culture ruminating on itself, a culture self-consciously concerned with the meaning of personhood and with the character of the bonds that unite people into groups, including especially the bonds that unite people as kin. Only three of the essays—those by Representative Vernon J. Ehlers,⁴⁶ Sophia Kolehmainen,⁴⁷ and Lisa Sowle Cahill⁴⁸—unreservedly recommend that human cloning be banned. But, all of the essays presume that human cloning challenges deeply entrenched assumptions within Western society about reproduction, individuality, and human relationships. Read as a group, they add new commentary to an older debate about what it means—or should mean—to be a person, and about the nature of the bonds that connect people into familial, and other, groups. Many of the terms of the debate are familiar. Some of the implications are not.

So, for instance, the debate about cloning reflects an older, wide-ranging debate about the comparative importance of nature and nurture (culture). Not only does cloning promote reconsideration of interactions between, and the comparative significance of, nature and culture, but as Professor Lee M. Silver explains, cloning, when combined with genetic engineering—a combination that Silver labels “reprogenetics”⁴⁹—allows culture comprehensively to redesign—or more accurately, to presume to redesign—nature. Thus, Professor Silver’s predictions in this issue of a society divided between those privileged through the mental and physical enhancements provided by genetic engineering and those not so privileged, reflects the hubris central to the tales presented in Professor Davis’s essay.

Eric and Richard Posner delineate other potential consequences of redesigning nature through cloning and genetic engineering. They suggest, for instance, that one consequence of culture’s increasing ability to encompass and direct nature may be a society increasingly ready to displace sexual reproduction with reproduction in a test-tube.⁵⁰

Connected to concerns about the consequences of culture’s manipulating, and perhaps finally obliterating, nature, are concerns about the potential of cloning to commodify people. Fears regarding that potential have been widely voiced in the social debates about surrogacy

46. See Vernon J. Ehlers, *The Case Against Human Cloning*, 27 HOFSTRA L. REV. 523 (1999).

47. See Kolehmainen, *supra* note 37, at 557.

48. See Lisa Sowle Cahill, *No Human Cloning: A Social Ethics Perspective*, 27 HOFSTRA L. REV. 487 (1999).

49. See Lee M. Silver, *How Reprogenetics Will Transform the American Family*, 27 HOFSTRA L. REV. 649, 651 (1999).

50. See Posner & Posner, *supra* note 36, at 604-05.

and frozen gametes and embryos.⁵¹ Cloning exacerbates those fears. Emily Marden and Dorothy Nelkin describe the particular dangers of a large, unregulated market in cloned humans and human parts, driven by the projected wealth of such markets.⁵²

R. Alta Charo refers to a fear voiced before the NBAC that cloning will lead to “commercialized eugenics . . . [or the] selling [of] embryos cloned from ‘desirable’ people at a price higher than that of ‘undesirable’ people.”⁵³ The broader fear is that cloning will replace human diversity with a new sort of startling uniformity. Images of people, mass produced like widgets, forebode the loss of dignity and choice—and thus the loss of personhood as now valued.⁵⁴

Karen H. Rothenberg’s essay describes cloning as potentially dangerous to personhood because it can undermine an understanding of people as individual, interdependent, and as indeterminate.⁵⁵ Thus, explains Rothenberg, cloning, which challenges people to self as well as in their relation to others, “test[s] . . . concepts basic to our humanness.”⁵⁶ Many share Rothenberg’s concern. Others, however, do not see cloning as inevitably a threat to families. Thus, Lewis Solomon concludes that cloning does not threaten personhood or the family, since both, in his opinion, have already adjusted to a universe in which a wide variety of family forms exist and are widely accepted.⁵⁷ Similarly, John Robertson suggests that human cloning need not harm families, in that cloning can be regulated to serve beneficent ends and minimize risks.⁵⁸ That regula-

51. See, e.g., ELIZABETH BARTHOLET, FAMILY BONDS: ADOPTION AND THE POLITICS OF PARENTING 218-29 (1993) (describing the “industry” of gamete and embryo donation and of surrogacy); Ruth M. Lucier et al., *Heritage, Surrogacy, and the Ethics of Community: Choice and Avoidance in African and African-American Parenting Traditions*, in ISSUES IN REPRODUCTIVE TECHNOLOGY: AN ANTHOLOGY I 333, 337-38 (Helen Bequaert Holmes ed., 1992) (comparing surrogacy to the consequences of servitude and capture in war); Gina Kolata, *\$50,000 Offered to Tall, Smart Egg Donor*, N.Y. TIMES, March 3, 1999, at A10 (describing advertisements in college newspapers offering \$50,000 to a tall, female student with S.A.T. scores above 1400, willing to donate ova).

52. See Emily Marden & Dorothy Nelkin, *Cloning: A Business Without Regulation*, 27 HOFSTRA L. REV. 569, 575-76 (1999).

53. R. Alta Charo, *Cloning: Ethics and Public Policy*, 27 HOFSTRA L. REV. 503, 504 (1999). For the most part, Professor Charo explains, the NBAC discounted these fears as speculative and a ban of cloning “is just not feasible to implement.” *Id.*

54. That fear, voiced in one form or another, in virtually every discussion of cloning carries its own irony. See *infra* p. 486 (describing this irony).

55. See Karen H. Rothenberg, “*Being Human*”: *Cloning and the Challenges for Public Policy*, 27 HOFSTRA L. REV. 639, 641 (1999).

56. *Id.* at 645.

57. See Solomon, *supra* note 35, at 665-66.

58. See John A. Robertson, *Two Models of Human Cloning*, 27 HOFSTRA L. REV. 609 (1999).

tory task, suggests Nanette Elster, will, in its turn, produce new questions about the dimensions and scope of “family.”⁵⁹

III. CONCLUSION

Some of the essays in this symposium suggest that society may assimilate cloning, as it has tried to assimilate the new reproductive technologies, to a model of relationship grounded in familial understandings of personhood and relationship; grounded, even, in surviving assumptions about “natural” truth.⁶⁰ Others suggest that society may assimilate cloning to a new vision of relationship, one not connected to “natural” truths. Finally, others suggest that society may, or should, reject human cloning altogether. At present, the legal prohibition or regulation of human cloning may be of less moment than the ideological assumptions those legal choices represent or challenge.

Cloning, like other forms of assisted reproduction, separates reproduction from sexuality, and thus challenges deeply internalized assumptions about the ground on which family relationships are predicated; threatens to commodify children by creating a market in babies and in the biological parts (and services) needed for their production; and reflects and, presumes to satisfy, an apparently relentless commitment to unending choice in contemporary Western society.

However, cloning, especially when combined with genetic engineering, also differs from other reproductive technologies. Cloning, for instance, threatens to displace choice entirely. Especially insofar as cloning intensifies a broad tendency toward genetic essentialism,⁶¹ it

59. See Nanette Elster, *Who Is the Parent in Cloning?*, 27 HOFSTRA L. REV. 533 (1999).

60. For example, in cases involving gestational surrogacy, California courts have characterized a woman as a child’s natural mother on the basis of her “intent” to create the child and to raise it. In *Johnson v. Calvert*, 851 P.2d 776, 782 n.10 (Cal. 1993), the state supreme court restricted that designation to women with at least some biological connection (either gestational or genetic) to the child in question. In *Buzzanca v. Buzzanca*, 72 Cal. Rptr. 2d 280 (1998), however, an appellate court relied on *Johnson* to proclaim the “natural” maternity of a woman with no biological relation to her child on the ground that she fulfilled the intent requirement. See *id.* at 284-88. The case involved a couple, Luanne and John Buzzanca, who had arranged for a surrogate to gestate and give birth to a baby for them. See *id.* at 282. The embryo was created from the sperm and ovum of anonymous donors. See *id.* Luanne and John separated before the birth of the child. See *id.* None of the parents but Luanne desired parentage. See *id.*; see also Dolgin, *supra* note 29, at 245-53 (examining and discussing the *Buzzanca* case).

61. See DOROTHY NELKIN & M. SUSAN LINDEE, *THE DNA MYSTIQUE: THE GENE AS A CULTURAL ICON* 2, 200 (1995) (defining “genetic essentialism” as “a scientific discourse . . . with the potential to establish social categories based on an essential truth about the body” (quoting Sarah Franklin, *Essentialism, Which Essentialism? Some Implications of Reproductive and Genetic Technoscience*, in *ISSUES IN BIOLOGICAL ESSENTIALISM VERSUS SOCIAL CONSTRUCTION IN GAY AND LESBIAN IDENTITIES* 27, 34 (John Dececco & John Elia eds., 1993))).

will be expected to restrict the universe of “choices” for those cloned. Thus, perhaps, as science fiction authors of an earlier age foresaw, human cloning and genetic engineering represent a choice to eviscerate choice.

A peculiar irony already marks the debate about cloning—an irony that may portend a transformative shift in the terms of debate about personhood in American society. Cloning represents reproductive choice.⁶² Yet, cloning erodes choice, as the metaphor for dismal uniformity long associated with it seems increasingly to merge with actuality.⁶³

Choice, the correlate of autonomy, has long been envisioned as antithetical to traditional family organization.⁶⁴ More and more, society embraces choice, accepts the relationship between adults and families, and even (though more slowly, and with deeper ambivalence) between parents and children, as open to contract. Thus, a vision of family as a communal whole is replaced more and more with an understanding of family as a collectivity of separate individuals, valued in their own right, not for their place within a larger whole.

The irony within the debate about cloning spares neither tradition nor modernity. Cloning, like the new reproductive technologies, challenges traditional understandings of family by providing choice in place of the inevitabilities of status and custom. But cloning—especially when combined with genetic engineering—challenges choice, and thus autonomous individuality, as well. Finally, cloning’s central challenge may be to the autonomy and privacy of the individual, in whose name the perceived threat of cloning to the family is tolerated and dismissed.

62. See, e.g., John A. Robertson, *Liberty, Identity, and Human Cloning*, 76 TEX. L. REV. 1371, 1403 (1998) (“We do no great violence to prevailing understandings of procreative choice when we recognize DNA cloning to produce children whom we will rear as a legitimate form of family or procreative choice.”).

63. The peculiar effort to *choose* to limit future choice is not unique to the cloning endeavor. So-called “covenant marriage” represents another instance of the invocation of choice within a familial context in the effort to restrict other choices. See, e.g., LA. REV. STAT. ANN. § 307 (West 1997 & Supp. 1998).

64. See JANET L. DOLGIN, *DEFINING THE FAMILY: LAW, TECHNOLOGY, AND REPRODUCTION IN AN UNEASY AGE* 14-31 (1997) (describing transformation of American family).